

Study on the Influencing Factors of Older Adults Learning to Improve Acquired Helplessness on the Spiritual Construction of Healthy Aging

-- Taking Nanjing Elderly People as an Example

Meng Xu *

School of Management, Nanjing Normal University of Special Education, Nanjing Jiangsu, 210038, China

* Corresponding author Email: Xumeng616@njts.edu.cn

Abstract: With the aging of China's population and the rapid development of digital technology, the Internet, as a common public product and resource, has never been equally available or accessible to everyone. Acquired helplessness in the process of learning to adapt to digitalization leads to the loss of information about intelligent operation, which is seriously detrimental to the mental health of the elderly. The purpose of this study is to explore the relationship between gerontological learning, acquired helplessness, and the spiritual construction of healthy aging. By analyzing the theoretical basis of geriatric learning, it was found that learning participation not only improves health but also promotes healthy aging. This paper collects data through questionnaires and uses multiple linear regression, analysis of variance and path analysis to process the data. The study finds that learning in old age can shape a positive mindset with the help of learning achievement to enhance self-confidence, social interaction to improve self-efficacy, knowledge learning to change the way of thinking, and sharing of experiences, thus improving learned helplessness and having a positive impact on the spiritual construction of healthy aging.

Keywords: Learning in Old Age; Learned Helplessness; Mental Health.

1. Introduction

As the global trend of population aging intensifies, the mental health of older persons is increasingly becoming a focus of social concern. Elderly learning, as one of the important means of active aging, not only helps older people maintain their cognitive vitality but also has a profound impact on their mental health. With the development of Internet technology, older people's access to learning resources has diversified, and learning methods have become more flexible and convenient, providing them with new learning opportunities. However, older people often feel overwhelmed and easily frustrated by digital technology. Due to a variety of factors such as declining physical functions, changing social roles, and reduced family support, older people are more prone to frustration and failure, which in turn leads to a sense of powerlessness. This psychological state not only affects the quality of life of the elderly but may also lead to a series of mental health problems, such as depression and anxiety disorders. As a negative psychological state, learned helplessness not only affects the quality of life of the elderly, but may also exacerbate their negative emotions, such as depression and anxiety, and impose a heavy burden on the family and society. Therefore, exploring how to effectively improve powerlessness through gerontological learning is of great significance in enhancing the mental health of older adults and promoting healthy aging.

By systematically analyzing the intrinsic connection between multiple modes of gerontological learning and learned helplessness, this study aims to reveal the specific mechanisms of gerontological learning in improving learned helplessness, promoting the overall enhancement of older

adults' mental health, enhance their cognitive ability, strengthen their sense of social participation, and promote the positive effects of emotional communication, and then mitigate the negative impacts of learned helplessness, and optimize gerontological learning programs' design and implementation to better meet the personalized needs of older adults and improve learning outcomes. This study not only helps to promote a positive psychological state and improve the quality of life of the elderly but also provides an important reference for policy making.

2. Methods and Materials

2.1. Questionnaire Design

In designing the questionnaire for this study, this paper follows the principles of systematicity, scientificity, and operability to ensure that the content of the questionnaire can comprehensively and accurately reflect the impact of gerontological learning on acquired helplessness and mental health. The questionnaire was divided into eight main sections, each of which was carefully designed with specific measurement indicators and questions to ensure the reliability and validity of the data. As shown in [Table 1](#).

The design of this questionnaire fully considered the characteristics and needs of older learners, and through scientific and reasonable board division and question setting, it ensured the comprehensiveness and accuracy of the data, laying a solid foundation for the subsequent data analysis and research conclusions.

Table 1. Questionnaire design

Serial number	Content Board	Description	Measurement indicators and number of items
1	Basic Information	Collect basic information on older learners such as gender, age, and educational background	Number of questions: 5
2	Assessment of learned helplessness	Difficulties encountered by older adults in daily life and their corresponding feelings of helplessness were assessed by means of a scale	Scale items: 10 (e.g. I often feel powerless when things get difficult)
3	Evaluation of Learning Effect	Examine the degree of knowledge mastery, skill enhancement and application of practical effects of the elderly after learning	No. of questions: 8 (e.g. After the study, I can better solve the problems I encounter in my life)
4	Mental health status	Assesses the mental health status of older adults, including emotional state, life satisfaction, etc	Scale items: 7 (e.g. I feel happy most of the time)
5	Motivation and Attitudes to Learning	Explore older adults' motivations for engaging in learning, as well as their attitudes and expectations about learning	No. of questions: 6 (e.g. I study to keep up with the times)
6	Social Support and Interaction	Examines the impact of older adults' Social networks, family support, and level of social engagement on learning	Number of items: 5 (e.g. My family is very supportive of my participation in learning activities)
7	Learning environment and resources	Assesses the learning environment, accessibility and use of learning resources in which older adults live	Number of questions: 4 (e.g. My community provides a wealth of learning resources)
8	Open-ended questions	To collect personal opinions and suggestions from older adults about learning to improve learned helplessness and promote mental health building	Number of questions: 2

2.2. Sample Selection and Quantitative Collection

Considering the heterogeneity of the elderly population, this study used stratified random sampling. Stratification is based on variables such as age, gender, place of residence, and education level to ensure a balanced distribution of the sample across multiple dimensions. Through this approach, it is sought that the sample can fully reflect the actual situation of the elderly population in Nanjing.

In terms of sample size, this study refers to the sample sizes of similar studies at home and abroad, and combines the purpose of the study and the need for statistical analysis, and finally determines no less than 500 valid questionnaires as the basis for quantitative analysis. This scale ensures the robustness of the statistical analysis and is also in line with the principle of economy in resource utilization.

The data collection process, on the other hand, was mainly conducted through a combination of online and offline methods. Online, social media platforms, exclusive APPs for the elderly and cooperative community websites were utilized, and links to electronic questionnaires with detailed instructions for filling in the questionnaire and contact information were posted so that the elderly could receive timely assistance when they encountered problems [11]. In order to ensure the authenticity and validity of the online data, this paper set up mechanisms such as IP address restriction and duplicate response detection.

Offline, a professional research team was organized to conduct face-to-face questionnaire surveys in communities,

senior activity centers and nursing homes. The research team consists of professionally trained interviewers who are not only familiar with the content of the questionnaire, but also have good communication skills and patience, and are able to effectively answer the questions of the elderly and improve the recovery rate of the questionnaire and data quality.

After data collection was completed, all questionnaires were subjected to a rigorous review and cleaning process. For questionnaires with too many missing values, logical errors or obvious inconsistencies, this paper carried out the elimination process to ensure the quality and reliability of the final data set used for analysis.

Through the above series of rigorous operational processes, this study successfully collected a batch of high-quality data, laying a solid foundation for the subsequent data analysis and research conclusions.

2.3. Data Analysis

In the data analysis phase of the quantitative study, this paper adopts various statistical analysis methods to comprehensively and deeply explore the relationship between learning in old age and acquired helplessness.

Through multiple linear regression analysis, the quantitative indicators of learned helplessness were used as the dependent variable, and the degree of participation in older adult learning was used as the independent variable. The goal was to clarify which specific factors in older adult learning significantly affect the improvement of learned helplessness and quantify the degree of influence of these factors.

To verify the differential impact of different gerontological

learning modes on acquired helplessness, this paper also employs an analysis of variance (ANOVA). By comparing differences in acquired helplessness scores between different learning groups (e.g., interest-based learning groups, community education course participants, online learning platform users, etc.), this paper reveals the unique effects of different learning modes in promoting mental health. ANOVA not only helped us identify which learning modes were more effective but also allowed us to explore further the potential reasons behind these differences, such as the relevance of the learning content, the interactivity of the learning community, or the flexibility of the learning approach.

Path analysis is also used to explore the mechanisms underlying the improvement of learned helplessness in older adults. By modeling a series of causal hypotheses and using statistical software to test the validity of these hypotheses, path analysis reveals how learning in old age ultimately contributes to the improvement of learned helplessness by influencing intermediate variables (e.g., self-efficacy, sense of social support, etc.). This approach can provide a deeper understanding of the complex process of geriatric learning for mental health and provide a theoretical basis for the development of more precise and effective intervention strategies.

In the process of data processing, a random sampling method was used to select the study sample from a group of older adults from multiple regions, different age groups, and

social backgrounds, and the questionnaire data were rigorously cleaned and organized to eliminate invalid and outlier values. This paper also used SPSS statistical software to test and analyze the data in multiple rounds to ensure the accuracy and scientificity of the research results.

3. Results and Discussion

3.1. Findings

The samples for this study were selected from the elderly population in different areas of Nanjing, aiming to ensure a broad and representative sample. By means of random sampling, a total of 400 older learners from different regions, economic backgrounds, and cultural levels were collected in this paper, of which the ratio of men to women was about 1:1, and the age span ranged from 60 to 85 years old, with an average age of 72.3 years old.

In terms of educational attainment, the sample included 20% of older adults with elementary school education or below, 35% with junior high school education, 30% with high school or junior college education, and 15% with college education or above. This distribution reflects the current status of the education level of the elderly population in Nanjing society, i.e., the majority of the elderly have an intermediate or lower education background, but there is still a significant portion of the elderly who have received a relatively higher level of education, see [Figure 1](#).

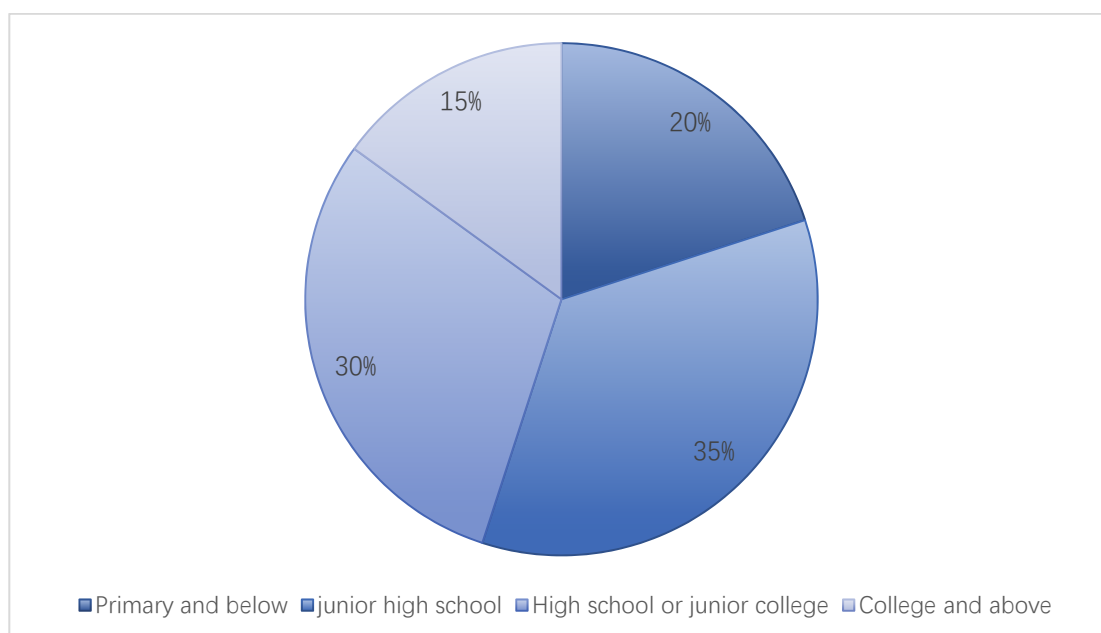


Figure 1. Pie chart of educational attainment of the study population

In terms of health conditions, the elderly in the sample generally suffered from chronic diseases of varying degrees, such as hypertension (55%), diabetes (20%), and arthritis (30%), which affected their daily lives and learning activities to varying degrees. However, it is worth noting that more than 70% of the respondents indicated that they were willing to improve or maintain their health status by participating in learning activities, showing a positive attitude towards learning, and increasing health awareness of the elderly group.

In terms of residential status, the elderly in the sample mainly live alone and with their spouses, accounting for 35% and 45% respectively, while the remaining 20% live with their children or other relatives. This residential distribution

characteristic has an impact on the elderly's learning participation and mode, e.g., the elderly living alone may be more inclined to choose online learning or centralized community-based instruction, while those living with family members may be more likely to receive family support and accompanying learning.

This paper also surveyed the study habits and interest preferences of the older adults in the sample. The results showed that most older adults showed strong interest in cultural courses (e.g., calligraphy, Chinese painting, and poetry appreciation), health and wellness (e.g., tai chi, yoga, and nutrition), and technological applications (e.g., smartphone use, computer basics). These interest preferences

not only reflect the diverse learning needs of the elderly but also provide an important basis for the subsequent design of learning programs that meet their characteristics.

The samples in this study showed diverse characteristics in terms of age, gender, education level, health status, residence status, and learning interests, which provides rich and valuable data support for a comprehensive and in-depth exploration of how gerontological learning can improve acquired helplessness and promote the spiritual construction of healthy aging.

3.2. Discussion of Results

As shown in Table 2, the statistical analysis of the collected questionnaire data reveals a strong relationship between acquired helplessness and learning effectiveness in elderly learning. The data show that there is a significant negative correlation between the acquired helplessness score (mean of 40.08, standard deviation of 12.34) and the learning effectiveness score (mean of 75.23, standard deviation of 10.45), with a correlation coefficient of -0.67 and a p-value of less than 0.01, which suggests that the relationship between the two is highly statistically significant.

Table 2. Analysis of questionnaire results

Variable	Mean	Standard deviation	Correlation coefficient	P-value
Learned helplessness score	40.08	12.34	-0.67	<0.01
Learning Effectiveness Score	75.23	10.45		
Spirituality in Healthy Aging Score	50.08	12.12	-0.72	<0.01

This shows that the reduction of learned helplessness and the improvement of learning effectiveness in the learning process of older adults show a synchronized trend. This means that as older adults gradually overcome the difficulties and frustrations encountered in the learning process and reduce their fear of failure and sense of powerlessness, their learning effectiveness is significantly improved accordingly. This finding fits with the positive psychology theory in psychology, which states that a positive state of mind and emotion can stimulate an individual's potential and promote learning ability.

Acquired helplessness is not only directly related to learning outcomes, but also shows a stronger negative correlation (correlation coefficient of -0.72, p-value <0.01) with the Healthy Aging Spirituality Building Score (mean of 50.08, standard deviation of 12.12). Thus, the reduction of learned helplessness not only enhances the learning effectiveness of older adults but also positively affects their

overall mental health status. The Healthy Aging Spiritual Building Score is an important indicator of the mental health, social participation, and quality of life of older adults, and its significant improvement indicates that older adults not only gained knowledge and skills but also enhanced their self-confidence and sense of well-being during the learning process, which in turn promotes the development of their overall health.

Combined with relevant research and data available on the Internet, it was found that the role of learning in old age in improving learned helplessness is widely recognized. Many studies have shown that by providing diversified learning resources, flexible learning styles, and positive feedback mechanisms, the learned helplessness of older adults can be significantly reduced, helping them rediscover the joy and motivation of learning. These successful experiences provide useful references for us to further explore the path of learning for the elderly to improve acquired helplessness.

Table 3. Results of selected studies

Serial number	Subjects	Sex	Age	Years of study	Degree of learned helplessness (initial)	Healthy aging spirituality building score (initial)	Degree of improvement of learned helplessness after learning	Degree of improvement in healthy aging spirituality building after learning
1	Grandpa Xu	Male	72	2 years	Moderate	65	Significant improvement	20%
2	Grandma Li	Female	68	3 years	Mild	75	Partial Improvement	15%
3	Grandpa Wang	Male	75	1 year	Severe	55	Significant Improvement	25%
4	Grandma Zhang	Female	70	4 years	Moderate	70	Significant Improvement	18%
5	Grandpa Zhao	Male	65	5 years	Mild	80	Slightly improved	12%

As shown in Table 3, the significant effect of learning in old age is in improving learned helplessness and enhancing the spiritual construction of healthy aging. From the data, it

can be seen that regardless of the initial degree of acquired helplessness of the elderly, their helplessness has been improved to different degrees through continuous learning

activities. For example, Elder Xu and Grandpa Wang were initially in moderate and severe states of acquired helplessness, but after different years of learning, they both realized significant improvements, which suggests that long-term learning practices have a positive effect on alleviating the psychological helplessness of the elderly.

Further analysis revealed a positive trend between the number of years of study and the degree of improvement in learned helplessness. Grandmothers Li and Zhang showed higher improvement in acquired helplessness after 3 and 4 years of study, respectively, while Grandpa Wang (1 year) and Grandpa Zhao (5 years but with slight improvement), who had a shorter number of years of study, showed relatively smaller improvements. This finding suggests that continuous and stable learning input is crucial for the gradual elimination of learned helplessness. It is worth noting that the relatively low improvement of Zhao Lao, despite having the longest years of learning, may be affected by a variety of factors such as individual differences and the matching of learning content and methods, and future studies may further explore the mechanisms of these factors.

All study participants improved their healthy aging spirituality-building scores after learning, with the greatest improvement in Elder Xu and Grandma Zhang, which reached 20% and 18%, respectively. This suggests that learning activities not only help to improve the psychological state of the elderly but also promote their mental health and sense of social participation at a broader level. This

enhancement may be closely related to the positive experiences of accomplishment, social support, and the acquisition of new skills gained during the learning process.

4. Conclusion and Policy Recommendation

4.1. Conclusion and Implication

This study not only deepens our understanding of the relationship between learning and learned helplessness in old age, but also provides valuable practical insights for mental health promotion and learning policy development for older adults.

The findings suggest that active participation in gerontological learning activities can significantly reduce older people's learned helplessness, and that gerontological learning is not only the acquisition of knowledge but also the process of strengthening psychological resilience. In practice, older adults should be encouraged to participate in diverse learning activities, such as interest classes, community education, and online courses, to meet the needs of different interests and ability levels. The government and communities should increase investment in education resources for the elderly and establish more convenient, high-quality learning platforms so that older people can easily access learning resources and enjoy learning, see [Figure 2](#).

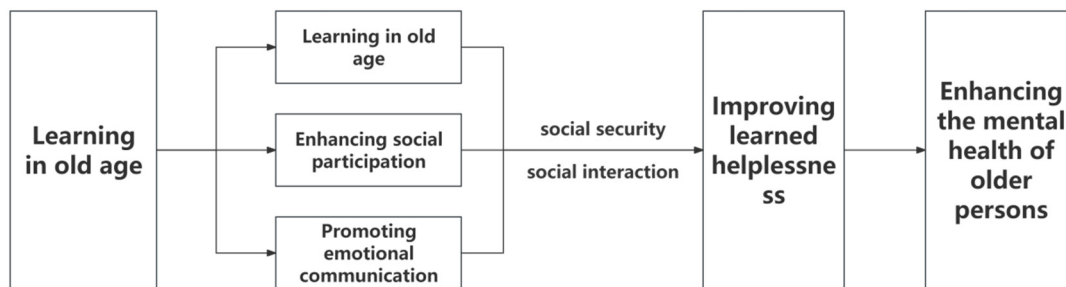


Figure 2. Mechanism diagram of the impact of learning in old age on the mental health of older people

This study found that social support and interaction played a key role in the learning process. The sense of belonging and fulfillment that older adults gain from group learning can help alleviate feelings of loneliness and helplessness. Therefore, when designing learning programs for the elderly, emphasis should be placed on facilitating communication and interaction among participants and establishing learning groups or interest communities so that the elderly can grow together with mutual encouragement and support. Family members and all sectors of society should also give older persons more understanding and support, pay attention to their learning needs and psychological changes, and work together to create a positive learning environment.

In view of the differences in age, health condition, educational background, and other factors, different older persons have different needs for and acceptance of learning. Therefore, when formulating learning policies, individual differences should be taken into account, and flexible and diverse learning paths and assessment methods should be provided to ensure that every older person can find a learning method that suits him or her and realize the enhancement of his or her self-worth.

The Government should introduce relevant policies to

encourage and support the development of elderly education, including the provision of financial support, the formulation of curriculum standards, and the improvement of evaluation systems. It should strengthen the tracking and evaluation of the effects of learning for the elderly, keep abreast of the learning effectiveness and psychological changes of the elderly, and provide a basis for policy adjustment and optimization. Cross-sectoral cooperation should also be strengthened, and social resources should be integrated to form a support system for learning in old age that is government-led, socially participatory, and beneficial to older persons.

4.2. Policy Recommendation and Implementation

(1) Education and training policy recommendation

Education and training for the elderly should focus on multidimensional and personalized needs, stimulate the enthusiasm of the elderly for learning, enhance their mental health, and effectively alleviate acquired helplessness.

1) Construct a lifelong education system and increase the number of courses on geriatric education.

The government should increase investment in geriatric

education, incorporate geriatric education into the lifelong education system, and encourage colleges and universities, vocational colleges, and community education centers to offer courses suitable for the elderly, such as digital skills, health and wellness, culture and art, and psychological adjustment, to satisfy the diverse learning needs of the elderly. Utilizing Internet technology, online learning platforms have been developed to provide flexible and convenient learning methods, so that the elderly can participate in learning anytime and anywhere.

2) Implementing the “Silver Age Learning Program” to encourage the elderly to participate in learning communities.

Drawing on international experience, launching a “silver-age learning program” to provide learning subsidies or scholarships for the elderly, to reduce the cost of learning. Encourage the establishment of learning communities for the elderly, and promote knowledge exchange and emotional interaction through group discussions and sharing sessions, to enhance their sense of belonging and self-worth. This community-based learning model helps the elderly support each other and face the challenges of learning together, effectively alleviating the sense of learned helplessness.

3) Strengthen the construction of teachers and improve the quality of teaching.

Given the special characteristics of geriatric education, a group of teachers with professional knowledge, rich teaching experience, and an understanding of geriatric psychology should be cultivated. Through regular training and seminars, teachers' teaching ability and service consciousness should be improved to ensure the quality of teaching. Teachers should be encouraged to innovate teaching methods and adopt the methods of fun and simulation to stimulate the interest and motivation of the elderly in learning.

4) Establishing a mechanism for evaluating the effectiveness of learning to ensure the effectiveness of learning.

To better understand the learning situation and effectiveness of the elderly, a scientific learning effectiveness assessment mechanism should be established. Through regular tests, questionnaires, and interviews, collect feedback and opinions on the learning of the elderly and make timely adjustments to the teaching content and methods. Give commendations and rewards to elderly people with excellent performance, set up learning role models, and motivate more elderly people to participate in learning.

5) Strengthen publicity and guidance to create a good learning atmosphere.

Through media publicity, community activities, and other means, strengthen the publicity and guidance of education for the elderly, and raise social awareness of and support for education for the elderly. Encourage family members to participate in the learning process of the elderly, and work together to create a good learning atmosphere, so that the elderly can feel the joy and value of learning.

The education and training policy recommendations on learning for the elderly should focus on building a lifelong education system, implementing a “silver-age learning program”, strengthening the construction of teachers, establishing a mechanism for evaluating the effectiveness of learning, and strengthening publicity and guidance, to comprehensively enhance the learning experience and mental health of the elderly.

(2) Community support and interventions

When promoting learning for the elderly through

community support and intervention measures, it is necessary to build a comprehensive support system from multiple dimensions. The community should become an important platform for the integration of resources for geriatric education, and use Internet technology to build online learning platforms, such as the opening of geriatric university online courses and interest group online exchange groups, to break down geographic constraints and enable older people to access learning resources conveniently. According to data from the National Health Commission, there are more than 2,000 universities for the elderly in China, but offline capacity is limited, and the promotion of online platforms can greatly broaden learning channels.

1) Organize diversified learning activities to meet the learning needs of different elderly groups.

Communities can organize health and wellness lectures, calligraphy and painting classes, smartphone application training, mental health counseling, and so on. By organizing these activities regularly, they can not only enrich the spiritual life of the elderly but also effectively alleviate learned helplessness. For example, smartphone application training can help the elderly to cross the “digital divide”, so that they can better integrate into modern society and reduce the feeling of helplessness due to technological backwardness.

2) Establishing community learning support groups.

Within the group, the elderly can learn from each other and share their experiences, forming a positive learning atmosphere. The community can invite volunteers or professionals as mentors to provide guidance and support to the group to ensure the professionalism and effectiveness of the learning activities. This combination of peer support and professional guidance can significantly enhance the learning motivation and self-confidence of the elderly.

3) The community should also pay attention to the mental health of the elderly and provide necessary psychological intervention services.

Acquired helplessness is often closely linked to psychological problems, so the community should set up psychological counseling rooms to provide psychological counseling services for the elderly to help them solve their psychological troubles and build a positive mindset. By organizing mental health lectures, group counseling, and other activities, they can popularize mental health knowledge and improve the psychological quality of the elderly.

4) The government and all sectors of society should increase their support for learning for the elderly and provide policy and financial guarantees.

The government can introduce relevant policies to encourage social forces to participate in the cause of elderly education, such as giving tax concessions and financial subsidies. The media should also actively publicize the importance of learning in old age and create a good social atmosphere so that more people will pay attention to and support learning in old age.

The promotion of learning for the elderly through community support and intervention measures requires the formation of an all-round support system by starting from several aspects, such as resource integration, activity organization, mutual help group construction, mental health support as well as policy protection. Only in this way can we effectively improve the learned helplessness of the elderly and enhance their mental health and quality of life.

Acknowledgments

This research was financially supported by: (1) 2024 Jiangsu Province Social Science Applied Research Excellent Project: Special Topic on Social Education (Social Science Popularization) (24SJA-42); (2) Jiangsu “Qing Lan” Project.

References

- [1] Pryce R C, Azzinnari D ,Spinelli S, et al.Helplessness: A systematic translational review of theory and evidence for its relevance to understanding and treating depression[J]. *Pharmacology and Therapeutics*,2011,132(3):242-267.
- [2] G D B. Self-efficacy and depression in late life: a primary prevention proposal. [J]. *Aging & mental health*,2002, 6(4): 315-24.
- [3] Yanfei Zhu. A qualitative inquiry based on the factors influencing the acquisition of participation in learning in a beginning-age group[J]. *Adult Education*,2020,40(11):43-51.
- [4] LI Mingzhe, XIONG Yan'e, LIU Xiaoliu, et al. A study on the promotion of mental health status of the lost elderly under the perspective of positive psychology[J]. *Health Career Education*, 2020, 38(08):113-116.
- [5] LIU Xiaoliu, XIONG Yan'e, YU Guilin, et al. A study on improving the mental health status of the lost elderly under the perspective of positive psychology[J]. *Chongqing Medicine*, 2020, 49(12):2009-2012.
- [6] SUN Tenteng, LIU Hongying, WANG Nana,et al. Current status of research on the quality of life of elderly patients with chronic diseases under the perspective of positive psychology [J]. *China Geriatric Health Care Medicine*,2022, 20(01): 95-98.
- [7] Li Yuling. Research on the effect of psychological care and health education for elderly hypertensive patients[J]. *Contemporary Medicine Series*,2017,15(07):26-28.
- [8] Zhu Xiaoling. Research on the influencing factors of medical service utilization of the elderly group[D]. Jinan University, 2020.
- [9] ZHOU Rong, ZHOU Yanqiong. The correlation between cognitive weakness and malnutrition in the elderly and the progress of nutritional intervention[J]. *Contemporary Nurses (Zhongdian)*, 2022,29(08):5-8.
- [10] Yao Yuqi. Research on the influence mechanism of health knowledge acquisition behavior of the elderly under the perspective of information ecology[D]. Jiangxi University of Finance and Economics,2023.
- [11] WANG Ailing, GAO Minghuan. Impact of health education guided by trans-theoretical modeling on self-management ability and quality of life of elderly patients with coronary heart disease [J]. *Geriatric Medicine and Health Care*,2019, 25(03): 323-326.
- [12] Zhang Caiyuan. The effects of depression and health literacy on self-neglect among older adults in Yanji City[D]. Yanbian University, 2021.
- [13] XUE Zhuan,LIU Yongbing. Research on the relationship between mild cognitive dysfunction and health literacy in the elderly[J]. *Chinese Journal of Practical Nursing*,2018, 34(20): 1521-1526.
- [14] ZHANG Pu, GUO Jiaping. The effect of positive psychology on the mental health of the elderly in the context of aging[J]. *Movement*,2018(4):139-140.
- [15] BAI He Yi, CHEN Cheng, TAN Xiao. Research on mental health management of the elderly in the context of an aging society [J]. *Knowledge Economy*,2016(8):27-2729.
- [16] Tian Jianli. The current situation of mental health and its influencing factors on the elderly population in nursing institutions [J]. *Chinese Journal of Gerontology*,2018,38 (24): 6087-6090.
- [17] Bai Bin. Research on the Development Model of Community Elderly Education under the Perspective of Lifelong Learning + Positive Aging [J]. *Avant-garde*,2022(6):67-69.