

How Successful Are We Aging^{*}

Ne Kadar Başarılı Yaşlanıyoruz

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ABSTRACT

Aim: This study was conducted to determine who live in southeastern Turkey, the older people how successful they get older.

Methods: The sample of the descriptive study; it consisted of 442 elderly individuals aged 60 and over who applied to two Family Health Centers (FHC) between July and October 2019. Personal Information Form and Successful Aging Scale were used to collect data. Percentage, frequency, average, standard deviation, linear regresyon, t test and Anova were performed in the data analysis (p<0.05).

Results: It was determined that the mean scores of Successful Aging Scale decreased with increasing age, increased with education and the difference between them was significant (p=0.00). It was determined that Successful Aging Scale total scale mean score was 46.5±12.0. The effect of independent variables on successful aging was determined as $R^2 = .262$.

Conclusion: It was determined that total mean score of successful aging of the elderly individuals included in the study was medium, and as the age increased, the mean score of successful aging decreased.

Keywords: Older People, Old Age Period, Successful Aging

ÖZ

Amaç: Bu çalışma Türkiye'nin güneydoğusundaki yaşlıların ne kadar başarılı yaşlandıklarını belirlemek amacıyla yapılmıştır.

Yöntem: Tanımlayıcı çalışmanın örneklemi; Temmuz-Ekim 2019 tarihleri arasında iki Aile Sağlığı Merkezi'ne (ASM) başvuran 60 yaş ve üzeri 442 yaşlı bireyden oluşmaktadır. Veri toplamak için Kişisel Bilgi Formu ve Başarılı Yaşlanma Ölçeği kullanılmıştır. Verilerin analizinde yüzde, frekans, ortalama, standart sapma, lineer regresyon, t testi ve Anova yapılmıştır.

Bulgular: SAS ortalamalarının yaşla birlikte azaldığı, eğitimle arttığı ve aralarındaki farkın anlamlı olduğu belirlenmiştir (p=0.00). SAS toplam ölçek puan ortalamasının 46.5±12.0 olduğu, bağımsız değişkenlerin başarılı yaşlanma üzerindeki etkisi R²=.262 olarak belirlenmiştir.

Sonuç: Çalışmaya alınan yaşlı bireylerin başarılı yaşlanma puanlarının toplam puan ortalamasının orta olduğu, yaş arttıkça başarılı yaşlanma puan ortalamasının azaldığı belirlenmiştir.

Anahtar kelimeler: Yaşlı Birey, Yaşlılık Dönemi, Başarılı Yaşlanma

^{*}Lokman Hekim Dergisi, 2021; 11 (2): 331-339

DOI: 10.31020/mutftd.878363

e-ISSN: 1309-8004, ISSN 1309-761X

Geliş Tarihi – Received: 10 Şubat 2021; Kabul Tarihi - Accepted: 31 Mart 2021

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Etik Onay: Hasan Kalyoncu Üniversitesi Sağlık Bilimleri Fakültesi Girişimsel Olmayan Klinik Araştırmalar Etik Kurulu (Tarih: 14. 06. 2019; Karar no: 2019/95)

Introduction

The populations of all the developed and developing countries get older and the increase in the older people bring along many problems. The disease burden of the elderly increases as the prevalence of chronic and infectious diseases increases in old age.¹ As the diseases observed in older people cause a heavy economic and social burden for the individuals and their relatives, the developed societies endeavor to eliminate this situation.^{2,3} The recent studies have revealed that chronic diseases may be prevented through changes in lifestyle and the needs of elderly people for medical and social services may be decreased.⁴⁻⁷

Due to the aging population and the increased life expectancy in the developed world, how to "age successfully" has attracted the attention of the clinic, public health and policies and there is an increasing interest for the need to identify the concept and reach a consensus in this subject.⁸ While the concept of healthy aging is used in the field of medicine for this, the concept of successful aging is commonly used in the social sciences.³

One of the most successful ideas of gerontology is successful aging.⁹ Successful aging is used in the following senses: increasing active life expectations by minimizing physiological degradation through preventing chronic diseases as well aspsychological well-being, looking positively about life being satisfied with life, maximum physical and mental functionality, and being economically safe.^{10,11} The concept of successful aging is also defined as "aging of life" or "active aging" or "productive aging". This means that older people can contribute to society in their later lives.¹² The people who do not lose their relationship with life compared to their peer group and do have almost no function loss are described as successfully aged people.¹¹

The concept of successful aging has been included in the Renaissance texts for the first time in history. However, it emerged as a modern gerontological idea after the 1950s and later gained prominence in the work of Rowe and Kahn.¹³ This concept, which has become popular by means of the studies by Rowe and Kahn, includes positive physical and mental competencies.^{14,15} In the study conducted by Strawbridge with the elderly people aged between 65 and 99, it was found that the rate of the people who were regarded successfully aged was 18.8% and 50.3% of the same people perceived themselves to age successfully.³ Health, social and psychological resources, coping mechanisms and the ability to adapt to changes in life are the main sources of successful aging.¹⁶ In many studies, health is the most important determinant of successful aging in different socioeconomic groups.⁷ Also, the level of the individuals to achieve their goals and objectives as well as their knowledge and awareness about themselves and life are important in successful aging.¹⁷ Individual acceptance is another factor affecting successful aging and quality of life and is effective in revealing one's psychological intentions.¹⁸

The basis of successful aging is that the individuals take the decisions about their lives by their own will. If this period is productive, the losses and damages to be experienced during the aging period is minimized.¹⁹ In the literature, studies of successful aging was seen in Turkey generally is done in the western regions and major cities. However, there is no study showing the successful aging levels of individuals living in the eastern regions of our country. Therefore this study was conducted to determine the level of successful aging for the elderly living in southeastern Turkey. We believe that our study will contribute to the literature.

Research questions

1.Is there a relationship between the sociodemographic characteristics of elderly individuals and their successful aging?

- 2. What is the level of successful aging of elderly people?
- 3. What are the factors affecting successful aging?

Materials and methods: Design, setting, and sample

The research was carried out in descriptive design. The universe of this descriptive study; 60 years and older registered in the Family Health Centers in the province in the southeast of Turkey is 34.406 individuals. The sample of the research is; according to the sample calculation, it was calculated as 380 people at a 5% error rate at 95% confidence interval, and the research was completed with 442 older individuals. The Family Health Centers where the study was conducted were selected because they are similar in sociocultural structure. The elderly individuals included in the study were included in the study using simple random sampling method, one of the probabilistic sampling methods. The city where the study was conducted is a settlement area where industrialization is not much and people make a living mostly with agriculture and animal husbandry.

Study inclusion criteria

Individuals who live in the center of the province where the study was conducted, who are mentally healthy, who can communicate, and who are 60 years old and over, who are registered in designated family health centers, volunteering to participate were included in the study.

Data collection

The data of the study were collected between July and October 2019 in determined two FHCs by using face-to-face interview method. The data of the study were collected using 13-question "Personal Information Form" and "Successful Aging Scale".

Personal information form: It is a form including the sociodemgraphic (age, gender, marital status, educational status, physical and mental activity status, diet etc.) characteristics of individuals.^{3, 7, 17}

Successful aging scale: The scale was developed by Gary T. Reker in 2009.²⁰ It was translated into Turkish by Hazer and Özsungur.¹⁷ The scale is composed of two subscales and 10 questions about the healthy lifestyle of elderly people related to successful aging and coping with problems. The total Cronbach's α value of the Successful Aging Scale is 0.85. Each item is scored from 1 to 7. It is a 7-point Likert scale. The items in the scale are rated as follows: Strongly agree=7, agree=6 partly agree=5, neutral=4, partly disagree=3, disagree=2, strongly disagree=1.¹⁷ The total Cronbach's α value of Successful Aging Scale was determined to be 0.91 in the present study.

Data analysis

In the statistical analysis of the data, SPSS 21 (Statistical Package for Social Sciences for Windows) software was used and number, percentage, mean, independent samples t test, linear regression and ANOVA were applied. The results obtained in the present study were assessed at the significance level of p<0.05 and confidence interval of 95%.

Ethical consideration

Ethics committee approval was received from the non-interventional research ethics committee of a University (Decision number: 2019/95). Necessary permissions were obtained from the family health centers in which the study would be conducted. The participants were informed about the purpose of the study and their written and verbal consents were obtained.

Results

It was determined that 58.1% of the participants were female, 57% were aged between 65 and 74, 86.9% were married, 51.6% were housewives, 51.4% were illiterate, and 51.6% were living with their spouses. When examining SAS mean scores based on age, it was determined that SAS mean score decreased with the increasing age and the difference between them was significant (p<0.05). In the examination of SAS mean scores based on educational level, it was determined that SAS mean score increased together with the increasing educational level and the difference between them were significant (p=0.00). In the examination of SAS mean scores based on gender, marital status, profession, and the people living with the participants, it was determined that there was no significant difference between them (p>0.05) (*Table 1*).

SAS % **X±SD** n Significance Gender Female 257 58.1 45.8±12.5 t=-1.438 p=0.151 Male 185 41.9 45.5±11.1 Age 60-64 110 24.9 47.6±12.3 F=5.733 65-74 252 57.0 47.5±11.7 p=0.001 75-84 70 15.8 42.8±11.3 85 and over 10 2.3 36.2±8.5 **Marital status** Married 384 86.9 46.8±11.9 t=1.256 p=0.207 Single 58 13.1 44.7±12.0 **Educational Status** Illiterate 227 51.4 45.0±11.9 F=6.621 p=0.000 Literate 122 27.6 45.7±11.1 48.8±11.7 Primary school 55 12.4 Secondary School 21 4.8 53.2±11.3 High school and above 17 3.8 56.8±12.1 Profession Housewife 228 51.6 45.1±12.5 F=2.093 p=0.100 Retired 37.8 47.9±11.1 167 Employed 33 7.5 48.6±11.3 14 Farmer 3.2 47.5±11.5 People living with the participant Alone 48 10.9 45.9±12.2 F=1.783 p=0.150 Spouse 228 51.6 47.5±11.4 Children and spouse 96 21.7 46.5±12.5 Children 70 15.8 43.8±12.6

 Table 1. Comparison of SAS mean scores of the participants based on their sociodemographic characteristics (n=442)

Independent Samplest Test, ANOVA. SAS=Successful Aging Scale

It was determined that as the levels of satisfaction from life and happiness increased, SAS mean score increased and the difference between them was significant (p=0.00). It was determined that SAS mean scores of those participating in physical and mental activities were higher compared to those who did not and the difference between them was significant (p=0.00). As the interaction with other people increased, SAS mean score increased and the difference between them was significant (p=0.00). It was determined that the SAS mean score of those who had an adequate and balanced diet and regular health checks increased and the difference between them was significant (p=0.00) (*Table 2*).

Table 2. Comparison of SAS mean scores based on some characteristics of the participants (n=442)

	SAS			5
	n	%	X±SD	Significance
Are you satisfied with your life?				
Very satisfied	60	13.6	54.3±11.2	F=22.560
Moderately satisfied	317	71.7	46.3±10.9	p=0.000
Not at all satisfied	65	14.7	40.6±13.8	
How do you describe yourself?				
Mostly happy	110	24.9	51.9±12.2	F=20.411
Sometimes happy	283	64.0	45.5±10.8	p=0.000
Unhappy	49	11.1	40.2±13.3	
Do you participate in physical activities?				
Yes	117	26.5	53.2±10.2	t=7.415
No	325	73.5	44.1±11.6	p=0.000
Do you participate in mental activities?				
Yes	113	25.6	50.8±11.5	t=4.505
No	329	74.4	45.0±11.8	p=0.000
How is your interaction with other people?				
I am very active	89	20.1	52.7±13.2	F=21.690
I am slightly active	242	54.8	46.3±11.1	p=0.000
l am not active	111	25.1	42.0±10.6	
Do you have an adequate and balanced diet?				
Yes	280	63.3	49.6±11.8	t=7.586
No	162	36.7	41.2±10.3	p=0.000
Do you have regular health checks?				
Yes	236	53.4	50.1±12.1	t=7.097
No	206	46.6	42.4±10.3	p=0.000

Independent Samples T Test, ANOVA. SAS=Successful Aging Scale

It was determined that SAS total scale mean score was 46.5±12.0, "Coping with Problems" subscale mean score was 31.4±8.7, and "Healthy Lifestyle" subscale mean score was 15.1±4.1 (*Table 3*).

Table 3. SAS total and subscale mean scores of the participants

	Min-Max	X±SD
Healthy Lifestyle	3-21	15.1±4.1
Coping with Problems	7-49	31.4±8.7
SAS Total	10-70	46.5±12.0

SAS=Successful Aging Scale

Table 4 shows the impact of socio-demographic characteristics on successful aging. The effect of qualitative data on successful aging was determined and found as R = .499, $R^2 = .249$, 24.9% of the total variance in the successful aging dependent variable was explained by these variables and the result was statistically significant (p<0.001). It was found that age has a negative effect on successful aging, and successful aging decreases as age increases. It was determined that physical activity, interpersonal interaction, a balanced diet and regular health checkups have a positive effect on successful aging (p<0.05) (**Table 4**).

Model	Unstandardized		Standardized		
	coefficients		coefficients		
	BE	SE	Beta	t	Sig
Constant	75.599	3.648		21.720	.000
Age groups	-1.601	.722	094	-2.216	.027
Education	.797	.503	.071	1.568	.113
Self definition	-1.726	974	084	-1.772	.077
Physical activity	-4.631	1.280	.170	-3.617	.000
Mental activity	-1.016	1.241	.037	819	.413
Interaction	-2.276	.835	.127	-2.725	.007
Balanced diet	-3.086	1.237	.124	-2.494	.013
Health check	-3.719	1.153	.155	-3.227	.001
	R	R	F	р	
	.499ª	Square	17.965	.000 ^b	
		.249			
	p<0.001				
	p<0.05				

Table 4. Explanation of the factors affecting successful aging levels by regression analysis

a. Dependent variable: Successful Aging Scale total

b. Predictors (Constant): Age groups, education, life satisfaction, self-diagnosis, physical activity, mental activity, interaction, balanced nutrition, health control

In the study, it was determined that individuals between the ages of 60-64, 65-74 and 75-84 who graduated from university had higher scores on successful aging (*Figure 1*)



Figure 1: SAS mean scores by age and education level

Discussion

It was determined in the present study research that the difference between the successful aging scale mean scores of the individuals based on gender, marital status, profession, and the people living with them was not significant. The people living with the individuals, socio-cultural characteristics, environmental factors, chronic diseases, accepting old age, satisfaction with life, psychological and economic factors, and being engaged in life actively may be effective on the successful aging perceptions. It is reported in the

literature that many factors such as health status, education, income level, physical activity level, maintaining strong social relations with friends, family, neighbors, and social environment affect successful aging.^{3,21,22} In addition, living with a spouse and life satisfaction are also effective on successful aging.²³

It was determined that as age of the individuals in the present study increased, their successful aging mean scoresdecreased and the difference between the age groups was significant. It was determined in the study by Bowling and Iliffe on successful aging models that the successful aging score of the elderly decreased with the increasing age and this studyhas similar results with the present study.⁸ With increasing age during old age period, increased frequency of diseases, impaired quality of life, dependence on others, physical and mental function losses, loss of beloved ones, decreased positive attitude towards life, increased economic problems may cause the perception of successful aging to decrease. Longevity, biological and mental health, cognitive competence, social competence and productivity, personal control and enjoyment of life are the most basic indicators of successful aging.²³⁻²⁵

It was determined in the present study that the successful aging mean scores of the individuals increased as their educational level increased and the difference between them was significant. This difference may be associated with the knowledge levels of the educated people on healthy aging, their researching about exercise, adequateand balanced diet, things to do for a healthy life and learning new things, using this knowledge in their lives, and participating in social life actively. Successful aging perception may vary based on the factors such as age, gender, health status, culture, education, profession, and income.^{3,23,25}

It was determined in the present study that as the participants' satisfaction with life, happiness level, participating in the physical and mental activities, having adequate and balanced diet, having regular health checks, and their interaction with others increased, their successful aging mean scores increased and the difference between them was significant. The results we obtained at the end of the study are compatible with the literature. Long life, healthy life, decreased depression and loneliness, high physical and mental functionality, exercise, successful social relations, travelling, and adequate and balanced diet are important factors in successful aging.^{11,26,27} The elderly individuals make progress in successful aging process with their social relations.

It was determined in the present study that "Healthy Lifestyle" (max:21, X±SD= 15.1±4.1) subscale mean scoreof the successful aging scale of the individuals was slightly higher than the moderate level. The current lifestyles and habits of the individuals included in the study, their healthy lifestyles, their knowledge levels about the subject, health responsibilities, environmental factors, socio-cultural characteristics, and healthy lifestyle behaviors of other individuals in their immediate surroundings may be effective on the score.

It was found in the present study that the participants' mean scores of "Coping with Problems" (max:49, X±SD=31.4±8.7) subscale were slightly higher than the moderate level. With each passing day, aging-related problems are more frequently encountered together with the increase in the old age population. These problems are caused by the physical and environmental conditions and economic and mental situation of older people.²⁸ It was considered that the age of the individuals in the present study was effective in coping with problems. Some researchers have revealed that the problem-solving mechanisms of elderly people in different fields are lower compared to young and middle aged people.^{29,30} Also in the study conducted by Chen et al., in 2017, they stated that problem solving performance started to decrease after the age of 50.³¹ Also, the variety of the problems experienced by older people, their problem-solving approaches, social support mechanisms, personality structures and mental health may be effective in coping with the problems they experience.

It was determined in the present study that the successful aging mean scores (max:70, X±SD=46.5±12.0) of the participants was at moderate level. It may be considered that the knowledge of older people on successful aging, their current diseases, habits, physical and mental activity status, diet styles, socialization status, environmental factors, socio-cultural structure, satisfaction from life, educational level, age, economic status, and mental status were effective on the result. Successful aging is a complete well-being in terms of not only health but also social and psychological terms.¹³

In the study, it was determined that socio-demographic characteristics have an effect on successful aging. The study conducted by Gutierrez et al. shows similarities with our study as it was determined that people who do physical exercise age more successfully and that their health and life satisfaction are associated with better aging.³² It has been reported that adequate physical activity increases social relationships³², and increases life satisfaction and quality of life in the elderly.³³ Bosnes et al. research shows similarities with our study because younger age, higher education, weekly exercise, and more satisfaction with life are associated with successful aging.³⁴

Conclusion

It was determined in the present study that as age of the participants increased, successful aging mean score decreased; and also as educational level, satisfaction with life, happiness level and the interaction with others increased, successful aging mean score increased. Successful aging mean scores of those who participated in physical and mental activities, had regular health checks, and had adequate and balanced diet increased. It was determined that mean scores of coping with problems and healthy lifestyle subscales of the individuals were slightly higher than the moderate level and their successful aging total mean score was at the moderate level.

In accordance with the results, a successful aging should be encouraged for the elderly individuals who are an important part of our society, to maintain an active and productive, healthy life, a broad public health approach should be adopted and the health status of the elderly people should be promoted. Healthcare professionals should be ensured to evaluate successful aging and the affecting social support factors, develop health training and application programs, extend successful aging programs, and develop policies.

Acknowledgement

The study was conducted in Family Health Centers located in the city center between certain dates. Therefore, the results obtained from the research can only be generalized to this group.

Thank you to all individuals who participated in the research.

The authors report no actual or potential conflicts of interest. No institutional and financial support.

Ethical approval

In this study, national and international ethical rules are followed. Prior to the study, written permission was obtained from Hasan Kalyoncu University's non-interventional research ethics committee, dated 14.06.2019 and with decision number 2019/95.

Author contributions

Filiz Polat: İdea/Concept, Design, Control/Supervision, Data Collection or Processing, Analysis or Interpretation, Literature Review, Writing Article, Critical Review, References and Fundings, Materials. Leyla Delibaş: İdea/Concept, Design, Control/Supervision, Data Collection or Processing, Analysis or Interpretation, Literature Review, Writing Article, Critical Review, References and Fundings, Materials.

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