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Employment Effects of the Internet on Rural Residents in the Context of the Digital Village

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Abstract: Promoting the employment of rural labor is an important way to improve the living standards of farmers and narrow the income gap between urban and rural areas, as well as a key measure to comprehensively promote rural revitalization. Based on the 2017 China General Social Survey (CGSS) data, the impact of Internet use on rural residents' employment and its mechanism of action were validated and tested using the Probit model and KHB method. The study finds that Internet use can significantly promote the employment participation of rural laborers, and the "digital dividend" of the Internet can rely on human capital to play an effective role, and the mediating effect of healthy human capital is stronger than that of educational human capital. In addition, the effect of the Internet in promoting employment is more obvious in the youth group and the sample with a low level of social trust. Therefore, in the process of promoting rural revitalization and the employment and entrepreneurship of the rural population, it is necessary to use the Internet dividend to continuously optimize the employment structure of rural residents, and to strengthen the skills training of rural residents in the use of the Internet. It is also necessary to help them improve their professionalism and accumulate human capital, so as to strengthen the promotion effect of digital empowerment on non-farm employment.

Keywords: Internet Use; Rural Residents; Employment Participation; Human Capital.

1. Introduction

Employment is the basis of people's livelihood, and entrepreneurship is the source of employment.2022 The No.1 document of the central government pointed out that it is necessary to promote the employment and entrepreneurship of farmers in the vicinity of the place, and to cultivate the development of domestic service, logistics and distribution, old age care, and other living service industries. Promoting the employment and entrepreneurship of rural laborers is not only an important way to improve the income level of rural residents, but also the core content of comprehensively promoting rural revitalization. In recent years, agricultural labor productivity has been increasing with the advancement of mechanization, and a large amount of surplus labor has appeared in rural areas. At the same time, the development of the secondary and tertiary industries has created an ever-increasing demand for labor. Therefore, promoting the non-farm employment of rural residents is of great significance to optimizing the allocation of labor resources, promoting the income of farmers, as well as promoting the development of the rural revitalization strategy [1]. in recent years, with the rapid rise of digital technologies represented by the Internet, big data, cloud computing, etc., the construction of digital villages in China has been accelerated. In April 2022, the Central Internet Information Office, the Ministry of Agriculture and Rural Affairs, the National Rural Revitalization Bureau and other departments jointly issued the "Key Points of the Work on the Development of Digital Villages in 2022", which proposes to deepen the popularization of 4G in villages and improve the rural digital governance system. The rapid popularization of the Internet has had a comprehensive and profound impact on the way of life and employment of rural residents. On the one hand, the use of the Internet extends the relationship network of rural residents, helps rural residents break down information barriers, reduces the asymmetry of employment information, and broadens employment channels [2]. It has also given rise to some flexible jobs, providing rural laborers with richer employment opportunities. On the other hand, the use of the Internet can help rural residents receive skills training at a lower cost and in a more flexible way, which to a certain extent helps to improve the human capital of rural laborers [3].

However, in terms of Internet penetration, there is still a large gap between urban and rural areas in China. At the same time, the relative lack of knowledge and resources of rural residents themselves leads to fewer employment opportunities and more difficulties for them. If the Internet can have a positive effect on the employment of rural residents, it will undoubtedly provide new ideas on how to effectively develop the human capital of the labor force in rural areas and promote the entrepreneurial employment of farmers in the vicinity of the place, which is of great economic and practical significance. Therefore, in the context of the current high degree of penetration of the digital economy into the labor market and the construction of digital villages, does Internet use promote the employment of rural residents? And through what paths does it have an impact on employment? This paper will start from the perspective of rural residents' employment participation and use micro-survey data for empirical analysis.

2. Literature Review and Research Hypotheses

2.1. Literature Review

China's rural population has always accounted for a large proportion of the total population. With the increasing level of scientific and technological development and the reduction of available arable land, the scale and number of labor force transfers in rural areas are growing. In the early stage, domestic scholars have studied the micro and macro factors affecting the employment choices of rural laborers. For example, from the viewpoint of individual characteristics,

gender, age, education level, health status and marital status significantly affect the employment participation of rural residents, and are influenced by the traditional household division of labor [4,5]. For example, from the perspective of individual characteristics, gender, age, education level, health status and marital status all significantly affect the employment participation of rural residents, and due to the influence of the traditional division of labor in the family, marriage tends to have a more far-reaching negative impact on the employment participation of rural women [6]. In addition, family size and economic level have a significant impact on the employment participation of rural residents. In addition, family endowment factors such as family size and economic level also have a significant positive impact on the employment choices and employment hierarchy of rural laborers [7,8]. At the macro-institutional level, the improvement of medical and old-age insurance systems such as the New Rural Cooperative Program [9,10], agricultural and food subsidy policies [11] and agricultural land rights [12] and agricultural and food subsidy policies, and the confirmation of the right to farm land also have an impact on the employment participation of rural residents.

As the digital economy continues to permeate daily life, a growing number of scholars have argued that the Internet is also an important medium for influencing the employment participation of different groups. Atasoy found that access to the Internet increases U.S. labor employment by 1.8 percent[13] . Its role as the main information channel for people nowadays is conducive to promoting standard employment for individuals and increasing income levels [14]. First, using the Internet significantly extends the labor supply time of individuals and promotes the probability of self-employment for those who are flexibly employed [15]. Second, the Internet can increase women's employment rate in the labor market by saving their time for housework, telecommuting, and e-learning [16,17]. Based on the data from the China Health and Elderly Tracking Survey, Li Rui concludes that the Internet can develop the potential of the retired elderly group and increase their re-employment probability through the acquisition of knowledge and the accumulation of social capital [18]. The Internet can be used to develop the potential of the retired elderly through the acquisition of knowledge and the accumulation of social capital, increasing their re-employment probability. In addition, for college graduates, Internet use can also contribute to employment and labor force participation through the accumulation of social resources [19]. Using data from Germany, Fabritz found that the effect of Internet penetration on employment is more pronounced in rural areas [20]. The impact of Internet penetration on employment rates is more pronounced in rural areas. Chi's test of heterogeneity in assessing the employment effects of digital life also suggests that digital life has a more significant impact on the employment of individuals in agricultural households [21].

In terms of exploring the relationship between Internet use and rural labor force employment, Ma Junlong empirically concluded that Internet use would significantly increase farmers' non-farm employment rate by 21.2 percent [22]. Most scholars have also affirmed its positive effects. It is believed that the use of the Internet can broaden the social network of rural residents, reduce the cost of information search, break the asymmetry of employment information, and then increase the employment participation rate of rural residents [23,24]. It is believed that the use of the Internet can increase the employment participation rate of rural residents by broadening their social network, reducing the cost of information search and breaking the asymmetry of employment information. However, some scholars believe that the Internet will bring entertainment effect to rural residents, and if it is not used effectively, it will also have a negative impact on the employment effect of rural residents [25]. However, there are also views that the Internet will bring entertainment effects to rural residents, and if it is not used effectively, it will also have negative effects on rural residents' employment.

Existing literature has provided a good research foundation for this paper, but it can be found that at present, the domestic academic community on the impact of the Internet on the rural labor force's non-farm employment has not yet formed a systematic study, and on the investigation of the intrinsic mechanism, the existing literature has more often used the three-step method to focus on the two types of intermediary effects of information channels and social capital, and there is little literature on how the Internet affects the human capital and thus affects the employment participation of rural residents. Therefore, on the basis of existing research, this paper innovatively constructs Internet, human capital and employment participation in an analytical framework, which can enrich the research in this field to a certain extent, and provide certain reference for promoting farmers' non-farm employment and deepening the construction of digital countryside.

2.2. Research Hypotheses

With the development of the digital economy and the continuous innovation of the Internet, the Internet has gradually become an important tool for people to search and obtain information quickly, which can largely enhance the possibility for workers to find stable and well-paid jobs [26]. The Internet has become an important tool for people to search for and access information quickly. Studies have already pointed out that Internet use can affect rural workers' employment choices in terms of accumulating social capital, saving time for housework, and broadening information channels. Specifically, the use of the Internet has the following effects on the employment participation of rural residents: First, the Internet broadens the channels of employment information, improves the matching of supply and demand of labor jobs, and helps reduce the probability of unemployment caused by information asymmetry and high information collection costs [27]. Second, the Internet enables rural residents to transcend time and space constraints, enabling them to obtain richer employment information and increase their flexibility and autonomy in work. Third, in today's highly developed technology level, the use of the Internet has become a basic skill needed for long-term survival in the labor market, and mastering Internet skills can enable rural residents to adapt to job requirements more quickly and take the initiative. Based on the above theoretical analysis, this paper proposes hypothesis 1:

Hypothesis 1: The use of the Internet can significantly contribute to the employment participation rate of rural residents.

According to Schultz's theory of human capital, human capital is mainly expressed as the sum of the stocks of productive knowledge, labor and managerial skills, and health qualities embedded in human beings. Therefore, human capital, as an important "viable capability" of an individual,

inevitably has an impact on labor supply [28]. On the one hand, education and learning can increase human capital. On the one hand, education and learning increase human capital. The more educated workers are, the more competitive they are in the labor market and the more choices they have for employment. In addition to basic education, the Internet has spawned flexible learning methods such as online learning, e-learning, and distance learning, making learning resources richer and learning time more flexible, and enhancing rural residents' accessibility to knowledge. Therefore, the Internet may unleash a large human capital dividend through education [29]. On the other hand, an individual's healthy physical and mental state is also an important part of human capital and plays an important role in labor market decision-making. An individual's health status can be seen as a reserve of capital that can determine the efficiency of his or her production and services, and is the basis for long-term survival in the labor market. The Internet can help rural residents re-socialize, change their lifestyles and habits, and improve their health literacy, thus significantly improving the quality of life of individuals and improving their health status [30]. In short. In short, the Internet can improve the human capital stock of workers from both education and health levels, make them more competitive, get rid of the secondary labor market, and then promote their employment and entrepreneurship. Based on this, this paper proposes hypothesis 2:

Hypothesis 2: The Internet can contribute to the probability of employment of rural residents through human capital.

3. Data, Variables and Methods of Measurement

3.1. Data Sources

The data in this paper comes from the 2017 China General Social Survey (CGSS) program, which uses multistage stratified sampling and covers a wide range of provinces and cities across the country, making it well-representative. More crucially, the 2017 CGSS data contains questions on residents' Internet use, which is a rare, nationally representative, individual Internet use database covering types of Internet use, skill status, shopping status, online political participation, etc., which fits the research theme of this paper. Since the group of concern in this paper is rural residents, the samples whose household registration is urban are excluded from the survey, and then screened according to the research theme, excluding the samples that do not meet the research and the related lack of variables, and finally obtaining 7,224 valid rural resident samples.

3.2. Selection of Variables

The explanatory variable of the model is whether or not to be employed, selecting the question "your work experience and status", currently engaged in non-agricultural work means employment, assigning the value of 1, and the other value of 0. The core explanatory variables are whether or not to use the Internet and the use of the Internet, of which whether or not to use the Internet includes using computers to access the Internet and cell phones to access the Internet. In the questionnaire, "In the last six months, have you been on the Internet, including the use of computers, cell phones, smart wearable and other devices to access the Internet?" The frequency of Internet use is based on the question "In the past year, how did you use the Internet?" and is divided into five levels from "never" to "very frequently". The frequency of Internet use is based on the question "How did you use the Internet in the past year?", and is divided into five grades from "never" to "very often", with the values 0-5.

In order to eliminate research errors due to omission of variables, control variables for individual, family and social factors were introduced. These include age, gender, educational level, marital status, health status, political profile, number of children, annual personal income and participation in social security. In addition, middle age tends to be a period of job upward mobility, so considering the possible inverted U-shaped relationship between age and rural residents' employment choices, this paper puts the age-squared term into the model. Descriptive statistics such as the definition, assignment and mean of each variable are specified in the table below.

3.3. Measurement Methods

Table 1. Descriptive statistics of the main variables in this paper

variant	Variable Definition	average value	(statistics) standard deviation
start a career	Currently working in agriculture or not working = 0, currently working in non-agricultural work = 1	0.3379	0.4730
Whether or not you use the Internet	No = 0, Yes = 1	0.4708	0.4992
Frequency of Internet use	Never = 1, Rarely = 2, Sometimes = 3, Often = 4, Very often = 5	2.4514	1.6679
sexes	Female = 0, Male = 1	0.4708	0.4992
(a person's) age	Continuous variable for age of respondents	50.9572	16.1085
age squared	Age of respondents squared	2856.0840	1654.3780
matrimonial	Unmarried/separated not divorced/divorced/widowed = 0, cohabiting/first marriage with spouse/remarriage with spouse = 1	0.7974	0.4019
Highest level of education	Junior high school and below = 1, high school/junior college/technical school/specialty = 2, bachelor's degree and above = 3	1.2619	0.5328
political profile	Non-party members = 0, party members = 1	0.0645	0.2460
health status	Very unhealthy/quite unhealthy = 1, average = 2, quite healthy/very healthy = 3	2.2530	0.8281
Number of children	Sum of number of sons and number of daughters	1.9553	1.4152
Annual personal income	Households' 2016 annual income taken in logarithms	9.5029	1.3747
Participation in social security	Not participating = 0, participating = 1	0.9449	0.2280

Since the dependent variable in this paper, whether or not employment is a normally distributed binary discrete variable, a binary probit model is selected, assuming the following equation.

$$Pr(Job = 1) = \emptyset(\alpha + \beta Internet_i + \gamma X_i + \varepsilon_i) \quad (1)$$

Where Job denotes the explanatory variable "whether employed", currently engaged in non-farm work is assigned a value of 1, the other 0. Internet is the core explanatory variable in this paper, and its corresponding coefficient is also the main focus of this paper to be estimated. β Internet is the core explanatory variable of this paper, and its corresponding coefficient is also the main coefficient to be estimated in this paper; X_i denotes control variables such as demographic characteristics, family characteristics, social characteristics of individuals in the sample, and γ are the coefficients of the control variables, and α is the constant term, andε_i is the random error term indicating unobservable factors affecting the employment participation of rural residents.

4. Empirical Results and Analysis

4.1. Impact of Internet Use on the Employment of Rural Laborers

Table 2 reports the results of the baseline regressions of the impact of Internet use on the employment of the rural labor force estimated on the basis of a binary Probit model. To simplify the model, only the independent variable of whether or not to use the Internet is included in column (1), and the individual characteristics and household characteristics variables are included in column (2), and the results all show that using the Internet significantly increases the employment level of rural residents at the 1% statistical level. It fully indicates that Internet use has a positive contribution to the non-farm employment of rural residents. On the basis of models 1 and 2, column (3) replaces the core explanatory variable "whether to use the Internet" with "frequency of Internet use", and column (4) adds personal characteristics and family characteristics on the basis of frequency of Internet use. The results show that the higher the frequency of Internet use, the higher the probability of non-farm employment for rural residents. That is, rural residents who use the Internet frequently have a 12.72% higher employment rate than those who use it infrequently. Efficient and frequent use of the Internet not only reduces the time cost for rural residents searching for employment information, but also breaks the geographical constraints, enhances the relevance of employment information, and greatly improves the efficiency of job matching. Hypothesis 1 is verified.

Table 2. Benchmark regression of the impact of digital life on the labor force of rural residents

variable name	Model (1)	Models (2)	Models (3)	Models (4)
Whether or not you use the Internet	1.3214*** (0.0337)	0.3727*** (0.0538)		
Frequency of Internet use			0.4022*** (0.0100)	0.1272*** (0.0169)
distinguishing between the sexes		0.0954* (0.0427)		0.0955*** (0.0427)
(a person's) age		0.0599*** (0.0106)		0.0681*** (0.0107)
(Math.) age squared		-0.0009*** (0.0001)		-0.0009*** (0.0001)
matrimonial		-0.1103 (0.0653)		-0.1197 (0.0654)
Highest level of education		0.3320*** (0.0468)		0.3069*** (0.0474)
political profile		-0.0423 (0.0869)		-0.0420 (0.0872)
health status		0.1837*** (0.0293)		0.1813*** (0.0293)
Number of children		-0.0628** (0.0231)		-0.0585* (0.0231)
Annual personal income		0.4645*** (0.0219)		0.4585*** (0.0219)
Participation in social security		-0.2127 (0.0941)		-0.2060* (0.0942)
observed value	7224	5780	7224	5780

Note: ***, ** and * indicate significant at the 1%, 5% and 10% statistical levels, respectively, with robustness standard errors in parentheses.

The estimation results of other control variables show that: in terms of demographic characteristics, the employment rate of rural male residents is higher than that of females, which may be due to the influence of the traditional division of labor in the family, and females are more responsible for taking care of the elderly and children, reducing the probability of going out to be employed; age has an inverted "U"-shaped relationship with the employment participation rate of rural residents. It can be seen that middle-aged residents are more popular in the labor market; the education level will significantly increase the employment rate of rural residents, and the higher the education level, the more obvious the promotion effect. The higher education level significantly increases the employment rate of rural residents, and the higher the education level, the more obvious the promotion effect is. The coefficient before health status is significant and positive, indicating that individuals with better health status have a higher probability of participating in employment; the number of children also significantly affects the probability

of rural residents' employment, and has a negative effect on it. This is due to the fact that the care of children requires more energy consumption, crowding out the time for out-of-home employment. Annual personal income is statistically significantly positively correlated with employment at the 1% level, with better-off residents likely to have more solid primary capital accumulation and a stronger sense of employment, and often able to fully utilize the Internet. Otherwise, marriage, political affiliation and participation in social security do not have a significant effect on rural residents' employment.

4.2. Robustness Tests

In order to ensure that the conclusions are robust and reliable, this paper will conduct a robustness test in terms of replacing both the regression model and the core explanatory variables. First, the regression was conducted using the Logit model (Table 3). The results show that the regression coefficients of touchdown frequency are significantly positive regardless of whether control variables are added or not.

Second, "Is the Internet the most important source of information?" was further selected as a proxy variable for whether or not one uses the Internet and how often one uses the Internet. as a replacement variable for whether to use the Internet and the frequency of Internet use. Using the Internet as the main source of information in daily life will greatly increase the frequency of using the Internet, so there is a strong correlation between the two. According to the questionnaire setup, the answer with Internet (including cell phone Internet access) as the main source of information is assigned a value of 1, and the others are assigned a value of 0. The results in Table 4 show that Internet as the main source of information is still significantly and positively correlated with employment participation regardless of whether or not the control variables are added, which further validates the robustness of the regression results of Internet use and rural residents' employment as described above.

Table 3. Robustness test: Replacement of Logit models

variant	Model (1)	Models (2)	Models (3)	Models (4)
Whether or not you use the Internet	2.2155*** (0.0595)	0.5878*** (0.0911)		
Frequency of Internet use			0.6660***	0.2020***
			(0.0173)	(0.0286)
Other variables		containment		containment
constant term (math.)	-1.9202***	-11.2844**	- 2.4724***	-11.6878***
	(0.0484)	(0.6104)	(0.0577)	(0.6180)
observed value	7224	5780	7224	5780

Note: ***, ** and * indicate significant at the 1%, 5% and 10% statistical levels, respectively, with robustness standard errors in parentheses.

Table 4. Robustness test: Replacement of independent variables

variant	(1)	(2)	(3)
Whether the Internet is the dominant source of information	1.2195*** (0.0336)	0.4141*** (0.0550)	0.4116*** (0.0551)
personal factor		containment	containment
Other factors			containment
constant term (math.)	-0.8730***	-6.4687***	-6.3930***
	(0.0208)	(0.3260)	(0.3410)
observed value	7189	5752	5752

Note: ***, ** and * indicate significant at the 1%, 5% and 10% statistical levels, respectively, with robustness standard errors in parentheses

5. Further Discussion

5.1. Heterogeneous Effects of Internet Use on the Employment of Rural Residents

Use of the Internet or frequent use of the Internet can promote the employment of rural residents, but the conclusion is only an overall effect, and this section examines the heterogeneous effects in terms of age and social trust. In terms of age, referring to UNESCO's definition of the youth group, this paper defines the group under 45 years old as the youth group, and the group older than or equal to 45 years old as the middle-aged and old-aged group. For social trust, according to the questionnaire, "In general, do you agree that the majority of people in this society can be trusted?" The question "On the whole, do you agree that the vast majority of people in this society can be trusted?" was defined as the high social trust group, and those who answered "agree quite a bit" and "agree very much" were defined as the high social trust group, while those who answered "disagree very much", "disagree quite a bit "Strongly disagree" and "Strongly agree" were defined as high social trust groups, and "Strongly disagree", "Comparatively disagree" or "Can't say whether I agree or disagree" were categorized as low social trust groups.

As shown in Table 5, the regression coefficients for the youth group are higher than those for the middle-aged and old-aged groups in the age groupings of (1) and (2), indicating that the use of the Internet enhances the employment effect of the youth group to a greater extent. On the one hand, this may be due to the "digital divide" between the youth group and the middle-aged and old-aged groups, and there are differences in the ability to use the Internet [31]. On the one hand, it may be due to the "digital divide" between the youth group and the middle-aged and old-aged groups and the difference in their ability to use the Internet. Compared with the youth group, the middle-aged and old-aged groups are weaker in integrating and recognizing the information on the Internet, and lack the skills to use it. On the other hand, young people can quickly master new skills and obtain fresh information through the Internet. On the other hand, the middle-aged and old-aged groups have limited energy and trial-and-error costs, so they have less flexibility in their choice of employment and more fixed employment directions, and may not be easily disturbed by Internet information.

In terms of social trust, the regression coefficients of the two groups (3) and (4) show that the use of the Internet has a more obvious effect on the employment of rural labor groups with low social trust. Social trust is an emotional attitude toward the outside world, which arises in the process of daily interaction activities and influences individual interaction behavior [32]. Social Trust While the Internet broadens people's information channels, it also subtly affects people's attitudes toward social interaction and their trust in society. For people with low social trust, they are usually cautious about things and information around them, and most of them will not rely on media or third-party platforms to look for jobs. On the one hand, the Internet can increase their social frequency in the network world and get good interpersonal relationships, thus enhancing their trust in the surrounding society [33]. On the other hand, the Internet has shaped a more publicized and open society. On the other hand, the Internet shapes a more open and democratic public space, eases information asymmetry, and helps individuals gain greater opportunities for mutual trust and [34], in turn, more significantly promote employment participation of low-trust groups through the Internet.

Table 5. Heterogeneous effects test based on age and social trust

	(1)	(2)	(3)	(4)
	youth group	Middle and old age groups	High Social Trust Group	Low social confidence group
Internet usage	0.4968***	0.3510***	0.2947***	0.5179***
	(0.1183)	(0.0630)	(0.0199)	(0.0674)
Other variables	containment	containment	containment	containment
Pseudo R2	0.2328	(0.3264)	0.4029	0.3828
Observations	1966	3795	3784	1977

Note: ***, **, and * indicate significant at the 1%, 5%, and 10% statistical levels, respectively, with robustness standard errors in parentheses reporting marginal effects.

5.2. Mechanism Test of the Impact of the Internet on the Employment of Rural Residents

Table 6. Mechanism test based on the KHB approach

form	(1)	(2)
	Educational human capital	Health human capital
aggregate effect	0.3760***	0.3751***
	(0.0539)	(0.0540)
direct effect	0.3495***	0.3657***
	(0.0545)	(0.0540)
indirect effect	0.0264**	0.0337*
	(0.0084)	(0.0040)
Other variables	containment	containment
observed value	5757	5757

Note: ***, ** and * indicate significant at the 1%, 5% and 10% statistical levels, respectively, with robustness standard errors in parentheses

The previous studies have proved that Internet use has a significant effect on rural residents' employment, and this part of the paper will innovatively test the influence mechanism of Internet use on rural residents' employment from the aspects of "educational human capital" and "health human capital". In the definition of educational human capital, this paper chooses the frequency of reading newspapers in free time as a proxy variable for human capital, which is measured by the questionnaire "In the past year, did you often read books/newspapers/magazines in your free time?". This question. The frequency includes five categories: daily, several times a week, several times a month, several times a year or less, and never. In terms of health human capital, the questionnaire "In the past four weeks, how often did you feel depressed or frustrated" was used as a proxy indicator of individual health human capital. The values are 1, 2, 3, 4 and 5 in descending order, with larger values indicating higher health human capital for individuals.

Table 6 shows the results of the mediation effect test based on the KHB method. As shown in column (1), the indirect effect of education human capital is significantly positive at the 5% statistical level, which implies that Internet use can indirectly increase the employment level and participation rate of rural residents through enriching education and learning; the results in column (2) show that the indirect effect of health human capital is significantly positive at the 10% level, which suggests that the use of the Internet will promote the health literacy of rural residents through improving their employment status in the labor market. Further analysis shows that the estimated value of the indirect effect of education human capital accounts for about 7% of the total effect, and the estimated value of the indirect effect of health human capital accounts for about 9% of the total effect, indicating that health human capital plays a greater indirect role than the indirect effect of education human capital in the process of Internet use affecting rural residents' employment. Throughout the regression results, Internet use not only directly promotes rural residents' employment, but also indirectly promotes their non-farm employment by enriching

learning channels and improving rural residents' health literacy, and Hypothesis 2 is verified.

6. Conclusion and Recommendations for Response

In the context of digital village construction, digital technologies such as the Internet have far-reaching significance for the rural economy and rural residents' employment. Based on this, this paper uses data from the 2017 China Comprehensive Social Survey to demonstrate the positive impact and mechanism of Internet use on the employment of rural residents, and obtains the following conclusions: first, using the Internet can significantly increase the probability of employment of farmers, and the higher the frequency of using the Internet the higher the probability of employment of rural residents, replacing the model and using the Internet as the main source of information as a measure for the corresponding Second, the impact of the Internet has a heterogeneous effect, and its impact on the employment participation of young and low social trust rural residents is higher. Third, the mechanism of action shows that human capital is an important channel through which the Internet promotes farmers' employment, i.e., Internet use helps to enhance the educational and health human capital of the rural labor force and, in this way, promotes its employment participation rate.

In recent years, China's Internet has been developing rapidly, but it still faces problems such as unbalanced regional coverage of the Internet and a large development gap between urban and rural areas. Therefore, combining the findings of this paper, the following suggestions are made to release the employment effect of the Internet among rural laborers and help rural revitalization in the future: First, the government should increase investment to promote the popularization of the Internet in rural and remote areas, and improve the network infrastructure in rural areas through the construction of digital villages. At the same time, it is necessary to reduce the cost of Internet access, promote Internet access for all, and narrow the "digital divide" between urban and rural areas. Secondly, because the average human capital level of rural residents is low and their digital literacy is not high, it is difficult to give full play to the positive effects of the Internet. Therefore, we should strengthen skills training for rural groups in the use of digital technology, especially for middle-aged and old-aged groups, and emphasize the change of their way of thinking, so as to guide them to actively use the Internet to participate in employment. Thirdly, the Internet is also accompanied by information security problems, with more and more false information being released, while rural residents are less able to identify information. The government should strengthen the regulation of Internet information, guide the correct value norms, and improve the efficiency of employer-employee matching through the establishment of special employment platforms. Fourth, the government should improve the employment protection system for rural migrant workers, especially the protection of their rights and interests in the flexible employment mode, and encourage entrepreneurship-led employment and multi-channel flexible employment. In addition, financial subsidies and institutional safeguards for employment and entrepreneurship in rural areas should be increased, and the scale effect of the Internet should be more fully utilized.

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