

The Characteristics and Life Preferences of Turkish Older Adults

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Abstract

The older adult population have been increasing around the World. The interaction of older adults with their physical and social environment is so important to promote age-friendly societies. In the present study, it is aimed to explore variables associated with satisfaction among older adults living at home and nursing home. Participants were composed of 1770 older adults living at home (N= 846) and nursing home (N=924). Results revealed that, regarding variables associated with home satisfaction, older adults having at least a hobby, participating in social activities, living with her/his spouse and living at a home belongs to her/himself or spouse had higher scores of satisfaction than their counterparts. Regarding variables associated with nursing home satisfaction, older adults referred to a nursing home by herself/himself, older adults having visitors (a family member or another person rather than a relative) at a nursing home, older adults visiting her/his family and older adults having at least a hobby had higher satisfaction scores than counterparts. Results were discussed with the literature and clinical implications.

Keywords: Older adults living at home, older adults living at the nursing home, home satisfaction, nursing home satisfaction, living place, participating in social activities, hobbies.

Key Practitioners Message

- The interaction of older adults with their physical and social environment is so important and identifying factors associated with satisfaction among the older adults living at home and nursing home are needed to assess on the basis of the ecological approach.
- Living with spouse at home and owning the house in which (s)he lives are significantly related factors to home satisfaction of older adults.
- Participating in social activities and having hobbies are important for residence satisfaction among older adults either living at home or a nursing home.
- Having a visitor (family member or another person rather than a relative) at a nursing home increases the residence satisfaction.

The older adult population have been increasing around the World (Kasper, Freedman, Spillman, & Wolff, 2015) as well as in Turkey (Durak, 2018). The number of older adults to population proportion was 13% while this ratio will increase to 21% in 2050 and 28% at the end of the 21st century (United Nations, 2017, p. 6). Similarly, Turkey Statistical Institute (TSI, 2008) reported that the total population of individuals age 65 and older was 7.1%

and the older adult population (65 and over age) increased by 17% in the last five years (TSI, 2017). Also, while the ratio of older adult population to total population was 7.7% in 2013, it increased to 8.5% in 2017 (TSI, 2017). According to population projections, the rate of older adult population was estimated to be 10.2% in 2023, 12.9% in 2030, 16.3% in 2040, 22.6% in 2060 and 25.6% in 2080 (TSI, 2017).

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In countries with growing older adult populations, a large number of studies have been conducted. Concerning the number of older adult population, studies conducted with this sample is necessary to understand aging-related problems and to find possible solutions to these problems. On the basis of the ecological perspective, comprehensive assessment of older adults living in different places is recommended (Ellis, Whitehead, Robinson, O'Neill, & Langhorne, 2011). Also, it is highlighted that socio-cultural variables affect representations of old age (Moreno, Sánchez, Huerta, Albala, & Márquez, 2016). In this respect, physical and social environment and aging interaction have been examined in the literature (i.e. Sachs et al., 2011). In a cross-cultural study conducted in six countries over ten thousands of participants, older adults were more likely to live at home and less likely to live in institutions (Ellis et al., 2011). A study about home was more preferred by older adults and institutions were less preferred places to live (Farber et al., 2011). In case older adults had suffering illnesses and received inpatient treatment, they showed eagerness to return home after illnesses treated. Therefore, it can be said that the place of residence is so important for older adults. It was also found to be related to social contact which means based on place of residence, social contact differed especially among older adults having hearing problems (Shin, Baik, Chung, Heo, & Ha, 2017).

In a study revealing the importance of the housing for the older adults, 56.3% of the 55-69 age group individuals responded the place of residence was as "very important" and 39.4% answered the question "important" (Tufan, 2003). Also, older adults generally prefer to live their homes rather than a nursing home where is seen as "last chance" (Kalaycıglu, Tol, Küçükkural, & Cengiz, 2003), irreversible and isolated places by them (Soygur, 2000). As mentioned by Tufan (2003), "Even if the physical and sensory abilities of the older adults are diminishing, their house helps them to perceive their own existence positively. Our house is the only environment in which decisions are taken by ourselves and we are not attracted" (p.135). Therefore, it can be said that the home is becoming the

central aspect of satisfaction with life in old age (Tufan, 2003). On the other hand, older adults living at home and having health problems such as dementia need help more than their counterparts living at an institution and they receive caregiving mostly from family or unpaid caregivers (Kasper et al., 2015). Also, it was reported that almost 40% of older adults (living in the US) have experienced health problems and their participation in daily activities are quite limited (Johnson, & Appold, 2017). Therefore, institutional care is also needed for older adults especially for cases having health problems.

In respect to the ecological perspective, other studies have also been conducted as comparing older adults living in rural or urban areas. Community in rural areas includes more social cohesion, more contact and more interactive atmosphere than urban areas (Shin et al., 2017). On the other hand, urban environments are seen as more stimulating cognitively, socially and relational (Cassarino, O'Sullivan, Kenny, & Setti, 2016). In a national survey conducted over 4000 individuals, the difference between older adults living in rural and urban areas was going to diminish in terms of health status and functionality in China (Wu, Yue, & Mao, 2015). In this study, the quality of the local environment (access to water) was important among rural residents. In another study conducted with Irish older adults (N=3765), older adults living in urban areas demonstrated better performance on cognitive abilities and executive functions than others living in urban areas (Cassarino et al., 2016). Therefore, both rural and urban areas have some advantages for older adults.

Regarding the ecological view, the people who live with is also mentioned to be important for older adults. In several countries, living with more than one generations are becoming prevalent and called multi-general houses. The spreading of the multi-generational houses is related to the effect of living with others on the well-being of older adults. A descriptive study was conducted based on frequencies between 2001-2015 in US (Johnson, & Appold, 2017). The results revealed that the most of them were living with alone or with a spouse (69%), others were living with a child/

son-daughter (13.5%), grandchild (4.6%), and/or father or mother (3.8%). In this study, household typologies were identified as one generation households (alone) two-generation households (two or more adults with their offsprings), three plus generation houses (one or more adults, their offsprings and grandchildren) and missing generation houses (one or more adult with grandchildren). Based on this typology, most of US residents (79.2%) were living in a one-generation house and 15% of them had caretaker and caregiver households. Also, based on the owner of their home, 50% of them were the owner of their house and 20% were living in a rental house. Besides, 45% of them were living long-termly at the same home. Another Study conducted over 143 countries revealed that 55% of older adults lived with children, 15% of them lived with a spouse, and 12% of them lived alone (United Nations, 2017). These studies questioned the importance of households on older adults despite revealing descriptive results. In a study examining people live with and quality of life and personal distress, older adults live alone had lower scores about the quality of life and higher scores of personal distress than the ones living with a spouse (Henning-Smith, 2016). On the contrary, this result was quite different based on the gender variable. Women older adults live with other people (i.e. spouse) had lower scores of quality of life and had higher scores of personal distress than men. The researcher explained the difference as the value of living with others to explain older adults live with someone. However, this relationship sometimes does not exist since social support might create distress among especially women older adults.

As the aforementioned studies mentioned above demonstrates, older adults interact with their physical and social environment is so important. To enhance age-friendly societies, understanding the physical and social environment on aging adults is important (Johnson, & Appold, 2017). The purpose of this research is to determine the characteristics of older adults living at home and nursing home and to compare their preferences on the basis of their satisfaction about living place.

Therefore, the characteristics of older adults living at home and nursing home are aimed to examine on the basis of their satisfaction in the present study. In terms of their satisfaction with the living either home or nursing home, variables related to their environment (age, gender, social activities, people who live with, visits and visitors) are compared. In respect to hypotheses, there would be differences between variables related to the environmental variables.

Methods

Participants

The sample of the present study consists of 1770 older individuals. Based on the living place, 52 % of them were living in nursing homes ($n = 924$) and 48 % of them were at home ($n = 846$). To collect the data from those participants, simple random sampling by clustering technique was provided by the Turkish Statistical Institute (TurkStat). Participants were selected older adults who do not have any cognitive impairment. All participants were 60 or older and their age ranged between 60 and 100 ($M = 73.82$, $SD = 7.97$) (for detailed information, see Table-1)

Demographic Information Form

A socio-demographic information form including gender, education level, income, marital status, place of residence, participation in social activities, and a number of visitor in a nursing home was asked to participants. Additionally, the participants were asked to rate their residence (home and nursing home) satisfaction on a 10 point Likert scale (1=Not satisfied at all, 10= Completely satisfied).

Procedure

In order to conduct the study, ethical approvals were taken from both Human Research Ethics Committee (Abant İzzet Baysal University) and Ankara Clinical Research Ethics Committee (Ministry of Health, General Directorate of Pharmaceuticals and Pharmacy.) Also, in order to collect data from nursing homes, the permission was taken from the "Turkish Ministry of Family and Social Policy". Also, in order to reach the older adults residing at home,

Table-1. Socio-demographic characteristics of participants

	NURSING HOME		HOME		TOTAL	
	(N = 924)		(N = 846)		(N = 1770)	
	M	SD	M	SD	M	SD
Age	76.42	7.37	70.99	7.63	73.82	7.97
Monthly Income*	979	2214	1744	1398	1352	1900
	F	%	F	%	F	%
<i>Gender</i>						
Women	403	43.61	440	52.01	843	47.63
Men	521	56.39	406	47.99	927	52.37
<i>Marital Status</i>						
Single / never married	92	9.96	22	2.60	114	6.44
Married	165	17.86	540	63.83	705	39.83
Divorced	196	21.21	34	4.02	230	12.99
Widow	471	50.97	250	29.55	721	40.73
<i>Education Level</i>						
Literate	216	23.38	149	17.61	365	20.62
Primary school graduate	312	33.77	279	32.98	591	33.39
Secondary school graduate	118	12.77	90	10.64	208	11.75
High school graduate	169	18.29	165	19.50	334	18.87
College graduate	44	4.76	65	7.68	109	6.16
Graduated from a university	65	7.04	98	11.59	163	9.21
<i>Place of Residence**</i>						
Village	101	10.93	112	13.24	213	12.03
Town	32	3.46	105	12.41	137	7.74
City	133	14.39	135	15.96	268	15.14
Metropolitan (suburb)	66	7.14	81	9.57	147	8.31
Metropolitan (center)	592	64.07	413	48.82	1005	56.78
<i>Number of Children</i>						
No children***	223	24.13	72	8.51	295	16.67
One child	159	17.21	102	12.06	261	14.75
Two children	239	25.87	267	31.56	506	28.59
Three children	150	16.23	219	25.89	369	20.85
Four and more children	153	16.56	186	21.99	339	19.15
<i>Working Status</i>						
Still working	12	1.30	72	8.51	84	4.75
Currently not working	684	74.03	462	54.61	1146	64.75
Housewife	228	24.68	312	36.88	540	30.51
<i>General Health Insurance</i>						
No	106	11.47	41	4.85	147	8.31
Yes	818	88.53	805	95.15	1623	91.69

* = Turkish Lira (₺)

** = The longest duration of life

*** = Include single older adults

address information was taken from the "Turkish Statistical Institute (DIE)" which provided help to researchers about a random assignment for the individuals living at home. Participants were visited in their living environment (home or institution) and the purpose of the study was explained to them.

After participants were informed about the study, they participated in the study voluntarily by means of face to face interaction and with the help of researchers while completing forms. It took 15-25 minutes to complete the questionnaires.

Results

Gender and Marital Status Difference on Place of Residence

In the present study, a chi-square test of independence was performed to examine the relationship between gender and residence type. As can be seen by the frequencies cross-tabulated in [Table-2](#), there is a significant relationship between gender and residence type, $\chi^2(1, N = 1770) = 12.48, p = 4.12e-04$, Cramer's $V = .08$. However, the effect size for this analysis is small according to the Cramer's V criteria ([Téllez, García, & Corral-Verdugo, 2015](#)).

gender and residence type, $\chi^2(1, N = 1770) = 421.68, p = 4.46e-36$, Cramer's $V = .49$. Widowed older adults ($N = 471, 51.0\%$) were living more at a nursing home than married ($N = 165, 17.9\%$), divorced ($N = 196, 21.2\%$), and single older adults ($N = 92, 10.0\%$). On the other hand, married older adults ($N = 540, 63.8\%$) were living more at home than widowed ($N = 250, 29.6\%$), divorced ($N = 34, 4.0\%$), and single older adults ($N = 22, 2.6\%$). The effect size for this analysis is large according to the Cramer's V criteria ([Téllez, García, & Corral-Verdugo, 2015](#)) and those results supported the presence of higher frequency of single, divorced and widowed at the nursing home and higher frequency of the married at home.

Table-2. Chi-square results for gender X residence type

	Women	Men	Total	$\chi^2(1)$	Cramer's V	p
Nursing Home	403 (440.07)	521 (483.93)	924	12.48	.08	4.12e-04
Home	440 (402.93)	406 (443.07)	846			
Total	843	927				

Note: Expected values shown in parentheses.

While more men ($N = 521, 56.4\%$) than women ($N = 403, 43.6\%$) were living at the nursing home, more women ($N = 440, 52.01\%$) than men ($N = 406, 47.99\%$) were living at home among the participants in the study.

Additionally, a chi-square test of independence was performed to examine the relation between marital status and residence type. According to the cross tabulation demonstrated in [Table-3](#), there is a highly significant relationship between

Gender, Place of Residence, and Alternative Place of Residence Relationships

According to the cross tabulation demonstrated in [Table-4](#), there is a significant relationship between place of residence (village, town, city- metropolitan) and alternative place of residence type, $\chi^2(7, N = 846) = 52.98, p = 3.73e-9$, Cramer's $V = .25$. Older adults who were in the village, town, and city preferred more to live with their children

Table-3. Chi-square results for marital status X residence type

	Nursing Home	Home	Total	$\chi^2(3)$	Cramer's V	p
Married	165 _a (368.03)	540 _b (336.97)	705	421.68	.49	4.46e-36
Single	92 _b (59.51)	22 _a (54.49)	114			
Divorced	196 _b (120.07)	34 _a (109.93)	230			
Widowed	471 _b (376.39)	250 _a (344.61)	721			
Total	924	846				

Note 1: Expected values are shown in parentheses.

Note 2: Each subscript letter denotes a subset of the place of residence categories whose column proportions do not differ significantly from each other at the .05 level.

Note 3: Subscript letter of b demonstrates a bigger proportion than the subscript letter of a.

Table-4. Chi-square results for the place of residences X alternative residence preferences (Where would you prefer to stay if you didn't stay at home right now?)

(S)he wants to live	Village, Town, and City	Metropolitan	Total	$\chi^2(7)$	Cramer's V	p
with her/his children	97 _b (66.2)	62 _a (92.8)	159			
with relatives and friends	9 _a (9.6)	14 _a (13.4)	23			
in a natural or holiday settings	18 _a (27.0)	47 _b (38.0)	65			
in a nursing home	46 _a (68.2)	118 _b (95.8)	164			
in her/his own country	25 _a (25.8)	37 _a (36.2)	62	52.98	.25	3.73e-9
where (s)he still lives in (no change)	65 _a (79.5)	126 _b (111.5)	191			
in her/his own house	80 _b (66.6)	80 _a (93.4)	160			
in a rented house	12 _a (9.2)	10 _a (12.8)	22			
Total	352	494				

Note 1: Expected values are shown in parentheses.

Note 2: Each subscript letter denotes a subset of the place of residence categories whose column proportions do not differ significantly from each other at the .05 level.

Note 3: Subscript letter of b demonstrates a bigger proportion than the subscript letter of a.

than individuals who were living in the metropolitan. Those individuals were also more likely to live their own home rather than older adults lived in the metropolitan. Older adults who were in metropolitan preferred more to live in natural/ holiday setting than older adults in village, town, and city. Older adults who were in metropolitan preferred more to live in a nursing home than older adults in village, town, and city. Older adults who were in metropolitan preferred more to live in the same place and they were preferred less to change liv-

ing place than older adults in the village, town, and city.

According to the cross tabulation demonstrated in Table-5, there is a significant relationship between gender and alternative place of residence type, $\chi^2(7, N = 950) = 29.33, p = 1.26e-04$, Cramer's V = .19. Women were more likely to live with their children than men. Men were more likely to live in a natural/holiday setting and nursing home than women.

Table-5. Chi-square results for gender X alternative residence preferences (Where would you prefer to stay if you didn't stay at home right now?)

(S)he wants to live	Women	Men	Total	$\chi^2(7)$	Cramer's V	p
with her/his children	102 _b (82.7)	57 _a (76.3)	159			
with relatives and friends	13 _a (12.0)	10 _a (11.0)	23			
in a natural or holiday settings	22 _a (33.8)	43 _b (31.2)	65			
in a nursing home	69 _a (85.3)	95 _b (78.7)	164			
in her/his own country	30 _a (32.2)	32 _a (29.8)	62	29.33	.19	1.26e-04
where (s)he still lives in (no change)	105 _a (99.3)	86 _a (91.7)	191			
in her/his own house	91 _a (83.2)	69 _a (76.8)	160			
in a rented house	8 _a (11.4)	14 _a (10.6)	22			
Total	444	406				

Note 1: Expected values are shown in parentheses.

Note 2: Each subscript letter denotes a subset of the place of residence categories whose column proportions do not differ significantly from each other at the .05 level.

Note 3: Subscript letter of b demonstrates a bigger proportion than the subscript letter of a.

Characteristics of the Older Adults Residing at Home

Among the older adults residing at home, the majority of the participants live with their spouse (N = 340, 40.19%) or with their spouse and children (N = 214, 25.30%). In terms of house ownership, the majority of the participants live in their own house (N = 497, 58.75%). In terms of alternative residence places, mostly the participants prefer not to change their living places (N = 191, 22.58%), to

Characteristics of the Older Adults Residing at Nursing Home

Regarding who refers her/him to a nursing home, the majority of participants said herself/himself (N=680, 73.59%), her/his children (N=77, 8.33%), her/his relatives (N=66, 7.14%). In respect to the frequency of visiting the family outside to nursing home, the majority of them did not visit their family (N=423, 45.78%) and others visited a few times in a year (N=253, 27.38%). Regarding who visited her/

Table-6. Characteristics of the older adults residing at home

	F	%		F	%
People who live together			Who belongs to the house (s)he lives in?		
Spouse	340	40.19	Herself/himself	497	58.75
Spouse + children	214	25.30	Spouse	134	15.84
Alone	113	13.36	Child	93	10.99
Children	96	11.35	Another (rent)	83	9.81
Close to someone*	83	9.81	Close to someone*	39	4.61
Alternative residence preferences** : (S)he wants to live...			Receiving services offered by the State or the Municipality		
where (s)he still lives in (no change)	191	22.58	Travel aids***	163	19.27
in a nursing home	164	19.39	Health services****	132	15.60
in her/his own house	160	18.91	Caring services at home*****	90	10.64
with her/his children	159	18.79	Other aids*****	343	40.54
in a natural or holiday settings	65	7.68	No information	196	23.17
in her/his own country	62	7.33	Services needs offered by the State or the Municipality		
with relatives and friends	23	2.72	Travel aids	84	9.93
in a rented house	22	2.60	Health services	154	18.20
Participation in social activities			Caring services at home	73	8.63
No	559	66.08	Other aids	431	50.95
Yes	287	33.92	No information	293	34.63

Note-1: * Close person is a brother, sister, parent, relative, friend, etc.

Note-2: ** The question: Where would you prefer to stay if you have not stayed at home?

Note-3: *** Travel aids = Free / discount travel card, etc.

Note-4: **** Health services = Injection, inserting serum, sugar level - blood pressure measurement, transfer to the hospital with an ambulance/a car, urinary catheterization, wound care dressings

Note-5: ***** Caring services at home = Hair beard care, body cleaning, bathing, urinary catheterization, wound care dressings

Note-6: ***** Other aids = Financial support (in-kind / cash assistance), residential heating aid, cleaning assistance, paint assistance, diaper aid, and bill payment assistance

live in a nursing home (N = 164, 19.39%) and to live with their children (N = 159, 18.79%). Regarding the type of aid offered by the state, other aids (N = 343, 40.54%), travel aids (N=163, 19.27%) and health services aids (N = 132, 15.60%) were the most common type of help. The majority of the participants reported that they did not participate in social activities (N = 559, 66.08%) (for detailed information, see [Table-6](#)).

him at the nursing home, the majority of them were visited by family members (N=569, 61.58%), relatives (N=408, 44.16%) and other contacts (N=396, 42.86). Regarding participating social activities, 47.08% (N=435) of them participated in social activities in a nursing home while 43.51% (N=402) did not participate in social activities. While the majority of them did not have any hobby (N=578, 62.55%), others had a hobby (N=346, 37.45%) (for detailed information, see [Table-7](#)).

Table-7. Characteristics of the older adults residing at the nursing home

	F	%		F	%
Referral to nursing home			Participating social activities in...		
Herself/himself	680	73.59	Not participating	402	43.51
Her/his children	77	8.33	Nursing home	435	47.08
Her/his relatives	66	7.14	Nursing home and outside	87	9.42
Her/his neighbors or others	57	6.17	People who visited her/him at the nursing home*		
Her/his Spouse	26	2.81	Family members	569	61.58
Her/his friends	18	1.95	Relatives	408	44.16
The frequency of visiting the family**			Other contacts	396	42.86
A few times in a year	253	27.38	No visitors	137	14.83
A few times in a month	149	16.13	Having a hobby		
At least once a week	99	10.71	No	578	62.55
Not going to visit her/his family	423	45.78	Yes	346	37.45

Note-1: * One resident might have more than one visitors, therefore total frequency is not 100% Note-2. ** Visiting the family outside the nursing home, at home

Place of Residence Satisfaction: Variables Associated with Home and Nursing Home Satisfaction

The participants were asked to rate their residence satisfaction on the scale of 1 to 10 by replying one question of "How satisfied are you with living at your home / nursing home?". The residents of home respond to the question with the mean of 8.65 (*SD* = 1.94) and those of nursing home with the mean of 8.19 (*SD* = 2.30) (see Table-8). To see variables associated with home satisfaction, gender, having a hobby, the participation of social activities variables were analyzed

with t tests. An independent-samples t-test was conducted to compare home satisfaction scores of women and men. The test indicated that there was no significant difference in the home satisfaction scores for women and men, $t(844) = -.21, p = .831, d = .01$ (see Table-9).

An independent-samples t-test was conducted to compare home satisfaction scores of older adults having at least a hobby and those not having any hobby. The test indicated that scores were significantly higher for older adults having at least a hobby ($M = 9.01, SD = 1.65$) than for those not

Table 8. How satisfied are you in terms of living at/in...?

	YOUR HOME					NURSING HOME			
	F	%	cF	c%		F	%	cF	c%
1/10	12	1.42	12	1.42	1/10	21	2.27	21	2.27
2/10	2	0.24	14	1.65	2/10	12	1.30	33	3.57
3/10	8	0.95	22	2.60	3/10	27	2.92	60	6.49
4/10	10	1.18	32	3.78	4/10	15	1.62	75	8.12
5/10	41	4.85	73	8.63	5/10	57	6.17	132	14.29
6/10	41	4.85	114	13.48	6/10	55	5.95	187	20.24
7/10	71	8.39	185	21.87	7/10	72	7.79	259	28.03
8/10	120	14.18	305	36.05	8/10	120	12.99	379	41.02
9/10	82	9.69	387	45.74	9/10	150	16.23	529	57.25
10/10	459	54.26	846	100.00	10/10	395	42.75	924	100.00
<i>M</i>	<i>SD</i>	Minimum	Maximum		<i>M</i>	<i>SD</i>	Minimum	Maximum	
8.65	1.94	1	10		8.19	2.30	1	10	

Note-1: F = Frequency, cF = Cumulative frequency, c% = Cumulative percentage, M = Mean, SD = Standard deviation.

having any hobby ($M = 8.30$, $SD = 2.13$), $t(844) = -5.42$, $p = 7.81e-08$, $d = .37$ (see Table-9). These results suggested that at least having a hobby had an effect on home satisfaction for older adults. Specifically, when older adults engaged a hobby, they evaluated their home environment as more desirable.

An independent-samples t-test was conducted to compare home satisfaction scores of older adults participating in social activities and those not participating in social activities. The test indicated that scores were significantly higher for older adults

his spouse ($p = .006$). Additionally, home satisfaction scores were lower for older adults living with others ($p = .046$) and living with spouse and children ($p = .019$) than for older adults living with her/his spouse. Post-hoc analyses also indicated that home satisfaction did not differ significantly between older adults living alone and living with others ($p = .999$), living with children ($p = .663$), and living with spouse and children ($p = .904$). Additionally, Post-hoc analyses using Tukey's HSD indicated that home satisfaction did not differ significantly between older adults living with spouse and living with children ($p = .511$), older adults liv-

Table-9. Independent-samples t-test results on home satisfaction for older adults residing at home

	N	M	SD	t	df	p	d
GENDER							
Women	440	8.63	1.93	-.213	844	.831	.01
Men	406	8.66	1.96				
HAVING a HOBBY							
No	430	8.30	2.13	-5.419	844	7.81e-08	.37
Yes	416	9.01	1.65				
PARTICIPATION in SOCIAL ACTIVITIES							
No	559	8.47	2.10	-3.695	844	2.34e-04	.28
Yes	287	8.99	1.54				

participating in social activities ($M = 8.99$, $SD = 1.54$) than for those not participating in social activities ($M = 8.47$, $SD = 2.10$), $t(844) = -3.70$, $p = 2.34e-04$, $d = .28$ (see Table-9). These results suggested that participation in social activities had an effect on home satisfaction for older adults. In particular, when older adults participated in social activities, they saw their home as more pleasant. Several A one-way analysis of variance (One-way ANOVA) tests were calculated on home satisfaction scores. One-way ANOVA showed there was no main effect of age on home satisfaction, $F(2, 843) = .62$, $p = .538$.

One-way ANOVA showed a main effect of "people who live with" on home satisfaction, $F(4, 841) = 4.61$, $p = 9.84e-04$, $\eta^2 = .02$ (Table-10). Post-hoc analyses using Tukey's HSD indicated that home satisfaction scores were lower for older adults living alone than for older adults living with her/

ing with others and living with a spouse and children ($p = .982$).

One-way ANOVA showed a main effect of "who belongs to house" on home satisfaction, $F(4, 841) = 20.26$, $p = 6.04e-16$, $\eta^2 = .09$. Post-hoc analyses using Tukey's HSD indicated that home satisfaction scores were lower for older adults living at a home belongs to close person than for older adults living at a home belongs to her/himself ($p = .001$), for older adults living at a home belongs to spouse ($p = .001$), and for older adults living at a home belongs to children ($p = .039$). Also home satisfaction did not differ significantly between older adults living at a home belongs to close person and older adults living at a rented home ($p = .781$). Post-hoc analyses using Tukey's HSD indicated that home satisfaction scores were lower for older adults living at a rented home than for older adults living at a home belongs to her/

himself ($p = .001$), for older adults living at a home belongs to spouse ($p = .001$). Also, home satisfaction did not differ significantly between older adults living at a rented home and older adults living at a home belongs to children ($p = .225$). An independent-samples t-test was conducted to compare the nursing home satisfaction scores of older adults referred to a nursing home by herself/himself and those by others (i.e., spouse,

older adults having visitors in nursing home and those not having visitors. The test indicated that scores were significantly higher for older adults having visitors in a nursing home ($M = 8.27, SD = 2.21$) than for those not having visitors ($M = 7.73, SD = 2.73$), $t(922) = -2.53, p = .012, d = .22$ (see Table-11). These results suggested that the presence of visitors had an effect on a nursing home satisfaction for older adults. In particular, older

Table-10. One-way ANOVA results: Group differences on home satisfaction

	N	M	F	df	p	Partial η^2
AGE						
Adult-young-old (60-74)	230	8.53				
Middle-old (75-84)	578	8.69	.621	2, 843	.538	.01
Old-old (85+)	38	8.71				
PEOPLE WHO LIVE with						
With spouse	340	8.98 _c				
With children	96	8.63 _{abc}				
With spouse and children	214	8.46 _{ab}	4.671	4, 841	9.84e-04	.02
With Others	83	8.33 _{ab}				
Alone	113	8.27 _a				
WHO BELONGS to HOUSE						
Herself/himself	497	8.98 _c				
Spouse	134	8.90 _c				
Children	93	8.13 _b	20.257	4, 841	6.04e-16	.09
Another (rent)	83	7.54 _{ab}				
Close to someone	39	7.13 _a				

Note-1: Means with different subscripts are significantly different from each other.

children, relatives, friends, neighbors). The test indicated that satisfaction scores were significantly higher for older adults referred by herself/himself ($M = 8.44, SD = 2.18$) than for those referred by others ($M = 7.49, SD = 2.47$), $t(922) = 5.60, p = 2.87e-08, d = .41$ (see Table-11). These results suggested that referral to nursing home had an effect on the nursing home satisfaction for older adults. In particular, when the older adults settled in the nursing home by their own will they felt more delighted in a nursing home than referred by others.

An independent-samples t-test was conducted to compare nursing home satisfaction scores of

adults with guests were more satisfied with the nursing home than older adults without guests.

An independent-samples t-test was conducted to compare the nursing home satisfaction scores of older adults having family member visitors at the nursing home and those not having family member visitors. The test indicated that satisfaction scores were significantly higher for older adults having family member visitors at the nursing home ($M = 8.32, SD = 1.19$) than for those not having family member visitors ($M = 7.97, SD = 2.45$), $t(922) = -2.25, p = .024, d = .15$ (see Table-11). These results suggested that the presence of family member visitors had an effect on the nursing

home satisfaction for older adults. Specifically, when older adults had family member visitors the nursing home they evaluated their environment as more desirable.

An independent-samples t-test was conducted to compare the nursing home satisfaction scores of older adults having relative visitors in a nursing home and those not having relative visitors. The test indicated that there was no significant difference in the nursing home satisfaction scores for older adults having relatives visitors at the nursing home and those not having relatives visitors, $t(922) = -1.58, p = .116$ (see Table-11).

An independent-samples t-test was conducted to compare the nursing home satisfaction scores of older adults having other visitors at the nursing home and those not having other visitors. The test indicated that satisfaction scores were significantly higher for older adults having other visitors at the nursing home ($M = 8.37, SD = 2.11$) than for those not having other visitors ($M = 8.05, SD = 2.42$), $t(922) = -2.05, p = .040, d = .14$ (see Table-11).

These results suggested that the presence of other visitors had an effect on the nursing home satisfaction for older adults. Specifically, when older adults had other visitors (who are non-relatives) at the nursing home they evaluated their nursing home environment as more satisfied.

An independent-samples t-test was conducted to compare the nursing home satisfaction scores of older adults having at least a hobby in and those not having any hobby. The test indicated that scores were significantly higher for older adults having at least a hobby ($M = 8.53, SD = 1.94$) than for those not having any hobby ($M = 7.98, SD = 2.47$), $t(922) = -3.55, p = 4.10e-04, d = .25$ (see Table-11). These results suggested that having at least a hobby had an effect on a nursing home satisfaction for older adults. Specifically, older adults having at least a hobby had evaluated nursing home as more satisfied. One-way ANOVA showed there was no main effect of age on the nursing home satisfaction, $F(2, 921) = 1.42, p = .243$.

One-way ANOVA showed a main effect of "visit-

Table-11. Independent-samples t-test results on the nursing home satisfaction for older adults residing in a nursing home

	N	M	SD	t	df	p	d
GENDER							
Women	403	8.48	2.07	3.441	922	6.06e-04	.23
Men	521	7.96	2.44				
REFERRAL to NURSING HOME							
Herself/himself	680	8.44	2.18	5.598	922	2.87e-08	.41
Other	244	7.49	2.47				
PRESENCE of VISITORS							
No	137	7.73	2.73	-2.530	922	.012	.22
Yes	787	8.27	2.21				
HAVING FAMILY VISITORS							
No	355	7.97	2.45	-2.254	922	.024	.15
Yes	569	8.32	2.19				
HAVING RELATIVE VISITORS							
No	516	8.08	2.42	-1.575	922	.116	.10
Yes	408	8.32	2.13				
HAVING OTHER VISITORS							
No	528	8.05	2.42	-2.052	922	.040	.14
Yes	396	8.37	2.11				
HAVING a HOBBY							
No	578	7.98	2.47	-3.547	922	4.10e-04	.25
Yes	346	8.53	1.94				

ing sequence of the family” on the nursing home satisfaction, $F(3, 920) = 9.69, p = 3.00e-06, \eta^2 = .03$ (Table-12). Post-hoc analyses using Tukey’s HSD indicated that the nursing home satisfaction scores were lower for older adults not going to visit her/his family than for older adults visiting her/his family few times in a year ($p = .001$), few times in month ($p = .001$), and at least once a week ($p = .001$), but the nursing home satisfaction did not differ significantly between older adults

To see gender by place of residence relationship, a chi-square results revealed that the data were gathered from more men than women at the nursing home and from more women than men at home in the present study. Considering the random assignment provided by TurkStat, it can be assumed that these distribution reflected gender balance at the nursing homes. When men stay alone in Turkish society, they are more likely to live at the nursing home. On the other hand, wom-

Table-12. One-way ANOVA results: Group differences on the nursing home satisfaction

	N	M	F	df	p	Partial η^2
AGE						
Adult-young-old (60-74)	377	8.03				
Middle-old (75-84)	407	8.29	1.415	2, 921	.243	.01
Old-old (85+)	140	8.31				
VISITING SEQUENCE of FAMILY						
A few times in a year	253	8.44 _b				
A few times in a month	149	8.64 _b	9.692	3, 920	3.00e-06	.03
At least once a week	99	8.69 _b				
Not going to visit	423	7.76 _a				

Note-1: Means with different subscripts are significantly different from each other.

visiting her/his family few times in a year and few times in month ($p = .816$), older adults visiting her/his family few times in a year and at least once a week ($p = .792$), older adults visiting her/his family few times in month and at least once a week ($p = .999$).

Discussion

When considering the higher number of older adults around the World (United Nations, 2017), promoting age friendly societies is quite important (Johnson, & Appold, 2017). In this study, basic characteristics of older adults living either at home or nursing home were investigated on the basis of ecological perspective. Also, variables associated with satisfaction about where they lived were examined.

Place of residence/Gender and Alternative Place of Residence Relationships

en’s preferencet is to stay at their homes rather than going to a nursing home. Same results were found by United Nations (2017) that women were more likely to live atthe home.

Additionally, a chi-square test of independence was performed to examine the relation between marital status and residence type. Results revealed that widowed older adults were living at the nursing home more than married, divorced, and single older adults. On the other hand, married older adults were living at home more than widowed, divorced, and single older adults. This result supports the idea of higher frequency of single, divorced and widowed at the nursing home and higher frequency of the married at home. Those results supported familial contact is associated with nursing home practices (Moreno et al., 2016). Also, place of residence (village, town, city vs. metropolitan) and alternative place of residence relationship were investigated in the

present study. Older adults who were in the village, town and city preferred more to live either with their children or their own home rather than older adults lived in metropolitan. In a traditional life, it is expected to stay with children and live in their own home. When looking at older adults who were in metropolitan, they preferred more to live in natural/ holiday setting, if this is not possible, to live in where they were actually living (no change wish) or to live at the nursing home than older adults in village, town and city. In conclusion, considering those results, older adults living in metropolitan preferred to live in relaxing environment (i.e., nature or sea). If this is not possible, they preferred to stay at the same place or accept to consider live at the nursing home options. As mentioned in some studies, societal changes have influence on older adults that older adults consider nursing home practice due to decreased number of family carers (Moreno et al., 2016). On the other hand, individuals at village, town, and city preferred to live their own home that is close to their children. Again, since close society ties appear in those places, there are still opportunity to obtain family careers when needed.

In addition to place of residence and alternative place of residence relationship, gender and alternative place of residence relationship was investigated. While women were more likely to live with their children than men, men were more likely to live in natural/holiday setting than women. Also, men were accepting more to live at the nursing home than women. Considering those results, women wish to share more with children while men wish to stay calm and relax.

Older Adults Living at Home and at the Nursing Home

Regarding the characteristics of older adults living at home, the majority of the participants live with their spouse or with their spouse and children similar to other studies (Johnson, & Appold, 2017; United Nations, 2017). The majority of the participants was living at their own house likewise in US (Johnson, & Appold, 2017). In respect to alternative residence place, mostly, they preferred to not to change living place as appear in US

study (Johnson, & Appold, 2017). Others wanted to live at the nursing home and wanted to live with children. Regarding the type of aid offered by state, most of them took other aids including mostly financial support (in-kind / cash assistance) and other benefits similar to financial assistance (i.e., residential heating aid, cleaning assistance, paint assistance, diaper aid, and bill payment assistance). They reported also to receive travel aids and health services aids. In respect to social activities, the majority of the participants reported that they did not participate in social activities likewise seen in other studies (Johnson, & Appold, 2017).

Regarding the characteristics of older adults living at the nursing home, majority of participants referred to a nursing home by herself/himself, while others were referred by her/his children, and her/his relatives. As mentioned in the literature, individuals were preferred to live at the nursing home due to lack of family network when needed (Moreno et al., 2016). In respect to frequency of visits of the family outside to nursing home, the majority of them did not visit their family and others visited a few times in a year. Regarding who visited her/him at the nursing home, majority of them were visited by family members, relatives and other contacts. Besides, regarding participating social activities, the most of them participated social activities in nursing home while there were significant people not participating any social activities. Also, the majority of them did not have any hobby.

Variables Associated with Home and Nursing Home Satisfaction

In this study, the participants were rated their residence satisfaction on the 10 point Likert scale. Both older adults living at home at home ($X=8.65$; $SD = 1.94$) and nursing home (8.19 ; $SD = 2.30$) reported higher satisfaction when considering mean scores of satisfaction.

To see variables associated with home satisfaction, gender, having a hobby, participation of social activities variables were analyzed. To begin with gender, home satisfaction scores of women and men did not significantly different from each other. Both of them reported similar satisfac-

tion scores. When comparing home satisfaction scores of older adults having at least a hobby, they had higher scores of satisfaction than those not having any hobby. These results suggest that having at least a hobby is essential for home satisfaction among older adults. When older adults engage a hobby, they evaluate their home environment as more desirable. Besides, older adults participating in social activities had higher home satisfaction scores than for those not participating in social activities. Encouraging to participate activities for older adults living at home are recommended. Additionally, in terms of "people who live with", home satisfaction scores were lower for older adults living alone than for older adults living with her/his spouse. As mentioned in the literature, spouses receives support from each other (Okabayashi et al., 2004). Likewise, adults live alone had lower scores about the quality of life and higher scores of personal distress than the ones live with a spouse (Henning-Smith, 2016). Also, home satisfaction scores were lower for older adults living with others, living with both spouse and children than for older adults living with her/his spouse. Based on United Nations (2017) survey conducted over 143 countries, "who is the head of household" is important question for older adults living with children and spouse. When older adults co-reside with their children, their satisfaction was low. Therefore, understanding other parameters might be important for the variable "who live with". On the other hand, it can be said that living with spouse was related with higher satisfaction as seen in other studies (Henning-Smith, 2016). Moreover, regarding "who belongs to house" variable, older adults living at a home belongs to close person had lower satisfaction scores than those living at a home belongs to her/himself or spouse. Likewise US residents (Johnson, & Appold, 2017), Turkish older adults preferred to be owner of their homes. People live in a rental house also had lower scores of satisfaction than older adults living at a home belongs to her/himself or to a spouse. Those results might be related to anticipatory anxiety about possibility to change their living places in case their control is low.

To see variables associated with nursing home satisfaction, several independent sample t tests were performed. In respect to decision about

living at a nursing home, older adults referred by herself/himself had higher scores of satisfaction than for those referred by others. These results, particularly, recommend that once the older adults settle within the institution by their own will, they feel additional delighted during an institution than referred by others. These results suggest that professionals might work with people referred to nursing home by others. Regarding having visitors variable, older adults having visitors obtained higher scores of satisfaction than for those not having visitors. Moreover, regarding family member visitors, older adults having family member visitors had higher scores of satisfaction than for those not having family member visitors. When the family members visited the older adults at the nursing home, the older adults perceives the nursing home as a pleasant place. Similar with family visitors, when older adults had others visitors (who are non-relatives) at the nursing home they evaluated their nursing home environment as more satisfied. These results suggest that older adults having visitors and especially family member visitors and other visitors evaluate nursing home environment in a more desirable way. Similar results were obtained in another study that older adults not having visitors had higher depression scores than counterparts (Hacihasanoglu & Yildirim, 2009). Regarding "visiting sequence of family" on nursing home satisfaction, people visiting her/his family few times in a year, in a month, and at least once a week had higher scores of satisfaction than people did not have any visits. Therefore, professionals can encourage family visits since continuing social ties are important for older adults (Moreno et al., 2016). Regarding hobby status, older adults having at least a hobby had higher satisfaction scores than counterparts. Therefore, professionals can support hobbies at the institutions.

The present study has a limitation about not making causality since the design is cross-sectional. Also, results cannot be generalized older adults living in another country since all participants were Turkish older adults. Further studies comparing older adults living at home or nursing home would help researchers to explore variables associated with well-being (Durak, 2018). Satisfaction with life, flourishing and affective well-being measures

can be used to evaluate subjective well-being in future studies.

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References

- Cassarino, M., O'Sullivan, V., Kenny, R. A., & Setti, A.** (2016). Environment and cognitive aging: A cross-sectional study of place of residence and cognitive performance in the Irish longitudinal study on aging. *Neuropsychology, 30*(5), 543. [Crossref]
- Durak, M.** (2018). Late-Life Depression in the Older Adults Living in an Institution and at Home. *Journal of Aging and Long-Term Care, 1*(1), 5-17. [Crossref]
- Ellis, G., Whitehead, M. A., Robinson, D., O'Neill, D., & Langhorne, P.** (2011). Comprehensive geriatric assessment for older adults admitted to hospital: meta-analysis of randomised controlled trials. *BMJ, 343*, d6553. [Crossref]
- Farber, Nicholas, et al.,** (2011). Aging in Place: A State Survey of Livability Policies and Practices. National Conference of State Legislatures and AARP, available at <https://assets.aarp.org/rgcenter/ppi/liv-com/aging-inplace-2011-full.pdf>
- Hacihasanoglu, R., & Yildirim, A.** (2009). Depression among the Elderly in Erzincan Nursing Home and Influential Factors. *Türk Geriatri Dergisi-Turkish Journal of Geriatrics, 12*(1), 25-30.
- Henning-Smith, C.** (2016). Quality of life and psychological distress among older adults: The role of living arrangements. *Journal of Applied Gerontology, 35*(1), 39-61. [Crossref]
- Johnson Jr, J. H., & Appold, S. J.** (2017). US older adults: Demographics, living arrangements, and barriers to aging in place. *Kenan Institute*.
- Kalaycıoğlu, S., Tol, U. U., Küçükkural, Ö., & Cengiz, K.** (2003). Yaşlılar ve yaşlı yakınları açısından yaşam biçimi tercihleri (Lifestyle preferences for older adults and their relatives). *Türkiye Bilimler Akademisi Raporları*, Ankara
- Kasper, J. D., Freedman, V. A., Spillman, B. C., & Wolff, J. L.** (2015). The disproportionate impact of dementia on family and unpaid caregiving to older adults. *Health Affairs, 34*(10), 1642-1649. [Crossref]
- Moreno, X., Sánchez, H., Huerta, M., Albala, C., & Márquez, C.** (2016). Social representations of older adults among Chilean elders of three cities with different historical and sociodemographic background. *Journal of Cross-cultural Gerontology, 31*(2), 115-128. [Crossref]
- Okabayashi, H., Liang, J., Krause, N., Akiyama, H., & Sugisawa, H.** (2004). Mental Health Among Older Adults in Japan: Do Sources of Social Support and Negative Interaction Make a Difference? *Social Science and Medicine, 59*(11), 2259-2270.
- Sachs, G. A., Carter, R., Holtz, L. R., Smith, F., Stump, T. E., Tu, W., & Callahan, C. M.** (2011). Cognitive Impairment: An Independent Predictor of Excess Mortality A Cohort Study. *Annals Environment and Cognitive Ageing 33 of Internal Medicine, 155*(5), 300-308. [Crossref]
- Shin, Y., Baik, S., Chung, E., Heo, S., & Ha, J.** (2017). Impact of Hearing Loss on Social Contact Among Korean Older Adults: Place of Residence as Moderator. *Innovation in Aging, 1*(Suppl 1), 1174-1174. [Crossref]
- Soygür, H.** (2000). Bakımevlerinde yaşlı bakımı ve psikolojik değerlendirme (Psychological assesment and caring older adults at nursing homes), *Demans Dizisi, 1*, 32-40.
- Téllez, A., García, C. H., & Corral-Verdugo, V.** (2015). Effect size, confidence intervals and statistical power in psychological research. *Psychology in Russia: State of the Art, 8*(3), 27-47.
- TSI** (Turkish Statistical Institute) (2017). Older Adults Statistics, 2017 (İstatistiklerle yaşlılar, 2017). Türkiye İstatistik Kurumu Haber Bülteni, <http://www.tuik.gov.tr/PreHaberBultenleri.do?id=27595>
- Tufan, İ.** (2003). Modernleşen Türkiye'de yaşlılık ve yaşlanmak: Yaşlanmanın sosyolojisi (Old Age and Aging in Modernizing Turkey: The Sociology of Aging). İstanbul: Anahtar Kitaplar.
- United Nations**, Department of Economic and Social Affairs, Population Division (2017). Living Arrangements of Older Persons: A Report on an Expanded International Dataset (ST/ESA/SER.A/407).
- Wu, B., Yue, Y., & Mao, Z.** (2015). Self-reported functional and general health status among older respondents in China: The impact of age, gender, and place of residence. *Asia Pacific Journal of Public Health, 27*(2), NP2220-NP2231. [Crossref]