

The dilemma and countermeasures of rural elderly education under the background of intelligent education - based on the research and analysis of the rural elderly in J City

Bin CHEN¹, Yifei ZHANG²

1. Jinhua Open University, Jinhua 321000, China

2. Nanchang Qingshanhu School, Nanchang 330029, China

Abstract: China is rapidly entering the aging society, and the vast number of rural elderly group pension problems have gradually become the focus of China's rural development. Vigorously developing rural education for the elderly is an inevitable choice to deal with the active aging. However, the exploration of rural education for the elderly in China is still in its initial stage, facing many problems. Based on this, this paper takes the rural elderly residents of J City as the research object, selects four representative villages in J City to investigate the rural elderly education situation, analyzes the development plight of rural elderly education in J City, and puts forward a series of countermeasures, in order to provide useful reference for solving the plight of rural elderly education in China.

Key words: rural education for the elderly; wisdom education; dilemma; countermeasures

1 Research background and significance

The Party's 20th Report emphasizes the implementation of the national strategy of actively responding to the aging country, and the solution of the rural aging problem is an important measure for the implementation of the national active aging strategy. The Notice of the State Council on the Issuance of the 14th Five-Year Plan for the Development of the Elderly (No.35, 2021) further emphasizes the development goals of "building a smart society that takes into account the needs of the elderly" and "innovating and developing education for the elderly". With the acceleration of urbanization, the problem of the rural elderly has gradually become the focus of rural development. The proportion of the rural elderly population in China is relatively high. However, due to the lack of resources, economic backwardness and other conditions in rural areas, the rural elderly still have great difficulties in integrating into the smart society.

"Wisdom education" is defined as an approach that involves the construction of a technology-fused learning environment to enable "teachers" to implement efficient teaching methods, and to allow "scholars" to access appropriate personalized learning services and experience. It includes five key elements: modern education system, teacher system, students' information awareness, wisdom learning environment and wisdom teaching methods [1]. With the deep integration of wisdom + education and the continuous popularization of the application of intelligent technology in rural areas, it is feasible to use intelligent education to improve the quality and quantity of education for rural elderly.

2 Research technique and research method

The subject of this study is the rural elderly population. According to Article 2 of the Law on the Protection of the Rights and Interests of the Elderly, the starting point of the elderly is 60 years old, so this study takes the elderly over 60 years old as the sample. Considering the actual situation of economic development, cultural quality and population number, four rural areas of J City were selected to conduct field research to ensure the authenticity and effectiveness of the survey.

The research group used a random sampling method in the four selected rural survey areas. During the survey, 200 questionnaires were distributed and 183 were collected, and after excluding invalid questionnaires, 170 valid questionnaires were obtained. At the same time, we visited four rural cultural halls or rural activity centers for the elderly, conducted in-depth interviews with the heads of several rural activity centers for the elderly and the local elderly, and obtained more real first-hand information, including wisdom education, education expectations, learning needs, basic information, family factors, etc. After effective sorting, SPSS statistical software, Excel etc. analyzed the data and obtained more effective information.

3 Research finding

3.1 Basic information of the survey respondents

In the valid questionnaire of this survey, 66 males and 104 females completed the paper, with the proportion of 38.82% and 61.18%, respectively. The proportion of male and female was not deliberately controlled, which was the result of random questionnaire. In terms of age distribution, 23 people aged 61 to 65, accounting for 13.53% of the total number of respondents; 24 people aged 66 to 70, accounting for 14.12% of the total number of respondents; 41 people aged 71 to 75, accounting for 24.12% of the total number of respondents; 42 people aged 76 to 80, accounting for 24.71% of the total number of respondents; 40 people aged 81 and above, accounting for 23.53% of the total number of respondents.

According to the data of the questionnaire survey, the educational level distribution is as follows: 56 are illiterate, accounting for 32.94%; 58 have completed primary school, accounting for 34.12%; 41 have completed middle school, accounting for 24.12%; 14 have completed high school, accounting for 8.24%; and 1 has a university degree or higher, accounting for 0.59%. Before retirement, occupation distribution was: 6 employees in Party and State organs and institutions, accounting for 3.53%; 7 laborers, accounting for 4.12%; 8 self-employed, accounting for 4.71%; 120 farmers, accounting for 70.59%; 10 freelancers, accounting for 5.88%; 19 other occupations, accounting for 11.17%. Living conditions: 67 individuals live with children, accounting for 39.41%; 76 individuals live with spouses, accounting for 44.71%; 20 individuals live alone, accounting for 11.76%; and 7 individuals live with others, accounting for 4.12%.

After in-depth interviews, I learned that they have lived in the countryside for a long time and have to farm and work in their old age. Until their strength cannot keep up with their physical strength, the labor intensity will be appropriately reduced. It is common for the rural elderly aged 61-65 to go out to work, and fewer enter the "retirement" pension stage. A large proportion of the rural elderly aged 66-70 are engaged in farming in rural areas, and their health condition is better than that of urban elderly who have more leisure time.

3.2 The current situation of rural elderly education under the background of intelligent education

Focusing on the current situation of education for the rural elderly under the background of intelligent education, this study designed a questionnaire to focus on the situation, methods, digital literacy ability, and the learning willingness to participate in rural education for the elderly.

The study found that the number of rural elderly people in J City was balanced, with 84 people using smart devices, accounting for 49.41%, and the number of people not using smart devices was 86, accounting for 50.59%. Among them, the most commonly used smart devices are smart phones and smart TVs, with 59 people using smart TVs, accounting for

70.24%; 75 people using smart phones, accounting for 89.29%; 14 people using computers, accounting for 16.67%; 5 people using smart watches, bracelets and others, accounting for 5.95%.

The most commonly used mobile phone software for the elderly in rural areas is WeChat, which is used by 100% of smartphone users. The more commonly used mobile phone software is TikTok, Kuaishou, Kuahotspot and other video software, mainly used to obtain news, health, entertainment and other information. In the questionnaire, the number of rural elderly groups who participated in online courses through mobile phone or smart TV was 5, accounting for 5.95%. According to in-depth interviews, the online courses they participated in were mainly WeChat group health lectures.

When problems occur with smart devices, the rural elderly groups mainly seek solutions to their problems by asking their children for help. The specific data is as follows: the number of people with unsolved problems is 12, accounting for 14.29%; the number of people for exploration is 19, accounting for 22.62%; the number of people asking children for help is 55, accounting for 65.48%; the number of people asking acquaintances for help is 30, accounting for 35.71%; the others are 10, accounting for 11.9%.

Comprehensive questionnaire survey and field interview research results revealed that the proportion of rural elderly using smart devices has basically reached nearly half. The main purpose of using smart devices is to meet the demand of social interaction, entertainment and information access, the most commonly used functions are making phone calls, watching videos, and browsing short videos, etc., and smart devices are less used or hardly used to participate in elderly education [2].

4 Analysis of the practical dilemma and causes of rural education for the elderly under the background of intelligent education

Due to imperfect policies, services, technology, and other aspects, the rural elderly education work is facing many practical difficulties, which need the joint efforts of the government, society and educational institutions to solve them.

4.1 Weak learning awareness

Due to the cultural level, living habits, social environment and other reasons, the learning awareness of participating in the elderly education is weak. Most of the rural elderly generally have low cultural literacy and low digital literacy ability, and their awareness and attention to education is relatively low.

4.2 Lack of educational resources

In rural areas, the development of education for the elderly is relatively lagging behind, and the educational resources are seriously insufficient. This is reflected not only in the weak hardware setting of educational facilities, teaching materials, teaching equipment and other hardware, but also in the shortage of digital teaching resources, network platforms, professional teacher resources, and educational funds. Most rural education places for the elderly are rebuilt from primary schools, kindergartens, conference rooms, cultural halls and so on. Without suitable for aging design, modern teaching facilities are out of the question. In software, first, the online learning platform for the rural elderly is not yet perfect, and there is no basic condition for implementing intelligent teaching; second, the content of education resources for the elderly does not match the needs of the rural elderly.

4.3 Weak teaching foundation based on intelligent teaching forms

Intelligent teaching refers to a new teaching model based on information technology, where teachers and students conduct teaching and learning through the Internet. With the deep integration of information technology and education, intelligent teaching has been widely applied in daily education and teaching. However, in rural elderly education, traditional teaching is still the main form, and online teaching is very weak. Firstly, due to the limited digital literacy ability of the elderly population in rural areas, it is difficult to promote online teaching models. The system and mechanism of

rural elderly education are not yet perfect, and the relevant operational guarantee mechanisms are also not sound enough. Secondly, there is insufficient policy support for the education of elderly people in rural areas. Although the importance of education for the elderly in rural areas has increased in recent years, the implementation of relevant policies has not been fully supported, and there is a lack of specific guidance and support measures, resulting in difficulties in effectively ensuring funding, teachers, and educational facilities for rural elderly education.

4.4 Lack of teachers in rural areas

The education for the elderly in rural areas is most lacking in the learning of teachers who are willing to serve the elderly. The rural economy is relatively backward, transportation is inconvenient, and there are fewer professional teachers willing to engage in elderly education. There are many volunteers in society who provide basic education in rural areas, but there is little investment in elderly education. Without teachers, it is difficult to start the education of elderly people in rural areas.

5 Development path of rural education for the elderly

5.1 Change ideas for the elderly and create a learning atmosphere

Rural education for the elderly is an important part of the lifelong education system and one of the important measures to solve the problem of rural pension. Rural education for the elderly is helpful for the elderly to realize their self-value, enrich the lives of the elderly and build a new socialist countryside. Government departments at all levels should widely publicize it and improve the public's understanding of rural elderly education. Governments at all levels and education authorities should establish the concept of active aging, encourage educational institutions, social forces, families and individuals to participate in the education for the elderly, build rural elderly education teams that know the situation and meaning, and carry out various forms, rich channels and multi-level education for the rural elderly.

During the process of rural revitalization, it is essential to prioritize policies and environments that cater to the education of the elderly and actively create a good rural education atmosphere for them. First, broaden the construction of the platform, strengthen the promotion of the distance education learning platform, make good use of the multimedia distance education platform for the elderly, strengthen the construction and use of the distance education platform for the elderly, actively introduce the social school-running mode, and implant the intelligent audio-visual education platform into the distance education platform for the elderly. The second is to learn the typical experiences and practices. Third, take the construction of "digital countryside" as the starting point, give full play to the experience of the elderly in serving rural governance, and help the rural elderly to become lifelong learners in a real sense [3].

5.2 Optimize educational resources and implement precise teaching

First, strengthen the integration of educational resources, promote the docking and integration of provincial and municipal educational resources for the elderly and counties, townships and villages, and jointly build and share high-quality learning resources for the elderly. The second is to strengthen the rural elderly education teachers, increase the research on the rural elderly education, promote the rural elderly education reform from the theory and practice, create an education model, actively expand the coverage of rural quality education for the elderly, and promote the overall level of rural education. Third, explore high-quality courses with local characteristics, encourage rural development of characteristic courses, carry out various forms of teaching activities, and create a brand of elderly education with rural regional characteristics. Fourth, we will accelerate the integration of platforms for pooling resources, building systems, building platforms, creating models, and strengthening teams, encourage local enterprises and society to participate, ease the "generation gap between urban and rural areas", and fill the "digital divide".

5.3 Optimize learning methods and build a "wisdom +" rural education model for the elderly

Government departments at all levels and education authorities should actively promote the reform of rural education for the elderly, increase investment in rural education for the elderly, build a "wisdom +" joint service platform for rural elderly education, establish an intelligent and digital learning mode for the rural elderly, and enrich the intelligent life experience of the elderly. First, build a platform, improve the infrastructure, transform, upgrade and extend the existing lifelong learning platform, expand the radiation of smart education in rural areas, and push rich and colorful online teaching resources to rural areas. Second, improve the teaching methods by using the combination of online and offline methods, to accurately serve the learning needs of the rural elderly groups.

5.4 Strengthen top-level design and improve the security system

"The state and society should take measures to improve the social security system for the elderly, and gradually improve the conditions for ensuring their life and health and participating in social development, so that they can have access to care, medical care, work, learning and enjoyment." In order to promote the reform of education for the elderly, we should strengthen the top-level design, and form a system from policy support, management, course content, assessment, incentive mechanism and other directions [4].

6 Conclusion

Education for the elderly is an inevitable choice to meet the needs of the elderly for resocialization and active aging, and it is an important part of the lifelong learning social system. The number of elderly people in rural areas is large, but due to the difference between urban and rural development, the development of education for the elderly in rural areas faces many problems. In view of the problems existing in the rural education for the elderly in China at the present stage, we should strengthen the weak links, further enhance the participation of the rural elderly in the elderly education, and strive to enhance the sense of gain and happiness of the rural elderly, and stimulate the endogenous impetus of rural revitalization.

Acknowledgments

Research results of Zhejiang Open University in 2023 (Project No.: XKT2023Y24 Practical Research on the Construction of Digital Resources of Rural Elderly Education based on the Background of Smart Pension), 2023 Professional Development Project of Domestic Visiting Scholar Teachers in Zhejiang Province (Project No.: FX2023193 Construction and Application of Adult English Wisdom Teaching Mode Based on BOPPPS).

Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Yuen AHK, Park J. 2012. *The Digital Divide in Education and Students' Home Use of ICT*. Simonelli Editore University Press.
- [2] Du P, Han WT. 2021. The internet and the old age: challenges and opportunities. *Xinhua Digest*, 18: 5.
- [3] Feng CR, Xu HY. 2021. The practical dilemma and breakthrough path of the current digital rural construction. *Journal of Yunnan Normal University (Philosophy and Social Sciences Edition)*, 53(5): 93-102.
- [4] Liu CX. 2021. Digital integration differences: reflection and measurement of the generational digital divide - exploratory empirical analysis based on CGSS 2017 data. *Journal of Nantong University: Social Science Edition*, 37(5): 11.