

A Study on the Self Rated Health Status of Migrant Workers in Cities: A Linear Regression Analysis Based on CGSS2020

Enhao Wei

Department of Sociology, East China University of Political Science and Law, Shanghai, 201600, China

211127010102@ecupl.edu.cn

Abstract. With the gradual relaxation of the registered residence policy, the number of migrant workers in cities has increased rapidly in recent years, and the social health problems caused by the massive influx of this group of people into cities have become a problem that social development must face directly. This article is based on the 2020 CGSS data and uses SPSS statistical software to conduct linear regression analysis on the health level of this group evaluated by themselves. This study selects self-rated health as the indicator to measure the health level of this group, sourced from the question "How is your health condition?" in the questionnaire. Researchers have found that self-rated health status is significantly correlated with age, education level, and sense of life happiness. The research on the self-assessment of health status of this group is helpful to promote the progress and improvement of social welfare policies for this group, and has important reference value for future strategic planning such as the construction of the national medical and health service system, the improvement of the registered residence system, and the transformation of population policies.

Keywords: Migrant workers entering cities, self-assessment of health, linear regression.

1. Introduction

Self-rated health is a comprehensive evaluation of one's own health based on their actual physical and mental condition and social function, which is influenced by multiple factors. Moreover, compared with objective health evaluation indicators, self-assessment of health has greater value in improving lifestyle habits, enhancing health literacy, and promoting individual health development.

Since the beginning of the 21st century, scholars in the relevant academic circles in China have begun to pay attention to the important indicator of self-assessment of health. In the early stages of development, scholars primarily aimed to clarify the relationship between self-rated health and objective health, as well as how to distinguish between the two [1]. With the huge development of China's aging population in the 21st century, the academic community has taken the lead in introducing self-assessment of health into the field of elderly health research. Through a large amount of quantitative statistical analysis and research, fruitful academic achievements have been achieved. So far, self-assessment of health has been widely applied in various research fields [2].

At present, scholars in China have conducted research on the issue of imbalanced health among mobile populations by incorporating spatial information. They have analyzed the health status and influencing factors of mobile populations in China, and analyzed the differences between different geographical regions, providing theoretical support for promoting the balanced development of the health status of mobile populations. Self-rated health is a widely used indicator in evaluating the health condition of elderly people. In massive social researches in China, particularly for the elderly, using self-rated health marks to measure health condition has advantages that are not available in other measurement indicators [3]. So, in the initial stage of relevant research in China, studies focusing mainly on elderly people have sprung up like mushrooms after rain, laying the foundation for the development of self-evaluation health research in China. However, self-assessment of health status is easily influenced by the socio-economic status and social environment of the respondents, and sometimes there may be some deviations. The random error in self-assessment of health levels caused by differences in characteristics between different groups can lead to inaccurate questionnaire

results. Domestic and foreign scholars have found through empirical research that most social, economic, and demographic characteristics, such as age, gender, income, and place of residence, can lead to biased responses and reporting of self-assessment health indicators. Generally speaking, elderly, female, and low-income individuals tend to have a lower health cutoff point, which is that they are more likely to believe that their health condition is good, while those with higher income levels are more likely to report their health condition accurately [4-7].

Jylh ä believes that self-assessment of health status has become an important indicator in social sciences to measure the overall health status of individuals and regional populations [8]. Lei Peng believes that self-assessment of health is an individual's self-assessment of their own health status. This indicator can comprehensively reflect an individual's subjective feelings and physical function status, and can directly understand the comprehensive health status of a country or region's population [9]. As far as China is concerned, urban migrant workers are often considered one of the most vulnerable members of society. They are usually engaged in the so-called "3D" work - dirty, dangerous, demanding - and because of China's unique registered residence system, these people often hide from public view and public policies, and their basic rights and interests are not effectively protected [10].

However, currently, the vast majority of research on self-assessment of health status in China is concentrated on the self-evaluation of health level among the old, and there are few studies that analyze it from the perspective of migrant workers, a special occupational group; As the main force driving China's reform and opening up, industrialization, and urbanization, the health status of migrant workers in cities affects the healthy development of Chinese society, economy, and other aspects. Therefore, it is necessary to understand the self-evaluation health status of this group.

2. Object and Method

The data source of this study is the household economic data table in the CGSS2020 table in the CFPS database, and all migrant workers entering the city are selected for analysis.

Object selection selected 1410 samples engaged in non-agricultural labor and with agricultural household registration by controlling for two variables: household registration and occupation. All data were included in the analysis.

2.1. Basic Information of Survey Subjects

Among 1410 valid samples, 421 (29.9%) reported a good self-rated health level, while 989 (70.1%) reported a poor self-rated health level. Overall, the self-evaluation health level of migrant workers entering the city is poor.

2.2. Indicator Definition

2.2.1 Self rated health status

According to the answer to the questionnaire question "Do you consider your actual physical health status is", there are a total of 5 situations: "quite unhealthy", "relatively unhealthy", "average", "relatively healthy", and "quite healthy". Assign value labels to the above five situations in ascending order, starting from the number 1 to 5. This variable is the dependent variable.

2.2.2 Age

Since age is not a variable in the original data, it is sorted in ascending order after data processing.

2.2.3 Education level

Based on the answer to the questionnaire question "Your current highest education level", there are a total of the following situations and value labels are assigned in ascending order: "1=No education received", "2=Private school", "3=Primary school", "4=Junior high school", "5=Vocational high school", "6=General high school", "7=Technical secondary school", "8=Technical school",

"9=College", "10=associate degree", "11=undergraduate degree", "12=graduate and above" are another independent variable.

2.2.4 Happiness in life

According to the answer to the questionnaire question "Overall, do you reckon your life is happy?", the five results are "quite unhappy", "relatively unhappy", "cannot be said to be happy or unhappy", "relatively happy", "quite happy", and assigned values in order, from 1 to 5.

2.3. Data Analysis

Data analysis uses SPSS 26.0 for data processing and analysis. Due to the fact that the dependent variable "self-assessment of health status" is an ordered multiclass variable, a linear regression model was chosen for regression analysis to discuss the effects of education level, age, and gender on individual self-assessment of health status, with $P < 0.05$ as the standard, indicating that the analysis results are statistically significant.

3. Data Results

3.1. The Influence of Age on Self-rated Health

Firstly, the linear regression analysis results show that age has an impact on the self-rated health of migrant workers entering the city. From Table 1, the negative value of the standardization coefficient beta and the subsequent $P < 0.05$ indicate that age significantly affects the self-evaluation health condition of the population, and it has a negative impact. As age increases, physical fitness decreases, physical function declines, and the probability of illness increases. Individuals themselves may choose to lower their evaluation of their health level. It is consistent with the existing research results on the influence of age on the self-evaluation health of the old, indicating that this conclusion is universal, that is, age has a significantly negative effect on the self-assessment health level of all individuals in society.

Table 1. Linear regression analysis table

Dependent variable	Independent variable	Standardized Coefficient	Significance
Self-rated health	Age	-0.251	0.000
	Education level	0.160	0.000
	Happiness in life	0.247	0.000

3.2. The Influence of Education Level on Self-rated Health

Secondly, the linear regression analysis results show that the educational level has an impact on the self-evaluation of the health of migrant workers entering the city. From the standardized coefficient beta in the graph, which is positive and $P < 0.05$, it can be seen that educational level has a significantly positive influence on the health level of the group. That is to say, if the education level is higher, the self-evaluation health condition of the group will be better. The reason for this result is likely to be that the education level have something to do with the individual's health literacy, health awareness, and healthier daily behavior habits, resulting in a higher level of self-assessment of their health condition.

3.3. The Influence of Life Happiness on Self-rated Health

Finally, the analysis of the effect of life happiness on self-evaluation health status. From the standardized coefficient beta in the graph, which is positive and $P < 0.05$, it shows that the level of individual happiness in life has a significantly positive influence on the health status of migrant workers. This indicates that the higher the level of individual happiness in life, the better their evaluation of their own health level. This factor has a strong subjective color and is strongly correlated with health. In general experience, the improvement of material life often affects an individual's

evaluation of the subjective spiritual level, which can to some extent explain the mechanism of influence between the two. In addition, the level of individual life happiness is also influenced by many factors such as family, personality, and marriage. Previous studies have shown that factors such as family, personality, and marriage have a significant positive correlation with life happiness. Therefore, the relevant conclusions can be combined with the findings of this study. For migrant workers, factors such as family and marriage also have a significant influence on their self-evaluation health condition.

4. Conclusion

The research results show that age, education level, and sense of well-being have an important influence on self-rated health. In terms of age, these results are consistent with previous studies. Age has a higher importance among the many influencing factors of self-rated health. On the one hand, these differences can stem from the fact that age, as one of the demographic characteristics, can influence the population's own evaluation of public health services; On the other hand, as age increases, physical function declines, physical fitness deteriorates, and the risk of illness increases, which can also lead to a decrease in the health evaluation of this group of people. In addition, education level and happiness in life also have an important impact on self-rated health. However, this study also has certain shortcomings, as previous studies often focused on the self-evaluation health of the old, and there is currently very little research on these two influencing factors in China. Moreover, the processed sample data is also limited, so further research is needed to prove whether there is a significant positive impact of the two factors on the self-evaluation health of migrant workers.

In summary, age, education level, and sense of life happiness are the main influencing factors for the self-assessment of health status of migrant workers in cities. In the future, it is hoped that more research on the self-evaluation of health condition of this group can not only promote the attention of individuals and society to the health status of this group, but also help to promote the progress and improvement of social welfare policies for this group, which has important reference value for the evolution of the national registered residence system, the revision of population policies and other strategic planning in the future.

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