



An overview of the current situation and problems of elderly labour supply in Heilongjiang Province ---- based on observational indicators of influencing factors

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Abstract. In recent years, as demographic problems such as declining fertility rates, increasing population ageing and a shortage of school-age labor have intensified, it has become essential to tap the potential of the elderly in the labor market and to explore the current situation and problems of the labor supply of the elderly. This paper provides a systematic review of the factors influencing the labor participation of the elderly, summarizes the influencing factors into three dimensions: demographic characteristics, family factors, and health factors, and describes their influence on the labor participation of the elderly. Taking Heilongjiang Province as an example, we analyse the current situation of labor participation of the elderly and put forward countermeasures. The aim is to improve and promote the labor participation of the elderly in the context of "active ageing", rationally develop the human resources of the elderly, and achieve high-quality economic and social development.

Keywords: Heilongjiang Province; labor force participation rate; elderly people

1 INTRODUCTION

With the rapid socio-economic development and the continuous transformation of modern society, the age structure of China's population has also undergone great changes, and the degree of aging is increasing. As the third province in China with an ageing population, Heilongjiang Province has been entering an ageing society since 2005. As of 2022, 15.61 per cent of the population in Heilongjiang Province will be 65 years of age or older. The accelerating pace of population ageing has put pressure and obstacles on economic and social development. First, population ageing has led to a shortage of labor supply, resulting in a decline in the productive capacity of society. Secondly, the growing number of elderly people has led to a rise in the old-age dependency ratio, putting great pressure on young adults. Thirdly, ageing will exert greater pressure on government revenue and expenditure. At the same time, however, more and more elderly people nowadays expect to realise their self-worth and contribute to society

through participation in socio-economic activities after reaching retirement age. Therefore, guaranteeing and promoting the employment of the elderly population is of great significance in terms of the economy, society, the family and the elderly as individuals.

This paper focuses on the issue of labor participation of the elderly, takes Heilongjiang Province as the research object, analyzes the current situation of labor participation of the elderly, compiles and summarizes the relevant literature on the influencing factors of labor participation of the elderly in the academic circle, and explores how demographic characteristics, family factors, health factors affect the labor supply of the elderly to provide experience and reference to deal with the problem of structural shortage of the labor force in the future of Heilongjiang Province brought by the aging society. This will provide experience for Heilongjiang Province to cope with the structural shortage of labor brought by the aging society in the future.

2 CURRENT SITUATION AND PROBLEMS OF LABOR PARTICIPATION OF THE ELDERLY IN HEILONGJIANG PROVINCE

2.1 Statistical analysis of the population structure of Heilongjiang Province

Table 1. Changes in the age structure and dependency ratio of China's population, 2005-2021 (unit: 10,000 persons; per cent)

Year	Total population	0-14 years old	15-64 years old	65 years over	Child dependency ratio	Old-age dependency ratio	total dependency ratio
2005	3820	563.7	2966.5	289.8	19.0	9.8	28.8
2010	3833	458.4	3055.7	318.9	15.0	10.4	25.4
2015	3529	391.7	2752.6	384.7	14.2	14.0	28.2
2020	3171	327.4	2349.0	494.6	13.9	21.1	35.0
2021	3125	306.0	2292.0	524.0	13.3	22.8	36.1

Source: Official website of the Heilongjiang Provincial Bureau of Statistics

As show in table 1. According to the Heilongjiang Provincial Statistical Yearbook 2022, The population aged 0-14 has been declining year by year, which is directly related to China's fertility policy; the working population aged 15-64 has also shown a declining trend in general, because the group born at the peak of fertility in the 1960s and 1970s has begun to turn into an elderly population; and the total number of elderly people has been changing in line with the total number of the population, which has led to an increasing dependency ratio for the elderly population in China.

Over the past decade, China has implemented a population policy of liberalising population growth due to the ageing of the labor force structure and insufficient labor supply. However, limited by the change in people's thinking and the pressure of economic life, the effect of the policy is not ideal, after the implementation of the policy there was a short-lived fertility peak, and soon the birth rate and the natural population

growth rate continued to decline, the natural population growth rate declined markedly, as can be seen from Fig. 1, there was a negative growth rate from 2015 onwards, coupled with the impact of COVID-19 epidemics, and the natural population growth rate in 2020 and 2021 fell to the the bottom. In contrast, the proportion of elderly people over 65 years old is rising, which is the result of the population born in the 1960s during the period of high birth rate into old age, based on the previous analysis of the birth rate of the population, the number of elderly people and the proportion of the total population of China in the next ten years will also continue to rise.

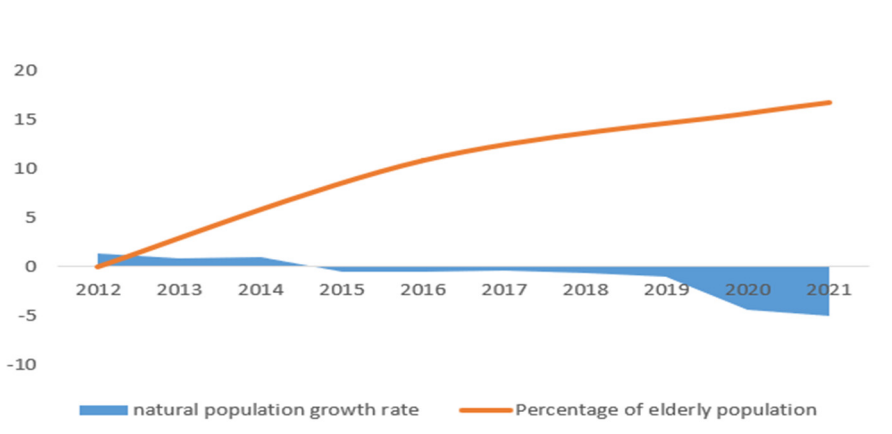


Fig. 1. Information on the natural population growth rate and the change in the proportion of the elderly population in Heilongjiang Province, 2012-2021

2.2 Problems in the employment of the elderly population in Heilongjiang Province

With the demographic changes, the size of the elderly population aged 65 and above in Heilongjiang Province in 2021 has exceeded 5.24 million people, but according to the data released by the National Bureau of Statistics of China in 2020, the number of labor force participation of the elderly population aged 65 and above in Heilongjiang Province is only 49,884. This reflects the current trend of population ageing in the midst of rapid industrialization and urbanisation, and the gradual severity of the problem of employment for the elderly.

There is an imbalance in the distribution of employment among older persons, both geographically and by industry. Firstly, in terms of geographical distribution, urban older persons generally have a fixed pension, whereas rural older persons lack a fixed pension, and most of them earn financial remuneration for their livelihood by participating in social labor, so that the employment rate of rural older persons is higher than that in towns and cities. In terms of the structure of employment, the majority of older persons are employed in the primary sector, such as agriculture, forestry, animal husbandry and fisheries, followed by the tertiary sector, with the secondary sector accounting for the least amount of employment.

The employment of older persons itself faces several difficulties. Firstly, older persons lack vocational skills and information technology, making it difficult for them to adapt to the modern job market. Secondly, the employment of the elderly also faces the problem of age discrimination, and many enterprises are reluctant to recruit the elderly. Finally, the relatively weak physical condition of the elderly makes certain occupations unsuitable for them.

3 FACTORS AFFECTING LABOR SUPPLY IN OLD AGE

3.1 Demographic characteristics

In terms of age, Ercilia Dini (2010) argued that workers' physiological functions and health levels decline as they age, so the likelihood of participating in social labor decreases significantly^[1]. In terms of gender, Huang Feng (2012) found through a survey that women are more responsible for household labor and that female older people are less likely to participate in labor than male older people for reasons of household division of labor^[2]. In terms of level of education, Yang Cuifen's (2018) study showed that educational attainment is positively associated with labor force participation among older people^[3].

3.2 Family factors

Family factors mainly include variables such as family size, marital status and intergenerational care.

In terms of family size, Wu Haisheng (2008) concluded that both the number of family members and the number of children working outside the home have a significant effect on the labor force participation of the elderly^[4]. In terms of marital status, Liao Yujuan (2013) concluded that the employment rate of older adults with spouses was higher than that of older adults without spouses^[5]. In terms of intergenerational relationships, Through their study, He Yuan (2015) similarly argued that intergenerational caregiving would advance the retirement age and withdraw older adults from the labor market^[6].

3.3 Health factors

Health status is a key indicator of labor participation among older people. Among the research results, Elisabetta Trevisan (2016) by finding that the health level of the elderly has a significant impact on their labor participation^[7]. Fang Tao (2015) found that the improvement of health status of the elderly can bring more than 10% increase in labor participation^[8].

4 COUNTERMEASURES AND RECOMMENDATIONS

4.1 Timely legislative amendments to protect and promote labor participation of the elderly

In terms of employment legislation for the elderly, the United States has enacted the Age Discrimination in Employment Act, and Japan has enacted the Act on Employment Stability for the Elderly. Drawing on the experience of various countries, legislative work can be carried out around the prohibition of discrimination against the elderly, the promotion and protection of the employment of the elderly, and employment training and employment assistance for the elderly. The Social Insurance Law should be amended at an appropriate time to extend the coverage of work-related injury insurance and unemployment insurance from employees to all employed workers in society, including older persons, so as to establish a social security system that covers the entire population in a systematic and continuous manner. The Employment Promotion Law of the People's Republic of China has been amended to add special provisions on the recruitment and employment of older workers, so as to protect the labor rights and interests of older persons.

4.2 Strengthening education and vocational skills training for the elderly

The establishment of a lifelong learning, on-the-job education and training system is the key to raising the level of human resources for the elderly. To this end, a lifelong learning system should be established to improve the knowledge quality and education level of all workers, including the elderly, and to strengthen the foundation of human capital for society as a whole; on-the-job training and skills upgrading training should be carried out extensively by making use of universities for the elderly and open universities, so as to improve the knowledge quality and work efficiency of elderly workers; and re-employment training should be carried out through the Internet, online learning, and other means in a multifaceted manner, so as to help elderly workers reintegrate into the labor market. To give full play to the functions of local senior citizens' associations and talent centres for the elderly, establish and improve information platforms for senior citizens' talents, and promote the effective connection between training activities and the job market; and, centered on the community, to carry out extensive community-based senior citizens' education, enriching the content and forms of senior citizens' education, and helping to empower senior citizens to participate in the labor market.

4.3 Building a market environment and industrial conditions for the employment of older persons

First, labor market reform should be accelerated and a flexible and elastic labor market should be established. The main reasons for the low labor participation rate of China's elderly population are: first, the relatively low employment income of the elderly. The

second is the lack of incentives in the labor market system and policies; in particular, the imperfections in the retirement system and the pension system have led to a very low rate of re-entry of the elderly into the labor market, and even early retirement due to the negative incentives of the pension system. To that end, the income level of older employed persons should be guaranteed and raised, and the level of pension payments should be increased to stimulate the participation of older persons in the labor market; enterprises and employers should be encouraged to hire older workers through tax breaks and subsidies. Secondly, industrial restructuring should be accelerated and the development of ageing and service industries should be vigorously pursued, so as to provide more jobs and employment opportunities for older workers.

5 CONCLUSIONS

Against the backdrop of an ageing population, the total amount of human resources for the elderly in China is large and will continue to grow rapidly. The State should advocate and encourage, under the synergistic action of government, market, society and individuals The State should advocate and encourage the participation of older persons in social and economic development through the concerted efforts of government, the market, society and individuals.

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