Higher education, internet usage, and Chinese female's identification with patriarchal perspective: An empirical analysis considering moderating effect

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ABSTRACT

Based on data from a sample of 377 females in the 2018 Chinese General Social Survey, this study constructs a logit model considering moderating effect to estimate the effect of receiving higher education on the patriarchal perspective held by Chinese females, and examines the moderating effect of internet usage on the relationship between receiving higher education and the patriarchal perspective. As a result of the study, the authors came to the following conclusions. Firstly, receiving higher education will have a direct and significant improvement effect on the patriarchal perspective held by Chinese females, reducing their identification with the patriarchal perspective, especially for Chinese rural females. Secondly, internet usage will not directly have a significant effect on the patriarchal perspective held by Chinese females, but it will indirectly have a significant moderating effect on the patriarchal perspective held by Chinese rural females by receiving higher education. The more frequently Chinese rural females use the Internet, the weaker the effect of receiving higher education on their patriarchal perspective. Ultimately, when Chinese rural females use the Internet very frequently, receiving higher education will make them identify with the patriarchal perspective. Thirdly, the act of marriage will significantly strengthen the identification with the patriarchal perspective for both Chinese urban and rural females. However, engaging in household investment activities will significantly reduce the patriarchal perspective of Chinese urban females, while Chinese rural females will only gradually identify more with the patriarchal perspective as they grow older.

Keywords

Higher education,internet usage, patriarchal perspective, Chinese urban female, Chinese rural female, logit model, moderating effect

For citation

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Высшее образование, пользование сетью «Интернет» и отождествление китайских женщин с патриархальным укладом: эмпирический анализ с учетом эффекта модерации

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АННОТАЦИЯ

На основе данных выборки из 377 женщин, полученных в ходе Всеобщего социального исследования Китая 2018 г., в исследовании строится логит-модель с учетом эффекта модерации для оценки влияния получения высшего образования на патриархальную перспективу, которой придерживаются китайские женщины, и изучается эффект модерации использования сети «Интернет» на связь между получением высшего образования и патриархальной перспективой. Полученные результаты свидетельствуют, что во-первых, высшее образование оказывает прямое и значительное улучшающее воздействие на патриархальную перспективу, которой придерживаются китайские женщины, уменьшая их идентификацию с патриархальной перспективой, особенно для китайских сельских женщин. Во-вторых, использование сети «Интернет» не окажет прямого значительного влияния на патриархальную перспективу, которой придерживаются китайские женщины, но косвенно окажет значительное модерирующее влияние на патриархальную перспективу, которой придерживаются китайские сельские женщины, благодаря получению высшего образования. Чем чаще китайские сельские женщины пользуются сетью «Интернет», тем слабее влияние получения высшего образования на их патриархальную перспективу. В конечном итоге, когда китайские сельские женщины очень часто пользуются сетью «Интернет», получение высшего образования заставит их идентифицировать себя с патриархальной перспективой. В-третьих, акт вступления в брак значительно усиливает идентификацию с патриархальной перспективой как у городских, так и у сельских женщин Китая. Однако участие в инвестиционной деятельности значительно снижает патриархальную перспективу у городских жительниц Китая, в то время как сельские жительницы Китая будут лишь постепенно отождествлять себя с патриархальной перспективой по мере взросления.

Ключевые слова

Для цитирования

INTRODUCTION

Patriarchal culture (The father is right in everything he says, and the females should obey all the father's arrangements completely), as the pillar culture in Chinese Male Power Culture, has long constrained the development of Chinese females, and it is urgent to study how to break the constraints of patriarchal culture on the development of Chinese females. Education, especially higher education, is usually regarded as an important way to receive advanced ideas and achieve intellectual liberation [Gao and Liu, 2021; Liu and Gao, 2021; Wang and Gao, 2021]. However, the correlation between higher education and the patriarchal perspective held by Chinese females has been relatively little studied in Chinese academia. In addition, it is also important to note that Chinese society has entered the digital era, and internet technology, as the underlying technology of various digital technologies, has profoundly changed the way of people's thinking and living [Gao, 2021a]. And some studies have shown that internetet usage can significantly improve Chinese females' gender competence perspectives and gender division of labour bias [Gao, 2021b; Gao and Liu, 2022]. It is worth considering whether the Internet intensifies or inhibits the spread of patriarchal culture, a factor that few studies have taken into account when studying patriarchal culture in current Chinese academia. Therefore, in order to enrich the existing research results, this study builds a logit model considering the moderating effect to examine the effect of higher education on the patriarchal perspective held by Chinese females based on the Chinese General Social Survey data in 2018, and the moderating effect of internet usage on the relationship between higher education and the patriarchal perspective held by Chinese females is examined in order to provide suggestions for the effectiveness of promoting the liberal development of Chinese females.

RESEARCH METHODOLOGY

Data sources

The data for this study were obtained from Chinese General Social Survey (CGSS) in 2018. Designed and implemented by the National Survey and Research Center of Renmin University of China, the CGSS uses a multi-order stratified probability proportional to size (PPS) random sample covering 31 provinces, municipalities and autonomous regions in mainland China, systematically and comprehensively collecting data at multiple levels of society, households and individuals. The reasons for choosing to use the data from the 2018 CGSS for this study are threefold as follows.

Firstly, the 2018 CGSS is the newest data published so far. Secondly, the CGSS questionnaire consists of three parts, a fixed core module, a thematic module that is repeated

once every five years, and a random module for specific social phenomena. The random module of the 2018 CGSS, namely social perceptions, contains patriarchal perspective. Thirdly, CGSS has been widely used in various social sciences research, and more than 3,000 academic papers have been published based on CGSS.

Thus, the 2018 CGSS has considerable credibility. The authors of this study obtained the permission to download the data by filling out the CGSS data use application form online at the official website of CGSS (http://cgss.ruc.edu.cn/xmjs/zzss.htm), declaring which year of CGSS data they need to apply for and which study they intend to use the data for, and after the CGSS project team has approved the application.

Finally, after excluding invalid data and missing data according to the purpose of the study and variable settings, 377 valid samples were obtained in this study.

Variable settings

Dependent variable. The dependent variable in this study is patriarchal perspective (PP). It was measured based on the corresponding question in the questionnaire, "In all cases, the father's authority in the home should be respected", the options for this question include "agree" and "disagree". "Agree" was assigned to 1, "disagree" was assigned to 0.

Independent variable. The independent variable in this study is higher education (HE). It was measured by the corresponding question in the questionnaire, "What is your current highest level of education?", the options for this question include "no education", "elementary school", "middle school", "high school", "junior college", "bachelor" and "master". Among them, "junior college", "bachelor" and "master" were assigned to 1, "no education", "elementary school", "middle school" and "high school" were assigned to 0.

Moderating variable. The moderating variable in this study is internet usage (IU). It was measured by the corresponding question in the questionnaire, "How often do you use the Internet?", the options for this question include "never", "rarely", "sometimes", "frequently" and "very frequently". Among them, "never" was assigned to 0, "rarely" was assigned to 1, "sometimes" was assigned to 2, "frequently" was assigned to 3, "very frequently" was assigned to 4.

Control variables. Based on the reference of existing studies [Gao, 2021b; Liu et al., 2021; Gao and Liu, 2022] and the actual design of CGSS, this study combines age (Age, actual age of the respondent female), household registration status (HRS, respondent female's household registration status, rural household = 1, urban household = 0), marital status (MS, respondent female's marital status, married = 1, unmarried = 0), annual labor income (ALI, actual annual labor income of respondent females), and household investment activities (HIA, whether

respondent females engage in household investment activities, yes = 1, no = 0) as control variables.

MODEL SETTING

Given that the dependent variable patriarchal perspective (PP) is a binary discrete variable, this study builds a logit model to more accurately estimate the effect of receiving higher education on the patriarchal perspective held by the respondent females, and introduces product term for the independent variable higher education (HE) and the moderating variable internet usage (IU) to examine whether internet usage (IU) moderates the relationship between higher education (HE) and patriarchal perspective (PP), the model is set as follows:

$$PP_i = \beta_0 + \beta_1 \cdot HE_i + \beta_2 \cdot IU_i + \beta_3 \cdot PT_i + PT_i + \beta_4 \cdot Age_i + \beta_5 \cdot HRS_i + \beta_6 \cdot MS_i + \beta7 \cdot ALI_i + \beta_8 \cdot HIA_i + \mu_i$$

In the above equation, PP_i, HE_i, IU_i, PT_i, Age_i, HRS_i, MS_i, ALI_i and HIA_i respectively represent the i-th respondent female's patriarchal perspective, higher education, internet usage, product term for higher education and internet usage, age, household registration status, marital status, annual labor income and household investment activities. β_1, β_2, β_3, β_4, β_5, β_6, $\beta7$ and β_8 respectively represent the regression coefficients of each of these variables. β_0 and μ_i respectively represent the constant term and the random interference term.

EMPIRICAL ANALYSIS

BENCHMARK DESCRIPTIVE STATISTICS

The benchmark descriptive statistical analysis of the above variables was completed using the software Stata 16.0 (SE) by invoking the command "sum", and the results are presented in Table 1. The statistics result shows that in terms of the dependent variable, the mean value of patriarchal perspective (PP) is 0.897, indicating that 89.7 % of the respondent females agree with the patriarchal perspective, and the respondent females has a higher overall identification with the patriarchal perspective. In terms of the independent variable, the mean value of higher education (HE) is 0.162, indicating that 16.2 % of the respondent females has received higher education, and the overall education level of respondent females is higher. In terms of the moderating variable, the mean value of internet usage (IU) is 2.570, indicating that the overall frequency of internet usage by respondent females is between sometimes and frequently.

In terms of the control variables, the mean value of age is 45.101 years, indicating that respondent females are mostly middle-aged females. The mean value of household registration status (HRS) is 0.576, indicating that 57.6 % of respondent females hold rural household registration and 42.4 % of respondent females hold urban household registration. The majority of respondent females are from rural areas. The mean value of marital status (MS) is 0.798, indicating that 79.8 % of the respondent females have been married and most of the respondent females have started a family. The average value of annual labor income (ALI) is 25,747.905 yuan (RMB), indicating that the overall salary income of respondent females is relatively low and the overall personal financial situation is not ideal. The mean value of household investment activity (HIA) is 0.111, indicating that 11.1 % of the respondent females have engaged in household investment activities, and the overall percentage of respondent females engage in household investment activities is relatively low.

BENCHMARK LOGIT ESTIMATION ANALYSIS

In this study, the benchmark logit estimation analysis was completed using the software Stata 16.0 (SE) by invoking the commands "logit" and "margins", and the results are presented in Table 2.

Table 1. **Benchmark descriptive statistics for each variable**

Variables	Sample size	Mean value	Standard deviation	Minimum value	Maximum value
PP	377	0.897	0.305	0	1
HE	377	0.162	0.369	0	1
IU	377	2.570	1.490	0	4
Age	377	45.101	15.306	19	81
HRS	377	0.576	0.495	0	1
MS	377	0.798	0.402	0	1
ALI	377	25,747.905	49,428.782	0	500,000
HIA	377	0.111	0.315	0	1

Note: PP – patriarchal perspective, HE – higher education, IU – internet usage, HRS – household registration status, MS – marital status, ALI – annual labor income, HIA – household investment activity

Compiled by the authors on the materials of the study

Table 2. **Logit estimation results of patriarchal perspective for all respondent females**

PP	Coefficient	Z-Value	Average marginal effect	Z-Value
HE	–5.282** (2.470)	–2.14	–0.400** (0.187)	–2.14
IU	–0.081 (0.169)	–0.48	–0.006 (0.013)	–0.47
PT	1.357** (0.669)	2.03	0.103** (0.051)	2.02
Age	1.826** (0.733)	2.49	0.138** (0.053)	2.60
HRS	0.943** (0.415)	2.27	0.071** (0.031)	2.28
MS	1.414*** (0.405)	3.49	0.107*** (0.030)	3.56
ALI	0.027 (0.039)	0.68	0.002 (0.003)	0.68
HIA	1.149** (0.567)	2.03	–0.087** (0.042)	–2.08
Constant	5.614* (3.064)	–1.83	–	–
Pseudo R2, %	20.23			
Sample Size	377			

Note: *** represents p < 0.01; ** represents p < 0.05; * represents p <0.1. Numbers in parentheses are standard errors. PP – patriarchal perspective, HE – higher education, IU – internet usage, HRS – household registration status, MS – marital status, ALI – annual labor income, HIA – household investment activity

Compiled by the authors on the materials of the study

Table 2 reports the results of the logit estimation of patriarchal perspective (PP) for all respondent females and the mean marginal effects generated by each variable. The estimation results show that in terms of the independent variable and the moderating variable, higher education (HE) has a significant negative effect on PP at the 5 % significance level, indicating that receiving higher education will significantly reduce respondent females' identification with patriarchal perspective. While internet usage (IU) itself do not directly have a significant effect on PP, product term (PT) of internet usage (IU) and higher education (HE) has a significant positive effect on the 5 % significance level, indicating that internet usage (IU) had a significant moderating effect on the relationship between higher education (HE) and patriarchal perspective (PP).

Specifically, when the respondent females never use the internet, higher education (HE) produces an average marginal effect of –0.400 on their patriarchal perspective (PP), receiving higher education will decrease the respondent females' identification with patriarchal views by 0.400. When respondent females rarely use the Internet, HE has an average marginal effect of –0.297 on their patriarchal perspective (PP), receiving higher education will decrease the respondent females' identification with the patriarchal perspective by 0.297. When respondent females sometimes use the Internet, higher education (HE) has an average marginal effect of 0.195 on their PP, receiving higher education will decrease the respondent females' identification with the patriarchal perspective by 0.195. When respondent females frequently use the Internet, higher education (HE) has an average marginal effect of –0.092 on their PP, receiving higher education will decrease the respondent females' identification with the patriarchal perspective by 0.092. When respondent females very frequently use the Internet, higher education (HE) has an average marginal effect of 0.011 on their PP, receiving higher education will increase the respondent females' identification with the patriarchal perspective by 0.011.

Using the software Excel to plot Figure 1 based on the above calculations reveals that the improvement effect of receiving higher education on the patriarchal perspective held by respondent females continues to diminish as the frequency of internet usage of respondent females increases. Especially when the frequency of internet usage by respondent females reaches very frequently, receiving higher education may even strengthen respondent females' identification with the patriarchal perspective. The reason for this phenomenon is probably that the current "opinion leaders" and "gatekeepers" in cyberspace are more often males. For example, the CEOs (Chief Executive Officers) of relatively unisex social media software such as Google, Twitter and MicroBlog are mostly males, while the CEOs of very male social media software such as TianYa, Zhihu and HUPU are completely controlled by males, and even the CEOs of social media software with distinctly female characteristics such as Little Red Book are also males. When males are the dominant group in cyberspace, they will take a series of actions to maintain their dominance, spreading patriarchal perspective is an effective way to do so. With the help of internet technology, the spread of patriarchal perspective will be strengthened, especially when the "opinion leaders" and "gatekeepers" are also mostly males. Females are likely to be gradually influenced by the patriarchal perspective widely disseminated in cyberspace in the process of using the Internet, so that the improvement effect of receiving higher education on their
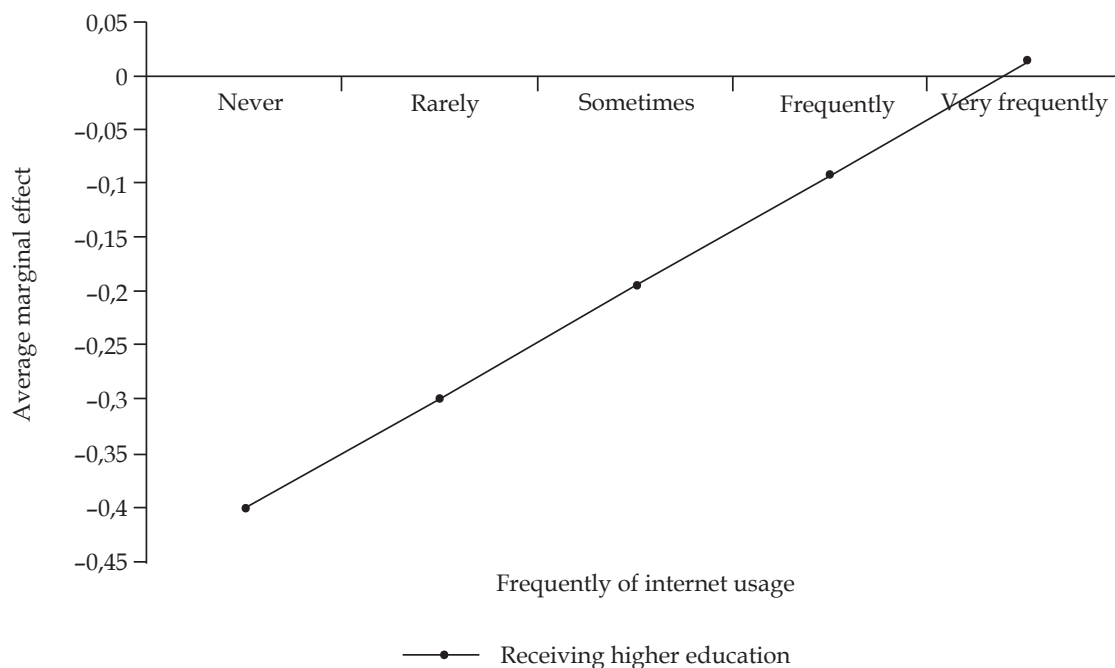
patriarchal perspective identification is constantly weakened, and eventually females identify with the patriarchal perspective.

In terms of the control variables, Age, HRS and MS have significant positive effects on PP at 5 %, 5 % and 1 % significance levels, respectively, indicating that as the respondent females grow older and her family is formed, her identification with patriarchal perspective will be strengthened, especially for respondent females in rural areas. It should be noted that HIA has a significant negative effect on PP at the 5 % significance level, indicating that respondent females' engaging in household investment activities will significantly reduce respondent females' identification with patriarchal perspective.

Heterogeneous descriptive statistics

Considering the obvious urban-rural differences in Chinese society, this study further analyzes the respondent females sample statistically according to household registration status by using the software SPSS 23.0 (independent samples t-test), and the result of the statistical analysis is represented in Table 3.

The statistical result shows that in terms of the dependent variable, the mean values of PP for urban and rural respondent females are 0.844 and 0.935, respectively, indicating that 84.4 % of urban respondent females identifies with patriarchal perspective. Although both urban and rural respondent females have a higher level of identification with the patriarchal perspective, urban respondent females still have a significantly lower level of identification with the patriarchal perspective than rural respondent females. The result of the Levene's variance equivalence test (hereafter referred to as the test result) indicates that the difference is statistically significant at the 1 % level of significance. In terms of the independent variables, the mean values of HE for urban and rural respondent females are 0.269 and 0.083, respectively, indicating that 26.9 % of urban respondent females has received higher education, while only 8.3 % of rural respondent females has received higher education. There is a significant urban-rural difference between urban respondent females and rural respondent females, and the test result shows that the difference is statistically significant at the 1 % level of significance.

Compiled by the authors on the materials of the study

Fig. 1. **Effect of higher education on the patriarchal perspective of all respondent females**

Table 3. **Statistical Analysis of Each Variable for Urban and Rural Respondent Females**

Variables	Means of urban respondent females	Means of rural respondent females	Mean difference (urban minus rural)	Levene's equivalence of variances test
PP	0.844 (0.364)	0.935 (0.246)	−0.091	35.462***
HE	0.269 (0.445)	0.083 (0.276)	0.186	110.068***
IU	2.813 (1.370)	2.392 (1.551)	0.421	14.000***
Age	48.963 (15.749)	42.253 (14.354)	6.710	3.619*
MS	0.719 (0.451)	0.857 (0.351)	−0.138	44.435***

End of Table 3

Variables	Means of urban respondent females	Means of rural respondent females	Mean difference (urban minus rural)	Levene's equivalence of variances test
ALI	32,850.625 (59094.479)	20,510.876 (40217.495)	12,339.749	8.903***
HIA	0.181 (0.386)	0.060 (0.238)	0.121	61.266***
Sample Size	160	217	–57	–

Note: *** represents p<0.01; ** represents p<0.05; * represents p<0.1. Numbers in parentheses are standard deviation. PP – patriarchal perspective, HE – higher education, IU – internet usage, HRS – household registration status, MS – marital status, ALI – annual labor income, HIA – household investment activity

Compiled by the authors on the materials of the study

In terms of the moderating variable, the mean values of IU for urban and rural respondent females are 2.813 and 2.392, respectively, indicating that urban respondent females mostly use the Internet sometimes, while rural respondent females mostly use the Internet rarely, the frequency of Internet usage among rural respondent females is significantly lower than that of urban respondent females, there is a significant urban-rural difference between them, and the test result shows that the difference is statistically significant at the 1 % level of significance.

In terms of the control variables, the mean values of age for urban and rural respondent females are 48.963 and 42.253 years, respectively, indicating that although both urban respondent females and rural respondent females are predominantly middle-aged, urban respondent females are significantly older compared to rural respondent females. And the test result shows that the difference is statistically significant at the 10 % level of significance. The mean values of MS for urban and rural respondent females are 0.719 and 0.857, respectively, indicating that 71.9 % of urban respondent females have been married, while the married rate of rural respondent females reaches 85.7 %. The married rate of urban respondent females is significantly lower than that of rural respondent females, there is a significant urban-rural difference between them, and the test result show that the difference is statistically significant at the 1 % level of significance. The mean values of ALI for urban and rural respondent females are 32,850.625 yuan (RMB) and 20,510.876 yuan (RMB), respectively, indicating that the wage income of urban respondent females is significantly higher than that of rural respondent females, there is a significant urban-rural difference between them, and the test result shows that this difference is statistically significant at 1 % level of significance. The mean values of HIA for urban and rural respondent females are 0.181 and 0.060, respectively, indicating that 18.1 % of urban respondent females have engaged in household investment activities, while the engagement rate of rural respondent females is only 6.0 %. The proportion of urban respondent females engaged in household investment activities is significantly higher than that of rural respondent females, there is a significant urban-rural difference between them, and the test result shows that the difference is statistically significant at the 1 % level of significance.

Heterogeneous logit estimation analysis

The above heterogeneous descriptive statistical analysis shows that there are significant urban-rural differences in a series of characteristic variables including dependent, independent, moderating, and control variables between urban respondent females and rural respondent females. It is worth considering whether higher education (HE) and internet usage (IU) have a different impact on the patriarchal perspective (PP) held by urban respondent females and rural respondent females. For this reason, this study further uses the software Stata 16.0 (SE) to invoke the commands "logit" and "margins" to estimate the respondent females in groups according to household registration status, the estimation results and the average marginal effects generated by each variable are presented in Table 4.

Table 4. **Logit estimation results of patriarchal perspective for urban and rural respondent females**

PP	Urban respondent females		Rural respondent females	
	Coefficient	Average marginal effect	Coefficient	Average marginal effect
HE	–3.842* (2.204)	–0.414* (0.238)	–60.346*** (5.839)	–2.769*** (0.622)
IU	–0.019 (0.237)	–0.002 (0.026)	–0.056 (0.208)	–0.003 (0.009)
PT	0.761 (0.603)	0.082 (0.065)	19.656*** (1.816)	0.902*** (0.204)
Age	1.460 (0.977)	0.157 (0.100)	2.351*** (0.887)	0.108*** (0.046)
MS	1.228** (0.481)	0.132** (0.050)	2.117*** (0.712)	0.097*** (0.031)

End of Table 4

PP	Urban respondent females		Rural respondent females	
	Coefficient	Average marginal effect	Coefficient	Average marginal effect
ALI	0.049 (0.050)	0.005 (0.006)	–0.047 (0.063)	–0.002 (0.003)
HIA	–1.129* (0.642)	–0.122* (0.065)	–1.684 (1.078)	–0.077 (0.048)
Constant	–4.170 (4.074)	–	–6.777* (3.530)	–
Pseudo R2, %	17.80		27.92	
Sample Size	160		217	

Note: *** represents $p<0.01$; ** represents $p<0.05$; * represents $p<0.1$. Numbers in parentheses are standard errors. PP – patriarchal perspective, HE – higher education, IU – internet usage, PT – product term, MS – marital status, ALI – annual labor income, HIA – household investment activity
Compiled by the authors on the materials of the study

The estimation results show that in terms of the independent variable and moderating variable, HE has a direct negative effect on PP held by urban and rural respondent females at the 10 % and 1 % significance levels, respectively, indicating that no matter both urban respondent females or rural respondent females, receiving higher education will significantly reduce their identification with the patriarchal perspective. However, the direct effect of receiving higher education on the patriarchal perspective held by rural respondent females is significantly greater than that of urban respondent females, and the result of the coefficient difference test also supports this conclusion (Table 5, calculated by invoking the command "bdiff" using the software Stata 16.0 (SE)), which is likely because the overall acceptance rate of higher education among rural respondent females is relatively low, the improvement effect of receiving higher education on the patriarchal perspective held by rural respondent females is still at the stage of increasing marginal gains, while the overall acceptance rate of higher education among urban respondent females is relatively high and the improvement effect of receiving higher education on the patriarchal perspective held by urban respondent females is likely to have entered the stage of decreasing marginal gains. In addition, the effect of IU on PP held by urban and rural respondent females is also highly different, although IU do not have a significant direct effect on PP held by both urban and rural respondent females. However, IU has a significant moderating effect on the relationship between HE and PP held by rural respondent females, but not on the relationship between Higher Education HE and PP held by urban respondent females. The coefficient difference test also supported this finding (Table 5, calculated by invoking the command "bdiff" using the software Stata 16.0 (SE)).

Specifically, the average marginal effect of HE on the PP held by urban respondent females is –0.414, receiving higher education will directly decrease the urban respondent females' identification with the patriarchal perspective by 0.414. While the average marginal effect of HE on the PP held by rural respondent females is moderated by IU. Specifically, when the rural respondent females never use the Internet, higher education (HE) produces an average marginal effect of –2.769 on their patriarchal perspective (PP), receiving higher education will decrease the rural respondent females' identification with patriarchal views by 2.769. When the rural respondent females rarely use the Internet, higher education (HE) produces an average marginal effect of –1.867 on their patriarchal perspective (PP), receiving higher education will decrease the rural respondent females' identification with patriarchal views by 1.867. When the rural respondent females sometimes use the Internet, higher education (HE) produces an average marginal effect of –0.965 on their patriarchal perspective (PP), receiving higher education will decrease the rural respondent females' identification with patriarchal views by 0.965.

Table 5. Coefficient differences test

PP	Coefficient Urban- Coefficient Rural	P-Value
HE	56.503**	0.020
IU	0.037	0.440
PT	–18.895***	0.000

Note: *** represents $p<0.01$; ** represents $p<0.05$; * represents $p<0.1$. HE – higher education, IU – internet usage, PT – product term
Compiled by the authors on the materials of the study

When the rural respondent females frequently use the Internet, higher education (HE) produces an average marginal effect of –0.063 on their patriarchal perspective (PP), receiving higher education will decrease the rural respondent females' identification with patriarchal views by 0.063. When the rural respondent females very frequently use the Internet, higher education (HE) produces an average marginal effect of 0.839 on their patriarchal perspective (PP), receiving higher education will increase the rural respondent females' identification with patriarchal views by 0.839.

Using the software Excel to plot Figure 2 based on the above calculations reveals that under the guidance of male "opinion leaders" and "gatekeepers" and with the powerful communication ability of internet technology, the communication of patriarchal perspective will be further strengthened, while the acceptance rate of higher education among rural respondent females is relatively low, their cognitive ability is relatively undeveloped. In addition, as a whole seldom use the Internet, the Internet is still a novelty to rural respondent females, and the use of the Internet will have a strong impact on rural respondent females, thus weakening the effect of receiving higher education on improving the patriarchal perspective held by rural respondent females, and even eventually making rural respondent females submit to the patriarchal perspective that is widely spread in cyberspace. However, the use of the Internet does not significantly affect the patriarchal perspective held by urban respondent females, most likely because, on the one hand, the acceptance rate of higher education among urban respondent females has been relatively high overall, and their cognitive abilities are relatively mature, so they can effectively resist the spread of the patriarchal perspective in cyberspace and are not affected by it. On the other hand, the Internet is no longer a novelty to urban respondent females, and its usage does not have a strong impact on urban respondent females. Therefore, receiving higher education is still sustainable and effective in reducing urban respondent females' identification with the patriarchal perspective.

In terms of the control variables, marital status (MS) and household investment activities (HIA) have significant positive and negative effects on patriarchal perspective (PP) held by urban respondent females at the 5 % and 10 % significance levels, respectively, indicating that with the formation of a family, urban respondent females will identify with the patriarchal perspective step by step. However, engaging in household investment activities can reduce their identification with the patriarchal perspective. Both age and marital status (MS) have a significant positive effect on patriarchal perspective (PP) held by rural respondent females at the 1 % significance level, indicating that rural respondent females' identification with patriarchal perspective will be strengthened as they grow older and as their families' form.

CONCLUSIONS

The study finds that firstly, receiving higher education will directly and significantly reduce the patriarchal perspective of both urban and Chinese rural females, and will have a more significant effect on the improvement of the patriarchal perspective of Chinese rural females. Secondly, internet usage will not directly have a significant effect on the patriarchal perspective held by Chinese urban and rural females, but internet usage
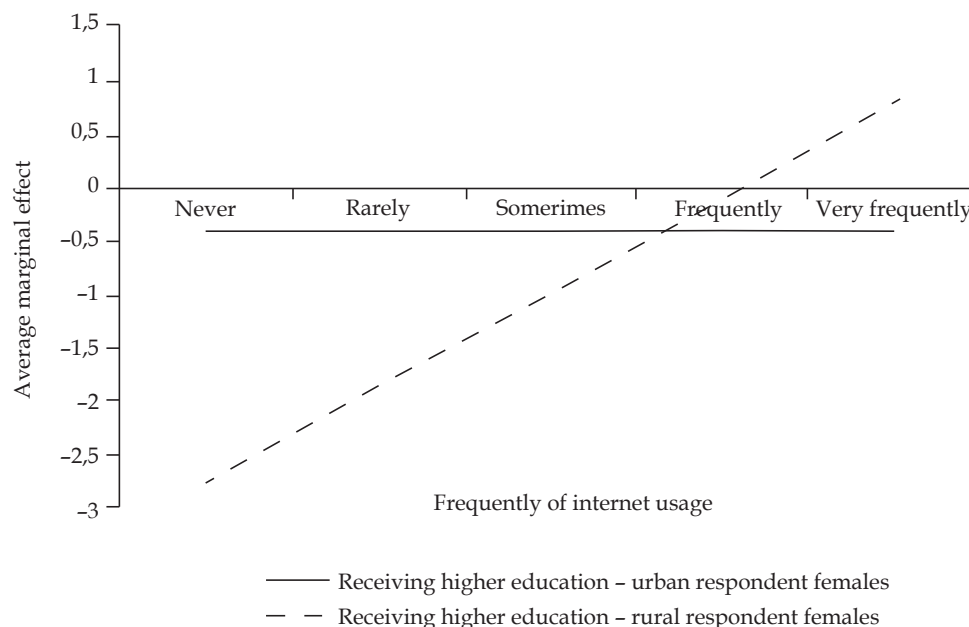
Compiled by the authors on the materials of the study

Figure 2. Effects of higher education on the patriarchal perspective of urban and rural respondent females

will significantly moderate the relationship between receiving higher education and the patriarchal perspective held by Chinese rural females. Specifically, internet usage will weaken the effect of receiving higher education on the patriarchal perspective held by Chinese rural females, and the effect will decrease as the frequency of internet usage increase, and eventually, when Chinese rural females' use of the Internet reach very frequent, receiving higher education will strengthen their patriarchal perspective. Thirdly, the act of marriage will significantly increase Chinese urban and rural females' identification with the patriarchal perspective, but engaging in household investment activities will significantly improve the patriarchal perspective held by Chinese urban females, while Chinese rural females will only gradually identify more with the patriarchal perspective as they grow older.

The above findings suggest that although higher education can significantly reduce rural Chinese females' identification with patriarchal perspective, because Chinese society has entered the digital age and the males have become more of the "opinion leaders" in the digital cyberspace, internet usage can significantly reduce the improvement effect of higher education on rural Chinese females' identification with patriarchal perspective. Especially when Chinese rural females use the Internet very frequently, internet usage completely reverses the improvement effect of higher education on Chinese rural females' identification with patriarchal perspective, higher education instead strengthens Chinese rural females' identification with patriarchal perspective. However, internet usage does not significantly affect the improvement effect of higher education on Chinese urban females' identification with patriarchal perspective, higher education continues to significantly reduce Chinese urban females' identification with patriarchal perspective. Chinese governmental departments should focus on the widespread spread of patriarchal perspective in digital cyberspace, appropriately reduce the proportion of males among "opinion leaders" and allow more females to speak out, in order to keep digital cyberspace as neutral as possible. In addition, since rural areas in China are most influenced by the old feudal system, Chinese government departments should also focus on the cultivation of females' attitudes in rural areas to cut off the spread of patriarchal perspective from the source.

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