

# *Research on Improving the Quality of Self-employment of Migrant Workers Based on Three-dimensional Capital*

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**Abstract:** In the context of mass entrepreneurship and innovation, self-employment has become an important choice for migrant workers' employment. In the past five years, the proportion of migrant workers engaged in self-employment activities in China has remained around 40%. However, the quality of self-employment of migrant workers is poor. The article empirically tests the relationship between human capital, social capital, psychological capital, and the quality of self-employment of migrant workers. The results showed that human capital, social capital, and psychological capital have a significant positive impact on their employment quality, and the impact of social capital is greater than that of human capital and psychological capital.

## 1. Introduction

Employment is the greatest livelihood. At present, China's economy is in a critical period of transformation in development mode, optimization of economic structure, and transformation of growth momentum, transitioning from high-speed growth to high-quality development. China is a populous country that has been facing significant employment pressure. During the critical period of economic structural transformation, structural contradictions have become more prominent. In the context of mass entrepreneurship and innovation, self-employment has become an important choice for migrant workers' employment. Self-employment, as a form of informal employment, has significant practical significance for stabilizing and expanding the employment market. In 2021, the total number of migrant workers in China was 292.51 million, including 133.09 million migrant workers entering the city. In the past five years, the proportion of migrant workers engaged in self-employment activities in China's urban labor market has remained around 40% [1]. However, compared to the stable growth of employment for migrant workers, the quality of self-employment for migrant workers is not optimistic. The quality of self-employment among migrant workers is closely related to their own capital stock (such as human capital, social capital, and psychological capital). But how does human capital, social capital, and psychological capital overall affect the quality of self-employment of migrant workers? This is precisely the focus of this article.

## 2. Literature Review

Since the United States proposed the concept of "quality of work and life" in the 1950s, research

on employment quality has begun. However, in the early days, scholars mainly conducted research on job satisfaction, job quality, employment quality, and other aspects. In 1999, the International Labour Organization (ILO) proposed decent work. The United Nations Economic Commission for Europe (UNECE) believed that employment quality should include seven dimensions: employment safety and ethics income and bonus, working hours and work life balance, employment security and social security, social dialogue, skill development and training, workplace relations and work motivation. The European Foundation (EF), Canada, New Zealand, the United Nations Economic Commission for Europe and the United States have successively proposed the evaluation system of employment quality [2-4]. It can be seen that foreign research mainly focuses on the macro level.

The research on employment quality by Chinese scholars began in the late 1990s. By reviewing the literature, Chinese scholars have mainly conducted research on the connotation of employment quality, influencing factors of employment quality, and evaluation of employment quality. Cheng Qi and Yin Ningbo (2003) first defined the connotation of employment quality, and they defined it from three aspects: the labor employment environment, the production efficiency of employees, and the contribution of labor employment to economic life [5]. Scholars have conducted research on the influencing factors of employment quality from macro, meso, and micro levels. Globalization has led to an accelerated frequency of labor resource allocation and reallocation, resulting in a decrease in employment stability, as well as phenomena such as scarcity of capital and an increase in labor supply but insufficient employment opportunities, leading to a decline in the quality of employment for workers [6]. The influencing factors at the meso level mainly target the college student population [7,8]. The research content at the micro level is relatively rich, and scholars have conducted research on the influencing factors of the employment quality of college students and migrant workers [9-16].

Looking at the existing research results, there have been relatively rich research results on employment quality both domestically and internationally. These research results provide an important theoretical basis for the research in this article. Existing literature has conducted in-depth research on the employment quality of college students and migrant workers (mainly employed farmers and migrant workers), but there is little research on the employment quality of the self-employed group of migrant workers. This article conducts research on this. There are differences in the employment characteristics between self-employed migrant workers and employed migrant workers, and their employment quality will also have certain differences. Therefore, studying the employment quality status of this group can help promote higher quality employment for this group.

### **3. Data, Variables, and Hypotheses**

#### **3.1. Data**

The data in this article is from the survey results of the Self-employed Employment Quality Survey Group of Tianjin Agricultural University from July to October in 2022. The questionnaires were distributed in the form of on-site distribution and questionnaire star distribution. We distributed 600 questionnaires, actually collected 570. 563 questionnaires were valid, with a questionnaire recovery efficiency of 93.8%. The research group provided training to the survey personnel before the survey, which to some extent ensured the quality of questionnaire filling. The survey objects are distributed across multiple provinces and regions across the country, making the survey samples representative to a certain extent.

## 3.2. Variables

### 3.2.1. Dependent Variable

The dependent variable is the quality of self-employment of migrant workers. On the basis of sorting out domestic and foreign employment quality indicators, and based on the characteristics of self-employed employment of migrant workers, this article believes that their employment quality indicators should include objective and subjective indicators. The objective indicators are measured from monthly income and weekly working hours, while the subjective indicators refer to employment satisfaction, mainly from the aspects of income level, working hours, working conditions, work pressure, career development, career stability, and social security level. Considering that each indicator is equally important for the quality of self-employed employment of migrant workers, this article adopts the method of determining weights based on equal weight to calculate the score of employment quality. As follows:

$$Sep = \frac{1}{9} \sum_{i=1}^9 x_i \quad (1)$$

### 3.2.2. Independent Variables

The independent variables include human capital, social capital, and psychological capital.

At present, scholars at home and abroad have basically reached a consensus on measuring human capital through education level, skill level, and health status. This article measures six indicators: education level, health status, length of work, number of skills, skill level, number of training sessions, and learning duration. According to the definition of social capital in the existing literature, social capital mainly comes from social networks, social trust and social participation. Based on relevant literature, social capital is measured using three indicators: network size, network density, and network quality. According to Luthans and other scholars' views, the measurement indicators of psychological capital include resilience (that is, strength in the face of difficulties), optimism, self-efficacy, modesty, calm, hope, initiative and other aspects of migrant workers' individual psychology [17]. The explanatory variables were all calculated using the method of equal weight averaging, and all three variables were continuous variables.

### 3.2.3. Control Variables

The main control variables include gender and marital status. Gender is the second categorical variable, with "male" as the reference category; Marriage status is also a second categorical variable, with "married" as the reference category.

## 3.3. Hypotheses

Workers with higher human capital can receive better income [18]. Xie Yong (2009) found through empirical research on migrant workers in Nanjing that migrant workers with higher human capital reserves are more likely to obtain formal labor contracts and have higher wage levels [19]. Other relevant studies have shown that education, as an important means of acquiring basic abilities and improving employment ability, can not only increase the probability and stability of migrant workers' employment, but also affect their ability to choose employment location, employment time, and industry category. Workers who obtain national vocational qualification certificates have significantly higher skill levels than undocumented workers. The higher the certificate level, the higher the skill level, and the significant income effect of the certificate. Based on the above research, this article proposes:

H1: Human capital has a significant positive impact on the quality of self-employment of migrant workers.

There is a causal relationship between social capital and the acquisition of resources. Individuals with strong social capital advantages maintain close contact with other individuals with advantages through "strong alliance" and establish internal sharing mechanisms within the organization to maintain long-term ownership of certain resource advantages. The viewpoint of Zhang Yu and Yang Caiyun (2011) is that the employment quality of the new generation of migrant workers is significantly influenced by social network class differences. They not only have limited social capital reserves, but also have low levels of employment quality [20]. Qian Fang and Chen Dong (2014) found that migrant workers who achieve employment through strong relationships have higher satisfaction with employment, while migrant workers who achieve employment through weak relationships have higher objective employment quality in terms of income and employment formality [21]. Based on the above research, this article proposes hypotheses:

H2: Social capital has a significant positive impact on the quality of self-employment of migrant workers.

The psychological capital theory suggests that individuals can stimulate more potential energy to have a positive impact on external behavior through effective management of psychological capital. Li Hua and Cao Xingtian (2011) pointed out a significant correlation between psychological capital and employability, and changing psychological capital can positively predict employability [22]. Shen Shijie (2018) found that the human capital possessed by the new generation of migrant workers with higher psychological capital has a better effect on improving their employment quality compared to the new generation of migrant workers with lower psychological capital. At the same time, their social capital has a better effect on improving their employment quality [15]. Based on these studies, this study proposes hypotheses:

H3: Psychological capital has a significant positive impact on the quality of self-employment of migrant workers.

## 4. Results

### 4.1. Sample Description

Among the 563 samples, there are 304 females, accounting for 54.0%, slightly more than males. In terms of age, there are 66 people between the ages of 18 and 25, accounting for 11.7%; 209 people between 26 and 30, accounting for 37.1%; There are 140 people between 31 and 35, accounting for 24.9%; 121 people aged between 36 and 45, accounting for 21.5%; 27 people aged 46 and above, accounting for 4.8%. From these data, we can see that the post-80s and post-90s generations have become the main body of self-employed migrant workers. From the perspective of education level, the proportion of students with a junior high school degree is 40.0%, the proportion of students with a high school (technical secondary school) degree is 25.0%, and the proportion of students with a college degree is 22.2%. From the perspective of marital status, 481 people are married, accounting for a relatively high proportion. From the current industry, the survey sample mainly engages in the residential service industry and wholesale and retail industry, accounting for 57.4% and 33.0% respectively. Self-employed migrant workers are limited in their industries due to economic capital, educational qualifications, and other limitations, and are concentrated in residential services and wholesale and retail industries.

### 4.2. Variable Distribution

Human capital, social capital, psychological capital, and employment quality all play equally

important roles in improving their levels. Therefore, this article adopts the idea of equal weight averaging to determine the weights. This method has also been widely applied by scholars both domestically and internationally. Table 1 shows the distribution of each variable.

Table 1: Variable statistics.

Variables	Mean	Min	Max	Std. Deviation	Variance
Human capital	2.83	1.14	5.00	0.98	0.95
Social capital	2.46	1.00	4.83	0.87	0.77
Psychological capital	3.48	1.25	4.88	0.81	0.66
Employment quality	2.53	1.11	4.46	0.80	0.65

### 4.3. Correlation Analysis and Collinearity Diagnosis

This article uses SPSS26.0 software and Pearson correlation coefficient to test the correlation between explanatory variables, control variables, and the dependent variable. Table 2 shows that the self-employment quality of migrant workers is significantly correlated with human capital, social capital, psychological capital, and marital status at the 0.05 level; The self-employment quality of migrant workers is not significantly related to gender.

Table 2: Correlation analysis.

		Human capital	social capital	psychological capital	Gender	Marriage
Employment quality	correlation coefficient	.374**	.477**	.282**	-.064	.153**
	Sig	.000	.000	.000	.131	.000

Table 3: Multicollinearity diagnosis statistical table.

	Index	Human capital	Social capital	Psychological capital
Collinearity diagnosis	Tolerance	.998	1.000	.999
	VIF	1.002	1.000	1.001

Before conducting regression analysis on the data, it is necessary to judge whether there is multicollinearity in the research data, so as to avoid the puzzle of regression analysis caused by the high correlation between the respective variables. The most commonly used indicators to judge multicollinearity are tolerance and variance inflation factor tests. Scholars generally believe that the smaller the tolerance, the more serious the multicollinearity. When it is less than 0.1, there is serious multicollinearity. The larger the variance expansion factor is, the more serious the multicollinearity is. When the VIF is greater than 10, there is serious multicollinearity. Table 3 shows the diagnosis results of multicollinearity. The minimum tolerance of human capital, social capital and psychological capital is 0.998, which is far more than 0.1, while the maximum value of variance expansion factor is 1.002, which is far less than 10. Therefore, there is no multicollinearity between the respective variables.

### 4.4. Regressive Analysis

Use regression analysis to test hypotheses. As shown in Table 4, Model 1 shows the impact of human capital on the quality of self-employment of migrant workers, with a standardized regression coefficient of 0.356. There is a positive correlation between human capital and employment quality. Model 2 is the impact of social capital on the quality of self-employment of migrant workers, with a standardized regression coefficient of 0.482. There is a positive correlation between social capital and

employment quality. Model 3 is the impact of psychological capital on the quality of self-employment of migrant workers, with a standardized regression coefficient of 0.279. There is a positive correlation between psychological capital and employment quality. From this, it can be concluded that assumptions 1, 2, and 3 have all been validated.

Table 4: Regression analysis statistical table.

Variables		Module 1	Module 2	Module 3
Independent variables	Human capital	0.356**		
	Social capital		.482**	
	Psychological capital			.279**
Control variables	Gender	-.042	-.057	-.054
	Marriage	.087	.166	.150
	Adjusted R <sup>2</sup>	0.145	0.255	0.100
	F	32.731	65.174	21.868

\* \*' indicates significant at the 0.05 level

## 5. Conclusions

Self-employment can alleviate employment pressure to a certain extent. The article mainly explores the relationship between human capital, social capital, psychological capital, and employment quality of self-employed migrant workers. This study focuses on self-employed migrant workers and proposes corresponding research hypotheses based on a review of relevant literature both domestically and internationally. This study mainly collected first-hand data through a questionnaire survey, and used SPSS26.0 to process and test the data. Empirical analysis was conducted on the employment quality of self-employed migrant workers from three theoretical perspectives: human capital, social capital, and psychological capital.

Firstly, the level of human capital and social capital of self-employed migrant workers is moderate, with an average of 2.83 and 2.46, respectively. The psychological capital score is relatively high, with an average of 3.48. From this, migrant workers should improve the human and social capital; Secondly, the overall quality of employment for self-employed migrant workers is relatively low. The average score of self-employed migrant workers' employment quality constructed through 9 measurement indicators is 2.53; Thirdly, there is a significant positive correlation between the human capital, social capital, psychological capital, and employment quality of self-employed migrant workers. Among them, the impact of social capital is greater than that of human capital and psychological capital, and there are certain differences in the magnitude of the impact of the three variables on the employment quality of self-employed migrant workers.

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