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The Relationship Between Lifelong Learning and Successful Aging Among Older Adults[1]

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Abstract

This study aimed to investigate the relationship between lifelong learning and successful aging in individuals aged 60 years or older. A total of 433 individuals were included in the research, selected through a convenience sampling approach. Data were gathered using three tools: a Personal Information Form, a Successful Aging Scale, and a Lifelong Learning Scale. The results indicated that both the level of lifelong learning and the extent of successful aging among the participants were moderate. It was noted that individuals aged 73-84 years had a higher level of lifelong learning compared to those aged between 60 and 72. Furthermore, it was found that individuals who had attained high school or higher education showed a greater level of lifelong learning than those who had only completed primary or secondary education. A moderate positive correlation was found between the participants' lifelong learning status and their successful aging status. This information can be used by educators and gerontologists to create lifelong learning initiatives from a geragogical perspective, which can support individuals as they prepare for older adulthood and those who are already in their later years.

Keywords: Lifelong learning, older adults, older adulthood, successful aging, geragogy.

Introduction

Aging is a multifaceted gerontological process that transcends chronological and biological indicators, representing a continuous interaction between an individual's physical, cognitive, and social capacities and their environment. While aging is a lifelong, continuous phenomenon, it is essential to focus on the concept of old age, which represents a specific developmental stage and social manifestation of this process. Indeed, the World Health Organization (WHO, 2002) defines old age as a period when an individual's ability to adapt to their environment declines. Although the United Nations (UN) recognizes 60 as the threshold for old age, the experience of aging varies among individuals based on their genetic makeup, dietary habits, and the sociocultural context in which they live (Costa & McCrae, 1977). With increasing life expectancy and decreasing birth rates, the population of older adults is growing in many countries. It is projected that by 2050, the percentage of the global population aged 60 and above will double, rising from 12% in 2015 to 22% (WHO, 2019). This growing trend highlights the importance of understanding the different aspects of aging and how these factors influence individuals and societies. Aging is not solely a biological process; it is also a complex, multidimensional stage of life influenced by psychological, social, and cognitive elements.

Along with the increase in life expectancy, the WHO emphasized that individuals should age in a way that is independent, productive, and successful, reflecting the idea that "We have added years to life, now we

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should add life to years" (Özdemirkan et al., 2020). The first formal definition of successful aging in academic writing was introduced by R.J. Havighurst (Işık et al., 2021). According to Havighurst, successful aging, as a key goal of gerontology, means "adding life to the years and being satisfied with life" (Havighurst, 1961). Rowe and Kahn later described successful aging as “positive physical and mental abilities” (Rowe & Kahn, 1997). The concept of successful aging, which has been defined in various ways, is grounded in the idea that aging involves not only losses but also gains in mental and social aspects (Schulz-Nieswandt, 2006). It emphasizes the need to strike a balance between these losses and gains, to make the most of one's current abilities, and to effectively manage any limitations (Hewstone et al., 2005). Successful aging refers to individuals maintaining an active lifestyle through the preservation of their physical health, well-being, and cognitive functioning (Rowe & Kahn, 1997). For this reason, even though the idea of successful aging is often seen as something that only applies to older people, the process of aging actually starts from the womb, and successful aging can happen throughout a person's life (Aydın & Aydın-Sayılan, 2014).

Achieving a successful aging process by maintaining physical, cognitive, and social capacities is only possible if the individual possesses the updated tools to meet the demands of an ever-changing world. Consequently, lifelong learning emerges as the most fundamental instrument ensuring the continuity of this adaptation process. The need for people to adjust to a constantly changing world has made lifelong learning an important topic (Keskinkılıç-Kara, 2020). Lifelong learning is a process that helps people keep learning and growing in their knowledge, skills, or values at every stage of life (Jarvis, 2004). In the Faure Report by UNESCO from 1972, it was said that lifelong learning supports personal development and helps people fit better into society (UNESCO, 1972). Learning starts when a person is born (Selçuk, 2020), and if this learning continues throughout life, it can influence the concept of successful aging. Especially in older adulthood, lifelong learning can help people keep their minds sharp, build stronger social connections, and feel more satisfied with their lives.

When older adults take part in lifelong learning, it helps them stay healthy, enjoy life more, connect with others by reducing loneliness, keep up with daily life changes, handle problems better, and improve their ability to deal with difficulties (Oğlak & Canatan, 2020). Encouraging lifelong learning is key to achieving successful aging. Being mentally active and keeping up with new things is very important in preventing loss of mental abilities (Hertzog et al., 2008). Schroots (1996) mentions that older adults who engage in learning can overcome some of the mental and social challenges that come with aging. Lifelong learning helps older people be more active in social and cultural activities and strengthens their relationships. It can also help reduce feelings of isolation by building stronger social connections. In particular, learning how to use digital technology allows older adults to stay involved in society by joining online groups and improving their digital skills (Quan-Haase et al., 2016). Studies show that lifelong learning activities have a positive effect on the physical and mental health of older adults. For example, it has been found that older adults who take part in educational or social activities show fewer signs of depression and have a higher level of life satisfaction (Kim & Merriam, 2004). Furthermore, engaging in mentally stimulating activities may help to delay the onset of Alzheimer's disease and other types of dementia (Wilson & Bennett, 2003). Lifelong learning can have positive effects on older people, both in terms of their cognitive abilities and their social interactions (Jarvis, 2009). Including older individuals in learning activities is important for supporting their physical, mental, and social well-being (Boulton-Lewis, 2010). Boulton-Lewis (2010) emphasizes that involving older people in learning is not only beneficial for their cognitive development but also for their emotional and social growth. However, the level of engagement of older people in learning is often influenced by their personal interests and the opportunities available to them in society and the education system (Findsen, 2012). Even though lifelong learning contributes to successful aging, many factors prevent older adults from taking part in such activities. These factors include health issues, financial limitations, difficulties in getting around, and a lack of skills in using digital technology (Schuller & Watson, 2009). In addition to these challenges, accessibility and a lack of awareness also present obstacles in Türkiye. In recent years, various programs have been introduced by the Ministry of National Education (MoNE), universities, non-governmental organizations (NGOs), and local governments to improve educational access for older adults. Under the MoNE’s Directorate General for Lifelong Learning, public education centers offer different courses designed specifically for older individuals. Some universities in Türkiye also provide educational programs for older adults under the concept of the "Third Age University." Moreover, the National Action Plan on Aging and Implementation Program (2021–2025) has been introduced as a key policy document aimed at improving educational access for older people.

However, when looking at the participation of older adults in lifelong learning in Türkiye, data from the 2022 Adult Education Survey conducted by the Turkish Statistical Institute (TurkStat) show that the overall participation rate of individuals aged 18 and over in either formal or non-formal education was 22.9%. Of this, just 1.6% were aged 65 and above. In contrast, participation in informal learning—activities that take

place outside of formal, nonformal education and are usually guided by individuals, families, or society but are less structured and organized—was recorded at 18.9% for those aged 65 and above (TurkStat, 2023).

Education for older adults in Türkiye is designed within the lifelong learning framework and is backed by various policy documents. However, in reality, certain difficulties make it hard to create educational programs that are both inclusive and easy to access. Encouraging older adults to take an active part in learning can help them stay socially involved, which contributes to a healthier and more fulfilling aging experience. With the growing number of older adults in Türkiye, it is important to understand their learning habits and how lifelong learning connects to successful aging. These insights can help in creating better educational programs in the future.

In this context, the relationship between lifelong learning and successful aging in individuals aged 60 and over in Türkiye has not been sufficiently empirically investigated. To address this research gap, the study seeks answers to the following sub-problems:

1.What are the levels of lifelong learning tendencies and successful aging among the participants?

2.Do the participants' lifelong learning tendencies differ significantly according to their demographic characteristics?

3.Is there a significant relationship between lifelong learning tendencies and successful aging levels?

Method

Research Design

The study employed a correlational survey design, which is a type of quantitative research method that helps identify relationships between different variables and their levels (Büyüköztürk, et al., 2012).

The study had two parts. Because the Lifelong Learning Scale was not originally developed for middle-aged and older adults, confirmatory factor analysis was used on data collected from participants aged 45 and above in the first part to check if the scale is suitable for this group. The second part looked at the connections between demographic factors, lifelong learning, and the relationship between successful aging and lifelong learning.

Population and Sample

In the study, two different samples were created using convenience sampling, which is one of the non-probability sampling methods. The first sample, which focuses on examining the validity and reliability of the Lifelong Learning Scale among individuals aged 60 and over, consisted of 313 participants. The second sample consists of 433 participants who are also aged 60 and over. In both samples, individuals aged 60 and over were identified and included in the sample group.

Table 1. Frequency and percentage distributions of demographic information of the sample

Variable	Category	n	%
Age	60-72 years old	379	87.5
	73-84 years old	54	12.5
Gender	Female	235	54.3
	Male	198	45.7
Educational Level	Primary School	12	2.8
	Middle School	23	5.3
	High School	102	23.6
	Associate Degree	95	21.9
	Bachelor's Degree	174	40.2
	Master's Degree	19	4.4
	PhD	8	1.8
	Total	433	100

An examination of Table 1 reveals that the vast majority (n=379, 87.5%) of the 433 individuals participating in the study fall within the 60–72 age range (the 'young-old' group). Although the gender distribution of the participants is relatively balanced, there is a slight predominance of female participants (54.3%) compared to males (45.7%). In terms of educational background, approximately 40.2% of the sample holds a bachelor's degree, suggesting that the sample represents an educated elderly population.

Data Collection Tools

In this study, which utilized an online survey method via Google Forms without any regional restrictions to reach a broad geographical spectrum of participants, individuals were informed about the research objectives and data privacy, and their informed consent was obtained prior to the data collection process. Following this stage, data were gathered using a personal information form and two specific instruments: the Successful Aging Scale and the Lifelong Learning Scale.

The Successful Aging Scale

The Successful Aging Scale is a 10-item tool created by Gary T. Reker in 2009 in Canada. It was later translated into Turkish by Hazer and Özsungur in 2017. The scale includes two main areas: maintaining a healthy lifestyle and managing problems. It uses a seven-point Likert-type format, and the total score ranges from 10 to 70. A higher score reflects a better level of successful aging. When the Turkish version was developed, 510 participants aged 60 and older were involved in studies to check the tool's validity and reliability. The Cronbach Alpha coefficient for internal consistency was found to be .85, showing that the scale is both valid and reliable. For the healthy lifestyle part, the reliability coefficient was .83, and for the problem management part, it was .92 (Hazer & Özsungur, 2017). In the current study, the Cronbach Alpha was .89, the reliability for the healthy lifestyle sub-dimension was .84, and for the dealing with problems sub-dimension, it was .85.

The Lifelong Learning Scale

While the Lifelong Learning Scale developed by Wielkiewicz and Meuwissen (2014) and adapted into Turkish by Engin et al. (2017) was developed as 16 statements, in the Turkish adaptation study, one item of the scale was removed from the scale because it was out of the factor and a unidimensional scale with 15 statements was obtained. The score that individuals can get from this five-point Likert-type scale is between 15 and 75. In the process of developing the Turkish version of the scale, validity, and reliability studies were conducted with 727 university students. The Cronbach Alpha internal consistency coefficient of the scale was reported as .93, and it was stated that the scale was valid and reliable (Engin et al., 2017).

Validity and Reliability

To check if the scale works for middle-aged and older people, a pilot study was done with 313 participants aged 45 or older. The reliability of this pilot study was .91. In the next step, when the study was applied to the main sample, the reliability was .92.

To ensure the scale is valid, Confirmatory Factor Analysis (CFA) was used on the data from the 313 participants. The results of the fit indices were as follows: x2 / df = 2.655, RMSEA = 0.073, RMR = 0.045, NFI = 0.894, TLI = 0.914, CFI = 0.930, IFI = 0.931, RFI = 0.869, AGFI = 0.878, and GFI = 0.914. To evaluate the model integration, established threshold values from the literature were utilized. According to Byrne (2011), CFI and TLI values above .90, RMSEA below .08, and x2 / df below 3 indicate an acceptable model fit. When these criteria are applied to the current findings, the calculated fit indices demonstrate that the model falls within the acceptable ranges, confirming the structural validity of the scale.

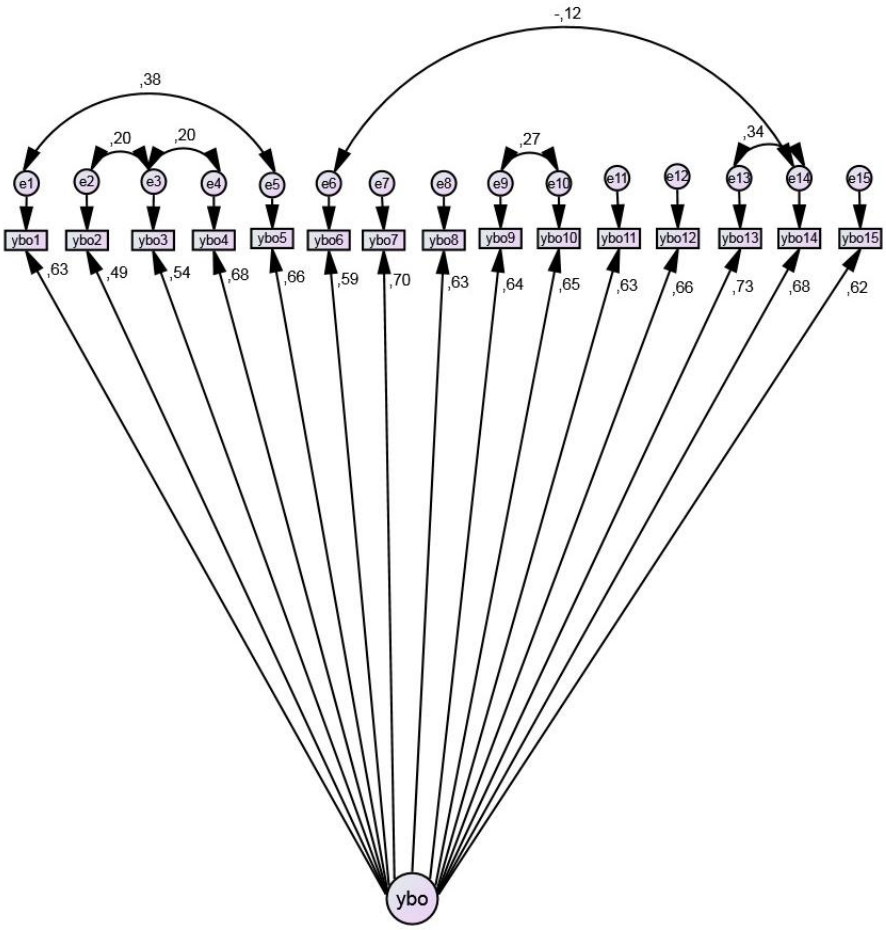

Figure 1. CFA results for the lifelong learning scale

Analysis of Figure 1 shows that the Lifelong Learning Scale consists of a single factor. The structural diagram illustrates the standardized model pathways, where the standardized factor loadings for all items range between 0.49 and 0.73. The factor analysis results indicate that all 15 items of the scale successfully group under a single factor. Additionally, the CFA results suggest that the lifelong learning scale can be used effectively for older adults.

Data Analysis

SPSS was utilized for analyzing the data from the study. Confirmatory Factor Analysis was performed on the data collected during the pilot study to assess how well the Lifelong Learning Scale fits the sample. Frequency analysis was carried out to find out the percentage distribution of participants' demographic details. Cronbach's Alpha coefficients were computed to check the reliability of the scales. The results from the K-S Test indicated that the total scores and scores for each sub-dimension of both scales were not normally distributed ($p < 0.05$). The Mann-Whitney U (MWU) Test was applied to compare the scale scores across different age groups and genders. The Kruskal-Wallis H (KWH) Test was used to compare the scale scores among various educational statuses. In addition to these analyses, 95% Confidence Intervals (CI) and effect size coefficients (r and η^2) were calculated for each test to determine the practical significance and population-level reliability of the findings. Spearman's Rank-Order Correlation Coefficient analysis was employed to examine the relationship between the scales; furthermore, the Bootstrap method (1,000 resamples) was applied to determine the 95% confidence interval values regarding the correlation coefficient.

Limitations

Although this study presents significant findings regarding the relationship between lifelong learning and successful aging, it possesses several methodological limitations. The cross-sectional nature of the research precludes definitive causal inferences concerning the direction of the relationship between variables. To observe the evolution of interactions between these variables over time, it is recommended that future studies adopt a longitudinal approach. Furthermore, there is a numerical imbalance in the sample regarding age and educational levels. Specifically, the number of participants in the 73–84 age group (n=54) is considerably lower than those in the 60–72 age group (n=379), which limits the generalizability of the results to the oldest-old population. Similarly, the low representation of participants with very low educational levels (n=12) or doctoral degrees (n=8) resulted in wider confidence intervals for these subgroups.

Data collection via Google Forms restricted the study to older adults with digital literacy and internet access. This may have led to the exclusion of individuals with limited technology use or access, a factor that should be considered when generalizing findings to the entire elderly population. Additionally, as data were gathered through self-report instruments, participants' responses may have been influenced by social desirability bias. The tendency of participants to portray themselves as more active or successful than they are constitutes a limitation regarding the objectivity of the findings. Finally, the study's execution within a specific timeframe and with a particular participant group may limit its capacity to represent elderly populations with diverse socio-cultural characteristics across Türkiye.

Findings

Under this heading, the results and interpretations of the statistical analysis of the data are presented. Descriptive statistics providing information about the participants' successful aging level and lifelong learning level are presented in Table 2.

Table 2. Descriptive statistics of successful aging scale scores and lifelong learning scale scores

	N	$\bar{X}$	95% CI [LL, UL]	SD	Median	Min. points scored	Max. points scored
Successful Aging	433	62.80	62.19-63.41	6.468	64	22	70
Healthy Lifestyle	433	19.12	18.91-19.33	2.226	20	3	21
Dealing with Problems	433	43.68	43.24-44.13	4.722	44	15	49
Lifelong Learning	433	59.12	58.19-60.05	9.885	61	26	75

An examination of Table 2 reveals that the participants' mean total score for the Successful Aging Scale is 62.80 (SD=6.468), with this mean falling within the 95% confidence interval of [62.19-63.41]. In terms of sub-dimensions, the mean for Healthy Lifestyle was found to be 19.12 (95% CI [18.91-19.33]), while the mean for Coping with Problems was 43.68 (95% CI [43.24-44.13]). The mean total score (62.80) is quite close to the scale's midpoint of 64, suggesting that the successful aging levels of the elderly participants are concentrated at a moderate level. Furthermore, the narrow confidence intervals indicate relatively precise estimates within the sampled population. Regarding the Lifelong Learning Scale, the participants' mean score is 59.12, ranging between [58.19-60.05] at a 95% confidence interval. The minimum and maximum scores obtained on this scale are 26 and 75, respectively. The mean value of 59.12 is slightly below and very close to the scale midpoint (61). In light of these findings, it can be concluded that the lifelong learning status of the elderly individuals participating in the study is at a moderate level.

The findings of the comparison of participants' lifelong learning status according to their ages are presented in Table 3.

Table 3. MWU test results for lifelong learning scale scores

		N	MR	$\bar{X}$	95% CI [LL, UL]	u	p	R
Lifelong Learning Score	Age 60-72	379	212.24	58.73	57.72-59.74	8429.500	.036	.10
	Age 73-84	54	250.40	61.85	59.44-64.26			
	Female	235	218.84	59.31	58.07-60.54	22833.000	.739	.016
	Male	198	214.82	58.90	57.47-60.33			

An examination of Table 3 reveals that participants' lifelong learning scores show a statistically significant difference based on the age variable (U=8429.50; p<0.05). When mean ranks and descriptive statistics are analyzed, it is observed that the lifelong learning levels of participants in the 73–84 age group ($\bar{X}$=61.85; 95% CI [59.44–64.26] are significantly higher than those in the 60–72 age group ($\bar{X}$=58.73; 95% CI [57.72-59.74]. However, the calculated effect size coefficient (r=.10) indicates that this difference between age groups has a small effect at a practical level.

Furthermore, as indicated in the same table, participants' lifelong learning scores do not show a statistically significant difference according to the gender variable (U=22833.00; p>0.05). An analysis of descriptive statistics and confidence intervals shows that the mean lifelong learning scores of female participants $\bar{\mathbf{X}}$=59.31; 95% CI [58.07–60.54] and male participants $\bar{\mathbf{X}}$=58.90; 95% CI [57.47–60.33] remain quite similar. The fact that the calculated effect size coefficient (r=.016) is close to zero scientifically confirms that gender does not have any practical effect on lifelong learning motivation.

The results of the comparison of participants' lifelong learning status based on their educational background are summarized in Table 4.

Table 4. KWH test results for lifelong learning scale scores

	Education Status	N	Rank Mean	$\bar{X}$	95% CI [LL, UL]	Sd	χ^2	p	η^2
LL Score	Primary School	12	143.38	53.00	45.48-60.52	6	15.531	.017	.022
	Middle School	23	140.07	52.52	47.89-57.15				
	High School	102	210.52	58.96	57.23-60.69				
	Associate Degree	95	227.39	60.16	58.34-61.98				
	Bachelor's License	174	228.45	59.69	58.11-61.27				
	Master's Degree	19	227.53	60.47	57.06-63.89				
	PhD	8	233.81	61.38	52.64-70.11				
	Total	433							

An examination of Table 4 reveals that participants' lifelong learning scores show a statistically significant difference based on educational status (χ^2(6)=15.53; p<0.05). When the 95% confidence intervals for the groups' lifelong learning levels are analyzed, it is observed that the lowest interval belongs to middle school graduates ([47.89–57.15]), while the highest interval is found among those with a doctoral degree ([52.64-70.11]). Pairwise comparisons indicated that the difference was in favor of high school, associate's, bachelor's, and master's degree holders, who exhibited significantly higher scores compared to primary and middle school graduates. However, the calculated effect size coefficient (η^2=.022) confirms that the impact of educational status on lifelong learning is at a small level.

The results regarding the connection between participants' lifelong learning status and their successful aging status are presented in Table 5.

Table 5. Spearman rank difference correlation coefficient between lifelong learning scale scores and successful aging scale scores

		Successful Aging Scores	Lifelong Learning Scores
Successful Aging Scores	rs	1.000	.543**
	p	.	.000
	N	433	433
	95% CI	-	[.467-.611]
Lifelong Learning Scores	rs	.543**	1.000
	p	.000	.
	N	433	433
	95% CI	[.467-.611]	-

**p<.01

An examination of Table 5 reveals a positive, moderate, and statistically significant relationship between the lifelong learning levels and successful aging levels of older adults (rs=0.543; p<0.001). The 95% confidence interval data calculated using the Bootstrap method indicates that this relationship ranges between [0.467–0.611] in the general population. The obtained correlation coefficient (rs=.543) points to a moderate effect size according to Cohen's criteria.

Results, Conclusions and Recommendations

It is clear that the older adults involved in the study have a moderate level of successful aging and lifelong learning.

The finding of moderate levels of successful aging and learning skills suggests that older adults' participation in lifelong learning could be increased, and with enhanced support systems, their achievements in these areas could be elevated. Educational programs that encourage the use of technology can potentially allow older adults to benefit more from learning opportunities. Similarly, programs that include social and physical activities can further support the aging process. Continuing to learn is associated with an enhanced their quality of life and a lower risk of becoming socially isolated. However, many older individuals encounter several obstacles when trying to take part in educational activities. These challenges may include difficulty adapting to new technologies, financial limitations, and health-related issues, which can all prevent them from fully engaging in lifelong learning (Withnall, 2010). In this context, the moderate levels of successful aging and lifelong learning seen in the study participants may be linked to these challenges and the lack of sufficient support. Creating more educational and social opportunities at both local and national levels could support older adults in staying mentally and socially active throughout their lives.

Findsen and Formosa (2011) looked into how lifelong learning is important for older adults and pointed out that having access to learning opportunities is closely linked to successful aging. This connection helps improve both social inclusion and cognitive health. Rowe and Kahn (1997) also stated that when older adults take part in lifelong learning, it helps them age successfully by keeping their minds active and maintaining their social connections. They stressed that being mentally engaged through learning is key to slowing down cognitive decline. Boulton-Lewis (2010) discovered that lifelong learning is a valuable part of the process for successful aging in older adults. Baltes and Baltes (1990) highlighted that lifelong learning builds cognitive reserves, which support successful aging. Schroots (1996) showed that mental exercises and cognitive training help older adults age more healthily. Hertzog et al. (2008) explored the relationship between lifelong learning and cognitive growth, finding that older adults can keep their mental abilities strong as long as they keep learning. Their research showed that cognitive activities can improve mental skills that usually get worse with age, and they stressed that lifelong learning programs help older adults maintain and improve their cognitive abilities, which is a direct factor in achieving successful aging.

When the lifelong learning levels of individuals were analyzed based on their ages, it was found that the lifelong learning status of those aged 73-84 was significantly higher compared to those aged 60-72.

This result might seem unexpected at first, as it is commonly thought that people's interest in learning tends to decline as they get older. However, factors such as having more life experiences, more free time, and a stronger desire to access lifelong learning opportunities could explain these findings.

In their studies, Çetinkaya et al. (2019) and Akçay (2021) found no difference in lifelong learning tendencies across different age groups. Canatan and Boz (2019) conducted a study with individuals aged 60 and above and found that individuals aged 60-64 participated more in lifelong learning activities and courses. Günüç et al. (2012), in their review study, stated that although lifelong learning is a process that continues throughout life, it occurs in different ways during each stage of life.

In looking at why older adults take part in lifelong learning, Withnall (2010) discovered that people aged 70 and above showed more interest in learning activities than those in younger age groups. Carstensen's socioemotional selectivity theory (1992) suggests that as people get older, they change how they connect with others and what they aim to achieve in life. Those between the ages of 73 and 84 are more likely to engage in activities that are meaningful and have clear goals. For these individuals, lifelong learning can be a way to find purpose and personal satisfaction. According to Carstensen, older adults value the process of learning as a way to grow and develop. This helps explain why people in the 73-84 age group might focus more on learning than those in the 60-72 age range.

When looking at the lifelong learning involvement of the participants based on their level of education, it was found that people with high school or higher education were more involved in lifelong learning than those with only secondary education.

This could be because these individuals had higher levels of learning in the past, or they increased their education after retiring to use their free time and continue their studies. However, it was not seen that those with doctoral degrees had any special advantage in terms of lifelong learning. In their study, Canatan and Boz (2019) found that people who took part more in lifelong learning activities had higher levels of education. Akçay (2021) noted that there is not a big difference in lifelong learning tendencies based on education level.

When the lifelong learning status of participants was examined based on gender, no significant differences were found. Meerah et al. (2011) noted that female students showed stronger tendencies toward lifelong learning. Çetinkaya et al. (2019) also found that women scored higher on all sub-dimensions of lifelong learning tendencies. However, in studies focusing on the age group of 65, it was observed that men generally participate more in lifelong learning activities than women (Canatan and Boz, 2019). Similarly, Komşu (2013) pointed out that female participation rates are lower due to family responsibilities and domestic duties. More research is needed to improve women's involvement in educational processes in Türkiye.

Given the strong connection between lifelong learning and successful aging, the demographic differences observed in this research can provide a perspective for developing policy interventions. Specifically, since individuals aged 60-72 demonstrated lower lifelong learning scores than the 73-84 group, it is recommended that local governments prioritize 'pre-aging' awareness programs for this younger cohort to foster early educational engagement. Furthermore, as higher education levels were associated with greater learning involvement, inclusive and low-barrier non-formal education programs should be developed to reach older adults with limited formal schooling, thereby reducing the inequality in successful aging outcomes.

In a study carried out by Canatan and Boz (2019) in Türkiye, older adults mentioned that they gained advantages from lifelong learning activities in areas such as social involvement, health, happiness, staying productive after retirement, promoting solidarity between generations, and fulfilling social responsibilities. Despite these benefits, there is a clear need for more services in this area in Türkiye. To address this, it is important to consider the needs and interests of the elderly. According to the Evaluation of the Turkish Adult Education System (Yayla, 2009), lifelong learning programs are not being developed properly, the training provided does not adequately support the lives of older people, the challenges they face in participating in activities are not recognized, and there are no effective solutions in place. Additionally, educators lack the necessary understanding of how to teach adults. The participation of individuals aged 65 and above in lifelong learning remains relatively low in Türkiye. This low level of participation is largely because many older people in Türkiye face not only physical limitations caused by aging but also economic, political, and social issues. Moreover, an inactive lifestyle, such as that associated with retirement, often appears to hinder them from leading a more active and engaged life.

In Türkiye, it is observed that 95 percent of individuals aged 65 and above experience some level of functional disability (MFSP, 2013). A study on individuals aged 65 and older in Türkiye revealed that 8.58% of them could not take part in certain activities due to illness (TurkStat, 2015). However, beyond this, it is clear that the main reason elderly people in Türkiye do not engage in lifelong learning activities is because they lack awareness about the importance of such programs. According to a study by Özmete (2016), individuals aged 65 and above in Türkiye cited a lack of interest (44.62%) or not knowing about these opportunities (46.79%) as the main reasons they could not participate in educational, seminar, course, and conference activities related to lifelong learning.

Since lifelong learning is a key component of educational sciences in the 21st century and presents a positive relationship with successful aging, there is a need to create awareness programs aimed at individuals over the age of 65 in Türkiye. These programs should be designed to align with both lifelong learning and the concept of active aging. Educators and gerontologists should collaborate in planning, developing, and implementing these initiatives. Nevertheless, an examination of the gerontological literature in Türkiye reveals that research predominantly focuses on pathological processes and physical health indicators; however, lifelong learning activities, which manifest the cognitive and social potentials of older adults, are not sufficiently represented within the active aging perspective.

Successful aging is not just about keeping the body in good health; it also requires staying mentally, socially, and emotionally active. Keeping up with learning throughout life plays a vital role in this process, and it is linked to benefits for both individuals and the wider community. It is essential to create education programs that cater to the needs of older adults, help them develop their digital skills, and support their involvement in society. The National Action Plan on Aging and Implementation Program (2021–2025) is an important policy initiative aimed at improving educational opportunities for older people. For this plan to be effective, local governments and non-governmental organizations (NGOs) need to be more involved, as there is a clear connection between successful aging and lifelong learning. Increasing access to digital education and building more inclusive learning environments are also crucial steps in helping older adults remain engaged in learning activities. To address the moderate levels of successful aging observed in the participants, it is also recommended that gerontologists and educators collaborate to integrate cognitive support systems and digital literacy training into the National Action Plan, ensuring that lifelong learning becomes a more accessible and less intimidating process for all older adults in Türkiye.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by the studies was conducted under the Declaration of Helsinki and approved by the Sakarya University Educational Research and Publication Ethics Committee with the decision number E-61923333-050.99-139006. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

This article is derived from the first author's master's thesis. The study was designed and conducted by the first author (student), under the supervision of the second author (thesis advisor). The first author collected the data, conducted the initial analysis, and prepared the first draft of the manuscript. The second author provided academic supervision throughout the process, contributed to the data analysis and interpretation, and revised the manuscript critically for important intellectual content. Both authors read and approved the final version of the manuscript.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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