



# Effect of Perceived Social Support on Self-care Agency and Loneliness Among Elderly Muslim People

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Accepted: 29 July 2021 / Published online: 11 August 2021

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## Abstract

This study was conducted to investigate the effect of perceived social support on self-care agency and loneliness among elderly Muslim people. This study used a cross-sectional design and included 965 elderly individuals who met the inclusion criteria. There was a positive correlation between perceived social support and self-care agency and a negative correlation between perceived social support and loneliness in elderly muslim individuals ( $p < 0.05$ ). It is recommended that psychiatric nurses should activate the social support mechanisms of elderly individuals, and necessary follow-ups to increase self-care agencies must be conducted.

**Keywords** Perceived social support · Self-care agency · Loneliness · Elderly muslim people

## Introduction

Ageing is a universal and irreversible process causing decreases in all functions. Due to the improvement of living conditions, the life expectancy of humans has increased (Duru, 2020). The World Health Organization (WHO) reports that the elderly population in the world will exceed 1.2 billion in 2025, accounting for 22% of the world population; furthermore, the proportions of young and old individuals will be equal by 2050 (National Institute on Aging and WHO, 2011). In Turkey, the proportion of elderly individuals is estimated to rise 10.2% in 2023 and 16.3% in 2040 (TÜİK, 2018).

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The increase in the elderly population has also increased the trend of biological, psychological, social and cultural problems among elderly people (Gökler-Danışman, 2011). Perceived social support is an important coping mechanism that eases elderly individuals' fight with these difficulties, increases adaptation to old age and well-being, and positively affects physical and psychological health and quality of life (Boylu, 2018; Polat & Bayrak-Kahraman, 2013). In their studies, Kim and Kooshiar et al. found that elderly people living alone had low levels of social support (Kim, 2018; Kooshiar et al., 2012). Jiang stated that social support emotionally affected elderly people more than young people (Jiang, 2018). Since old age has a destructive nature, the lack of social support mechanisms can contribute to a decreased self-care agency.

Self-care is an important concept, including personal responsibilities varying from preventing impairment of health to promoting health and protecting the psychological well-being of the individual (Tanimura et al., 2019). The concept of self-care was first introduced by Orem in 1959. Self-care activities are practices related to protecting the health of individuals and promoting their health. In Orem's individual self-care model, individuals' self-care capacities are affected by the following internal and external factors: gender, age, social and cultural orientation, developmental stage, healthcare system dynamics, health status, family system, environmental issues, and sufficiency of resources dynamics (Lee & Park, 2017). Many studies have been conducted in recent years on self-care in elderly people. Tel et al. found that self-care agency decreases with age (Tel et al., 2006). Erci et al. stated that elderly people need others to meet their daily needs and self-care (Erci et al., 2017). In their studies, Karagözlüoğlu et al. and Yıldırım et al. found that elderly people living in nursing homes, had slightly more self-care agencies than those living at moderate levels (Karagözlüoğlu et al., 2012; Yıldırım et al., 2007). Supporting and increasing the self-care agency of elderly people are very important in terms of sustaining their lives in the best quality (Uğurlu et al., 2010). All factors that can reduce self-care agency should be minimized. One of these factors is loneliness.

Although, loneliness is a natural feeling that can be seen at any age, it is more common in old age due to reasons such as reduced social support, emotional withdrawal, and loss of spouse or relatives (Kapıkıran, 2016). According to the studies, the prevalence of loneliness was determined to be 80% in those aged 65 and over and 40% in those under 18. This rate slowly decreases in middle adulthood but increases again starting at the age of 65 (Akgül, 2018; Eshbaugh, 2009; Hawkley & Cacioppo, 2010; Stone et al., 2013). The prevalence of loneliness increases significantly after the age of 75 (Dykstra, 2009; Schoenmakers et al., 2012). The results of the studies conducted in nursing homes are quite striking in terms of showing that elderly people have a high level of loneliness (Dereli et al., 2010; Kaçan-Softa, 2015; Kahraman et al., 2011; Parlar-Kılıç et al., 2014). In an increasingly globalized world, elderly individuals are driven to loneliness in society and must often face the consequent problems alone.

Social relationships are critical in the development of personality and the formation of a positive self-image. The importance of social relationships increases even more for a healthy old age period. The reason is that the decreasing social environment with ageing can cause elderly individuals to withdraw and lead him/her to loneliness. Due

to healthcare problems increasing with age, individuals may have difficulties fulfilling their self-care needs. Social support is an important factor in increasing the self-care agency of elderly individuals. In fact, studies have revealed that there is a negative correlation between social support and loneliness and a positive correlation between social support and self-care agency in old age (Kapıkıran, 2016; Ong, 2016; O'Rourke, et al., 2018; Domenech-Abella et al., 2017; Püllüm & Akyıl, 2017; Liu et al., 2016; Kahraman et al., 2011; Sundsli et al., 2014).

The present study is the first to investigate the effect of perceived social support on self-care agency and loneliness.

This study, in which important results were obtained for elderly people, was conducted to investigate the effect of perceived social support on self-care agency and loneliness in elderly muslim people.

## Methods

### Design

This study was carried out using a cross-sectional design.

### Study Sample

The population of the study was composed of 4230 individuals aged 65 and over who were enrolled in four Family Health Centers (FHC); these FHCs were selected from a total of 12 FHCs located in a city centre in eastern Turkey via the lottery method according to population density. The sample size of the study was determined to be 965 elderly individuals at a confidence interval of 95%, an effect size of 0.08 and power of representing the population of 0.95 by power analysis (according to independent samples t-test). Each FHC was accepted as a cluster. Elderly individuals were listed according to their FHC registration numbers and selected by using a simple random sampling method.

### Inclusion Criteria of the Study

- Being 65 years and over
- Being able to communicate

### Exclusion Criteria of the Study

- Having an organic mental problem such as dementia or Alzheimer's disease as well as hearing loss

## Measurement

### Descriptive Characteristics Form

The form is composed of eight questions, including descriptive characteristics of the elderly (age, gender, marital status, education status, income status, working status, health perception).

### Multidimensional Scale of Perceived Social Support

Turkish validity and reliability of the scale were assessed by Eker and Arkar (1995) (Eker & Arkar, 1995). The scale consisting of 12 items in total is a 7-point Likert scale. The scale has three subscales consisting of four items to determine family, friend, and significant other support. A high score obtained from the scale indicates a high level of perceived social support. The Cronbach's alpha coefficient of the scale varies between 0.78 and 0.92.

### Self-care Agency Scale

The scale Turkish validity and reliability study was conducted by (Nahcivan, 2004). Higher scores indicate high self-care agency. The Cronbach's alpha coefficient of the scale varies between 0.65 and 0.76.

### Loneliness Scale for Elderly

Akgül and Yeşilyaprak (2018) conducted a Turkish validity and reliability study. Of the scale items determined with a 3-point Likert-type rating, five are coded straight, and six are coded reversely. The lowest score of the scale is 0, and the highest score is 22. In two separate reliability studies of the scale, the Cronbach's alpha coefficients were found to be 0.97 and 0.84.

## Data Collection

The data were collected by the researchers using face-to-face interviews in Family Health Centers between August 2020 and October 2020. The data were collected in the gardens of family health centers, due to the Covid-19 epidemic, paying attention to mask and distance rules. The questions in the data collection tools were read to the elderly individuals, and their responses were recorded. Each interview lasted for averagely 20–30 min.

## Statistical Analysis

Significance in the study was accepted as  $p < 0.05$ . SPSS 24.0 software was used to analyse data. Linear regression and Pearson's correlation analysis were used to compare responses on the Multidimensional Scale of Perceived Social Support, Self-care

Agency Scale and Loneliness Scale. Reliability analysis was used to calculate the Cronbach's alpha values of the scales.

## Ethical Considerations

To conduct the study approval from the Health Sciences Non-Invasive Ethics Committee and legal permission from the Public Health Directorate were obtained (APPROV NO: 2018/5–14). Each elderly person included in this study was informed about the purpose of the study, and verbal and written permission was obtained from the elderly persons. The participants signed written consent. The elderly individuals were also informed that they would have the right to withdraw from the study at any time.

## Results

It was determined in this study that 100% of the elderly individuals were 65 years and over, 58.9% were male, 39.9% were literate, 87.4% were married, 94.3% were not working, 47.2% perceived their income level as good, 45.9% perceived their physical and mental health status as moderate, and 87.4% were living with their spouses and children (Table 1).

In the study, the perceived social support explained a significant proportion of the variance in self-care agency ( $p < 0.05$ ). Perceived social support accounted for 36% of the variance in self-care agency. It was also determined that there was a statistically positive and moderate correlation between perceived social support and self-care agency ( $p < 0.05$ , Table 2).

In the study, perceived social support explained a significant proportion of the variance in loneliness ( $p < 0.05$ ). Perceived social support accounted for hope by 57%. In addition, a statistically negative and moderate correlation was found between perceived social support and loneliness ( $p < 0.05$ , Table 3).

## Discussion

In the study, it was determined that perceived social support of elderly individuals was important in explaining self-care agency and that perceived social support accounted for 36% of self-care agency. In addition, a statistically positive and moderate correlation was observed between perceived social support and self-care agency. Studies have indicated that there is a positive correlation between social support and self-care agency in old age (Ong, 2016; O'Rourke et al., 2018). In their study, Karagözoğlu et al. found that loneliness affected the level of self-care (Karagözoğlu et al., 2012). Individuals may have difficulties fulfilling their self-care duties, due to health care problems increasing with age. Social support is an important factor in increasing the self-care agency of elderly people. The results of the study are consistent with those found in the literature.

**Table 1** Sociodemographic and clinical characteristics of the sample ( $n=965$ )

Descriptive characteristics	<i>n</i>	%
<i>Age groups</i>		
65 years and over	100	100.0
<i>Gender</i>		
Male	568	58.9
Female	397	41.1
<i>Education status</i>		
Literate	385	39.9
Primary education	309	32.0
Secondary education	191	19.8
University	80	8.3
<i>Marital status</i>		
Married	843	87.4
Single	122	12.6
<i>Working status</i>		
Employed	55	5.7
Unemployed	910	94.3
<i>Perception of income level</i>		
Low	61	6.3
Middle	448	46.4
Good	456	47.2
<i>Perception of physical and Mental condition</i>		
Good	436	45.2
Middle	443	45.9
Bad	86	8.9
<i>Who lives with</i>		
Loneliness	66	6.8
With spouse	462	47.9
With spouse and children	332	34.4
Only children	70	7.3
With other family members	36	3.6

**Table 2** Regression and correlation analysis results of the effect of perceived social support on self-care ability

	Perceived social support							
	Regression					Correlation		
Self-care ability	R	R <sup>2</sup>	$\beta$	<i>t</i>	<i>p</i>	F	r	<i>p</i>
	0.51	0.36	0.51	5.78	<b>0.00</b>	349.32	0.51	<b>0.00</b>

**Table 3** Regression and correlation analysis results of the effect of perceived social support on loneliness

	Loneliness							
	Regression					Correlation		
Perceived social support	R	R <sup>2</sup>	$\beta$	<i>t</i>	<i>p</i>	F	<i>r</i>	<i>p</i>
	0.24	0.57	-0.11	-3.46	<b>0.01</b>	12.02	-0.55	<b>0.00</b>

In the study, it was determined that perceived social support of elderly individuals was important factor affecting loneliness—perceived social support accounted for hope by 57%. In addition, it was determined that there was a statistically negative and moderate correlation between perceived social support and loneliness. Related studies have revealed that there is a negative correlation between social support and loneliness in old age (Kapıkıran, 2016; Domenech-Abella et al., 2017; Püllüm & Akyıl, 2017; Liu et al., 2016; Kahraman et al., 2011; Sundsli et al., 2014). Social relationships are critical in the development of personality and the formation of a positive self-image of an individual. The importance of social relations increases even more for a healthy old age period. The reason is that the social environment decreases with ageing, causing elderly individuals to withdraw and become lonely. These results are also consistent with those found in the literature.

In line with our study's results, psychiatric nurses should activate the social support mechanisms of elderly individuals, and necessary follow-ups to increase self-care agencies must be conducted, especially among elderly people living alone and those who have low social support. Such follow-ups should be frequently followed by necessary institutions and organizations, especially for their health and physical needs.

## Conclusion

It was found in the study that there was a positive correlation between perceived social support and self-care agency and a negative correlation between perceived social support and loneliness in elderly Muslim individuals.

## Limitation of the Study

The limitation of this study is that it was conducted with elderly people with similar sociocultural characteristics. The results of this research are expected to lead to interventional studies. Similar research should be carried out in a larger population in different places with cultural characteristics.

**Author contributions** Study conception/design; FK, GD, AAÖ, Data collection/analysis; FK, GD, AAÖ, AG, Drafting of manuscript; FK, GD, AAÖ, AG, Statistical expertise; FK, GD, AAÖ, Administrative/technical/material support); FK, GD, AAÖ.

**Funding** The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### Declarations

**Conflict of interest** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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