

**→ Regular Research Paper - SS**

Investigation of Loneliness in the Elderly in Terms of Various Variables¹

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Abstract

It is thought that loneliness, which is a psychological state peculiar to man, has existed since human existence. A natural feeling for every person, loneliness, at all times of life, whether a child, young or old, suffering a person experienced, psychological well-being negatively affects the unpleasant state of mind. Loneliness increases gradually and with age. Loneliness is a global social problem since it is experienced in different degrees in almost every country when it is evaluated and evaluated in terms of elderly people. Especially in developed countries, with the effects of modernization on human life, loneliness has increased in the elderly and has started to be considered as a problem.

The aim of this study is to investigate the cases of loneliness in the elderly in terms of various variables. The study examined whether the level of isolation of the elderly differs according to some variables (gender, marital status, age, where they live, number of child ownership, educational level, working status, monthly income level). The study group consists of 809 elder people living in Kayseri in 2015. Data on the levels of loneliness of the elderly were collected with "food loneliness scale". For the collection of data on personal variables, the "personal data form" prepared by the researchers was used. In addition to descriptive statistics in the analysis of data, t test applied to independent groups, one-way variance analysis and kvh analysis were applied to determine whether the levels of Solitude differed according to variables. The study found that the marital status of the elderly, age, where they lived, the number of children, educational level, working status and monthly income levels differ significantly.

Keywords: *Loneliness, emotion, geriatric, the case of loneliness.*

1. INTRODUCTION

When loneliness is examined and evaluated in terms of elderly people; it is a global social problem due to the fact that almost every country is experiencing different degrees. Especially in developed countries, with the effects of modernization on human life, loneliness has increased and started to be considered as a problem. Aging is a time-dependent process that begins with fertilization and continues until death. Aging is a physiological phenomenon and it is the state of losing individuals' physical, mental and cognitive strengths and features in a way that they will never come back (Çekal,

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2006). Today, advances in medicine, health protection, technology facilitating human life and changes in life have prolonged life. In addition, the downward trend in population growth leads to an increase in the proportion of the elderly in the general population. Especially in developed countries, the share of the elderly population in the total population has increased gradually with the increase in welfare. In addition, the average age and life expectancy in societies have increased due to technological developments, developments in medicine, spread of welfare and social opportunities.

In fact, loneliness, which is a natural feeling for every human being, is an unpleasant mood that causes pain to the individual, whether it be a child, a young person, an adult or an elderly person, and negatively affects psychological well-being, that is, loneliness is a common experience and people experience various periods of their lives. More or less, as you experience a sense of loneliness. When literature related to loneliness is examined, it is seen that loneliness is common in many segments of society. According to the loneliness and age report, loneliness is seen in 80% of those aged 65 years and older, and 40% in those under 18 years of age, gradually decreasing in middle adulthood but gradually increasing again in 65 years and older. In other words, the most common period of loneliness is ≥ 70 years of age (Eshbaugh, 2009; Hawkley & Cacioppo, 2010; Stone, Evandrou & Falkingham, 2013). The percentage of loneliness increases significantly after the age of 75 (Dykstra, 2009; Schoenmakers, van Tilburg and Fokkema, 2012).

When literature related to loneliness is examined, it is found that loneliness is common in many parts of the society but loneliness is a bigger problem especially for older people (Revenson, 1986; Stone, Evandrou and Falkingham, 2013; Tornstam, 2007; Victor et al., 2002). In the old age, experienced or perceived feelings of loneliness in the event of physical limitations, deterioration in health, decrease in quality of life, retirement, decreased earnings, marriage of children, loss of spouse. It has been found that it negatively affects the elderly and causes social isolation and isolation instead of establishing close relationships (Bekhet and Zauszniewski, 2012; Ericson, 1982; Masi, Chen, Hawkley and Cacioppo, 2011). Figure 1 presents the findings of loneliness according to age groups in the study prepared by Pinquart and Sörensen based on the researches of Gierveld, Perlman and Peplau. The participants were divided into five groups according to their age. Participants; Loneliness levels in Likert-type scale, which they answered as 'never', 'sometimes', 'often'; 'the highest', 'the lowest' and 'average'.

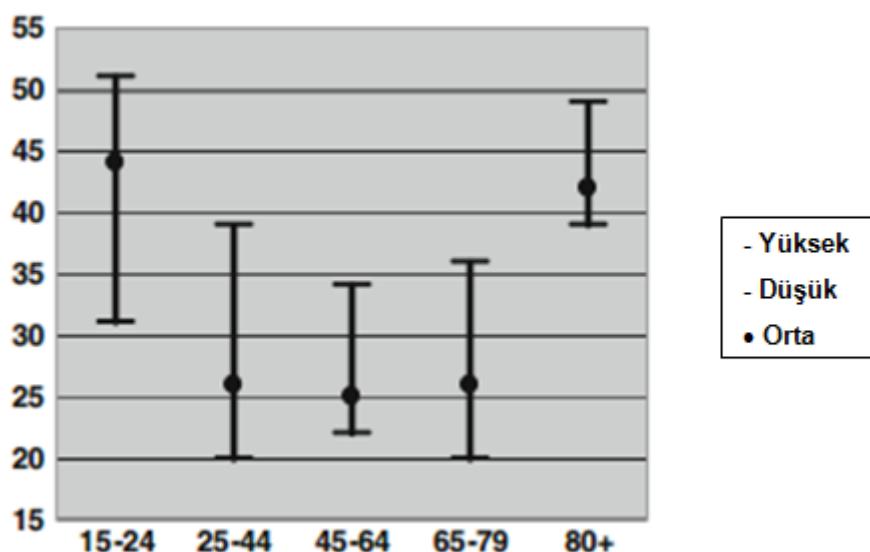


Figure 1. Percentage of Loneliness by Age

Source: Dykstra, P.A. (2009). "Older Adult Loneliness: Myths and Realities". European Journal of Aging, 6, 91.





When the results of the study were evaluated; loneliness was observed in all age groups. In the findings of the research; between 20% and 30% of young and middle adults experienced 'moderate' and 'serious' loneliness, the level of loneliness increased with increasing age, and 40% to 50% of individuals aged 80 years and over reported 'frequent loneliness'. Bekhet and Zauszniewski (2012) state that the loneliness rate in the elderly is estimated to be 40% and this figure is relatively constant in the last 25 years. Abramson and Silverstein in the United States in their study of the age groups evaluated their views on loneliness. They concluded that individuals 65 years and older perceive loneliness as a serious problem compared to other age groups (Dykstra, 2009).

Turkey is experiencing the changes brought about by the demographic changes in developed countries about aging and old age. As in the whole world, an increase in the elderly population is observed in our country. Population aged 65 and over in Turkey accounted for 2% of the entire population in 1950, 4.3% in 1990, 5.7% in 2000, while in 2013 it was determined that accounts for 7.7%. the proportion of elderly population in Turkey is increasing at a higher rate than the rate of population in other age groups. The growth rate of the total population in Turkey in 2013, while the growth rate of the elderly population 13.7‰ and 36.2‰ it is about 3 times as much. While the proportion of elderly population is 7.7% in 2013, it is estimated that it will increase to 10.2% in 2023, 20.8% in 2050 and 27.7% in 2075 according to population projections. In a society, young, mature, old definitions can be claimed for the societies according to the level of the share of the number of individuals aged 65 and over from the total population (Ministry of Development, 2014). According to the definition of the United Nations, the proportion of the elderly population in a country between 8% and 10% of the total population means that the population of that country is "old" and that the population is over 10% is "very old". Since 2007, Turkey has come to the point defined as the elderly population. According to the projections of population and Turkey's elderly population ratio will rise to 10.2% in 2023. "Too old" population is estimated to take place between countries (TurkStat, 2013). Therefore, the "aging population" at the point to be taken in the following years, problems and needs of the elderly in Turkey working groups on priority. The median age, which is one of the indicators providing information about the aging of the population, is the middle age when the population is ranked according to a single age and divides the population into two equal parts. There are an equal number of people in the younger and upper aged population groups. Turkey's median age is 30.4 in 2013, the median age for the world's population 29.4't. Today, there are about 5.892 million elderly people in Turkey (TUIK, 2013). 21st Century, in parallel to all the world expectancy in Turkey is considered to be a century older. As a result of the prolongation of human life due to many reasons, the increase in the elderly population in the society shows that the elderly and the elderly should be given importance in order to spend this period more effectively and efficiently (Tümerdem, 2006).

Purpose of the research

In this study, it is aimed to examine the loneliness of the elderly in terms of various variables. For this purpose, the following questions were sought:

1. Do elderly people's loneliness differ according to **gender**?
2. Do elderly people's loneliness differ according to **age** variable?
3. Do elderly people's loneliness differ according to the **marital status** variable?
4. Does the sense of loneliness of the elderly differ according to the variable **where they live**?
5. Do the elderly people's loneliness differ according to the **number of children having** variable?
6. Do elderly people's loneliness differ according to the **educational status** variable?
7. Do elderly people's loneliness differ according to the **working** variable?
8. Do elderly people's loneliness differ according to their **monthly income**?





2. METHOD

2.1. Research Model

This research is a descriptive study that tries to reveal the relationship between the loneliness levels of the elderly and various demographic variables (Büyüköztürk et al., 2009). The dependent variable of the research; is the level of loneliness of the elderly. The independent variables were gender, age, marital status, where she lived, the number and number of children, education level, employment status, monthly income level.

2.2. Research Group

The population of the study consists of elderly people aged 65 and over living in Kayseri. The sample of the study consists of 809 elderly selected by random sampling method (Creswell, 2013). In order to collect the data, a working group of 12 students from the members of Erciyes University OYKA student club was formed. In order to access the data, the working group members were given the necessary technical training on questionnaire and application. The questionnaire was applied to 950 elderly people aged 65 and over living in Kayseri city center, village and towns by face-to-face interviews. The data of 809 people were used for statistical analysis and a sample group was formed. The percentage distribution of 809 employees in the study group according to the variables was as follows: 425 (52.5%) of the elderly were female; 384 (47.5%) were male. 444 (54.9%) of the 809 elderly were in the 64-74 age range; 239 (29.5%) were in the 75-84 age range; 126 (15.6%) were individuals aged 85 and over. Among the individuals in the sample group; 457 (56.5%) of them are literate and primary school graduates; 71 people (8.8%) were secondary school graduates; 61 people (7.5%) were in high school; 28 people (3.5%) were university graduates; 7 (0.9%) of them were graduate graduates. 185 people (22.9%) were found to be illiterate. When the marital status of the individuals in the sample group was examined, it was found that 377 (46.6%) were still married; The spouse of 347 people (42.9%) died; 50 people (6.2%) were divorced; 18 people (2.2%) never married; It was found that 14 people (1.7%) lived separately from their spouses. When the number of children in the sample group was examined, it was found that 60 people (7.4%) had no children; 75 people (9.3) had 1 child; 110 people (13.6%) had 2 children; 210 people (26.0%) had 3 children; It was determined that 354 people (43.7%) had 4 or more children. When the sample group was examined in terms of working status, it was found that 38 people (4.7%) were still working; 316 people (39.1%) were not working; 455 (56.2%) were retired. When the sample group was examined in terms of residence, 371 people (45.9%) were in their own home with their family; 160 people (19.8%) with the child's family; 148 people (18.3%) alone in their own home; It was found that 110 people (13.6%) lived in facilities connected to the social service institution. When the sample group was examined according to health status, 374 people (46.2%) had the disease; 435 people (53.8%) were found not to have a disease. When the sample group is examined in terms of their place of residence, 476 (58.8%) of them are; 216 people (26.7%) live in districts and towns, 114 people (14.1%) live in the village. The income of 319 people (39.5%) is between 1000-3000 TL; The income of 10 people (1.2%) is over TL 3,000; however, 47 people (5.8%) had no income.

2.3. Data Collection Tools

In this study, Personal Information Form "and Loneliness Scale were applied in order to collect data.

Personal Information Form: The "Personal Information Form" was used to collect information about the demographic characteristics of the subjects who participated in the study.

LAPS Loneliness Scale: It was developed by De Jong Gierveld to measure the sense of loneliness (de Jong Gierveld and van Tilburg, 2011). It is a widely used measurement tool in many countries and in





cross-cultural research. It is most commonly used in research in the Netherlands and the United States, but also in research in European countries (Treacy et al., 2004; Victor, Scameler and Bond, 2012).

The scale was adapted to Turkish culture by Akgül and Yeşilyaprak (2015). The scale, which is adapted to Turkish culture, consists of 11 items for measuring social and emotional loneliness. The degree to which the situation is experienced by each person in the scale is determined by a 3-point Likert-type rating. Scoring of Likert-type items is as follows: 1 = yes, 2 = can be, 3 = no. The scale is answered by marking the grading expression which is thought to best express the person. Five of the scale items were coded straight and six of them were coded in the opposite direction. Items of the social loneliness sub-dimension containing positive expressions (1, 4, 7, 8, 11) can be 1 = yes, 2 =, 3 = no; items of negative loneliness sub-dimension of emotional loneliness (2, 3, 5, 6, 9, 10), on the contrary, can be 3 = yes, 2 =, 1 = no. To calculate the total loneliness score; emotional loneliness score and social loneliness score should be added. The sum of these two dimensions gives the overall loneliness score. The lowest score to be taken from the scale is 11 and the highest score is 33. The higher the score, the higher the loneliness level of the individual. The criterion validity correlation coefficient of the scale; It was .69 with geriatric depression scale and -.65 with WHOQOL-OLD: Proximity subscale scores. Cronbach Alpha internal consistency coefficient of the scale was .82. The test-retest reliability coefficient of the scale was .93 (Akgül and Yeşilyaprak, 2015).

2.4. Findings

Gender	n		Levene		t	p
			ss	sd		
			f	p		
Female	425	2.03	0.82		298	0.106
Male	384	2.01	0.86			0.745
					0.146	0.884

Table 1 shows that the loneliness levels of the elderly do not differ significantly according to the gender variable. However, when the arithmetic means are considered, it is seen that loneliness levels of women are higher.

The results of the anova test to test the second question of the study, "Do elderly people's loneliness sense differ according to age variable?" are given in Table 2.

Table 2: Results of ANOVA showing whether loneliness differs according to age

	SS	df	MS	F	P
Inter-groups	28,760	2	14,380	53,674	,000
In groups	255,939	806	,268		
Total	244,699	808			
Age Level					
65-74 Years Old		75-84 Years Old		85+	
N	X	N	X	N	X
444	1,83	239	2,04	126	2,36





As can be seen in Table 2, the differences between the mean scores of the groups were found to be significant at .001 level as a result of ANOVA test to determine whether loneliness scores differ according to age levels. The individuals with the highest loneliness level were 85 years of age and older (2,36), followed by individuals in the 75-84 age group (2,04), and the group with the lowest sense of loneliness was in the 65-75 age group (1,83).

The results of the anova test to test the third question of the study, Do the elderly feel loneliness differ according to the marital status variable? are given in Table 3.

Table 3: Results of ANOVA showing whether loneliness is differentiated according to the marital status variable

		SS	df	MS	F	P					
Inter-groups		31,460	5	6,292	23,694	,000					
In groups		213,239	803	,266							
Total		244,699	808								
Marital Status											
Married		Single	Divorced	Widow/Widower	Living Apart	Other					
N	X	N	X	N	X	N	X	N	X		
377	1,77	18	2,03	50	2,10	347	2,18	14	2,08	3	1,72

As seen in Table 3, the differences between the averages of the groups were significant at .001 level. The individuals with the highest loneliness level; lost their spouses (2,18), divorced (2,10) and singles (2,03). The group with the lowest sense of loneliness is still married individuals (1,77).

The results of the anova test to test the fourth question of the study, "Do the elderly feel loneliness differ according to the variable where they live?" Are given in Table 4.

Table 4: Results of ANOVA showing whether the feeling of loneliness differs according to the variable of where it lives.

		SS	df	MS	F	P			
Inter-groups		37,209	4	9,302	36,045	,000			
In groups		207,490	804	,258					
Total		244,699	808						
Where he lives / With whom he lives									
At home, with his family		At home, alone	With his child's family	In a Social Care Institution	Other				
N	X	N	X	N	X	N	X	N	X
371	1,77	148	2,25	166	1,98	110	2,20	20	1,98

As seen in Table 4, the differences between the averages of the groups were significant at .001 level. The individuals with the highest loneliness level; those who live alone at home (2,25), those who live in social services (2,20), and those who live with their children's families (1,98). The group with the lowest sense of loneliness is the group living with their own family at home (1,77).

The results of the anova test to test the fifth question of the study, "Do the elderly people's loneliness sense differ according to the number of having children?" is given in Table 5.



**Table 5: Results of ANOVA showing whether loneliness is differentiated according to the number of children and having variable**

		SS	df	MS	F	P
Inter-groups		3,336	4	,834	2,775	,026
In groups		241,298	803	,300		
Total		244,633	807			
Having Child and the Number of Child						
No Child		1 Child Exists	2 Children Exist	3 Children Exist	4+ Children Exist	
N	X	N	X	N	X	N
60	2,11	75	2,06	110	2,06	210
						1,95
						354
						1,93

As seen in Table 5, the differences between the means of the groups were significant at .05 level as a result of the ANOVA test to determine whether loneliness scores differed according to having a child. The individuals with the highest level of loneliness were the elderly without any children (2,11), then with 1 child (2,069), then with two children (2,064), and then with three children (1,95). and the group that has four or more children (1,73).

The sixth question of the study, "Do the elderly, loneliness differ according to the educational status variable? to test the question the results of the anova test is given in Table 6.

Table 6: Results of ANOVA showing whether loneliness differentiated according to education level

		SS	df	MS	F	P
Inter-groups		13,063	5	2,613	9,057	,000
In groups		231,635	803	,288		
Total		244,699	808			
Education Level						
N/A		Literate or Primary School	Secondary School	High School	BS	MS or PhD
N	X	N	X	N	X	N
185	2,16	457	1,96	71	1,70	61
						1,99
						28
						1,76
						7
						1,84

As can be seen in Table 6, the differences between the means of the groups were significant at the level of .001 as a result of the ANOVA test to determine whether the loneliness scores differed according to the educational status of the elderly. The individuals with the highest loneliness level were the illiterate elderly group (2,16), while the lowest loneliness group was the secondary school graduates (1,79).

The results of the ANOVA test for the seventh question of the study, m1 Does the feeling of loneliness of the elderly differ according to the working status variable? Are giiven in Table 7.

Table 7: Results of ANOVA showing whether loneliness differs according to working status

		SS	df	MS	F	P
Inter-groups		5,053	2	1,684	5,658	,001
In groups		239,645	805	,298		
Total		244,699	808			





Working Condition					
Working		Non-working		Retired	
N	X	N	X	N	X
38	1,64	316	1,99	455	2,00

As can be seen in Table 7, the group consisting of retired elderly people has the highest sense of loneliness (2.00), while the lowest level of loneliness belongs to the working group (1.64).

The results of the anova test to test the eighth question of the study, Do the elderly people's loneliness differ according to the monthly income level? are given in Table 8.

Table 8: Results of ANOVA showing whether loneliness differs according to monthly income level variable

		SS	df	MS	F	P	
Inter-groups		11,34	4	2,836	9,772	,000	
In groups		233,354	804	,290			
Total		244,699	808				
Monthly Income Level							
N/A		0-999TL	1000-1999TL	2000-2999TL	3000TL+		
N	X	N	X	N	X	N	X
47	2,08	433	2,07	279	1,82	40	1,97
						10	1,75

As can be seen in Table 8, the difference between the means of the groups was significant at .001 as a result of ANOVA test to determine whether loneliness scores differ according to income levels. The individuals with the highest level of loneliness were the elderly with no income (2.08), then the group with 0-999 TL (2.07), followed by 1000-1999 (1.82), and the group with the lowest loneliness had the highest income and the elderly who have 3000 TL and over (1.75).

3. DISCUSSION AND CONCLUSION

In this study, the loneliness levels of the elderly were analyzed in terms of gender, age, marital status, where they live, the status and number of children, and the educational status. The findings are discussed below according to the research problem.

When the loneliness scores were analyzed according to gender; the loneliness levels of the elderly did not differ significantly according to the gender variable. However, Rokach (2000) found that women reported more loneliness than men. Beal (2006) in the literature review of loneliness in elderly women; older women experienced more loneliness than their male counterparts. Pierce, Wilkinson and Anderson (2003) also found that older women experienced more loneliness, fear of losing control, and destructive behavior towards self in older women. In another study, although women consider themselves relatively more urban than men, their loneliness feelings in their social relationships were found to be slightly higher than men (Ersoy, 2009). In the study of Ceyhan (2005), it was found that gender affects the level of loneliness and women feel more loneliness than men. In this study, the sub-dimensions of loneliness level were not given, but in the sub-dimensions, emotional loneliness levels of women and social loneliness levels of men were higher than other genders. In total, no difference was found.

When loneliness is examined according to the age variable; As the age of the elderly increases, loneliness levels increase with the age. In the study conducted by Tel and Sabancioğulları (2006), it was found that age did not make a significant difference on loneliness. In contrast, Khorshid et al. (2004), Dereli et al. (2010) concluded that age is effective on loneliness. The results of this research are in parallel with the results of the study.





As a result of a literature review conducted on an area of Turkey where a limited number of studies about the loneliness of the elderly and this has been determined that a very large part of the work carried out by researchers in other fields. Guidance and psychological counselors do little work in this field.

In line with the results of this study, it may be suggested that the loneliness levels of the elderly people are examined in more detail; more variables affecting the perception of loneliness of the elderly can be examined. Research can be done on elderly people living in different regions. Emotional and social loneliness levels of the elderly can be examined and compared separately.

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