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Original Article

The Effects and Determinants of Leisure Time Activities on Successful Aging and Quality of Life in Older Adults

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SUMMARY

Background: This study aimed to determine the effects and determinants of leisure time activities on successful ageing and quality of life levels in older adults.

Methods: The study was cross-sectional. The population of the study consists of older adults residing in Samsun/Ayvacik district in Turkey (N = 2662). Descriptive statistics, Chi-Square test, Pearson correlation and multiple regression analysis were used to analyze the data.

Results: 60.6% were between 65 and 74, 84.8% were married, and 80.8% were primary school graduates. When the leisure time activities of the participants were analyzed, the first three ranks were watching TV, participation in social activities (97.8%), gardening (84.1%) and short walks (68.9%). The mean leisure time activities of the participants were 3.11 ± 0.71, the mean scores of successful ageing were 36.89 ± 8.06, and the mean scores of quality of life were 24.73 ± 3.30. A positive relationship was determined between leisure time activities, successful ageing and quality of life (p < 0.001).

Conclusion: The first significant result of the study is that participation in leisure time activities positively affects quality of life and healthy ageing. The second significant result is that the level of leisure time activities, successful ageing, and quality of life are affected by gender, and the scores of men are higher than those of women.

1. Introduction

Life expectancy at birth is increasing worldwide due to advances in the health sector, increased health awareness, changing dietary habits and improved economic and social conditions. According to the World Health Organization, one in six people will be over the age of 60 in 2030, and by 2050, the population over 60 is expected to reach 2.1 billion. While today the elderly population is mostly concentrated in developed countries, by 2050, two-thirds of this population is projected to be in low- and middle-income countries. According to 2022 data, the country with the highest proportion of elderly population is Monaco with 35.9%, followed by Japan with 29.9% and Italy with 24.1%. While the rate of elderly population worldwide is 9.8%, Turkey is among the elderly societies with 9.9%.[1−3]

Aging refers to the biological, physical and psychosocial changes that occur in the organism over time and are usually irreversible. This process can affect a person's physical health, cognitive abilities and quality of life.[4,5] Physically, aging causes changes, such as decreased muscle mass and bone density and loss of collagen in the skin. Cognitively, it can cause memory problems, attention deficits and a decrease in thinking speed. In addition, aging is associated with a weakened immune system, a lower metabolic rate and reduced energy levels.[6,7] Old age is a period when a person feels the effects of age more and more as the aging process progresses. At this stage, health problems may increase, the risk of chronic diseases may rise, and lifestyle changes may be necessary.[8,9] Aging and old age show individual differences and depend on genetic, environmental and lifestyle factors. Regular exercise, a balanced diet, stress management, health monitoring, and social connections and personal happiness are important for healthy aging and old age.[10−14] For this reason, individuals are paying more and more attention to successful ageing activities to reduce the effects of ageing and improve quality of life.[3]

Successful ageing includes a high quality of life in terms of physical, cognitive and social health. This is the ability of older people to maintain independence, lead active lives, participate in society and manage chronic illness or disabilities. Physical activity, a balanced diet, mental exercises, social interaction and regular health check-ups can improve quality of life. However, there are no general criteria for measuring quality of life in older people, as this varies depending on individual and cultural differences.[15−17] When setting goals for successful ageing and quality of life, individuals' physical, mental and cognitive health and social engagement need to be taken into account.[18,19] Fernández-Ballesteros (2019) and Annele et al. (2019) emphasized that the concept of successful aging should consider physical, social, functional and psychological factors together.[20,21] The study planned for these reasons aims to determine the effects and determinants of leisure time activities on successful ageing and quality of life levels in older adults.

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2. Methods

2.1. Population and sample

The study is cross-sectional. The population of the study consists of individuals over the age of 65 residing in Ayvacik district of Samsun province. The reason for the selection of this district is that in addition to the natural beauties of the district, individuals over the age of 65, who generally live a retirement life, reside here. According to Turkish Statistics Institute (TUİK) 2023 population data, the district's total population is 18,928. There are 1224 men and 1438 women over the age of 65 living in the district (TUIK, 2023). The minimum sample size of the study was determined as 384.[22]

2.2 Data collection tools

The study data were collected in 4 forms; "Personal Information Form", "Leisure Time Activities in Older Adults Form", "Successful Ageing Scale", and "Quality of Life Scale".

2.2.1. Personal Information Form
It consists of 17 statements questioning the socio-demographic characteristics of the participants, such as age and gender.

2.2.2. Leisure Time Activities in Older Adults Form
Six statements, including the leisure time activities of the participants, were taken from the study conducted by Zhao et al. Each statement was scored as "0-never, 1-Sometimes and 2-Usually". Then, "never" and "sometimes" were coded as "0" to represent not participating in leisure time activities, and "usually" was coded as "1" to represent participation in leisure time expressions. As a result, leisure time activities were scored as the lowest "0" and the highest "6".[3]

2.2.3. Successful Ageing Scale
It was developed by Reker (2009) and Hazer and Özsungur in 2017; a validity and reliability study was conducted in Turkish. The scale aims to evaluate the successful ageing status of the older adults. Statements 1–3 consist of the sub-dimension of "healthy lifestyle", and statements between 4–10 consist of the sub-dimension of "struggling with problems". It is a 7-point Likert-type scale. The point scale is as follows: Strongly agree = 7, Strongly disagree = 1. Participants can get at least 10 and, at most, 70 points from this scale. As the score increases, the successful ageing status of the participants also increases.[23,24] In this study, Cronbach's alpha value of the scale was 0.929.

2.2.4. Quality of Life Scale
The Turkish validity and reliability study of the scale developed by WHO was conducted by Eser et al. The scale was scored with a 5-point Likert scale. The extreme words of the answers are "1-never ..." and "5-very ...". The lowest score on the scale is 8, and the highest score is 40. There are no reverse items in the scale. The scale consists of one dimension. It is predicted that the higher the score obtained from the scale, the higher the quality of life.[25] In this study, the Cronbach's alpha value of the scale was 0.907.

2.3. Data collection

The research data were collected between 1 July 2023 and 30 November 2023 by conducting a face-to-face questionnaire to individuals over the age of 65 who applied to the district's state hospital for any reason. A total of 540 individuals, 270 females and 270 males, were included in the study by random sampling method.

2.4. Data analysis

The study data were transferred to the SPSS 26.00 program. Percentage, frequency, Chi-square, correlation and multiple regression analysis were used to analyze the data.

2.5. Ethics approval

Ethical approval for the study was obtained from Alanya Alaaddin Keykubat University Non-Interventional Clinical Research Ethics Committee with the date 19.11.2020 and numbers 25–26.

3. Results

Among the participants, 50% were female and 50% were male. 60.6% were in the 65–74 age range, 84.8% were married, 80.8% had primary education, 55.2% had hypertension and 58.9% had quit smoking (Table 1).

Table 1
Socio-demographic characteristics of participants.

Variables	N	%
Gender		
Female	270	50.0
Male	270	50.0
Age		
65–74	327	60.6
75–84	213	39.4
Marital status		
Married	458	84.8
Single	82	15.2
Education		
Primary education	436	80.8
High school	92	17.0
University	12	2.2
Regular income		
No	85	15.7
Yes	455	84.3
Who you live with		
Alone	41	7.6
With my wife	368	68.1
With my wife and children	131	24.3
Social security		
SSI fund	418	77.4
Pension fund	67	12.4
SEI fund	55	10.2
Smoking		
Yes	91	16.9
I quit	318	58.9
No	131	24.3
Alcohol consumption		
Yes	7	1.3
Rarely	14	2.6
Never	519	96.1
Do you have a disability?		
Yes	69	12.8
No	471	87.2
Which disability (N: 69)		
Chronic illness	62	11.5
Orthopaedic disability	7	1.1
Chronic disease		
Yes	434	80.4
No	106	19.6
Which disease (N: 457)*		
Diabetes	200	44.7
Hypertension	247	55.2
Heart failure	10	0.1

* More than one chronic disease is taken into account in the distribution of diseases.

When the leisure time activities of the participants are analyzed, 84.1% usually do gardening, 68.9% sometimes take short walks, 97.8% usually watch television, 97.8% usually participate in social activities, and 51.5% go to coffee houses or tea gardens (Table 2).

A statistically significant difference was determined between leisure time activities, successful ageing and quality of life of the participants according to gender ($p < 0.005$). In addition, it was determined that the mean scores of leisure time activities, successful ageing, and quality of life of men were higher than those of women (Table 3).

According to the results of the correlation analysis in which the relationship between the scales and sub-dimensions was evaluated, a positive relationship was found between leisure time activities, successful ageing and quality of life ($p < 0.001$). The participants' mean leisure time activities, successful ageing and quality of life scores were 3.11 ± 0.71, 36.89 ± 8.06 and 24.73 ± 3.30, respectively (Table 4).

When the leisure time activities of the participants were evaluated in terms of gender, it was found that the differences were significant ($p < 0.001$) (Table 5).

According to the results of multiple regression analysis in which quality of life and determinants were evaluated, the model was found to be significant ($F_{(7,533)} = 21.780$, $p < 0.05$). According to the model, independent variables explain 67% of the change in the dependent variable. According to the results of the analysis, quality of life is affected by educational status, marital status, gender, leisure time activities and successful ageing (Table 6).

4. Discussion

According to the Turkish Statistical Institute's (TUİK) data on

Table 2
Participants' leisure time activities.

Leisure time activities	N	%
Gardening		
Sometimes	86	15.9
Usually	454	84.1
Short walks		
Sometimes	372	68.9
Usually	168	31.1
Reading newspapers and books		
Never	108	20.0
Sometimes	432	80.0
Watching TV		
Never	12	2.2
Usually	528	97.8
Participation in social activities		
Never	12	2.2
Usually	528	97.8
Visiting coffee houses or tea gardens		
Usually	262	48.5
Sometimes	278	51.5

Table 3
Leisure time activities, successful ageing and quality of life by gender in the research group.

Variable	Leisure time activities	Successful ageing	Quality of life
Gender ($\bar{x} \pm SD$)			
Female	2.79 ± 0.65	35.23 ± 8.06	24.49 ± 3.42
Male	3.43 ± 0.59	38.56 ± 7.74	24.99 ± 3.16
p*	< 0.001	< 0.001	< 0.001

Student t-test.

Table 4
Relationship between Successful Ageing Scale, Quality of Life Scale and Leisure Time Activities Form.

Scales and subscales	$\bar{x}$	SD	1	1.1	1.2	2	3
1. Successful Ageing Scale	36.89	8.06	1				
1.1. Healthy lifestyle subdimension	11.10	2.83	0.916*	1			
1.2. Sub-dimension of struggling with problems	25.80	5.58	0.979*	0.816*	1		
2. Leisure time activities	3.11	0.71	0.618*	0.721*	0.530*	1	
3. Quality of Life Scale	24.73	3.30	0.424*	0.355*	0.433*	0.518*	1

* Correlation is significant at the 0.001 level (2-tailed). (Pearson correlation analysis, percentage, frequency).

Table 5
Leisure time activities by gender in the research group.

Leisure Time Activities	Female (270)		Male (270)		Total (540)		x^2/p
	N	%	N	%	N	%	
Gardening							
Usually	237	87.80%	217	80.40%	454	84.1%	x^2: 5.532
Sometimes	33	12.20%	53	19.60%	86	15.9%	$p < 0.001$
Short walks							
Usually	0	0.00%	168	62.20%	168	31.1%	x^2: 43.871
Sometimes	270	100.00%	102	37.80%	372	68.9%	$p < 0.001$
Visiting coffee houses or tea gardens							
Never	262	97.00%	0	0.00%	262	48.5%	x^2: 8.921
Sometimes	8	3.00%	270	100.00%	278	51.5%	$p < 0.001$
Reading newspapers and books							
Never	12	4.40%	96	35.60%	108	20.0%	x^2: 6.671
Sometimes	258	95.60%	174	64.40%	432	80.0%	$p < 0.001$
Watching TV							
Never	12	4.40%	0	0.00%	12	2.2%	x^2: 12.273
Usually	258	95.60%	270	100.00%	528	97.8%	$p < 0.001$
Participation in social activities							
Never	12	4.40%	0	0.00%	12	2.2%	x^2: 12.373
Usually	258	95.60%	270	100.00%	528	97.8%	$p < 0.001$

Pearson Chi-Square Test.

Table 6

Quality of life and its determinants.

Variables	B	SE	β	t	p
(Constant)	17.924	6.678		15.269	**0.000**
Age (65–74)	1.192	1.017	0.162	11.218	0.584
Education (associate degree)	0.604	0.231	0.106	2.608	**0.032**
Marital status (married)	-0.720	0.409	-0.078	-1.760	**0.005**
Gender (female)	0.074	0.282	0.011	2.263	**0.009**
Leisure time activities (usually)	0.890	0.311	0.046	3.394	**0.000**
Successful ageing	1.190	0.017	0.463	11.218	**0.000**
Adjusted R2 = 0.67		F = 21.780	df = (7,533)		p < 0.001
Dependent Variable: Quality of Life					

(Multiple regression analysis).

older adults, life expectancy at birth in Türkiye is 77.7 years, and 64.5% of the older adult population is in the 65–74 age group.[26] This study determined that 60.6% of the participants were in the 65–74 age range. In the study of Demirağ et al. (2023), the average age was 71.62 ± 4.6, and in the study conducted by Bahadır et al. (2023) in Sivas province, 79.5% of older adults were in the 65–74 age range.[27,28] It is seen that there is a similarity between the studies conducted in recent years in Türkiye and the results of this study. Also, this result is in line with the general population pyramid by TUİK.

In aging, the transition from productive to consumer roles can lead to emotional and social transformations affecting the quality of life. In this period, leisure activities are an important determinant of quality of life and play a critical role in compensating for losses and adapting to the new life stage. These activities offer individuals new goals and help them to improve their quality of life by providing satisfying experiences.[29,30] Leisure activities vary according to personal interests, and activities such as art, sports, social interaction and reading can provide mental and emotional fulfillment for older adults. Participation in these activities offers benefits such as finding meaning in life, personal development, social connections and spiritual well-being. Research shows that passionate engagement in leisure activities positively affects older adults' happiness, quality of life and successful ageing.[31–33] It also facilitates coping with geriatric depression.[34,35] As a result of the study, it was determined that 51.88% of older adults participated in leisure activities. In addition, it was determined that men's leisure time activities, successful ageing and quality of life scores were higher than women's.

According to the study results, there is a significant difference between leisure time activities, successful aging, quality of life and gender. Gender and age are important determinants of diseases and health outcomes and play a critical role in health research and shaping health policies.[36] In the study conducted by Zhao et al. (2023), it was found that there was a significant relationship between leisure time activities, successful ageing and age and gender.[3] Changes in quality of life vary with age, depending on various factors such as physiological changes. Aging can have adverse effects on physical health, such as muscle loss, decreased bone density, and reduced vision and hearing. However, it can also offer positive aspects such as retirement and relationships with family and friends. Physical activity, a balanced diet, health check-ups, maintaining social relationships and participation in leisure activities are recommended for healthy ageing and are important for improving quality of life.

High quality of life in older adults is associated with socioeconomic status, physical and mental health status and successful ageing activities.[37,38] As a result of the study, a positive relationship was found between quality of life and leisure time activities and successful ageing. In the study conducted by Değer and Ordu (2022) and Beşikçi (2023), a positive relationship was found between leisure

time activities and quality of life.[39,40] Many studies conducted in the literature have determined a positive relationship between leisure time activities, successful ageing and quality of life.[18,21,31,41] As a result, leisure time activities can contribute to a healthier life in old age by supporting the person's social, physical and mental health.

It was determined that the quality of life in older adults was affected by leisure time activities, successful ageing, educational status, marital status and gender variables. In the study conducted by Parra-Rizo et al. (2022), it was determined that quality of life was affected by gender, educational status and leisure time activities.[34] The study conducted by Değer and Ordu (2022) and Beşikçi (2023) determined that quality of life in older adults was related to gender, educational status and regular income.[39,40] Individuals with high levels of education have an advantage in access to quality job opportunities, high income and healthy lifestyles, which can improve quality of life. Education facilitates access to health services and increases health awareness, which can directly improve quality of life. Education-related activities include career, reading, travel and leisure. However, factors other than education are also important for understanding quality of life, including socioeconomic status, age, gender, living environment and genetics. Although education positively impacts the quality of life, especially among older adults, other variables need to be examined to analyze this effect comprehensively.

5. Conclusion

According to the results of this study, the quality of life of older adults is positively affected by socio-demographic characteristics, education level and gender variables, while it is negatively affected by marital status variables. In addition, quality of life is positively affected by leisure time activities and successful ageing activities. Therefore, it can be said that socio-demographic characteristics, leisure time activities and successful ageing are determinants of quality of life. Furthermore, according to the results of the study, women's quality of life, successful ageing, and participation in leisure activities scores are lower than men's. For this reason, it can be stated that more importance should be given to social responsibility projects that will increase the participation of older adult women in leisure time activities.

Ethics approval and consent to participate

Informed consent was obtained from all individual participants included in the study. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. This article does not contain any studies with animals performed by any of the authors.

Competing interests

There are no competing interests.

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