

Original Article**Assessing Perceived Social Support, Social Network, and Healthy Lifestyle Behaviors in Older Adults****Zahide Yuvakgil, MSc**

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Correspondence: Zahide Yuvakgil, Lecturer, Mugla Sitki Kocman University, Koycegiz Vocational School of Health Services, Elderly Care Department, Koycegiz, Mugla, Turkey E-mail: zahideyuvakgil@mu.edu.tr**Abstract****Background:** Social support is associated with physical health as well as mental health and it is associated with many health-related factors, such as reducing the impact of life stress and health damaging factors, reducing drug use and adhering to medical treatment.**Aim:** This study aimed to determine the relationship between perceived social support levels, social network sizes and healthy lifestyle behaviors in older adults.**Method:** A total of 369 volunteers aged 65 years and over, who were randomly selected between December 2016 and March 2017 in 6 family health centers in Ilgin district of Konya (Turkey), were included in the study. The data of the research was collected by the sociodemographic characteristics information form, Multidimensional Scale of Perceived Social Support Social Network List and Health-promoting Lifestyle Profile. The collected data were analyzed by t-Test, One-way Anova, Kruskal Wallis Test and Correlation.**Results:** While there was a positive relationship between perceived social support level and healthy lifestyle behaviors in older adults, there was no statistically significant relationship between social network and healthy lifestyle behaviors. As the age of individuals increases, perceived social support levels and healthy lifestyle behaviors decrease. Men, wives and employees have higher levels of perceived social support and healthy lifestyle behaviors than others. In addition, the social network of married people and employees is larger than other older adults.**Conclusion:** As the perceived level of social support in older adults increases, healthy lifestyle behaviors increase.**Keywords:** Healthy lifestyle behaviors, social network, social support, older adults**Introduction**

Along with aging many changes can be seen such as decline in physical and cognitive functions, change in health, productivity, social position, decrease in relationships with friends, spouses and relatives, social life, social support and death of spouse or children leaving home (Arslantas & Ergin, 2001; Bahar et al., 2005). These changes caused by aging can lead to psychological problems and loneliness, and thus depression (Bahar et al., 2009). Depression and loneliness are among the major factors that

impair quality of life in older adults (Singh & Misra, 2009).

As the population gets older, the question of how to improve the quality of the years and years to come to mind (Drewnowski et al., 2003) and individuals are looking for a healthier, higher quality and longer life (Cindas, 2001). Improving health of older adults, being independent in daily life, having good cognitive and physical levels are associated with active aging, and it is stated that health promotion can be possible with the adoption of healthy lifestyle (Tambag, 2013). Adoption of healthy lifestyle behaviors such as

appropriate physical activity, healthy nutrition, non-smoking and limitation of alcohol use are seen as factors contributing to longer and healthier life (Riekert et al., 2014). It is also stated that unhealthy lifestyle causes chronic diseases such as heart disease, cancer, stroke and diabetes and optimal health can be achieved only by increasing healthy behaviors (Ford et al., 2011). Healthy life will be possible only by applying and maintaining healthy lifestyle habits throughout the life period, not only in old age. Therefore, it is important to gain social awareness in order to ensure healthy living habits, to maintain health and to ensure the proper control and treatment required for the continuation of health (Karadakovan, 2014).

It is important for social support which is defined as psychological and instrumental resources provided from social networks to deal with stress (Cohen, 2004), especially for older adults to cope with negative changes caused by well-being and aging (Aksullu & Dogan, 2004; Altay & Aydin Avci, 2009; Litwin & Shiovitz-Ezra, 2006; Samancioglu & Karadakovan, 2010). Social support includes the size of the social network that an individual interacts with and the nature of the social support he perceives (Cetin & Uysal, 2013). Social support is also associated with physical health as well as mental health (Cohen & Wills, 1985; House, 1987). Social support is associated with many health-related factors, such as reducing the impact of life stress and health damaging factors, reducing drug use and adhering to medical treatment (Cobb, 1976; House 1987).

It is important to determine social support, social network and healthy lifestyle behaviors in order to protect the existing potential of older adults, to continue their activities and to protect and improve their health. Therefore, the aim of this study was to determine the factors affecting the social support levels, social network sizes and healthy lifestyle behaviors of older adults and the relationship between them.

Methodology

Participants: The population of the study consisted of 7674 older adults (65+) individuals who were registered to 6 family health centers in Ilgın district of Konya (Turkey). The sample of the study consisted of 369 older adults. The data of the research was collected by the random sampling technique from Family Health Centers

specified between December 2016 and March 2017.

Data Collection Tools: The data of the study were collected with the sociodemographic characteristics information form, Multidimensional Scale of Perceived Social Support, Social Network List and Health-promoting Lifestyle Profile.

Sociodemographic Characteristics Information Form: Sociodemographic characteristics information form consists of 8 questions including sociodemographic characteristics (age, marital status, gender etc.) of the participants prepared by the researchers.

Multidimensional Scale of Perceived Social Support: It was developed by Zimet et al. (1988) and was adapted to Turkish by Eker et al. (2001). Multidimensional Scale of Perceived Social Support (MSPSS) is a 12-item scale that evaluates support from three different sources: family, friend and private person. Each item is scored using a 7- point scale. The lowest score to be obtained from the whole scale is 12, the highest score is 84. The higher the score obtained, the higher the perceived social support. In this study, The Cronbach's Alpha coefficient was 0.88 in the present study.

Social Network List: It was developed by Social Network List Hirsch (1980) and was adapted to Turkish Sorias (1988) to evaluate the structural features of the social network. The list of social networking questions consists of two parts. The first part aims to determine who is composed of the social network and the size of the social network, while the second section aims to determine the relationship of the confidentiality.

Health-Promoting Lifestyle Profile: Health-promoting Lifestyle Profile (HPLP), developed by Walker et al. (1987), was adapted to Turkish by Esin (1999). The scale consists of 48 questions and 6 sub-groups: self-realization, health responsibility, exercise, nutrition, interpersonal support and stress management. The scale, which has a completely positive expression, has “Never”, “Sometimes”, “Often”, “Regular” answer options, and according to these options, respectively; It has 1, 2, 3, 4 points likert type scoring. The total score of the scale varies between 48-192. The high score obtained indicates that healthy lifestyle behaviors are high.

The Cronbach's Alpha coefficient was 0.78 in the present study.

Statistical Analysis: The data collected by the researcher using face-to-face questionnaire technique were analyzed with Student's t-test, One-way Anova, Kruskal Wallis and Correlation using SPSS 18 package program.

Ethical Implementations: Adnan Menderes University Faculty of Medicine Ethics Committee and Konya Public Health Directorate and participants received Enlightened Consent.

Results

The mean age of the participants was 70.05 ± 5.30 . Of the participants, 40.1% were women and 59.9% men; 85.1% were married, 14.9% single/widowed; 58.3% were illiterate/primary school, 9.5% secondary school and 23.6% illiterate individuals. Monthly average incomes are $1071,52 \pm 824,86$ TRY. While 13.3% of the participants are still working, 86.4% of them do not work, 85.1% of the participants had at least one chronic disease and they live with an average of 2 ± 1.26 individuals.

Statistical analyzes of the participants according to socio-demographic characteristics are shown in Table 1. According to the table, the mean total MSPSS score was $59,04 \pm 15,28$. There was a significant difference between characteristics included gender, marital status, educational status, working status and social support ($p < 0.05$). While there was a significant negative relationship between the ages of participants and

social support ($p < 0,05$), there was no significant relationship between income levels and social support ($p > 0,05$). As the age of the participants increases, their social support decreases. The average social network size of the participants was $5 \pm 2,36$. There is a significant difference between their marital status, working status and social network size ($p < 0,05$). There was no significant relationship between age of participants and social network sizes ($p > 0,05$). The mean total HPLP score was $123,12 \pm 12,08$. There is a significant difference between gender, marital status, educational status, working status, having a chronic disease and healthy lifestyle behaviors ($p < 0,05$). While there was a significant negative relationship between age of participants and healthy lifestyle behaviors, there was a significant positive relationship between income levels and the number of people with whom they live together and healthy lifestyle behaviors ($p < 0,05$). While the age of individuals increases as healthy lifestyle behaviors decrease, the number of people living together at home increases healthy lifestyle behaviors increases. The results of the analysis of the relationship between healthy lifestyle behaviors and social support and social network are shown in Table 2. According to the table, there was a significant positive relationship between healthy lifestyle behaviors and social support ($p < 0.05$), there was no significant relationship between healthy lifestyle behaviors and the size of social network ($p > 0,05$). As social support increases the healthy lifestyle behaviors of the participants increase.

Table 1. According to sociodemographic characteristics social support, social network and healthy lifestyle behaviors

Sociodemographic characteristics	N	%	Social support		Social network		Healthy lifestyle behaviors		
			Mean	SD	Mean	SD	Mean	SD	
Gender	Female	148	40.1	56.78	16.15	5	2.46	120.08	11.100
	Male	221	59.9	60.55	14.51	5	2.32	125.15	12.30
			t: -2.335 p: 0.02*		t: 0.012 p: 0.990		t: -4.038 p: <0.001		
Marital Status	Married	314	85.1	61.01	13.77	5	2.38	124.35	10.92
	Widowed/single	55	14.9	47.74	18.44	4	2.17	116.05	15.60
			t: 6.240 p: <0.001		t: 2.084 p: 0.038*		t: 4.844 p: <0.001		

Education	Not literate	87	23.6	52.85	16.96	5	2.68	117.55	12.05
	Literate / Primary	215	58.3	60.73	14.38	5	2.10	124.30	10.95
	Middle School	35	9.5	62.25	13.22	5	2.78	125.85	11.50
	High School/College /University	32	8.7	60.96	14.54	6	2.64	127.31	15.25
					F: 6.612 p<0.001		F: 0.925 p: 0.429		F: 9.327 p<0.001
Work	Working	49	13.3	62.04	12.30	5	2.87	127.16	12.36
	Not working	319	86.4	58.58	15.68	4	2.26	122.49	11.95
				t: 1.475 p:0.041*		t: 2.466 p: 0.014*		t: 2.531 p: 0.012*	
Chronic Disease	Chronic disease	314	85.1	58.88	15.34	5	2.32	122.40	11.72
	No chronic disease	55	14.9	59.94	15.02	5	2.54	127.20	13.24
				t: -0.475 p: 0.635		t: 1.520 p: 0.129		t: -2.737 p: 0.006*	
		Mean	SD						
Age		70	5.3	r: -0.208 p<0.001		r: -0.001 p: 0.984		r: -0.112 p: 0.032*	
Income		1071.52	824.86	r: 0.094 p: 0.073		r: -0.024 p: 0.652		r: 0.230 p<0.001	
Individual living together		2	1.2	r: 0.102 p: 0.050		r: 0.076 p: 0.148		r: 0.196 p<0.001	
*: p< 0,05		t: t-Test		F: One-way Anova		X ² : Kruskal Wallis		r: Correlation	
Significant p values appear bold.									

Table 2. The relationship between healthy lifestyle behaviors and social support and social network

	Social support	Social network
Healthy lifestyle behaviors	r: 0.252 p<0.001	r: 0.095 p: 0.071

r: Correlation Significant p values appear bold.

Dicusion

In the studies conducted in the relevant field, it is stated that male individuals have higher social support level compared to women (Akin & Emiroglu, 2006; Dayapoglu & Tan, 2009; Ozer & Fadiloglu, 2006) and the social support levels of married older adults are higher than other older adults (Akin & Emiroglu, 2006; Arslantas & Ergin, 2011; Aydiner Boylu & Hazer, 2012; Guclu et al., 2016). The findings obtained social

support the studies. Melchiorre et al. (2013) reported that university graduates have higher levels of social support than other individuals in a study conducted in older adults. Gokler Danisman & Aydin (2011) stated in their study that the results of the similar results were found to be high in the families of older adults with high education level and therefore they would be more sensitive to the changes caused by aging. Together with retirement, individuals can lose

both financial, status and social relations by moving away from a moving work environment (Henkes & Kalmijn, 2015). It is considered that the social support level of the working individuals is higher because working in a work environment enables social interaction with other people. In similar studies, it is stated that the social support perceived by individuals increases as age increases (Aksullu & Dogan, 2004; Dayapoglu & Tan 2009; Kacan Softa et al., 2016; Makabe et al., 2011). With age, loss of spouses and relatives, separation of children from home, retirement, physical and mental decline may cause individuals to experience mental problems and interpret their environment differently (Bahar et al., 2005). Therefore, as individuals age, their perception of social support may decrease.

Unlike older adults who are single/widowed to the social network of married individuals, his wife may be included. This can contribute to the social network size of married older adults. On the other hand, working at a job can help the coworkers to be involved in the social network of older adults, while at the same time the work environment can support the older adults' social relations.

According to the study results conducted by the Ministry of Health in Turkey for women than men to opt for more healthy fats, it is less salt and consume more rye, oats and whole wheat bread are preferred uttered, the men are available in the more physical activity when compared to the women (Dinc Horasan, 2013). Rakhshani et al. (2014) in their study in Iran found that male seniors had higher levels of healthy lifestyle behavior than females, individuals with university degrees and individuals with other education levels and married individuals. It is thought that the individuals with higher education level are more conscious about healthy life and therefore will have more healthy lifestyle behaviors. Healthy lifestyle behaviors of individuals without chronic diseases are considered to be high, as healthy lifestyle is an important factor in individuals not suffering from chronic diseases (Bozhuyuk et al., 2012). As the age of individuals increases, healthy lifestyle behaviors decrease. This finding obtained from this study is in line with the results of other studies (Cayir & Cevik Akyil, 2014; Kacan Softa et al., 2016; Tawalbeh et al., 2015; Yin et al., 2013). In the research, it was concluded that

there is a positive relationship between income and healthy lifestyle behaviors. Ahmadi & Roosta (2015) stated that there is a positive relationship between socio-economic class and healthy lifestyle behaviors.

In studies conducted with elderly individuals, a positive relationship is found between social support and healthy lifestyle behaviors (Gaede et al., 2006; Kacan Softa et al., 2016, McGroth & Bedi 2002; Melchiorre et al., 2013; Polat & Bayrak Kahraman, 2013). The results obtained are similar to the studies in the related field. Cohen (2004) stated that with membership in the social network, individuals enter a social control mechanism and that peer pressure can push individuals into healthier behaviors. However, there was no significant relationship between social network size and healthy lifestyle behaviors.

Conclusions: According to the results of the study, healthy lifestyle behaviors increase as social support increases. It is important to increase the level of social support in order to maintain the existing potential of older adults, continue their activity, protect and improve their health.

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