AN EXPLORATORY STUDY OF OLDER ADULTS' PARTICIPATION IN THE UNIVERSITY FOR THE THIRD AGE (U3A) IN GUANGXI PROVINCE, CHINA

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ABSTRACT: Older adults' participation in the University for the Third Age (U3A) positively influences their physical and emotional well-being and thus increases their quality of life. However, the number of the elderly participating in the U3A has remained low in China, especially in rural areas. This study explored the factors influencing older adults' attendance in a U3A in Guangxi Province, one of the less-developed provinces in China. Results indicated that factors impact participation associated with gender, overall life quality, general health, daily life activities, self-esteem, and social relationships in the U3A. This study provides a new understanding of Chinese older adults' learning in U3A in rural provinces and may help countries with similar situations.

Keywords: older adults, participation, China

Today people are living longer. Worldwide most people can expect to live into their sixties and beyond. In 2019, there was a total of 1 billion people 60 and over; by 2030, 1 in 6 people worldwide will be 60 years or over (WHO, 2021). The increasing population of older adults living longer provides significant adult learning opportunities. Indeed, older adult education has received increased attention globally, especially in countries where the more aging adult population has reached undeniably high proportions (Findsen & Formosa, 2016).

Learning in the U3A benefits older adult learners' physical and emotional well-being and thus increases their quality of life (Findsen & Formosa, 2016; WHO, 2021). Research has been conducted on many factors impacting older adult participation, such as the impacting factors from Institutions and providers' perspectives (Gierszewski & Kluzowicz, 2021). Yet, little is known about what factors prevent older adults, especially those in rural areas, from participating in lifelong learning. This study investigates the factors influencing the participation of older adults from rural areas in China to better understand their needs and attributes regarding going to the U3A or not. The following research question guides the study: What impacts older adult learners' participation in the university for the third age (U3A)? Among the non-participants, what barriers influence their plan to participate in learning at the U3A?

Literature Review

As age increases, older adults face multiple challenges, including health problems, social isolation, and feeling "left behind," which may impact their life satisfaction (Lu & Gilmour, 2004). Lifelong learning is considered an essential and significant strategy to address later life challenges and improve their overall quality of life (Findsen & Formosa, 2016; Fuentes, 2021). Various age ranges define an older adult. Previous research divided

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this population into young-old (ages 55 to 75) and old-old (ages 75 and beyond) (Backman et al., 2000). Currently, the United Nations defines an older person as someone over 60 (UNHCR, n.d.). Our study uses ages 60 and over to refer to older adults.

Life Satisfaction and Lifelong Learning

Life satisfaction describes the self-evaluation of one's quality of life. It is a subjective indicator of well-being (e.g., physical health, psychological). Life satisfaction has a long-established relationship between social networks and education (Fernández-Portero et al., 2017; Narushima & Diestelkamp, 2018). Researchers have noted that education is an essential social determinant of health and the relation of education to other facets of life, including health behaviors, economic resources, and stress (Fuentes, 2021). Escuder-Mollon and colleagues (2014) indicated that by learning specific subjects and attending activities (e.g., lifelong learning programs), older adults would be motivated to learn the updated information, establish a connection to the community, and actively develop personal aims in life, thus increased the quality of life.

Lifelong learning programs have been historically found to enhance participants' life satisfaction, positive health-related behaviors (e.g., less smoking, more exercise), and increase their social participation (e.g., civic engagement) (Narushima et al., 2013; Schuller, 2004). One longitudinal study found that social activities, including exercise and dancing, usually promote greater well-being and life satisfaction (Menec, 2003). Participation in lifelong learning generates positive outcomes that contribute to life satisfaction (AARP, 2000). Individuals may gain life-enhancing insight through lifelong learning, establishing social networks necessary to enhance their quality of life (Roberson, 2004). Lifelong learning is considered an activity that benefits an individual's health and well-being (Fuentes, 2021; Michalos, 2017).

Lifelong Learning Barriers

Multiple barriers challenge adult learners, including situational barriers (SB), institutional barriers (INSB), and dispositional barriers (DB) (Osam et al., 2017). Older adult learners face similar issues, if not more or worse. Lee (2018) revealed that factors related to an individual's surrounding environment, such as transportation, location of the classes, time, and economic situations, presented difficulties or reasons for older adults not attending lifelong learning programs. INSB consists of the policies and procedures of universities that prevent adult learners from participating in educational-based activities and their degree completion (Bergman et al., 2014). Therefore, researchers emphasize that support from college institutions is significant (Compton et al., 2006). DB refers to personal-specific characteristics such as fear of failure, attitude toward intellectual activity, and perceptions about the ability to succeed (Ekstrom, 1972). These characteristics would lead to adult learners' lack of confidence to succeed in learning (Osam et al., 2017).

Older adult learners generally have a significantly slower reaction time because aging leads to physical and cognitive changes; they may also suffer from fatigue and poor health (Zadworna, 2020). Therefore, they may experience a lower level of confidence with fear and anxiety in learning at their age. Besides, poor learning environments,

including lighting and seating unfriendly to older adults, and lack of motivation and support contribute to poor performance or lack of participation in lifelong learning (Boulton-Lewis et al., 2016; Sixsmith, 2013).

Further, informational (INFB) and physical (PB) barriers were added, especially for older adult learners. INFB—a lack of information regarding learning opportunities and benefits (Merriam & Baumgartner, 2020). Studies indicated that factors including a lack of program information or available courses, insufficient programming, and low interest in program topics often prevent successful participation and learning among older adult learners (Boulton-Lewis et al., 2016). PB—health-related issues influence older adults' learning and are a significant barrier for older adults to participate in learning (Boulton-Lewis et al., 2016; Wang et al., 2017; Zadworna, 2020).

The Older Learner in China

The current population of China is 1,450,387,165 (Worldometer, 2022), and China's population is rapidly aging (Xinhua News, 2017; Zhong et al., 2017). In 2019, 254 million older people were 60 and over, and 176 million older people were 65 and over. By 2040, an estimated 402 million people will be over 60, accounting for 28% of the total population (WHO, 2021). In the context of China, people who are age 60 (female is 55) would typically retire from their profession/work. With the increasing aging population, the China government has established educational institutions to provide lifelong learning opportunities for older adult learners.

The historical development of adult education enabled the Chinese government to see lifelong learning as an important part of serving older adults (Sun & Yuan, in press). Indeed, the plea for lifelong learning for the elderly has never been more urgent and receiving increased attention (Findsen & Formosa, 2016; Merriam & Kee, 2014). Chinese U3A has been established for older adults as a part of China's lifelong learning system in various communities across the country. It provides multiple life enrichment programs, including educational, recreational, cultural, health care, and community services, promoting an active lifestyle for retired adults.

Since the 2000s, the State Council of China has made national policies to expand lifelong learning opportunities for older learners (Sun & Yuan, in press). According to the 2016 national policy planning proposed by the State Council of the People's Republic of China, by 2020, every county-level city must have at least one institution for elderly learners. About 50% of townships would establish the U3A. 30% of villages would have learning facilities for the elderly. Research shows that the number of U3A arrived at 6,000, about six times that in 2017. In 2019, with the fast development of distance education, the number of U3A reached nearly 76,000, providing fully online learning programs with over 10 million participants (Diao 2021).

The Current Study

Although the enrollment of older adult learners is increasing, there is a large gap between well-developed and less-developed provinces. In 2019, for example, 53.6% of enrollment was in well-developed provinces in the Eastern region of China. In comparison, only

4.3% and 3.9% were in less-developed areas in the Northwestern and Northeastern regions, respectively (Diao, 2021). Therefore, understanding what impacts rural older learners' participation in lifelong learning activities becomes significant.

Our study explores the factors impacting older adults' participation in U3A in Guangxi, one rural province in China, to better understand their lifelong learning needs and attributes. This study may offer new understandings of the elderly lifelong learning factors to program planners, developers, policymakers, social workers, and other related personnel to develop strategies for recruitment and support policymakers of older adult learners in rural areas in China and countries with similar situations.

Methods

Using an anonymous online questionnaire comprised of the World Health Organization Quality of Life Instrument-Abbreviated Version (i.e., EUROHIS-QOL) (da Rocha et al., 2012) and Elder Learning Barriers (ELB) scale (Wang et al., 2017), we created Tencent survey platform (similar to Survey Monkey) for data collection. Through a snowball sampling approach, we distributed the survey link in Guangxi Province through WeChat, a popular social media platform used among the Chinese. The link was available for two weeks. One researcher initially recruited a participant who attended the U3A in Guangxi, China. This first participant then provided multiple referrals, snowballing multiple participants who also spread the study and WeChat link for Survey to more older adults. Each new referral offered new data until the survey link closed.

Participants

Two hundred and twenty-one (221) usable responses (69%) were collected among the total number of 321 responses (Table 1). The retirement age in China for women and men is 55 and 60, respectively. Therefore, individuals who are older than 50 years old are eligible to register for U3A. Hence, we selected participants 50 years old and above as the study participants. The ages of the 221 participants ranged from 50 to 80 years, with most of the participants (91.3%) aged from 50 to 65. Among them, 20.4% were female, while 76.5% were male. Among them, 34.4% had participated in the U3A, while 65.6% had never attended any U3A activities. Of the non-participants, 60 (27.1%) intended to participate in the U3A, and 26 (11.8%) had no intention to participate in U3A. Fifty-eight respondents (26.2%) were uncertain about their participation (see Table 1). 80% of the participants had enrolled in music-related courses, approximately 10% attended painting-related classes, and less than 10% took classes such as photography, yoga, and calligraphy.

Table 1. Demographic Characteristics of Participants

Characteristics	N	Percent	
Age			
50-55	86	38.9%	
56-60	79	35.7%	
61-65	37	16.7%	
66-70	12	5.4%	
71-75	3	1.4%	
76-80	4	1.8%	
Gender			
Male	169	76.5%	
Female	45	20.4%	
Attended Universities for Elderly			
Yes	76	34.4%	
No	145	65.6%	
Plan to attend in the future			
Yes	60	27.1%	
No	26	11.8%	
Not Sure	58	26.2%	

N = 221

Instruments and Data Analysis

A combination of a shortened version of the World Health Organization Quality of Life Instrument-Abbreviated Version (i.e., EUROHIS-QOL) (da Rocha et al., 2012) and Elder Learning Barriers (ELB) scale (Wang et al., 2017) was used. EUROHIS-QOL comprises eight items (1 very poor to 5 very good). Each item represents one factor: overall QOL, general health, energy, daily life activities, esteem, relationships, finance, and home. The ELB is a 26-item questionnaire that consists of five aspects (1 not at all to 5 completely): Dispositional Barriers (DB), Informational Barriers (INFB), Physical Barriers (PB), Situational Barriers (SB), and Institutional Barriers (INSB).

According to Wang and colleagues (2017), DB represents "an individual's values, attitudes, or perceptions inhibiting participating in learning activities" (p. 473). INFB means "a lack of information about learning opportunities and benefits" (p. 473). PB refers to health-related obstacles. SB "raises from one's situation in life" (p. 473), and INSB is "those practices, procedures, and policies that place limitations on participation opportunities for adult learners" (p. 473). The Cronbach's alpha of EBT in this study ranges from 0.899 to 0.963, indicating a reliable survey result. Data were analyzed through SPSS. Binary logistic regression was used to examine the influence of life satisfaction and potential barriers on university participation behavior for the elderly. The alpha level was set at .05.

Results

RQ1: What impacts older adult learners' participation in the university for the third age?

Binary logistic regression was used to examine the impact of life satisfaction and personal characteristics on university enrollment behavior for the elderly. Women were coded as 1, and men were coded as 0. Participants were coded as 1, while non-participants were coded as 0. Results indicated a significant association between gender, overall life quality, general health, energy, daily life activities, esteem, relationship, finance, home, and participation in the university for the elderly (see Table 2). The logistic model fits the data ($\chi 2(9) = 38.78$, p < .001), and 72.2% of the outcomes are correctly predicted by this model.

Logistic regression shows that women were less likely to participate in the university for the elderly than their male counterparts. Additionally, for every unit, the overall life quality, general health, energy, daily life activities, esteem, the relationship, finance, and neighborhood living environment increase, and the probability of participating in U3A increases by 44%, 8%, 68%, 39%, 52%, 52%, 37%, and 8%, respectively. Similarly, female senior learners are less likely to participate in U3A by 16% of the odds. Old adults who have a higher overall life quality are more likely to participate in the university by 56% of the odds; those who have a higher level of daily life activities are more likely to participate in the university for the elderly by 47% of the odds; learners who have a higher level of relationship are more likely to participate the university for elderly by 68% of the odds, and those have a higher level of finance are more likely to participate the university for elderly by 44% of the odds. Lastly, learners with a better living environment are more likely to participate in the university for the elderly by 8% of the odds.

Table 2. Binary Logistic Regression of Life Satisfaction of the Entire Sample

		95% CI for Odds Ratio			
			Odds		
	B(SE)	Lower	Ratio	Upper	
Participant vs. Non-Participant					
Intercept	-2.31 (.78)**		0.10		
Gender	-1.82(.53)**	0.06	0.16	0.46	
Overall Life Quality	0.44 (.30)	0.87	1.56	2.78	
General Health	-0.08 (.30)	0.52	0.93	1.66	
Energy	-0.68 (.33)**	0.27	0.51	0.97	
Daily Life Activities	0.39 (.32)	0.78	1.47	2.77	
Esteem	-0.49 (.33)	0.32	0.61	1.18	
Relationship	0.52 (.33)	0.90	1.68	3.21	
Finance	0.37 (.24)	0.90	1.44	2.30	
Home	0.08 (.27)	0.64	1.08	1.82	

^{*} p<.1, ** p<.05, *** p<.001 N=205

RQ2: Among the non-participants, what learning barriers influence their plan to participate in the universities for the elderly?

Among the participants who have not yet enrolled in the U3A, those who planned to attend the university for the elderly were coded as 1, and those who did not have an enrollment plan and those who held an uncertain attitude were coded as 0. Binary logistic regression results indicated a significant association between learning barriers and the intention to participate in the U3A among the current U3A non-participants (see Table 3). The logistic model fits the data ($\chi 2(5) = 13.2$, p =.02), and this model correctly predicts 63% of the outcomes.

According to logistic regression, for every unit, the dispositional, the information, the physical, the situational, and the institutional barriers increases, and the probability of planning to participate in the university for the elderly decreases by 69%, 74%, 7%, 97%, and 62%, respectively. Similarly, senior learners who have higher dispositional barriers are less likely to participate in the U3A for the elderly by 50% of the odds; those who have a higher level of information barriers are more likely to participate in the U3A by 10% of the odds; learners who have a higher level of the physical obstacles are more likely to participate the U3A by 7% of the odds, and those have a higher level of situational barriers are less likely to participate the U3A by 38% of the odds. Lastly, learners with higher institutional barriers are more likely to participate in the U3A by 85% of the odds.

Table 3. Binary Logistic Regression of Learning Barriers Among Nonparticipants

		95% CI for Odds Ratio				
			Odds			
	B(SE)	Lower	Ratio	Upper		
Willing to Participate vs. Not & not sure						
Intercept	-0.18 (.47)		0.84			
DB	-0.69(.40)*	0.23	0.50	1.10		
IB	0.74 (.31)**	1.14	2.10	3.88		
PB	0.07 (.35)	0.54	1.07	2.14		
SB	-0.97 (.44)**	0.16	0.38	0.89		
INSB	0.62 (.36)*	0.93	1.85	3.72		

^{*} p<.1, ** p<.05, *** p<.001 N=137

Discussions and Conclusions

Results indicate that in Guangxi Province, a rural region in China, gender, overall life quality, general health, energy, daily life activities, esteem, relationship, finance, and neighborhood living environment impact the older adults participating in the U3A. Our study result shows that older female adults are less likely to participate in lifelong learning programs. This differs from a previous study that older female learners are more likely to engage in learning (Formosa, 2010), which presents us with a new understanding of the current context and that is worth future studies to broadly learn about their perceptions of and reason for not attending these learning programs for elderly so to serve them better.

Older adults with a higher level of overall life quality, daily life activities, positive relationships and finance, and a better neighborhood living environment are more likely to be involved in learning activities of the U3A. To a certain extent, these findings echo early studies that attending the U3A has a significant relationship between older adults' life satisfaction, including economic resources and social participation (Escuder-Mollon et al., 2014; Narushima et al., 2013; Schuller, 2004).

Education is an essential social determinant of health (Braveman et al., 2011). Interestingly, our study shows a negative relationship between health, energy, and the participation of the U3A. However, participants with better health conditions and more energy are less likely to attend the U3A. Yet, among the non-participants, those with more health-related obstacles are more likely to participate in the U3A. An early study noted that memory difficulty is the most common complaint of older adults as their ability to learn and remember information begins to decline (Hertzog & Dixon, 1994). A possible explanation is that these healthy and energetic older adults in rural China enjoy activities, such as public square dancing (广场舞)—a popular activity among mid-aged old Chinese adults, rather than classroom learning in a particular discipline and are knowledge-related that requires much mental work. Certainly, time and family situations for necessary learning resources to succeed in U3A may impact their participation. More research is needed to investigate this assumption.

Additionally, those with a higher level of esteem tend not to join lifelong learning programs, which contradicts studies' findings related to older adults' lack of self-confidence in learning, leading to their lack of motivation to attend the U3A (Osam et al., 2017). This may lead us to wonder if the learning activities' content areas cannot meet these older adults learning needs considering the program activity to be lower-level classes. More research needs to examine this hypothesis.

In terms of the barriers that influence non-participants' intention to attend the U3A, results reveal that gender does not affect their plan to participate in the U3A. One interesting phenomenon worth mentioning was that the number of male participants is more significant than that of female participants. The traditional Chinese culture may influence gender roles inside the family and social and learning activities outside, particularly in rural areas. This also indicates that learning content and needs may impact female older adults' participation. Future research may explore further.

Those with a higher level of perceptions inhibiting participating in learning activities and having more life situations barriers are less likely to participate in lifelong learning programs in the future. Interestingly, non-participants with less information about learning opportunities and benefits are more likely to plan to join the U3A. Moreover, the fewer institutional restrictions and limitations on enrollment for adult learners, the more likely an older adult would plan to participate in the U3A.

The study results argue with the previous conclusions that a lack of information about available courses or programs would deter older adults from participating in lifelong learning programs (Boulton-Lewis et al., 2016). Curiosity is an aspect of intrinsic motivation that drives student learning (Pluck & Johnson, 2011), and the information gaps—an individual's knowledge of a topic but lacks specific details—would stimulate

their learning motivation to fill the information gaps (Loewenstein, 1994). The participants in our study may have heard about the U3A but had insufficient information regarding the university programs. Therefore, this information gap and their curiosity may have led them to become interested in attending learning in the U3A.

Implications and Limitations

Overall, this study discovers that a better life quality, daily life activities, relationships, finance, and a neighborhood living environment would encourage rural Chinese older adults to participate in the U3A. Thus, improving the older adults life quality, especially those who live in rural areas, becomes vital for benefiting from lifelong learning activities. Strategies such as organizing volunteers to establish a long-lasting relationship with older adults, particularly those who usually live alone, are essential. Family members' support and encouragement while staying in strong relationships with friends are also helpful when considering participating in learning activities and becoming more attached to society and the local community. These strategies may naturally lead to access to information and social happenings and thus encourage them to learn more.

It is also critical to provide necessary facilities to improve older adults' health and welfare, including centers for information consultation, social networking, entertainment gathering, and exercise and recovery. The local government should periodically provide information about the U3A, its programs, and its benefits. The U3A should also conduct a need assessment of local older adults' situations, and learning needs to develop educational programs and public activities. Further, providing classes with different levels and helping older adults step by step would help build their learning confidence. Finally, older adults must have financial support to improve their quality of life, such as increasing the older age allowance, expanding health insurance coverage, and reducing the U3A fees to a minimum for enrollment.

Limitations exist in our study. First, this study used an online (WeChat) self-reported questionnaire method. Future research may apply qualitative studies to explore older adults' perspectives further. Second, information was collected from participants in one rural province. Thus, the results cannot represent all older adult learners in rural China. Future studies should recruit more participants in other rural areas in China. Third, snowball sampling was used in this study, and sample bias may exist. Therefore, future studies may collect data through third parties and obtain more diverse older adults' random samples to reduce sample bias.

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