

## **THE IMPACT OF EDUCATION ON THE ELDERLY WELL-BEING: A META-STUDY**

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### **ABSTRACT**

In light of the global demographic shift towards an aging population, ensuring the well-being of the elderly has emerged as a pressing concern. Consequently, a multitude of researchers have offered valuable perspectives on this critical issue. Seeking to contribute to this discourse, this study conducted meta-research on a related research objective to explore the impact of education on the well-being of the elderly. Elderly education is a part of a lifelong education, which gives effects positively on the well-being of the elderly. This study used data screening, assessing education and the well-being of the elderly based on the article published from 2019 to 2023. The findings of this study suggested that education can be effective in improving the elderly well-being, mainly reflected in the positive effects of elderly education on their emotional regulation, social integration, cognitive ability, and quality of life. The findings also shed light on issues of self-actualization and positive emotions in elderly well-being. The findings of this comprehensive study highlight the impact of education on the elderly well-being, while emphasizing the need for the improvement. These insights have important implications for education practitioners and call for attention to the effectiveness of elderly education in terms of elderly well-being.

### **Keywords:**

*Education, Well-being, Elderly, Influencing Factors, Meta-research.*

### **INTRODUCTION**

The global population is experiencing rapid aging, a phenomenon that stems from the inevitable transformation of population structure. It stands as a significant challenge confronting human society in the 21st century. (Liu, 2021; Nagarajan et al., 2023). According to Dsouza, Chakraborty and Kamath (2023), the world is facing a demographic revolution, with rapidly increasing numbers of people over 60 in almost every country. It is an indisputable fact that population aging is becoming increasingly serious, and population aging has become a global phenomenon (Sarkar et al., 2023). The trend of population aging is obvious, mainly due to the increase in life expectancy, decline in fertility rate and improvement in health status (Dsouza et al., 2023). According to the data from "World Population Prospects: The 2019 Revision", the age group proportion of the global population, after 2020, the world's elderly population will increase sharply. By 2050, the proportion of the global population aged 65 and over is expected to increase from about 703 million in 2020 to about 2.13 billion, accounting for 9% of the total population age group to 16%. (See the 2019 Revised World Population Prospects for more details), as shown in Figure 1. Therefore, how to improve the well-being of the elderly has not only become a topic of medicine, gerontology and psychology (Olatunji et al., 2023), but also the focus of education.

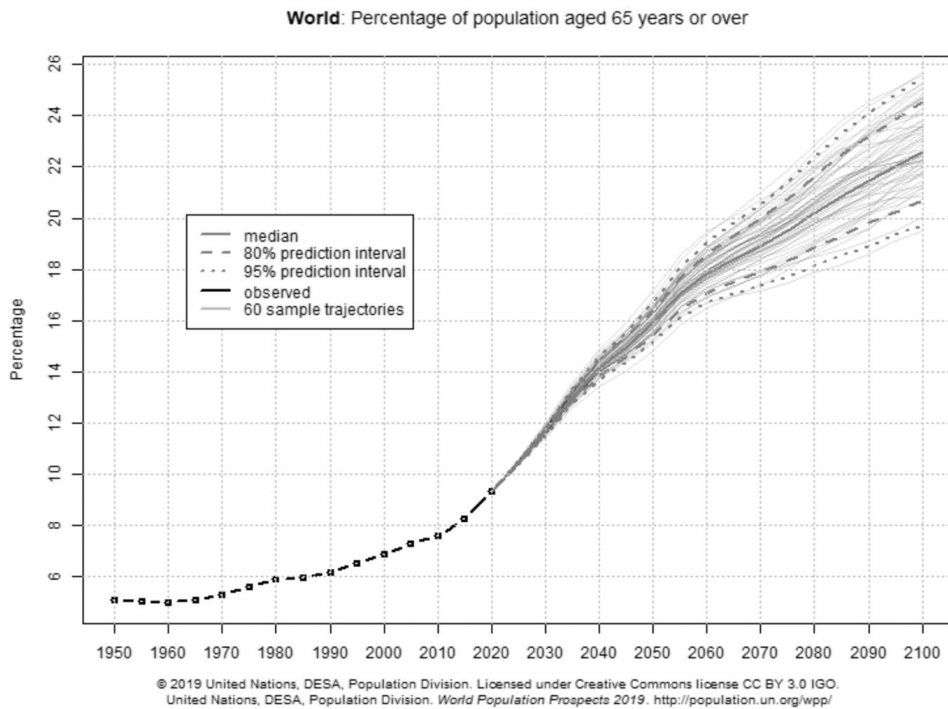


Figure 1: Estimated percentage of world population aged 65 or over (United Nations Secretariat, 2019)

Educating the elderly is a component of adult education and represents the culmination of lifelong learning (Zheng, 2020). It serves as a critical embodiment of the principle of lifelong learning, safeguarding the educational rights of older individuals and ensuring their access to rational education, thereby upholding their human rights (Xia & Yu, 2020). According to Fan (2020) and Hong et al. (2023) that advancement of elderly education contributes significantly to the holistic progression of society. Fan (2020) has emphasized that the well-being of the elderly holds the key to achieving societal harmony, asserting that education for this demographic fosters societal cohesion. Correspondingly, Hong et al. (2023) emphasized that education for the elderly is an effective measure to promote healthy aging and establish age-friendly communities. Adriani and Elmaghfuroh (2023) have underscored the efficacy of tele-nursing-based health education in enhancing the awareness of COVID-19 prevention strategies among older individuals with diabetes. Evidently, education yields a significant affirmative impact on the elderly. Therefore, understanding the impact of education on the well-being of the elderly and focusing on which factors affect education, and developing methods to improve their well-being through education, remains a top priority.

## LITERATURE REVIEW

Well-being is not an academic term and there is no uniform definition, for the most part, well-being research is based on researchers' measurements. In different research articles, well-being has been described as various expressions, such as “subjective well-being” (Wang, 2022), “life satisfaction” (Colucci et al., 2022), “psychological well-being” (Galiana et al., 2020), “positive emotions” (Won et al., 2020), “social well-being” (Banerjee et al., 2020), etc. Debates about the connotation of well-being are most commonly divided into two categories: subjective well-being (SWB) and psychological well-being

(PWB) (Anglim et al., 2020). Bianchi (2021) pointed out that well-being is usually considered as subjective well-being (SWB), including three aspects of life satisfaction, positive affect and low negative affect. On the contrary, many philosophers have criticized the excessive focus on emotion in subjective well-being research, arguing that the evaluation of emotion cannot provide a clear answer to the meaning of well-being. Galiana et al. (2020) believe that the concept of well-being is the realization of one's individual potential. In addition, many scholars support that happiness encompasses both subjective well-being and psychological well-being, suggesting a potential relationship between these two concepts (Joshnloo, 2019; Moreta-Herrera, 2023).

The well-being of the elderly has always been one of the important focuses of scholars in the study of well-being. Many factors influenced changes in elderly well-being. First, Zhao and Tan (2022) and Peng (2021) all believed that there was no statistically significant difference in the well-being level of the elderly between genders. However, other scholars held the opposite view (Zheng, 2020; Wang, 2022; Deng et al., 2024). Deng et al. (2024) pointed out that the well-being level of women was higher than that of men. Zheng (2020) share the researchers conducted a questionnaire survey on elderly college students, and the results showed that women had higher well-being scores than men, and the gap between well-being scores was 1.718. On the contrary, Wang (2022) believed that the well-being level of male elderly people was higher than that of women. Second, Zhu et al. (2020) compared the economic status of the elderly and the family economic status of the elderly and local families and pointed out that the elderly with relatively high income had higher levels of well-being. Wang (2022) agreed with Zhu et al. (2020) and added that there were spatial and regional disparities in well-being levels, that is, older people living in wealthier areas were generally happier than those living in relatively less affluent areas. Won et al. (2020) and VanTienwoven et al. (2020) held the same ideas that identified social participation as one of the important factors affecting elderly well-being. VanTienoven et al. (2020) investigated the relationship between active participation time and life satisfaction among older adults in Belgium and the United States, using a general measure of life satisfaction as an indicator of well-being. The analysis of the study showed a correlation between active participation and life satisfaction. Similarly, Won et al. (2020) conducted a study on active physical activity and subjective well-being among Korean older adults. Findings suggested that physical activity could promote social engagement and enhance elderly well-being.

Zhu and Li (2021), Fan (2020), and Liu (2021) shared the same idea, all believing that education for the elderly could promote the social integration of the elderly. Zhu and Li (2021) reported an interview study with a group of elderly urbanized community residents. The results showed that geriatric education could accelerate the transformation of older people's identity, improve individual self-satisfaction and social integration, and promote urbanization, advocacy, and community building for social harmony. Fan (2020) stated that geriatric education could improve the quality of life of older adults, help them maintain physical function and productivity for a longer period, increase social participation, make new friends, and reduce alienation by analyzing the benefits of geriatric education in the context of active aging. Similarly, Liu (2021) demonstrated through a study of geriatric education activities in American museums that geriatric education could eliminate the negative impact of age discrimination on older people, build a friendly community for older people, enable older people to participate in meaningful educational activities, relieve loneliness, and provide a sense of purpose and opportunities to build good relationships with others. Likewise, Eufemia et al. (2023) demonstrated that there was a significant correlation between education for the elderly and happiness of the elderly, and cultural participation played a partial mediating role in the relationship between high-quality home care and happiness of the elderly. In addition, Elzohairy et al. (2024) pointed out that psychological education programs are an effective way for older people to cope with climate change and promote successful aging.

Dong et al. (2022) agree with Zheng (2020) that older people with higher education have higher levels of well-being. Zheng (2020) conducted a review of the well-being of students in geriatric education in senior colleges. The findings suggest that the education level of older adults has a significant impact on students' well-being scores. Later well-being levels increased with higher levels of education.

Similarly, Dong (2022) pointed out that the number of adult higher education schools is the main factor affecting the differences in well-being levels in different provinces. In addition, Wang et al. (2023), Rena et al. (2023), and Noguchi and Shang (2023) shared the same ideas that elderly education has a positive impact on the well-being of the elderly, especially in the field of art. Wang et al. (2023) pointed out that art is a way of expressing feelings and emotions, and art education activities have a positive impact on a person's psychological state and physiological parameters. Rena et al. (2023) proved that art is related to healthy aging, and they found that receptive or participatory participation in art activities lasting for more than four years is associated with good physical function, indicating that it may have some benefits for healthy aging. Similarly, Noguchi and Shang (2023) investigated the relationship between art participation and mental health among elderly people in Japan. They pointed out that active art participation frequency has a positive impact on the mental health of elderly people, and high art participation frequency is significantly correlated with higher levels of positive emotional scores.

Analyzing the factors influencing elderly well-being through education, as well as the aspects that these factors concentrate on, is a prerequisite for implementing elderly education and improving the well-being of the elderly.

## METHODOLOGY

Meta-synthesis is an aspiring and popular method of synthesizing qualitative research results with the aim of obtaining opinions that are broader, more general, and more conceptually developed than any individual insight study. Sim and Mengshoel (2023) pointed that meta-synthesis includes the stages of formulating research questions, identifying relevant studies, extracting data, synthesizing findings, and interpreting results to generate new opinions or theoretical frameworks. In the context of meta-studies, the results of other studies were qualitatively analyzed. According to Hass and Springer (2014), meta-studies have the potential to allow for increased research productivity by providing an in-depth narrative description and allow for broad exploration. meta-research has emerged as a promising approach in organizational and management research (Habersang & Reihlen,2023). This investigation employed Google Scholar as the search engine for data collection, filtering the retrieved data using key terms such as "elderly education" and "well-being". The results were sorted based on relevance, with priority given to articles listed in SSCI, SCI, and Scopus databases. Additional selection criteria included publication dates between 2019 and 2023, and reports of evaluations conducted within educational institutions.

Based on article search and screening, this meta-analysis selected 10 articles for analysis, as shown in Table 1. Among them, one article was published in 2019, two articles were published in 2020 and 2021 respectively, one article was published in 2022, and four articles were published in 2023. According to Table 1, 10 articles were coded separately for easier analysis and discussion. Among them, A represents the article, and the numbers 1-10 refer to 10 articles respectively. For example, A1 refers to the first article in the list, A2 refers to the article 2, A3 refers to the article 3 and so on.

Table 1: Meta-Analysis Findings

	Title	Author/s	Year	Journal
A1	Towards Sustainability: The Involvement of the Elderly in the Educational Activities of NGOs in Lithuania	Edita Štuopytė	2022	Sustainability
A2	Comparing the Effects of Group and Family-Centered Education in the Elderly Lifestyle	Shaafi M.S, Hosseini N, Akbartabar Toori M, Moqimi M.	2020	Journal of Clinical Care and Skills

A3	The Integration and Development of Piano Art and Media Education and Its Influence on the Long-Term Care and Happiness of the Elderly People	Xuan Chen <sup>1,2</sup> , Fangwei Huang <sup>3</sup> and Yingfeng Wang <sup>4</sup>	2021	Frontiers in Psychology
A4	Protective effects of education on the cognitive decline in a mental rotation task using real models: a pilot study with middle and older aged adults	Rahe, M., & Quaiser-Pohl, C.	2023	Psychological Research
A5	The Role of Continuing Education on Elderly Memory: Islamic Perspective	Basuki, R., Latief, H., Bashori, K., & Suud, F. M.	2023	Islamic Perspective. In 1st Lawang Sewu International Symposium 2022 on Health Sciences (LSISHS 2022)
A6	A Social Resource of Education for the Elderly in a Digital Society	Bolshunova, T., Grigorieva, N., & Maslova, O	2023	In 2023 3rd International Conference on Technology Enhanced Learning in Higher Education (TELE) IEEE.
A7	The impact of art education and training on the well-being of the elderly	Xu Yanjun, Yu Qiong	2023	Adult and Higher Education Clausius Scientific Press, Canada
A8	The Impact of the Educational Intervention on Sleep Quality and Psychological Well-being Among the Elderly People	Kaveh, M. H., Behmanesh, V., & Karimi, M.	2021	Malaysian Journal of Medicine & Health Sciences
A9	Relationship between mental health and the education level in elderly people: mediation of leisure attitude	Belo, P., Navarro-Pardo, E., Pocinho, R., Carrana, P., & Margarido, C.	2020	Frontiers in Psychology
A10	The Effect of the elderly's motivation to participate in lifelong education on their life satisfaction	Cho, K. W., & Choe, C. S.	2019	Asia-pacific Journal of Convergent Research Interchange

Note: A: Articles, numbers 1-10 refer to 10 articles respectively. For example, A1 refers to the first article in the list, A2 refers to the article 2, A3 refers to the article 3 and so on.

## **RESULTS AND DISCUSSION**

Štuopytė (2022) conducted a qualitative study focusing on group discussions, and stated the analysis of the educational activities of non-governmental organizations for the elderly in a region of Lithuania. Eight individuals participating in educational activities participated, with an average age of 67.5 years old. The research results indicate that educational activities have improved the social activities of the elderly, promoted social integration, increased communication and self-esteem, improved social skills, and expanded their social networks. Bolshunova et al. (2023) and Štuopytė (2022) have the same ideas that education is beneficial for the social integration of the elderly. Bolshunova et al. (2023) analyzed the national policies of the Russian Federation regarding elderly people, such as basic documents “the Action Strategy for the Interests of the Elderly by 2025”. They pointed out that education is one of the conditions for realizing the life potential of the elderly. On the one hand, education affects the reemployment of the elderly, and on the other hand, it can help them participate in social connections, overcome social distancing, and improve their adaptability. Actively participating in society is an important way for the elderly to improve their quality of life, and education can help them achieve this goal.

Belo et al. (2020), Kaveh et al. (2021), and Chen et al. (2021) hold the same ideas that education affects the emotions of the elderly, and education can effectively enhance their positive emotions. Belo et al. (2020) conducted a convenience sampling questionnaire survey on retirees residing in institutions in northern and central Portugal, aiming to explore the impact of education on the mental health of retirees. The research results indicate that older adults with higher levels of education exhibit better mental health and more positive leisure attitudes. Older people with lower levels of education experience higher levels of pain. Similarly, Kaveh et al. (2021) used a random sampling method to select samples from clients at the Borazjan Comprehensive Health Center in Iran and conducted a randomized education field-controlled trial on 90 elderly individuals with sleep disorders. Intended to conduct a 5-week activity and virtual learning educational intervention through lectures, group discussions, and other means. The research results show that behavioral intervention education is beneficial for alleviating psychological anxiety and improving mental health in the elderly, thereby improving their sleep quality. In addition, Chen et al. (2021) conducted a questionnaire survey on elderly people living in Guangzhou, Beijing, and Tianjin, China who participated in piano education and those who did not, with the aim of examining the changes in their mental health after participating in piano education compared to before. The research results indicate that after elderly people participate in piano education, with the increase of learning time, positive emotions and positive emotional experiences are improved, while negative emotions and negative emotional experiences decrease with the increase of piano learning time.

Rahe & Quaiser-Pohl (2023) and Basuki et al. (2023) maintaining a consistent view, they believe that education can improve the cognitive abilities of the elderly. Rahe & Quaiser-Pohl (2023) discussed the protective effect of education on cognitive decline in psychological rotation performance. They believe that cognitive decline caused by aging does not occur in the same way for everyone, and that education has a moderating effect on the impact of aging. Education for the elderly is not only a tool for acquiring new knowledge or verifying old knowledge, but also an important way to prevent cognitive impairment. Similarly, Basuki et al. (2023) pointed out that education will have a significant impact on the quality of life of the elderly. They used library research methods to explain the effect of continuing education on the memory of the elderly from an Islamic perspective. The research results indicate that continuing education can delay the decline of memory function in elderly people by increasing brain neural plasticity, which is very beneficial for protecting the neurological disorders that occur in the form of neurodegeneration in the elderly and affecting the decline of memory and cognitive function. And they particularly emphasize that the function of education is to transform natural development into directed development.

Shaafi et al. (2020), Xu and Yu (2023), Cho and Choe (2019) have the same ideas that elderly education improved the quality of life for the elderly. Shaafi et al. (2020) used purposive sampling to conduct three parallel randomized controlled field trials on 150 elderly people aged 60 to 74 in Yasuji,

Iran, including a group education group, a family centered education group, and a control group. The research results indicate that there is a statistically significant difference in quality of life between the family centered education group and group education and the control group. Both families centered education and group education effectively improve the quality of life of the elderly. And considering that the two types of educational interventions have similar effects, and the cost of home visits is relatively high, and more personnel are needed, it is recommended that group education be a suitable method to improve the lifestyle of the elderly. Xu and Yu (2023) pointed out that elderly education is a part of lifelong education, and elderly art education has a positive effect on improving the quality of life of the elderly. However, currently, there are still many problems in elderly art education, such as insufficient educational resources, overly simple educational content, and lack of enthusiasm among the elderly. Further optimization of elderly art education is needed. In addition, Cho and Choe (2019) conducted a quantitative study on 250 elderly people in K city, China. The results showed that elderly education provides an opportunity to improve quality of life by overcoming social alienation and promoting interpersonal relationships, effectively improving the life satisfaction of the elderly. Ma (2024) believes that participating in learning has a significant positive effect on the physical and mental health of the elderly. Liu (2023) has the idea that art education can help the elderly maintain a healthy mental and physiological state, enhance emotional communication, enhance aesthetic awareness, and promote the construction of social civilization.

Education, as a lifelong developmental process, continues to have active effects in old age. As shown in the results, findings from meta-studies suggest that continuing to learn and participate in educational activities can promote cognitive maintenance, emotional adjustment, social interaction, improve quality of life, and thus enhance their overall sense of well-being. Figure 1 shows the positive impact of education on the well-being of the elderly.

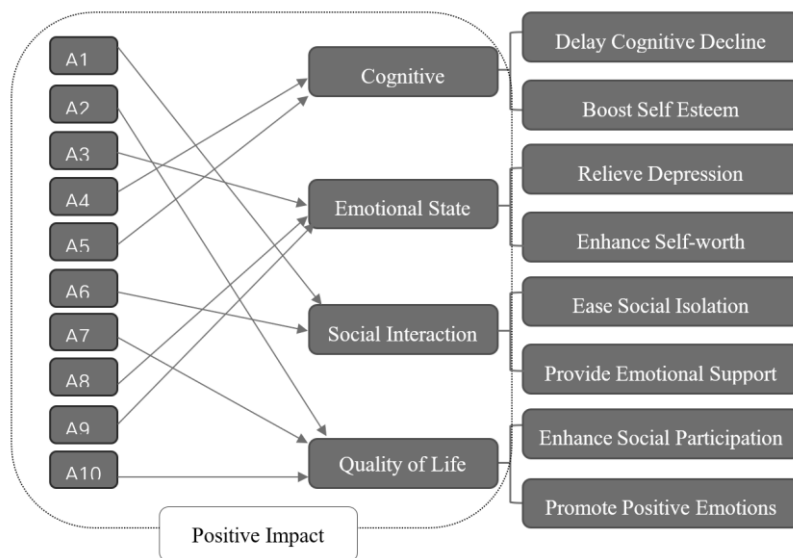


Figure 2: Positive impact of education on elderly well-being

## **SUMMARY OF RESULTS**

According to the results of meta comprehensive research, elderly education is considered an important influencing factor for the well-being of the elderly and has a beneficial impact on their well-being. In 1989, Ryff proposed six dimensions that make up mental health include autonomy, control of the environment, positive relationships with others, self-acceptance, life goals, and personal growth. Although this study reveals some problems with elderly education, overall, elderly education can still produce various beneficial effects. Education, particularly in the context of elderly education, emerges as a powerful tool to enhance the quality of life, cognitive well-being, and social engagement among older individuals. The positive impact of education on the happiness of elderly people can be attributed to several factors. Firstly, A4 and A5 show that continuous learning and cognitive engagement through education can help maintain or even enhance cognitive function. This is consistent with the results proposed by Zheng (2020) and Wang et al. (2023) that education supports cognitive well-being, including memory, problem-solving ability, and overall psychological agility. Furthermore, A3 point out that education cultivates a sense of purpose and personal growth. This result is consistent with the view proposed by Elzohairy et al. (2024) that education is an important pathway for successful aging. A2, A7 and A10 indicate that elderly education is associated with higher levels of life satisfaction and overall well-being, which is consistent with Bianchi (2021) study. On the other hand, A3, A8 and A9 proved that elderly education enables elderly people to lead a positive and fulfilling life. Through various activities such as art classes, physical exercise, and cultural activities, elderly people can find new satisfaction, generate positive emotions, and thus improve their psychological and emotional health. This result is similar with the research findings of Zhihao et al. (2021) and Shuai et al. (2021). Education as an effective pathway for emotional regulation in the elderly. In addition, A1 and A6 Shared that education also provides opportunities for social interaction and the formation of new friendships, which are vital for combating social isolation and loneliness among older adults. This result is consistent with the research findings of Van Tienoven et al. (2020).

Although education has great potential in improving the well-being of the elderly, addressing the challenges faced by elderly education programs is crucial. A7 point out that the contradictory fact, on the one hand, resource constraints, including funding constraints and a shortage of qualified teachers, may hinder the quality and accessibility of these projects. On the other hand, the willingness of elderly people to learn is not high, and the educational content is single, which cannot meet the needs of the elderly. This result is consistent with the viewpoint of Wu et al. (2023). Wu et al. (2023) pointed out that the surveyed population generally has a lower willingness to learn in their later years and prefers learning content that is more enjoyable for the elderly. Therefore, policy makers and educators should strive to make educational opportunities more equitable, regardless of individual economic status, location, or cultural background. This can be achieved through targeted outreach and the use of technology to assist elderly people in underserved areas (Hu, 2023). A2 show that in order to meet the unique learning needs of the elderly, teaching methods and courses must be adjusted accordingly. Meanwhile, course offerings in elderly education should exhibit flexibility to cater to the diverse interests and needs of older learners. This diversity may include topics related to health and wellness, arts and culture, technology, and more (Wu et al., 2023). By diversifying course content, educational programs can better align with the preferences and goals of older adults.

## **CONCLUSION**

The meta research findings of this study indicate that education for the elderly has a positive impact on their emotional regulation, social integration, cognitive abilities, and quality of life. Therefore, it can be considered that the well-being of the elderly can be improved by participating in educational activities, which further supports the importance of elderly education in addressing the challenges of population



aging. In addition, the study emphasizes that the curriculum of elderly education should be more personalized. By improving more comprehensive and social interactive educational methods, as well as improving policies and resources, the effectiveness of elderly education can be further enhanced to adapt to the trend of population aging. The limitation of this study is that the selected sample for this meta-synthesis study included 10 representative articles, yet it did not encompass a more extended period and all relevant articles as the research sample. The study is insufficient for a comprehensive analysis of all cases. Future research and stakeholders are advised to further investigate the influence of various types of elderly education activities on diverse circumstances and backgrounds, the correlation between the duration of education for the elderly and their well-being, the impact of active participation in elderly education on their well-being, the effect of elderly attitudes towards education on their well-being, and how to develop personalized courses based on the needs of the elderly. Moreover, there is a need to enhance more comprehensive and socially interactive elderly education methods to improve the implementation of elderly education.

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