

# An Investigation of the Relationship Among Self-Esteem, Death Anxiety and Depression in Older Individuals According to Certain Variables: Descriptive Research

## Yaşlı Bireylerde Benlik Saygısı, Ölüm Kaygısı ve Depresyon Arasındaki İlişkinin Bazı Değişkenlere Göre İncelenmesi: Tanımlayıcı Araştırma

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**ABSTRACT Objective:** This study aims to identify the relationships among self-esteem, death anxiety and depression in older individuals according to certain variables. **Material and Methods:** This descriptive and relational screening study was conducted with 330 older individuals who lived in a city center and volunteered to participate in the study. Data were collected using a socio-demographic form, Rosenberg's Self-Esteem Scale, Templer's Death Anxiety Scale, and the Geriatric Depression Scale Short Form. Data were analyzed using the SPSS 22 statistical package program, and  $p < 0.05$  was accepted as statistically significant. **Results:** An analysis of older individuals' mean scores for self-esteem, death anxiety, and risk of depression in relation to their demographic characteristics indicated statistically significant differences ( $p < 0.05$ ). It was found that generally, these older individuals had a low depression risk ( $6.26 \pm 3.811$ ), they had high self-esteem ( $1.03 \pm 0.426$ ), and they experienced a medium level of death anxiety ( $7.89 \pm 2.857$ ). A positive, medium-level relationship was found between self-esteem and depression, and a positive, low-level, but significant relationship was found between self-esteem and death anxiety ( $p < 0.05$ ). **Conclusion:** Income level and educational level are important factors influencing self-esteem, death anxiety, and depression risk. It was found that depression risk and death anxiety increased where there was a decrease in self-esteem in older individuals.

**Keywords:** Self concept; aged; attitude to death; depression; anxiety, castration

**ÖZET Amaç:** Bu çalışma, yaşlı bireylerde benlik saygısı, ölüm kaygısı ve depresyon arasındaki ilişkiyi incelemek ve bu durumu etkileyen faktörleri belirlemek amacıyla yapılmıştır. **Gereç ve Yöntemler:** Tanımlayıcı ve ilişki arayıcı türde yapılan bu araştırmayı, bir il merkezinde yaşamakta olan yaşlı bireyler arasından çalışmaya katılmaya gönüllü olan 330 birey oluşturmuştur. Veriler, tanımlayıcı bilgi formu, Rosenberg Benlik Saygısı Ölçeği, Templer Ölüm Kaygısı Ölçeği ve Geriatrik Depresyon Ölçeği Kısa Formu uygulanarak toplanmıştır. Verilerin analizi, SPSS 22 istatistik paket programında yapılmış;  $p < 0,05$  olan değerler anlamlı kabul edilmiştir. **Bulgular:** Yaşlı bireylerin tanımlayıcı özelliklerine göre benlik saygısı, ölüm kaygısı ve depresyon riski puan ortalamaları değerlendirildiğinde; istatistiksel açıdan anlamlı farkların olduğu bulunmuştur ( $p < 0,05$ ). Yaşlı bireylerin depresyon riski taşımadıkları ( $6,26 \pm 3,811$ ), yüksek benlik saygısına sahip oldukları ( $1,03 \pm 0,426$ ) ve orta düzeyde ölüm kaygısı ( $7,89 \pm 2,857$ ) yaşadıkları belirlenmiştir. Benlik saygısı ile depresyon arasında pozitif yönde orta düzeyde, ölüm kaygısı ile depresyon arasında ve benlik saygısı ile ölüm kaygısı arasında pozitif yönde düşük düzeyde anlamlı bir ilişki tespit edilmiştir ( $p < 0,05$ ). **Sonuç:** Gelir ve eğitim durumu benlik saygısı, ölüm kaygısı ve depresyon riski açısından önemli etkenlerdir. Yaşlı bireylerde benlik saygısının azaldıkça, depresyon riski ve ölüm kaygısının arttığı sonucuna varılmıştır.

**Anahtar Kelimeler:** Benlik kavramı; yaşlı; ölüme karşı tutum; depresyon; anksiyete; kastrasyon

Over the past 40-50 years, the population of older people has been increasing rapidly in both developed and developing countries around the world.<sup>1</sup> The population of older individuals aged over 65 has

increased at a proportion of 22.5% in our country within the last five years, and the majority of older individuals (63.8%) are in the 65-74 age group, 27,9% are in the 75-84 age group, and 8,4% are in

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the 85 and over age group.<sup>2</sup> With this increase, problems and disease characteristic of older age have gained prominence.<sup>3,4</sup> The self-esteem of older individuals is vulnerable due to factors such as disabilities, losses, and deficiencies, together with the normal changes of the aging process, the stigmatization of older people by society, and being perceived as useless. Individuals who have high self-esteem will continue to function actively as people who are happy with themselves, are self-confident, know their limitations and can manage themselves. However, for others, loss of self-esteem can cause emotions such as hopelessness, pessimism, insufficiency, insignificance, anxiety, and depression to develop.<sup>5-7</sup> The literature indicates that older individuals with low self-esteem show a higher prevalence of depression.<sup>8,9</sup>

Old age is a period characterized by the loss of many of the emotional support structures of the younger years, yet at the same time, people must face the inevitability of their own death. As death approaches, older people are often affected by fears such as having to disengage from the things that were previously central to their existence, fears of pain during the process of dying, uncertainty about what will happen to them after death, questions about heaven and hell, and fears of the tests they may face in the next world. Older individuals who have spent a happy life and whose self-esteem is high tend to accept death as a natural consequence of life. On the other hand, for those individuals who have spent unhappy lives, the limited time left to them can cause feelings of hopelessness and regret. They tend to have lower self-esteem and resist the prospect of death, experiencing depression in doing so.<sup>8-11</sup>

The purpose of elderly care is to maximize older individuals' physical, mental, and psychological capacity and to increase their quality of life. Given that nursing services should be developed in line with the needs of society, care services for older individuals, who will compose an increasing majority in the future, should be planned accordingly. Nurses have important roles to play in the identification, prevention, treatment, and rehabilitation of depression in the elderly.<sup>12,13</sup> This study aims to identify the relationships between self-respect, death anxiety, and depression in older individuals living in a city center in the east-

ern part of Turkey and the factors affecting those relationships.

## MATERIAL AND METHODS

Ethics committee approval was obtained from Ağrı İbrahim Çeçen University Scientific Research Ethics Committee (date: 06/06/2018, number 40) for this descriptive and relational screening study conducted at a university located in the eastern part of Turkey. The study was conducted in family health centers (FHCs) in the city center and followed the principles of the Declaration of Helsinki. The target population of the study was 6,283 older people who were registered in eight FHCs in the city center, and the sample was 330 individuals who had no hearing or vision loss, who could communicate verbally, and who were open to cooperation among 1,856 individuals registered in the 3<sup>rd</sup>, 5<sup>th</sup>, and 8<sup>th</sup> FHCs, which were chosen among eight FHCs using the random sampling method. Older individuals who came to the FHCs were given information about the study by the researchers. After they agreed to participate in the study, the three data collection tools were administered successively face to face. Data collection took about 30 minutes.

## DATA COLLECTION

Data were collected using a socio-demographic form, developed for identifying the relevant characteristics of the participants, the Rosenberg Self-Esteem Scale (RSES), Templer's Death Anxiety Scale (TDAS), and the Geriatric Depression Scale (GDS)-Short Form.

**The socio-demographic form:** This form was developed by the researchers and aimed to define the older individuals' characteristics (gender, age, education and income levels, etc.).

**Rosenberg Self-Esteem Scale:** This self-report scale that aims to assess self-esteem was developed by Rosenberg.<sup>14</sup> It was adapted to Turkish by Çuhadaroğlu, as indicated in many studies.<sup>15</sup> It is a self-report scale that evaluates self-perception. This study utilized the short form, which is composed of 10 items. While items 1, 2, 4, 6, and 7 are loaded positively, items 3, 5, 8, 9, and 10 are loaded negatively. Scores between 0 and 1 indicate high self-esteem;

scores between 2 and 4 indicate moderate self-esteem; and scores between 5 and 6 indicate low self-esteem. Thus, lower scores indicate high self-esteem, and higher scores indicate low self-esteem.<sup>15</sup> The Cronbach's alpha value for the scale was found to be 0.79.

**Templer's Death Anxiety Scale:** The scale developed by Templer was translated into Turkish by Şenol in 1989. Its reliability and validity were reviewed by Akça and Köse in 2008.<sup>16</sup> It is a 15-item scale with true/false responses. The first nine items in the scale are scored as 1 for each Yes answer and as 0 for each No answer. For the other six items, each No answer is scored as 1, and each Yes answer as 0. The total score obtained from the test indicates death anxiety. Scores between 0 and 4 indicate mild death anxiety, scores between 5 and 9 indicate moderate death anxiety, scores between 10 and 14 indicate severe anxiety and 15 points indicate death anxiety at a panic level. The Cronbach's alpha value of the scale was found to be 0.70.

**Geriatric Depression Scale-Short Form:** The original scale was developed by Yesavage et al. (1983) (GDS-30). This was revised by Burke (1991) as a shorter version of the scale that is quick and easy to use (GDS-15). The scale was adapted by Durmaz et al. for Turkish use.<sup>17</sup> In the GDS-15, items 1, 5, 7, 11 and 13 are loaded positively, and items 2, 3, 4, 6, 8, 9, 10, 12, 14 and 15 are loaded negatively.<sup>17</sup> This study found the Cronbach's alpha value for the GDS-15 to be 0.81. The scale is scored by giving 1 point when a No response is given to the positive questions and when a Yes response is given to the negative questions. The scores obtained from the scale range between 0 and 15.<sup>17</sup> When the cut-off point for the GDS is taken 8 in this study, the sensitivity of the scale was calculated 0.90, and specificity was found 0.94. A score of 8 and over is considered sufficient for a diagnosis of depression. In this study, Cronbach's alpha value for the GDS-15 was 0.81.

## DATA ANALYSIS

Data were analyzed using the SPSS 22 statistical package program. Analyses included numbers, means, percentage distributions, standard deviations, receiver operating characteristic analyses and Pearson correlation analyses. Values of  $p < 0.05$  at a

95% confidence interval were considered significant.

## RESULTS

Table 1 presents the demographic characteristics of the participating older individuals. Of the participants, 57.9% were males, 73.6% were aged between 65 and 74, 50% had graduated from primary school, 56.1% had income equal to expenses and 67.9% had social security. In addition, 78.5% lived with their children and relatives, 44.5% had a moderate level perceived health status, 77.9% had a chronic disease, 58.2% tried to solve their problems by themselves, and based on the finding that 63.9% of the older individuals had GDS-15 scores of between 0 and 7 (the cut-off point being 8), the majority of them were not at risk for depression. As 36.1% of older individuals had 8 points and over, they were found to have depression risk.

Table 2 demonstrates the findings of the analysis involving a comparison of the mean scores obtained from the RSES, TDAS, and GDS-15 according to the participants' demographic characteristics. An analysis of the RSES mean scores relative to the participants' ages showed that the RSES mean scores of the early old age group (64-75 yrs.) were lower compared to the scores of those of more advanced age groups (75-84 and 85 and over age groups). The difference between the groups was found to be statistically significant ( $p < 0.05$ ). An analysis of the GDS-15 mean scores according to age groups showed that the GDS-15 mean score of the medium old age group (75-84 yrs.) was significantly higher than that of the early old age group (64-75 yrs.) and the advanced old age group (>85 yrs.), with the differences between groups being statistically significant ( $p < 0.05$ ).

When the ages and TDAS mean scores were analyzed, no significant differences were found between age and death anxiety ( $p > 0.05$ , Table 2).

When the whole group's gender and RSES mean scores were analyzed, no significant relationship was found between gender and self-esteem ( $p > 0.05$ ). An analysis of the participants' TDAS and GDS-15 mean scores relative to gender showed that the women's

**TABLE 1:** Distribution of older individuals' descriptive features.

		N	%
Age	65-74	243	73.6
	75-84	62	18.8
	85 and over	25	7.6
Gender	Male	191	57.9
	Female	139	42.1
Education level	Illiterate	120	36.4
	Primary school	165	50.0
	Secondary school	45	13.6
Income level	Income more than expenses	70	21.2
	Income equal to expenses	185	56.1
	Income less than expenses	75	22.7
Presence of social security	Yes	224	67.9
	No	106	32.1
People they live with	Alone	36	10.9
	Spouse	35	10.6
	Other	259	78.5
Presence of a chronic disease	No	73	22.1
	Yes	257	77.9
Coping with the problem	I ignore the problem	19	5.8
	I solve the problem by myself	192	58.2
	I receive help from my environment	119	36.1
Depression (by the cut-off point)	0-7 points (no depression risk)	211	63.9
	8 points and over (depression risk)	119	36.1
Total		330	100.0

TDAS and GDS-15 mean scores were higher than those of the men and that the difference was statistically significant ( $p < 0.05$ , Table 2).

An analysis of the group's educational levels according to their RSES, TDAS, and GDS-15 mean scores showed that the RSES, TDAS, GDS-15 mean scores were lower in those who had graduated from secondary school in comparison to those who were illiterate or had graduated from primary school only, and the difference between the groups was statistically significant ( $p < 0.05$ ). An analysis of the participants' RSES, TDAS, and GDS-15 mean scores according to their income level showed that the participants who had higher income than expenses had lower RSES, TDAS, and GDS-15 mean scores in comparison to individuals who had income equal to expenses or income lower than expenses, and the difference between the groups was statistically significant ( $p < 0.05$ , Table 2).

An analysis of the participants' RSES and GDS-15 mean scores according to their social security status showed that participants who did not have social security had higher RSES and GDS-15 mean scores, and the difference between the groups was statistically significant ( $p < 0.05$ , Table 2).

No statistically significant relationship was found between having a chronic disease and the RSES mean score ( $p > 0.05$ ). The TDAS and GDS-15 mean scores of participants who had a chronic disease were higher in comparison to those who did not have a chronic disease, and the difference between the groups was statistically significant ( $p < 0.05$ , Table 2).

The RSES mean score of the participants who ignored problems was higher than that of participants who could solve their problems by themselves or who received help from their environment, and the difference between the groups was statistically significant ( $p < 0.05$ ). No statistically significant differences were

**TABLE 2:** Comparison of the RSES, TDAS and GDS-15 mean scores according to the participants' descriptive characteristics (n=330).

Descriptive characteristics	n	%	RSES total $\bar{X}\pm SD$	TDAS total $\bar{X}\pm SD$	GDS-15 total $\bar{X}\pm SD$
<b>Age</b>					
(1) 65-74	243	73.6	0.97±0.414	7.95±2.873	5.74±3.696
(2) 75-84	62	18.8	1.17±0.388	7.90±2.826	7.00±3.511
(3) 85 and over	25	7.6	1.34±0.438	7.95±2.873	6.26±3.885
			<b>KW=19.289</b>	<b>KW=1.810</b>	<b>KW=22.205</b>
Test			<b>p=0.000</b>	<b>p=0.405</b>	<b>p=0.000</b>
<b>Gender</b>					
Female	139	42.1	1.05±0.461	8.52±2.836	7.02±3.771
Male	191	57.9	1.02±0.400	7.43±2.791	5.70±3.754
			<b>MW-U=12866.5</b>	<b>MW-U=10366.5</b>	<b>MW-U=10577.0</b>
Test			<b>p=0.663</b>	<b>p=0.001</b>	<b>p=0.002</b>
<b>Education level</b>					
(1) Illiterate	120	36.4	1.11±0.439	8.22±2.651	7.21±3.648
(2) Primary school	165	50.0	1.05±0.392	7.98±2.988	6.23±3.742
(3) Secondary school	45	13.6	0.76±0.411	6.71±2.642	3.82±3.439
			<b>KW=18.149</b>	<b>KW=11.067</b>	<b>W=26.276</b>
Test			<b>p=0.000</b>	<b>p=0.004</b>	<b>p=0.000</b>
<b>Income level</b>					
(1) Good	70	21.2	0.92±0.391	7.15±2.932	4.90±3.746
(2) Medium	185	56.1	1.03±0.444	7.91±2.794	6.44±3.633
(3) Low	75	22.7	1.14±0.387	8.54±2.815	7.06±4.021
			<b>KW=8.363</b>	<b>KW=8.294</b>	<b>KW=11.362</b>
Test			<b>p=0.015</b>	<b>p=0.016</b>	<b>p=0.003</b>
<b>Presence of social security</b>					
Yes	224	67.9	0.95±0.408	7.74±2.784	5.50±3.559
No	106	32.1	1.20±0.420	8.21±2.995	7.84±3.853
			<b>MW-U=8082.5</b>	<b>MW-U=10728.5</b>	<b>MW-U=7749.0</b>
Test			<b>p=0.000</b>	<b>p=0.155</b>	<b>p=0.000</b>
<b>People they live with</b>					
(1) Alone	36	10.9	1.22±0.481	8.55±2.782	8.00±3.906
(2) Spouse	35	10.6	0.98±0.459	7.48±2.954	5.80±3.916
(3) Other (children/relative)	259	78.5	1.01±0.408	7.86±2.857	6.08±3.735
			<b>KW=6.801</b>	<b>KW=2.558</b>	<b>KW=8.367</b>
Test			<b>p=0.033</b>	<b>p=0.278</b>	<b>p=0.015</b>
<b>Presence of a chronic disease</b>					
No	73	22.1	0.95±0.424	7.13±2.745	4.64±3.637
Yes	257	77.9	1.06±0.425	8.11±2.857	6.71±3.740
			<b>MW-U=8396.0</b>	<b>MW-U=7535.5</b>	<b>MW-U=6473.5</b>
Test			<b>p=0.170</b>	<b>p=0.010</b>	<b>p=0.000</b>
<b>Coping with a problem</b>					
(1) I ignore it	19	5.8	1.24±0.477	7.31±2.473	5.73±3.603
(2) I solve it by myself	192	58.2	1.00±0.434	7.86±2.732	6.03±3.825
(3) I receive help	119	36.1	1.06±0.398	8.03±3.110	6.70±3.809
			<b>KW=6.987</b>	<b>KW=1.184</b>	<b>KW=2.950</b>
Test			<b>p=0.030</b>	<b>p=0.553</b>	<b>p=0.229</b>

RSES: Rosenberg Self-Esteem Scale; TDAS: Templer's Death Anxiety Scale; GDS-15: Geriatric Depression Scale; KW: Kruskal Wallis Analizi, MW-U: Mann-Whitney U Analizi  
 $\bar{X}\pm SD$ : Mean±standard deviation; \*p<0.05.

**TABLE 3:** The minimum-maximum, mean±standard deviation values obtained from the RSES, TDAS and GDS-15 and the relationships between the scales.

	Minimum-Maximum	X±SD	GDS-15	Correlation	
				RSES	TDAS
GDS-15	0.00-15.00	6.26±3.811	-		
RSES	0.00-2.40	1.03±0.426	0.504*	-	
TDAS	1.00-13.00	7.89±2.857	0.287*	0.169*	-

RSES: Rosenberg Self-Esteem Scale; TDAS: Templer's Death Anxiety Scale; GDS-15: Geriatric Depression Scale; X±SD: Mean±standard deviation; \*p<0.05.

detected between the participants' attitudes to coping with problems and their TDAS and GDS-15 mean scores ( $p>0.05$ , Table 2).

Table 3 shows that the GDS-15 mean score of the participants was lower than the value indicated for a diagnosis of depression (8.00) (6.26±3.811). The results also indicate a low level for the RSES mean score (1.03±0.426) and a moderate level for the TDAS mean score (7.89±2.857). These results indicate that the participating older individuals were generally not at risk for depression, had high self-esteem, and experienced only a moderate level of death anxiety. An analysis of the relationship between the scales indicates a positive, moderate-level relationship between the GDS-15 and RSES; in other words, the participants' self-esteem scores increased with an increase in their depression scores. A lower self-esteem score indicates improved self-esteem. Hence, it can be concluded that as older individuals' self-esteem diminishes their vulnerability to depression increases. A positive, low-level, and significant relationship was found between GDS-15 and TDAS (the participants' death anxiety increased together with increased depression). Given that the higher scores obtained for RSES and TDAS indicate low self-esteem and high death anxiety, the participants' death anxiety was found to increase with decreasing self-esteem; a positive, low-level, and significant relationship was found between these factors [ $r(330)$ ;  $p<0.05$ , Table 3].

## DISCUSSION

The relevant literature includes many studies that investigated this issue, but the studies that investigated the relationships among self-esteem, death anxiety,

depression in tandem with certain variables are limited in number. The findings of this study, which aimed to identify the relationships among self-esteem, death anxiety and depression in older individuals according to certain variables, are now discussed in relation to current literature.

An analysis of the distribution of the older participants' demographic characteristics showed that the distribution was not similar according to age groups; majority of them (73.6%) was in the early old age group. Majority of the participating older people graduated from primary school, were males, had income equal to expenses, and had social security.

The majority of the participants lived with their children and relatives and could solve the problems they encountered by themselves. The majority of them had a chronic disease and perceived their health as moderate (Table 1).

Table 2 presents a comparison of the participants' RSES, TDAS and GDS-15 mean scores in relation to some of the demographic variables. An analysis of the participants' RSES mean scores according to their age showed that the self-esteem of the early old age group (65-74 yrs) was lower than that of the medium (75-84 yrs) and advanced old age (>85 yrs) groups.

Self-esteem increases with a decrease in scores for the RSES: when the study findings were assessed, self-esteem scores were higher in the older group, in other words, self-esteem was lower. Although self-esteem has been reported to increase with advanced age and greater life experience, in this study, the scores of the individuals in the early old age group (65-74 yrs)

indicated higher self-esteem, leading to the conclusion that with the increased limitations brought about by aging, self-esteem is found to decrease.<sup>18</sup>

Depression is a common condition in older age due to physical, social, and emotional challenges of the later years.<sup>19,20</sup> In this study, the people in the medium and advanced old age groups (75-84 yrs) were found to have higher depressive tendencies than the early old age group and medium and advanced old age group. The findings of a study conducted by Karaman et al. report similar results.<sup>19</sup> The higher risk of depression among individuals in the middle years of old age can be explained by the fact that these individuals are affected by the difficulties of old age more. The lower risk of depression in the oldest group is possibly due to the fact that this age group represented only 7.6% of the sample and was therefore too small to be a reliable measure. This study found no significant relationships between age and death anxiety (Table 2). Although the general expectation in society is that death anxiety will increase with increased age, studies have shown that death anxiety decreases with increased age or at least remains stable.<sup>8,21</sup>

Table 2 demonstrates that there were no differences in the participants' self-esteem in relation to gender, and this finding is supported by another study.<sup>22</sup> However, the literature does report that death anxiety and depressive tendencies are higher among older women than among older men, and this finding is supported by this study.<sup>6</sup>

An analysis of the participants' education and income levels according to their RSES, TDAS, and GDS-15 mean scores showed that in older individuals, self-esteem increased, and death anxiety and depressive tendencies decreased with higher education and income levels (Table 2) ( $p < 0.05$ ). Other studies confirm that self-esteem increases as education level and income level increase.<sup>18,23</sup> The study findings indicate that individuals had better living conditions and a better mental state as their income levels increased, and this is in line with other study findings reported in the literature.<sup>24</sup> Studies investigating the relationship between education level and depression

show similar findings, indicating that depressive tendencies decrease with increased educational levels.<sup>24,25</sup> It is possible that higher levels of education and income among older individuals are indicative of psychological strength, which may also have an effect in decreasing death anxiety.

This study showed that older people who did not have social security had less self-esteem and more depressive tendencies (Table 2). Older individuals who do not have social security are reported to have higher depressive tendencies, which is in line with the results of the present study.<sup>26</sup>

This study found that older individuals who lived alone had lower self-esteem and higher depressive tendencies. The literature confirms that living alone affects self-esteem negatively in older individuals.<sup>5</sup> The findings of this study indicate that depressive tendencies were higher in individuals who had lost their spouses and lived alone, which is in line with the literature.<sup>27</sup>

This study found no relationships between the presence of a chronic disease and the participants' self-esteem (Table 2). This probably results from the general perception that the presence of a chronic disease is to be considered normal in the older population. This study found that 77.9% of the participants had a chronic disease, and both depressive tendency and death anxiety were higher in the individuals with a chronic disease (Table 2). The literature confirms that many older individuals with a chronic disease have high depressive tendencies.<sup>27,28</sup> Studies indicating that death anxiety is higher in individuals who have a chronic disease are in line with the results of this study.<sup>8</sup> An analysis of the participants' coping strategies showed that older individuals who ignored problems had decreased self-esteem (Table 2). Losing control over the events in one's life is a great source of stress. Ignoring problems is one approach to coping, but avoidance of problems is ultimately ineffective.<sup>29</sup> Where participants used ineffective coping methods self-esteem was decreased.

Table 3 demonstrates the RSES, TDAS, and GDS-15 total mean scores of the participating older

people. The low self-esteem scores of the participants indicate high self-esteem in these older individuals (Table 3). In a study conducted by Terakye, the older individuals reported higher self-esteem, which is in line with this study.<sup>5</sup> In this study, the participants felt positively about themselves and experienced the emotions of self-respect and confidence. When the cultural values of the region where the study was conducted are taken into consideration, the study results are considered to be affected by the continuation of autonomy and self-determination that is made possible by the relationship of older individuals with their families.

The participating older individuals were found to have a moderate level of death anxiety (Table 3), which is in line with several studies in the literature.<sup>30,31</sup> This study found that the GDS-15 mean score was 6.26, which meant that the participants experienced little depression (Table 3). The findings of this study are in line with other study findings that indicate a low risk of depression in older individuals.<sup>3,19</sup> However, depression risk is reported to increase in individuals living in nursing homes due to factors such as having to live in an institution, losing independence and productivity, and losing control of their life.<sup>6</sup> The study results are considered to be affected by the finding indicating that 78.5% of the participating elderly individuals lived with their relatives, had strong family ties and kept older individuals within the family.

Table 3 demonstrates the relationship among participating older individuals' self-esteem, death anxiety, and depression tendency. This study found that depression tendency increased as older individuals' self-esteem decreased. The results of this study are in line with other studies indicating that depression increased as self-esteem decreased in elderly individuals.<sup>6,11</sup> Death anxiety was found to increase as self-esteem decreased in participating older individuals in this study. Several studies similarly indicated that death anxiety increased as self-esteem de-

creased.<sup>11,20,32</sup> It was also found that death anxiety increased as older individuals' depression tendency increased.<sup>11,33-35</sup>

## CONCLUSION

The study, characteristics such as age, gender, social security, people they live with, perceived health, manner of coping with problems, and the presence of a chronic disease all played a role in determining levels of self-esteem, death anxiety, and risk of depression in older individuals. These older participants were generally not at risk for depression, had high self-esteem, and experienced medium-level death anxiety. On the other hand, the risk of depression and death anxiety were found to increase with decreased self-esteem. The results of this study can only be generalized to older individuals living in a city center in the east. In line with these results, it is recommended that older individuals should be provided with nursing interventions to increase their self-esteem and decrease death anxiety and depression tendency.

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### Conflict of Interest

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

### Authorship Contributions

**Idea/Concept:** Burcu D. Gökmen; **Design:** Burcu D. Gökmen; **Control/Supervision:** Burcu D. Gökmen, Eda Çeker; **Data Collection and/or Processing:** Burcu D. Gökmen, Eda Çeker; **Analysis and/or Interpretation:** Burcu D. Gökmen; **Literature Review:** Eda Çeker; **Writing the Article:** Burcu D. Gökmen, Eda Çeker; **Critical Review:** Burcu D. Gökmen, Eda Çeker; **References and Fundings:** Burcu D. Gökmen, Eda Çeker; **Materials:** Burcu D. Gökmen, Eda Çeker.

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