

## **Social and Physical Activity and Life Satisfaction among Turkish Elderly Women**

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### **Abstract**

*World Health Organization points out that the world population is getting older along with the planet Earth. At the beginning of this century, the population of the elderly aged 80 and above was 14 million. By 2050, it is expected to reach 400 million. As a consequence, the number of studies focusing on the elderly, especially on elderly women, is steadily increasing around the world. Studies show that the elderly populations face various problems depending on how developed countries are. In Turkey, the population of elderly women aged 65 and above has risen 10 times since 1990. According to the 2011 data, more than half (53.92%) of women aged 65 and above have lost their husbands. This study aims to look at the problems of these women who have to spend the rest of their lives alone or with another member of the family, as well as to reveal their life satisfaction. For this purpose, surveys are carried out in districts where the elderly population rates are highest in Istanbul and socio-economic development is most advanced. As old residential districts located in three major regions of the city, these districts will represent accurate samples for Istanbul. In this study, the demographic, socio-economic, physical and health conditions of the elderly women are examined in order to evaluate their willingness to participate in social and physical activities. The findings of this study are compared to the statistical data of other studies previously carried out in Turkey on the same subject, in order to examine the correlation between the degree of participation in social and physical activities among elderly women and their life satisfaction. A total of 410 people, 198 of whom consist of women, have responded to the survey. Findings suggest that there is a strong correlation between gender and age, employment, the number of people living in the house, time spent outside, the frequency of socializing with friends and satisfaction with living conditions. The most remarkable findings of the survey were that they were satisfied with their homes and its environmental conditions, that most suffered from health problems and that they were social and active.*

**Keywords:** elderly women; social; physical; activity, life satisfaction; Turkey

### **1. Introduction**

The integration and participation of the elderly into society and improving their quality of life is becoming an increasingly higher priority on the global agenda. For the elderly to overcome the challenges of old age and to come to terms with aging, to feel loved, respected and cherished and to lead a healthy, happy and satisfied old age, the support, affection and care of the family are of utmost importance (SPO, 2007). Compared to worldwide studies on the elderly, only a few comprehensive studies have been made in Turkey. Yet, such studies are of great significance in order to understand the socio-economic and demographic characteristics of the elderly and to meet the needs and expectations of this social group. One of the most comprehensive studies on the elderly in Turkey, which started in 2000, was conducted by the Department of Gerontology at Akdeniz University. According to one of the studies conducted by this University (2012), old age is considered to start at the age of 65 in most European countries.

Therefore, this study will also examine the characteristics of the group aged 65 and above. In 1960, the number of people aged 65 and above accounted for 1.76% of the total population in Turkey; however, in 2011 this figure increased to account for 7.35% of the population. According to 2011 data obtained from Turkish Statistical Institute (TUIK), the number of people aged 65 and above was approximately 5,49 million (Table 1, Map 1).

**Table 1: Distribution of “Age 65 and Above Group” among the Population in 1960, 1990 and 2011**

65 and above population	1960	1990	2011
Female	590645	1326221	3092790
Male	388087	1091142	2397925
Total	489366	2417363	5490715
Total Population	27754820	28236518	74724269

**Map 1: Distribution of “Age 65 and Above Group” among the Population in Turkey**

Figure 1 shows the percentage distribution of age groups according to census years and the population projections of TSI. The percentage change in age groups in the total population between 2000 and 2050 clearly shows that the population of the elderly dramatically increases in comparison to other age groups.

**Figure 1: The Percentage Distribution of the Population according to Age Groups**

It is seen that the number of women in the age 65 and above group increased approximately 11 times since 1990. It was found out that the rate of elderly women in the total population was 4.76% (265.244) in 1990, while it nearly doubled to 8.32% (3.092.790) in 2011.

**Table 2: The Rate of Elderly Population in Terms of Gender**

Female	2011(1)	2007(1)	2000	1990
65-69	2,67	2,61	2,54	1,87
70-74	2,16	2,11	1,96	1,09
75-79	1,67	1,79	0,97	0,85
80-84	1,15	1,04	0,44	0,56
85+	0,67	0,55	0,40	0,39
Total	8,32	8,09	6,3	4,76
Male	2011(1)	2007(1)	2000	1990
65-69	2,34	2,21	2,31	1,65
70-74	1,73	1,78	1,51	0,85
75-79	1,32	1,25	0,74	0,72
80-84	0,69	0,60	0,29	0,37
85+	0,30	0,24	0,24	0,23
Total	6,39	6,08	5,09	3,81

Source: TUIK, 2011 (1 Address based population registration system)

The demographic data of a study conducted by the Department of Gerontology at Akdeniz University (2012) revealed that life expectancy in Turkey has been gradually increasing. Average life expectancy in Turkey was 59 for men and 63 for women in 1990; however, in 2010 the average increased to 69 for men and 73 for women (73.6 as of December 2011). This approximately 5-year difference between the average life expectancy of men and women suggests that women constitute a larger section of the elderly population group. Hence it is seen that in the total elderly population, the proportion of women is 54% (SPO, 2007). This study aims to investigate life satisfaction and activity levels of women, who are to spend the rest of their lives alone or with other members of the family and the social, physical and economic conditions of the environment they live in.

## **2. Elderly Women and Life Satisfaction**

It is becoming more and more important to ensure that elderly women lead a quality life without being alienated from society. Their life satisfaction levels are taken into serious consideration. Some studies conducted so far investigate the differences between male and female populations while others focus only on women, revealing the problems that the elderly women are facing.

These studies are reviewed below. Balachandran et al. (2007), in their study conducted in Kerala, investigated the alienation and life satisfaction of elderly men and women and concluded that there are no differences between men and women in terms of life satisfaction. Kim and Sok (2013) conducted a study in Korea to investigate life satisfaction of elderly women and suggested that the major factor affecting life satisfaction in elderly Korean women who live alone was depression.

Another noteworthy issue that should be taken into consideration in terms of improving the quality of life for the elderly is their participation in social and physical activities and the continuity of this participation. In their study conducted in the USA, Glass et al. (1999) state that social activities organized for the elderly improve their quality of life and life expectancy. Cheng and Chan (2006) conducted a study on the benefits of social relations to life satisfaction. In their study conducted on elderly Swedish people, Silverstein and Parker (2002) observed that social activities contribute positively to quality of life. Jenkins, Pienta and Horgas, (2002) have conducted a survey on life quality to investigate the same subject. Gleit et al. (2005) also studied the effects of social activities on the elderly. Cattani et al. (2005) based their study on the importance of preventing social isolation and alienation.

In a study conducted by Matsuo et al. (2003), quality of life and personal characteristics of 321 persons aged 65 and above, some of whom were active participants in social activities, were investigated. It was determined that, when we consider the levels of old people's participating in various courses in community centers, participating in educational activities such as conferences, joining clubs and doing community work suitable for their age and other activities, the result of quality of life measurement turned out to be higher in the group who participates in activities than that of the group who doesn't and also the result of personality measurement turned out to be more positive in the former group.

Therefore, to encouraging the elderly to take part in various activities and ensuring their regular participation are important factors in terms of improving their quality of life. Agahi and Parker (2008) and Klumb and Maier (2007) studied the correlation between the activities that the elderly participate in and the rate of death; these studies greatly contributed to the literature and shed light once again on the importance of research on this subject. In a survey-based study on a group of middle-aged and elderly men and women, Malmberg et al. found that physical activity during free time prevents many diseases (Malmberg et al., 2005).

In a study by Crombie et al. (2004) conducted in Dundee, Scotland, "Regular physical activity has been shown to have many health benefits. However, it has been observed that many older people are physically inactive." Levels of knowledge about the specific health benefits of physical activity were high. Almost all participants (95%) believed that physical activity was beneficial and 79% believed that they did enough to keep healthy. However, 36% did no leisure time physical activity and a further 17% did less than 2 hours per week. Men were more likely to take part in leisure time physical activity than women (70% of men compared to 57% of women).

### ***3. A Field Study on the Elderly Women in Istanbul***

This study investigates the socio-demographic and socio-economic status of the 65 and above age group population, their residential and environmental living conditions and their health and willingness to participate in activities. The survey data was collected from 410 people living in three districts with the highest elderly population (Berkoz, Yirmibesoglu, 2013). Kadikoy (9%), Besiktas (10.03%), and Bakirkoy (12.18%) district centers have been selected as study fields because the rate of the elderly population is highest in these three areas (TUIK, 2010). According to TUIK findings in 2010, distribution of the rate of the elderly population aged 65 and above in these districts is as follows (map 2):

#### **Map 2: Elderly Population Distribution in Istanbul Districts**

According to 2010 data, the highest distribution of elderly women population aged 65 and above in Istanbul districts is Kadikoy, Bakirkoy, Fatih, Bahcelievler, Kucukcekmece, Sisli, Uskudar, Maltepe (Map 3).

#### **Map 3: Elderly Women Population Distribution in Istanbul Districts**

Overall results of the survey show that life satisfaction is significantly related to age, gender, employment, the number of household members, the frequency of going out and socializing with friends.

The demographic features of the respondents indicate that 48.3% of the survey population is women and 51.7% are men.

**Table 3: Gender of Survey Population**

Gender	Number of People	Percentage
Female	198	48,3
Male	212	51,7
Total	198	100,0

The study focuses particularly on data collected from a total number of 198 females. When we look at the ages of the women who responded to the survey, it is seen that 75-84 age group is the largest at 47.0%.

**Table 4: Respondents' Year of Birth**

Age	Number of People	Percentage
65-74	22	11,1
75-84	93	47,0
85>	83	41,9
Total	198	100,0

As for the educational status of the respondents, the majority are either primary school graduates (39.9%) or high school graduates (23.2%). Housewives (62.1%) and teachers (10.1%) constituted the two most common occupational groups. 98.0% are currently not working. Results show that the rate of persons who have social security is quite high (96.5%). As for the number of household members, it is seen that the rate of two-person households is 45.5% and the rate of people who live alone is 30.3%. The percentage of childless people is 7.6%.

The fact that family bonds are still strong in Turkey influences old person's residential preferences, especially when compared to developed countries. The results of the study have revealed that 7 out of every ten elderly are living with their children in the same household or at least in the same building, street or the same neighborhood. It is found that there is no significant difference between males and females in this regard and the general tendency is towards living with or close to the children. Such a preference might be considered socially and economically advantageous for the elderly and their children alike (SPO, 2007).

According to 2011 data, more than half of the 65 and above women in Turkey (53.92%) are widows (TUİK).

**Table 5: Marital Status of the Elderly Women in Turkey**

Gender	Never married	Married	Divorced	Widow/Widower	Total
female	0,51	3,63	5,07	53,92	5,55
male	0,18	5,53	3,35	11,05	4,30

Map 4 shows the distribution of the widow elderly population in Turkey and in Istanbul.

#### **Map 4: Widow Elderly Population Distribution**

#### ***Residence Characteristics***

Results show that home ownership is quite high, 85.4%. The majority of the respondents live either on the first floor (31.3%) or on the second floor (30.3%). The rate of respondents who stated that there is no elevator in their building is 51.0%. As for whether or not there is any physical disability that would make climbing stairs difficult, we find that 64.6% of the respondents do not suffer from any physical disability. To the question whether or not any walking aid is used, 28.3% of the respondents said yes.

With regard to the number of rooms in the residence, the majority of the residences have 2, 3 or 4 rooms. The rate of respondents who stated that the residence they live in is large enough is 94.9% and the residence satisfaction rate is found to be very high, 93.9%. A high proportion of respondents reported that there is a supermarket close to their residence (99.5%) and the majority also stated that there is a health care facility close to their residence, 87.9%. As for the respondents' satisfaction with the neighborhood they live in, 96% of the respondents responded positively. All in all, a great majority of the respondents are satisfied with the residence and neighborhood they live in and are not planning to move elsewhere.

#### ***Health Status and Physical Activity Levels among the Elderly***

A great majority of the respondents have an illness affecting their daily life.

**Table 6:Illness**

Illness	Number of People	Percentage
No	75	37,9
Yes	123	62,1
Total	198	100,0

The most common illnesses are joint disorders, hypertension and diabetes.

**Figure 2: Illness**

With regard to physical activity done to stay healthy, most of the respondents reported activities such as house work, shopping, going to the bank and regular walking. The rate of elderly women who reported that they do physical activity every day is 25.3%. The rate of people who said “no” or “rarely” for the same question is 29%. It is observed that the rate of physical activity level is high. A great proportion of the respondents stated that they do not have a caretaker (76.3%) or housemaids helping them with daily chores (65.2%). In other words, elderly women are observed to be physically active. It is seen for a fact that the rate of leisure time activities across Turkey (Time Use Survey, 2006) is very low (Total activities 5.10%). These activities are TV and video, socializing, reading, sports, hobbies and games, volunteer work and help and other activities.

**Table 7:The Rate of Leisure Time Activities across Turkey**

	Total	Male	Female
Elderly Population	5.490.715	2.397.925	3.092.790
%	14,7	6,39	8,32
Total Population	74.724.269	37.532.954	37.191.315
%	7,35	3,21	4,14

Source: Time Use Survey, 2006

According to the study, the rate of leisure time activity for the elderly population, and elderly women population in particular, is higher than that of total population.

**Correlation Analysis**

With regard to the correlation between life satisfaction and socio-demographic and socio-economic characteristics of the elderly women, it was found that;there is a negative correlation between presence of children, feeling lonely and life satisfaction,life satisfaction has a strong and positive correlation with having positive family relationships, doing physical activity, going on seaside holidays and having everything one wants (Table 8).

**Table 8: Correlation Analysis According to Socio-Demographic and Socio-Economic Characteristics**

Socio-Demographic and Socio-Economic Characteristics	Life Satisfaction			
	Female		Male	
	Pearson Correlation	Sig. (2-tailed)	Pearson Correlation	Sig. (2-tailed)
Age	-.064	.371	.149*	.030
Work Status	.030	.671	.178**	.009
Presence of children	-.171*	.016	.072	.300
Educational Status	.093	.191	.150*	.029
Residence Ownership	.045	.525	.160*	.019
Social Security	.067	.345	-.049	.178
Chronic Illness	.084	.260	-.171*	.260
Feeling Lonely	-.180*	.011	.218**	.001
Spending time with young people	.081	.259	.210**	.002
Positive family relationship	.317**	.000	.260**	.000
Participating in social activities	.100	.166	.133	.054
Physical activity	.309**	.000	.249**	.000
Seaside Holiday	.446**	.000	.325**	.000
Having everything in life	.658**	.000	.570**	.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

With regard to the correlation between life satisfaction and socio-demographic and socio-economic characteristics of the elderly men, it was found that;

- there is a negative correlation between chronic illness and life satisfaction,
- there is a positive correlation between age, educational status, residence ownership and life satisfaction
- life satisfaction has a strong and positive correlation with work status, feeling lonely, spending time with young people, having positive family relationships, doing physical activity, going on seaside holidays and having everything one wants.

With regard to the correlation between life satisfaction of the elderly women responding to the survey and the characteristics of their physical environment, it was found that:

Life satisfaction is highly and positively correlated to the excellence of living conditions, residential satisfaction, closeness to a health care facility and satisfaction with the neighborhood (Table 9).

**Table 9: Correlation Analysis According to Physical Environment Characteristics**

Physical Environment Characteristics	Life Satisfaction			
	Female		Male	
	Pearson Correlation	Sig. (2-tailed)	Pearson Correlation	Sig. (2-tailed)
Excellence of Living Conditions	.768**	.000	.662**	.000
Residential Satisfaction	.255**	.000	.225**	.001
Closeness to Health Care Facilities	.184**	.009	.161**	.019
Satisfaction with the Neighborhood	.206**	.004	.041	.550
Closeness to a Supermarket	-.037	.608	.023	.740

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

For elderly men, it was found that:

- Life satisfaction is highly and positively correlated to the excellence of living conditions, residential satisfaction, and closeness to a health care facility.

With regard to the correlation between residential satisfaction of the elderly women responding to the survey and the characteristics of the residence and residential environment, it has been determined that there is a positive and strong correlation between (Table 10);

- Age and residential satisfaction,
- Residential satisfaction and the size of the residence, satisfaction with the neighborhood and satisfaction with health care services,

It has been determined that there is a positive correlation between;

- Residential satisfaction and educational status,
- Residential satisfaction and the inhabited story, number of rooms lack or presence of an elevator.

**Table 10: Correlation Analysis According to House and Housing Environment Characteristics**

House and Housing Environment Characteristics	Residential Satisfaction			
	Female		Male	
	Pearson Correlation	Sig. (2-tailed)	Pearson Correlation	Sig. (2-tailed)
Age	.202**	.004	.066	.339
Employment Status	.036	.610	-.066	.342
Presence of Children	-.024	.733	.158*	.022
Educational Status	.158*	.026	.107	.120
Presence of chronic illness	.027	.716	-.235**	.001
The Size of the Residence	.715**	.000	.579**	.000
The inhabited Story	.149*	.036	.120	.080
The Number of Rooms	.169*	.017	.248**	.000
Presence of an Elevator	.164*	.021	.107	.120
Satisfaction with the Neighborhood	.485**	.000	.356**	.000
Satisfaction with health-care Services	.360**	.000	.497**	.000

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

For elderly men, it has been determined that there is a positive and strong correlation between;

- Residential satisfaction and the size of the residence, satisfaction with the neighborhood and satisfaction with health care services,
- Residential satisfaction and the number of rooms.

It has been determined that there is a positive correlation between;

- Residential satisfaction and presence of children.

It has been determined that there is a negative and strong correlation between;

- Residential satisfaction and presence of chronic illness.

### ***Conclusion and Discussion***

Aging is an inevitable part of life. It must be ensured that one leads a healthy and quality life in this period and elderly people must be valued and given the respect they deserve. One of the important ways to improve public health is to improve people's quality of life during old age and to develop healthy aging strategies (SPO, 2007).

Determining the demographic, socio-economic, physical environment and health status of elderly women in Istanbul, this study has investigated their willingness to participate in social and physical activities.

The following are the important findings of the study: Elderly women are satisfied with residential and environmental conditions they live in; the majority of them suffer from ill-health; they are socially active and the rate of their participating in activities is high. It is known for a fact that in studies on life satisfaction a lot of variables come into play. For instance, depression tendencies show significantly lower degrees of life satisfaction (Onishi *et al.*, 2010), impaired health have shown a low correlation with life satisfaction, however, personality (Hilleras, *et al.* 2001), satisfaction with friends (McCamish-Svensson *et al.*, 1999), independent life in the community (Gueldner *et al.*, 2001) and physical activities (McAuley *et al.*, 2000) were reported as strongly correlated variables with life satisfaction.

Within the framework of this study, the correlation analysis done to determine the variables affecting life satisfaction of elderly women has revealed that;

- Having positive family relationships, doing physical activity, going on seaside holidays, having what you want in life, the excellence of living conditions, residential satisfaction, closeness to health-care facilities and satisfaction with the neighborhood are factors contributing positively to life satisfaction
- Not having children and feeling lonely are factors contributing negatively to life satisfaction. The table below shows the difference between male and female regarding different characteristics, life satisfaction, and residential satisfaction.

**Table 11: Correlation Analysis of Different Characteristics, Life Satisfaction, and Residential Satisfaction Based on the Difference between Male and Female**

Characteristics	Life Satisfaction		Residential Satisfaction	
	Female	Male	Female	Male
	Age		+	++
Employment Status		++		
Presence of Children	-			+
Educational Status		+	+	
Residence Ownership		+		
Presence of Chronic Illness		-		--
Feeling Lonely	-	++		
Spending time with young people		++		
Positive family relationship	++	++		
Physical activity	++	++		
Seaside Holiday	++	++		
Having everything in life	++	++		
The Size of the Residence			++	++
The inhabited Story			+	
The Number of Rooms			+	++
Presence of an Elevator			+	
Satisfaction with the Neighborhood			++	++
Satisfaction with health-care Services			++	++
Excellence of Living Conditions	++	++		
Residential Satisfaction	++	++		
Closeness to Health Care Facilities	++	++		
Satisfaction with the Neighborhood	++			

++Positive strong relationship, + positive relationship

-- Negative strong relationship, - negative relationship

Below are the differences of elderly males from elderly females in this study;

- Age, educational status, residence ownership, feeling lonely are factors contributing positively to life satisfaction,
- Presence of chronic illness is a factor contributing negatively to residential satisfaction.

Crombie et al. (2004), in their study conducted in Dundee, Scotland, concluded that the elderly were not physically active; nonetheless, the Istanbul case in question suggests that most elderly women are physically active and perform activities such as daily chores and shopping. With regard to the impact of satisfaction with friends on life satisfaction, the present study has obtained different results from those of McCamish-Svensson et al. (1999) and it has been found out that family bonds and the presence of children contribute positively to life satisfaction.

In conclusion, this study emphasizes how important it is for the life satisfaction of elderly women, who are well-respected and have authority in the traditional family in Turkish society, to participate in social and physical activities and how important family bonds are.

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