



Research Article

**EXAMINING THE RELATIONSHIP OF NURSING STUDENTS' ATTITUDES TOWARDS ELDERLY INDIVIDUALS AND THEIR LEVELS OF COMPASSION WITH THE FACTORS INFLUENTIAL ON THEM**

**Havva Hande ÖZER<sup>1</sup>**  **Altun BAKSI<sup>2</sup>**  **Esin ÇETİNKAYA USLUSOY<sup>3</sup>** 

<sup>1</sup>Ege University, Dep. of Fundamentals Nursing, Ph.D. Program, Institute of Health Sciences, İzmir, Türkiye

<sup>2</sup>Suleyman Demirel University, Dep. of Surgical Nursing, Faculty of Health Sciences, Isparta, Türkiye

<sup>3</sup>Suleyman Demirel University, Dep. of Fundamentals Nursing, Faculty of Health Sciences, Isparta, Türkiye

\*Corresponding author: [altun.baksi@hotmail.com](mailto:altun.baksi@hotmail.com)

**Abstract:** Today, the changes that occur with aging are met negatively in most of the societies in the world, and elderly individuals are exposed to discrimination. This study aimed to examine the relationship of nursing students' attitudes towards elderly individuals and their levels of compassion with the factors influential on them. The study is of descriptive and cross-sectional type. The study was carried out with the 2nd grade, 3rd grade, and 4th-grade nursing students (n:508). In the study, the independent variables with a statistically significant relationship with the dependent variables were subjected to the stepwise multiple linear regression analysis. The students' mean scores were  $48.85 \pm 5.00$  on the UCLA geriatric attitude scale and  $99.17 \pm 10.98$  on the compassion scale. It was found that compassion, willingness to work with elderly individuals after graduation, the place the elderly person should stay in (in a nursing home, in their own home), perceived compassion fatigue level (mild), father's education level (undergraduate level and above), and problems experienced in social relations with elderly individuals were significant predictors of the nursing students' attitudes towards elderly individuals. It was revealed that nursing students' positive attitudes towards elderly individuals increased as their levels of compassion increased. It was seen that the students who had a mild level of compassion fatigue and who wanted to work with elderly individuals after graduation had more positive attitudes. Moreover, it was found that the students who thought that elderly individuals should stay in a nursing home or in their own home, whose father's education level was undergraduate level and above, and who had problems in social relations with elderly individuals had more negative attitudes. Educators, nursing students, nurses, and administrators can make use of the findings of this study so that they can develop appropriate strategies to improve attitudes toward elderly individuals.

**Keywords:** Elderly individual, attitude, compassion, nursing, student, education.

Received: July 25, 2023

Accepted: December 19, 2023

## 1. Introduction

Today, the changes that occur with aging are considered negative by most societies in the world, and elderly individuals are exposed to discrimination. Respect for elderly individuals, obedience to their words, and protection of them are traditional in Turkish culture, while today, urbanization, migration, increase in industry, economic difficulties, presence of women in work life, transition from extended family to nuclear family and rapid changes in social life cause changes in family structure especially in big cities [1]. The rapid increase in the elderly population and the vulnerability of these people to various

health problems cause an increase in the number of elderly patients who need healthcare [2]. This situation increases the need for well-equipped health workers who know the characteristics, needs, and problems of the elderly population, who understand them, and who have been trained in this regard [3]. Although different attitudes towards elderly individuals are demonstrated by health professionals, these individuals are generally seen as a group described as "bed-occupying", "requiring long-term hospitalization" and "failure in the health system as they cannot be treated" [4]. In addition to health problems, elderly individuals have to cope with this negative attitude they encounter [1]. In the literature, it is reported that young people constitute a risk group in terms of demonstrating negative attitudes towards elderly individuals [5-7]. Negative views about and negative attitudes towards aging affect the quality of nursing care negatively [8-10]. Nursing students' attitudes towards the elderly may affect the quality of therapeutic interaction between students and elderly individuals and their willingness to care for these patients [2]. Therefore, the quality of education in establishing positive relationships with patients is important [2,11].

The General Medical Council and Nursing Midwifery Council (2012) pointed out that students/healthcare professionals should have compassion as well as technical knowledge and skills before starting the profession [12]. The reason for this is that when people get sick, they become vulnerable, need the help of others even in the most trivial things, and want to be treated with care and compassion [13]. When the literature is examined, it is seen that there are studies on the attitudes of nursing students toward elderly individuals and the factors affecting them [9,14-17]. A study conducted with nursing students determined that students who live with an elderly person at home, care for elderly family members, and communicate with elderly individuals every day have positive attitudes toward the elderly [9]. In another study, it was stated that nursing students living in a large family and living with an elderly person showed more positive attitudes towards elderly individuals [16]. In the literature, it is seen that the number of studies on compassion in the care of elderly individuals is limited [18,19]. In addition, no research conducted to examine the effect of compassion on nursing students' attitudes toward elderly individuals was found. In this respect, the purpose of the study was to examine the relationship between nursing students' attitudes towards elderly individuals and their levels of compassion and the factors influential on them. Defining the relationship between nursing students' attitudes towards elderly individuals and compassion and the factors that may affect them is important for planning nursing education and for developing nursing care offered to elderly individuals.

## **2. Materials and Methods**

### **2.1. Research Type, Setting and Sample**

The study was conducted using the relational descriptive and cross-sectional research design. The study was carried out using questionnaire forms created online between December 2020 and April 2021. The universe of the study consisted of 2nd-grade, 3rd-grade, and 4th-grade students studying in the Department of Nursing. The research sample was made up of 508 students who agreed to participate in the study. The inclusion criteria for the research sample were being a nursing student, volunteering to participate in the study, and having experience in clinical practices. At the end of the study, the power of the study was found to be 0.99 according to the power analysis when the effect size was 0.237 ( $p=0.05$ ), when the number of predictors/predictive variables was 7, and when the number of participants was 508 [20].

## **2.2. Data Collection Tools**

### **2.2.1 Introductory Characteristics Form**

This form was prepared by the researchers in line with the related literature. The form included questions related to “*age, class, gender, family type, mother/father’s level of education, grade point average (GPA), willingness to be a nurse, taking courses on old age/geriatrics, presence of an elderly relative, wanting to live with their parents in the future, the place where elderly individuals should stay, willingness to work with elderly individuals after graduation, having problems in social relations with elderly individuals, and perceived compassion fatigue level*” [10,11,14,16,21].

### **2.2.2 UCLA Geriatric Attitudes Scale**

The scale was developed to determine the attitudes of healthcare professionals towards elderly individuals. The Turkish validity and reliability study of the scale was conducted with healthcare workers by Şahin et al. (2012). The scale consisted of a total of 14 items and five-point Likert-type options. The scale was made up of four sub-dimensions such as “social values, medical care, compassion, and resource allocation,” and the total attitude score was calculated as a combination of the sub-dimensions. The score to be obtained from the scale varied between 14-70. An increase in the scale score meant that the attitude towards elderly individuals was positive. The internal consistency reliability Cronbach alpha coefficient of the scale was found to be 0.67 [22]. The scale was used in this study to determine the attitudes of nursing students toward elderly individuals. The internal consistency Cronbach alpha reliability coefficient of the scale was calculated in the study as 0.60.

### **2.2.3 Compassion Scale**

The Turkish validity and reliability study of the scale was carried out by Akdeniz and Deniz (2016) with university students. The scale was made up of 24 and 5-point Likert-type items. The scores to be obtained from the scale varied between 24-120. As the total score obtained from the scale increased, the level of compassion increased as well. It was reported that the internal consistency Cronbach alpha reliability coefficient for the whole scale was 0.85 [23]. The scale was used in this study to determine the compassion levels of the nursing students. The internal consistency Cronbach alpha reliability coefficient of the scale for this study was 0.90.

## **2.3. Data Collection**

The data of the nursing students who voluntarily agreed to participate in the study were collected online due to the COVID-19 pandemic process. To collect the research data, firstly, online survey forms were created in Google, forms application, and then the students studying in undergraduate nursing departments were reached by using social media tools (WhatsApp, Instagram).

## **2.4. Data Analysis**

The data collected in the study were analyzed using the Statistical Package for Social Sciences (SPSS) (IBM SPSS Statistics, Chicago, IL, USA) 25.0 in a computer environment. Descriptive statistics, numbers, percentages, mean and min-max were used. Normality tests were used to examine whether there were missing values in the data set belonging to the research group and whether the data showed a normal distribution or not. Independent variables that had a statistically significant relationship with the dependent variables were included in the stepwise multiple linear regression analysis. Standard residual for the variables and multicollinearity for independent variables were examined before constructing the regression model. In stepwise regression analysis, an initial model was created, and all the variables were included in the model. Only the significant variables among all were included in the model step by step. In regression analysis, categorical variables were included in the analysis as "dummy" variables. For the variables to be included in the regression equation, the statistical

significance level was accepted as  $p < 0.05$  [24]. In addition, a power analysis was performed to calculate the power of the research. G \* power software, version 3\_1, was used for power analysis [20].

## 2.5. Research Ethics

Before starting the research process, approval (dated 17.11.2020, number 354) was obtained from the Medical Faculty Clinical Research Ethics Committee of Süleyman Demirel University. Written permission was obtained from the authors who conducted the Turkish adaptation of the measurement tools used in the study. Due to the COVID-19 pandemic process, permission was obtained online from the nursing students who met the criteria for inclusion in the research sample and who agreed to participate in the study. With the informed consent form at the beginning of the online survey forms, the students were informed about the purpose, duration, application, and data collection in the study; about voluntary participation in the study, about the possibility of leaving the research at any time, and about keeping the names of the participants confidential. It was accepted that the students who filled out the questionnaires after reading this information gave their consent.

## 2.6. Limitations

The results of the research represent only the second, third, and fourth-year students studying in the nursing department of some universities.

## 3. Results

The mean age of the nursing students participating in the study was  $21,22 \pm 1,47$  (min-max=19,00-27,00). Of all the students, 37,6% of them were 2nd-grade students; 78,1% were female; 82,7% had a nuclear family; and 47,6% of them had literate fathers. Findings regarding the introductory characteristics of the nursing students are given in Table 1.

**Table 1.** Findings regarding the introductory characteristics of nursing students (n: 508)

Introductory Characteristics	$\bar{X} \pm SD$	Min-Max	
Age	21,22±1,47	19,00-27,00	
	Variable Levels	N	%
Class Grade	2nd Grade	191	37,6
	3rd Grade	157	30,9
	4th Grade	160	31,5
Gender	Female	397	78,1
	Male	111	21,9
Marital Status	Single	501	98,6
	Married	7	1,4
Financial State	Income equal to expenditures	308	60,6
	Income higher than expenditures	50	9,8
	Income lower than expenditures	150	29,5
Registered Region	Marmara	66	13,0
	Aegean	72	14,2
	Central Anatolia	55	10,8
	Mediterranean	104	20,5
	Southeastern Anatolia	146	28,7
	Eastern Anatolia	33	6,5
	Black Sea	32	6,3
Longest lived place	City	281	55,3
	District	138	27,2
	Village	89	17,5

*Table 1. Continued*

	<b>Variable Levels</b>	<b>N</b>	<b>%</b>
Family type	Nuclear family	420	82,7
	Extended family	88	17,3
Parent status	Living together	456	89,8
	Divorced	22	4,3
	Dead	30	5,9
Mother's education level	Literate	295	58,1
	Below undergraduate level	195	38,4
	Bachelor level and above	18	3,5
Father's education level	Literate	242	47,6
	Below undergraduate level	198	39,0
	Bachelor level and above	68	13,4
Family member with best getting-along	Grandfather-grandmother	9	1,8
	Father-mother	131	25,8
	Brother-sister	122	24,0
	All	197	38,8
	None	49	9,6
Grade point average	80-100	270	53,1
	60-79	232	45,7
	Lower than 60	6	1,2
Wanting to become a nurse	Yes	361	71,1
	No	31	6,1
	Partly / Neutral	116	22,8
Having taken a course on old age/geriatrics	Yes	189	37,2
	No	319	62,8
Over how many years old is considered old	50 years old and younger	57	11,2
	51-64 years old	183	36,0
	65 years old and older	268	52,8
Presence of an elderly relative	Yes	489	96,3
	No	19	3,7
Having lived in the same house with an elderly individual aged 65 and over until now	Yes	296	58,3
	No	212	41,7
If yes (if s/he has lived in the same house with an elderly individual aged 65 and over); how long s/he has lived	Less than 1 year	92	31,1
	1-5 years	86	29,1
	6-10 years	52	17,6
	Longer than 10 years	66	22,3
If yes (if s/he has lived in the same house with an elderly individual aged 65 and over); Did s/he provide caring or support for caring	Yes	206	69,6
	No	90	30,4
Willingness to live with an elderly individual	Yes	284	55,9
	No	224	44,1
Willingness to live with parents in the future	Yes	354	69,7
	No	154	30,3
The place where older individuals should stay	In his/her own house	243	47,8
	With his/her children	252	49,6
	In a nursing house for the elderly	13	2,6
Willingness to work with elderly individuals after graduation	Yes	332	65,4
	No	176	34,6
Having problems in social relations with elderly individuals	Yes	75	14,8
	No	433	85,2
The level of perceived compassion fatigue	Low	54	10,6
	Medium	335	65,9
	High	119	23,4

The nursing students' mean scores were calculated as 48,85±5,00 (34,00-61,00) on the UCLA-GT scale and as 99,17±10,98 (68,00-120,00) on the Compassion Scale (Table 2).

**Table 2.** Findings regarding the UCLA-GT scale and compassion scale mean scores of the nursing students (n: 508)

Scales	$\bar{X}\pm SD$	Min-Max
UCLA Geriatric Attitude scale	48,85±5,00	34,00-61,00
Compassion scale	99,17±10,98	68,00-120,00

As the stepwise step was used, only the significant ones of all the variables included in the model were left in the model, and the meaningful variables were included in the model step by step. The VIF value, which expresses the relationship between the independent variables, was found to be less than 5, and it was seen that there was no multicollinearity problem in the model. When the results were examined, the final model, the seventh model, was found to be statistically significant ( $p < 0,05$ ;  $F = 23,553$ ). In the seventh model, 24% of the change in UCLA-GT level was explained with the willingness to work with elderly individuals after graduation, compassion, the place where the elderly individual should stay (in a nursing home), the place where the elderly person should stay (in their own home), perceived compassion fatigue level (low), father's education level (undergraduate level and above) and having problems in social relations with elderly individuals ( $Adj R^2: 0,237$ ).

When the seventh model was examined, it was seen that a one-unit increase in the compassion score increased the UCLA-GT level by 0,105 units. In addition, when the beta coefficients were examined in the seventh model, the students with a desire to work with elderly individuals after graduation had a higher UCLA-GT level than those who did not (the reference category was positive as the beta coefficient of willingness to work with elderly individuals after graduation was 2,194). The students who thought that elderly individuals should stay in a nursing home had a lower UCLA-GT level than the others (the reference category had a negative score as the beta coefficient of where elderly individuals should stay (in a nursing home) was -4,202). The students who thought that elderly individuals should stay in their own homes had a lower UCLA-GT level than the others (the reference category was negative as the beta coefficient of where elderly individuals should stay (in their own home) was -1,365). The students with a mild level of perceived compassion fatigue had a higher UCLA-GT level than the others (the reference category was positive as the beta coefficient of the perceived compassion fatigue level (mild) was 1,906). The students whose father had an undergraduate degree or above had a lower UCLA-GT level compared to others (the reference category had negative scores as the beta coefficient of the father's education level (undergraduate level or above) was -1,714). The students who had problems in social relations with elderly individuals had a lower UCLA-GT level than those who did not (the reference category was negative as the beta coefficient of having problems in social relations with elderly individuals was -1,386) (Table 3).

**Table 3.** Examining the effect of compassion and other introductory characteristics on nursing students' attitudes toward elderly individuals

	Model	Beta	T	Sig.	VIF	F	P	Adj. R <sup>2</sup>	Power
	Constant	46,517	131,064	0,000					
1	Willingness to work with elderly individuals after graduation	3,576	8,146	0,000	1,000	66,358	0,000	0,114	0,999
	Constant	34,770	19,027	0,000					
2	Willingness to work with elderly individuals after graduation	3,044	7,083	0,000	1,037	57,328	0,000	0,182	0,999
	Compassion	0,122	6,543	0,000	1,037				
	Constant	35,203	19,341	0,000					
3	Willingness to work with elderly individuals after graduation	2,943	6,878	0,000	1,044	41,602	0,000	0,194	0,999
	Compassion	0,119	6,434	0,000	1,040				
	Where elderly individuals should stay (in a nursing home)	-3,691	-2,908	0,004	1,011				
	Constant	36,005	19,751	0,000					
	Willingness to work with elderly individuals after graduation	2,595	5,915	0,000	1,116				
4	Compassion	0,120	6,522	0,000	1,040	34,163	0,000	0,207	0,999
	Where elderly individuals should stay (in a nursing home)	-4,417	-3,452	0,001	1,046				
	Where elderly individuals should stay (in their own homes)	-1,290	-3,113	0,002	1,097				
	Constant	36,196	19,984	0,000					
	Willingness to work with elderly individuals after graduation	2,544	5,834	0,000	1,118				
	Compassion	0,116	6,369	0,000	1,044				
5	Where elderly individuals should stay (in a nursing home)	-4,407	-3,468	0,001	1,046	29,373	0,000	0,219	0,999
	Where elderly individuals should stay (in their own homes)	-1,320	-3,208	0,001	1,098				
	Perceived compassion fatigue level (mild)	1,835	2,872	0,004	1,008				
	Constant	36,719	20,326	0,000					
	Willingness to work with elderly individuals after graduation	2,423	5,574	0,000	1,128				
	Compassion	0,114	6,286	0,000	1,046				
6	Where elderly individuals should stay (in a nursing home)	-4,418	-3,503	0,001	1,046	26,279	0,000	0,230	0,999
	Where elderly individuals should stay (in their own homes)	-1,331	-3,258	0,001	1,098				
	Perceived compassion fatigue level (mild)	1,947	3,065	0,002	1,011				
	Father's education level (undergraduate or above)	-1,690	-2,931	0,004	1,016				

Table 3 Continued.

Model	Beta	T	Sig.	VIF	F	P	Adj. R <sup>2</sup>	Power
Constant	37,959	20,284	0,000					
Willingness to work with elderly individuals after graduation	2,194	4,950	0,000	1,184				
Compassion	0,105	5,716	0,000	1,089				
Where elderly individuals should stay (in a nursing home)	-4,202	-3,339	0,001	1,051				
7 Where elderly individuals should stay (in their own homes)	-1,365	-3,354	0,001	1,099	23,553	0,000	0,237	0,999
Perceived compassion fatigue level (mild)	1,906	3,014	0,003	1,012				
Father's education level (undergraduate or above)	-1,714	-2,987	0,003	1,016				
Having problems in social relations with elderly individuals	-1,386	-2,390	0,017	1,127				

Footnote: Willingness to work with elderly individuals after graduation: Yes:1; No:0, Where elderly individuals should stay: In a nursing home:1; Other:0, Where elderly individuals should stay: in their own home:1; Other:0, Perceived compassion fatigue level: Mild:1; Other:0, Father's education: Undergraduate or above:1; Other:0, Having problems in social relations with elderly individuals: Yes:1; No:0

#### 4. Discussion

In the study, it was revealed that the nursing students' levels of compassion were high and that their positive attitudes toward elderly individuals increased as their levels of compassion increased. In the literature, there was no research examining the relationship between nursing students' levels of compassion and their attitudes toward elderly individuals. In the studies conducted on nursing students, it was seen that they had different levels of compassion and that their levels of compassion were generally high [25,26]. In a study carried out with staff giving care to elderly individuals, it was found that compassion had a positive effect on the attitude towards elderly individuals. In the same study, it was reported that good attitudes and personality traits (such as extraversion, and responsibility) of the staff giving care to elderly individuals allowed them to feel compassion for elderly individuals and to take action for caring [18]. In a qualitative study, nurses and students thought that compassion accelerated the recovery of elderly individuals and increased the quality of care [19]. In a systematic review, among the characteristics that a compassionate nurse should have are honesty, sincerity, trust, value, respect, sympathy, openness, courtesy, sincerity, authenticity, acceptance, and love [27]. The seven dimensions of compassion were attention to the patient's problems, active listening, accepting pain, participation, helping, being present, and understanding pain [28]. Pain is thought to be a triggering factor in the emergence of compassion. Various conditions such as weakness, chronic illness, loneliness, and disability can cause elderly individuals to suffer [25]. The pain experienced by elderly individuals due to any illness first arouses a desire for compassion in their relatives and then in the healthcare professionals whom they apply for help, or elderly individuals expect compassion from these healthcare professionals [29]. The ANA and ICN ethical codes and declarations are based on compassion. In the literature, it is pointed out that compassion is a strong support for achieving excellent care if it is accepted as the main competency in nursing and is considered important in terms of evidence-based practices [28]. In the Turkish traditional family structure, children try to care for their parents until they die, to maintain communication and interaction and not to leave them alone [30]. In this respect, it is seen that the characteristics of compassionate individuals, the seven dimensions of the nature of compassion and



the ethical principles have an important place in the curriculum of nursing education. In this case, the fact that the nursing students' attitudes towards the elderly person increased as their levels of compassion increased might be related to the individual and cultural characteristics of the students in the sample. It also suggests that it may have resulted from the development of the students' compassionate characteristics in line with the content of the nursing education and from the effect of what was expected from the students within the scope of the education.

In the study, it was revealed that the nursing students with mild perceived compassion fatigue had more positive attitudes towards elderly individuals. Compassion fatigue is expressed as the negative effect of helping individuals who have experienced a traumatic event or who are suffering from pain [31]. As compassion is one of the most basic components of nursing care, nursing students are at risk for compassion fatigue compared to other student groups [32,33]. Nursing education is an education that requires high levels of professional knowledge and skills and involves emotional and stressful clinical education environments where emotional exhaustion is common [32-34]. Compassion fatigue is a gradual decrease in compassion for patients over the long term. Nurses, who feel that the compassion they show towards patients tires them, may act insensitively towards patients [35]. In a study conducted on nurses, it was concluded that compassion fatigue could negatively affect service quality and work performance and cause problems in important issues for care such as clinical errors, wrong decisions, and wrong treatment planning [36]. In a study carried out on intensive care nurses, it was seen that there was a negative relationship between care ability and compassion fatigue [37]. In this respect, it is thought that students with mild compassion fatigue are more aware of the problems of elderly individuals; that they could be more sensitive/understanding towards them; and that they therefore demonstrate more positive attitudes than students with moderate and severe levels of compassion fatigue.

In the study, it was seen that the nursing students who were willing to work with elderly individuals after graduation had more positive attitudes toward elderly individuals. Looking at the research findings, it could be stated that 65,4% of nursing students wanted to work with elderly individuals after graduation. In a study conducted on nursing students (n:487), it was found that only 12% wanted to work in a geriatric clinic and that these students had more positive attitudes towards elderly individuals [8]. In studies conducted with nursing students and medical faculty students, those who wanted to work with elderly individuals after graduation demonstrated a more positive attitude [38,39]. In another study, it was reported that nursing students who were willing to care for elderly individuals in the future had more positive attitudes toward elderly individuals [9]. In another study, it was pointed out that healthcare professionals might prefer to focus on the acute health problems of young patients instead of dealing with the chronic problems of elderly individuals [30]. Consequently, when the literature was evaluated, it was seen that studies reported results similar to the ones obtained in the present study, and it was an expected result that those who wanted to work with elderly individuals after graduation had a positive attitude.

In the study, it was concluded that the attitudes of the nursing students who thought that elderly individuals should stay in a nursing home or in their own home were more negative than those who thought that their children should stay with them. In the literature, there are studies showing that students who are willing to live with elderly individuals have more positive attitudes toward them [40,41]. In studies conducted with health and nursing students, it was reported that 20,4% (n:1237) [21] and 24,9% (n:148) [32] were of the opinion that elderly people should stay in their own homes. In studies conducted with nurses [10], nursing students [9,16], and physiotherapy students [42], it was seen that living with elderly individuals had a positive effect on attitudes towards elderly individuals. In another study, it was stated that the time spent with elderly individuals positively affected their willingness to care for elderly individuals [43]. In the literature, it was stated that nursing students who lived with elderly individuals, who were willing to live with an elderly family member in the future and who participated in their care

had more positive attitudes as they gained experience and a perspective on elderly individuals [44]. In the literature, there are studies showing that living with elderly individuals or the place of residence of the elderly person does not affect the attitude towards these individuals [45,46]. In Turkish culture, respecting elderly individuals, respecting the word of the elderly, and taking care of the elderly are traditional and unchangeable expectations; moreover, nowadays, the status and prestige of the elderly in society are changing [4]. In line with this information in the literature, it is an expected result that students who think that the elderly person should stay in a nursing home or in their own home have a more negative attitude.

It was seen that the attitudes of the nursing students whose father's education level was undergraduate or above were more negative towards elderly individuals. Similar to the research finding, it was seen in a study conducted on nursing students that the positive attitude increases as the education level of the father decreases [47]. This situation suggests that families with a low level of father's education reflect the understanding of caring for and respecting the elderly person, which is part of the cultural characteristics of the Turkish family structure. Again, if it is assumed that the socio-economic levels of the students whose father's education level was undergraduate or above were better, it is thought that purchasing care services for elderly individuals from institutions and being together with elderly individuals less often negated the attitude. In the literature, there are findings different from the results of the present study [21,48,49].

In the study, it was revealed that the attitudes of the nursing students who had problems in social relations with elderly individuals towards elderly individuals are more negative/negative. Again, in the study, 1,8% of the students stated that they mostly got along with their grandparents, and 25,8% said they got along with their parents. In studies conducted with health and nursing students, approximately one-fourth of the students stated that they thought old people should stay at home and lead a quiet life. This situation shows that the students have a negative attitude such as isolating themselves from social life by not taking more roles in the social lives of elderly individuals [21,32]. In the literature, it is pointed out that there are problems in social relations between young and old individuals for such reasons as health problems, generation gap, incompatibility of tastes, and conflicting issues [50]. In a study carried out with elderly individuals (n:740), they thought that they were not respected as before (21,2%) and that their words were not valued (17,2%). Elderly individuals considered the causes of the changes in the relationship between parents and children to be technological developments (29,2%), the change in time (20%), the difference between generations (16,6%), and changes in family structure (12,4%)[51]. It is thought that there may be problems in social relations between young and old individuals due to differences between generations and incompatibility of tastes; therefore, students may exhibit negative attitudes towards elderly individuals. In this respect, it is an expected result that the students who had problems in social relations with elderly individuals had more negative attitudes towards them.

## 5. Conclusion

As the level of compassion in nursing students increases, their positive attitudes towards elderly individuals increase. It was revealed that the students who had a mild level of compassion fatigue and who wanted to work with elderly individuals after graduation had a more positive attitude. In addition, it was found that the students who thought elderly individuals should stay in a nursing home or in their own home, whose father's education level was undergraduate or above, and who had problems in social relations with elderly individuals, had more negative attitudes. To increase the positive attitude of nursing students toward elderly individuals, it is important to include more topics and practices related to old age and elderly care in the content of the undergraduate education, to increase the level of knowledge, to change the perspectives, to update the educational content constantly in line with the

literature, to organize programs on geriatric nursing before and after graduation and to ensure their participation in activities that will increase awareness of elderly care. To determine the elderly health education curriculum in nursing, more research on the needs of nursing students and nurses and on their perspectives regarding elderly individuals. Educators, nursing students, nurses, and administrators can make use of the findings of this study so that they can develop appropriate strategies to improve attitudes toward elderly individuals. Knowing the factors that affect the attitudes of nursing students towards elderly individuals will guide the educational and counseling services to be given to the students. However, it is seen in the literature that there are different findings regarding the factors likely to affect the attitudes of nursing students toward elderly individuals, and it is thought that more research should be carried out to clarify the concept.

Undergraduate education should focus on compassionate care as well as technical knowledge and skills. What is recommended is to inform nursing students about compassion, compassionate care behaviors, and skills such as empathy leading to compassion and to increase their awareness. Targeting the emotional learning domain, facilitating reflective thinking, fostering a culture of compassionate care, and integrating indicators of compassionate care into clinical and educational curricula could be beneficial for the development of students' compassion. In addition, preventive studies could be conducted to reduce perceived compassion fatigue levels so that students can provide elderly individuals with a good post-graduation care service. Finding someone to share their stress and troubles; raising awareness of what needs to be done such as adequate sleep, spare time for oneself, and development of areas of interest; and including these subjects in the education could be done to reduce the compassion fatigue of nursing students. Moreover, with the help of digital learning resources, the level of knowledge and awareness could be increased; they could be made aware of the factors that activate or hinder their ability to be compassionate; and breathing and meditation exercises could be done. Lastly, to reduce the problems experienced in social relations between elderly individuals and young people, educational and consultancy services could be provided for both groups.

### **Ethical statement**

Before starting the research process, approval (dated 17.11.2020, number 354) was obtained from the Medical Faculty Clinical Research Ethics Committee of Süleyman Demirel University.

### **Acknowledgment**

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

### **Conflict of interest:**

The authors declare no conflict of interest.

### **Authors' Contributions:**

Study conception and design: AB, HHÖ

Data collection: AB, HHÖ, EÇU

Data analysis and interpretation: AB, HHÖ, EÇU

Drafting of the article: AB, HHÖ, EÇU

Critical revision of the article: AB, HHÖ, EÇU

All authors read and approved the final manuscript.

## References

- [1] Özpulat, F., Erem, Ö., Özkal, F., “Youthfulness in Turkey and aged discrimination”, *Global Journal on Advances Pure and Applied Sciences*, 4, 168-17, 2014. [https://www.academia.edu/35498529/Youthfulness\\_in\\_Turkey\\_and\\_aged\\_discrimination](https://www.academia.edu/35498529/Youthfulness_in_Turkey_and_aged_discrimination)
- [2] Gholamzadeh, S., Khastavaneh, M., Khademian, Z., Ghadakpour, S., “The effects of empathy skills training on nursing students’ empathy and attitudes toward elderly people”, *BMC Medical Education*, 18(1), 198, 2018. <https://doi.org/10.1186/s12909-018-1297-9>.
- [3] The World Health Organization 2016. [Online]. Available: ([http://www.who.int/Gho/Mortality\\_Burden\\_Disease/Life\\_Tables/Situation\\_Trends\\_Text/EN/](http://www.who.int/Gho/Mortality_Burden_Disease/Life_Tables/Situation_Trends_Text/EN/)).
- [4] Zehirlioğlu, L., Yönt, G.H., Bayat, E., Günay, B., “Hemşirelerin yaşlılara yönelik tutumları ve etkileyen faktörlerin belirlenmesi”, *Yıldırım Beyazıt Üniversitesi Sağlık Bilimleri Fakültesi Hemşirelik E-Dergisi*, 21(1), 219-232, 2016.
- [5] Dinçer, Y., Usta, E., Bulduk, S., “Üniversite öğrencileri gözüyle yaşlılık nasıl algılanıyor?”, *Yaşlı Sorunları Araştırma Dergisi*, 9(1), 26-38, 2016. <http://dergipark.ulakbim.gov.tr/yasad/>.
- [6] Uçun, Y., Mersin, S., Öksüz, E. “Gençlerin yaşlı bireylere karşı tutumu”. *Journal of International Social Research*, 8(37), 1143-1149, 2015.
- [7] Kaçan, H., Dibekli, E., Akkan, K. “Toplumda yaşayan bireylerin yaşlı ayrımcılığı tutum düzeylerinin incelenmesi”. *Yaşlı Sorunları Araştırma Dergisi*, 11(2), 8-15, 2018.
- [8] Haron, Y., Levy, S., Albagli, M., Rotstein, R., Riba, S, “Why do nursing students not want to work in geriatric care? A national questionnaire survey”, *International Journal of Nursing Studies*, 50, 1558–65, 2013. <https://doi.org/10.1016/j.ijnurstu.2013.03.012>.
- [9] Alkaya, S.A., Okuyan, C.B., “Hemşirelik öğrencilerinin yaşlı bireylere yönelik tutumları”, *Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi*, 4(1), 43-52, 2017. <https://dergipark.org.tr/tr/pub/hunhemsire/issue/27606/331892>.
- [10] Pehlivan, S., Vatansever, N., “Hemşirelerin yaşlıya tutumları ve etkileyen faktörler”, *Uludağ Üniversitesi Tıp Fakültesi Dergisi*, 45(1), 47-53, 2019. <https://doi.org/10.32708/uutfd.468622>.
- [11] Cheng M, Cheng C, Tian Y, Fan X., “Student nurses' motivation to choose gerontological nursing as a career in China: A survey study”, *Nurse Education Today*, 35(7), 843-848, 2015. <https://doi.org/10.1016/j.nedt.2015.03.001>.
- [12] Bloomfield, J., Pegram, A., “Care, compassion and communication”, *Nursing Standard*, 29(25), 45-50, 2015. <https://doi.org/10.7748/ns.29.25.45.e7653>.
- [13] Perez-Bret, E., Rogelio, A., Javier, R., “Definition of compassion in healthcare: a systematic literature review”, *International Journal of Palliative Nursing*, 599-606, 2016. <https://doi.org/10.12968/ijpn.2016.22.12.599>.
- [14] Strugala, M., Talarska, D., Wysocki, J., “Attitudes towards the elderly among nursing students in poland-Initial findings”, *Journal of Gerontology and Geriatric Research*, 5, 1-8, 2016. <https://doi.org/10.4172/2167-7182.1000279>.
- [15] Faronbi, J.O., Adebawale, O., Faronbi, G.O., Musa, O.O., Ayamolowo, S.J., “Hemşirelik öğrencilerinin yaşlı hastaların bakımına yönelik algı bilgi ve tutumları”, *Uluslararası Afrika Hemşirelik Bilimleri Dergisi*, 7, 37-42, 2017. <https://doi.org/10.1016/j.ijans.2017.06.004>.

- [16] Muhsin, A.A., Munyogwa, M.J., Kibusi, S.M., Seif, S.A., “Poor level of knowledge on elderly care despite positive attitude among nursing students in Zanzibar Island: Findings From A Cross-Sectional Study”, *BMC Nursing*, 19(1), 1-8, 2020. <https://doi.org/10.1186/s12912-020-00488-w>.
- [17] Cheng, W.L.S, Ma, P.K., Lam, Y.Y., Ng, K.C., Ling, T.K., Yau, W.H., Li, P.P., “Effects of senior simulation suit programme on nursing students' attitudes towards older adults: a randomized controlled trial”, *Nurse Education Today*, 88, 104330, 2020. <https://doi.org/10.1016/j.nedt.2020.104330>.
- [18] Diren, Z., Yaşlı bakım çalışanlarında duygusal zekâ, kişilik özellikleri, örgütsel güven ve merhamet duyguları ile yaşlılara yönelik tutumlar arasındaki ilişkiler, İstanbul Arel Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, İstanbul, 2018. <https://tez.yok.gov.tr/UlusalTezMerkezi/tezDetay.jsp?id=zvuA9gdUCum91vZGBvq82w&no=tRqfN13Af1Wd923UI3POZQ>
- [19] Nathoo, S., Shaw, D.G., Sandy, P.T., “Determinants of compassion in providing care to older people: educational implications”, *Nurse Education Today*, 101, 104878, 2021. <https://doi.org/10.1016/j.nedt.2021.104878>.
- [20] Faul, F., Erdfelder, E., Buchner, A., Lang, A., G\*Power manual [computer software]. Version 3.1. Dusseldorf, De: Heinrich-Heine-University. 2020. ([https:// www. Psychologie. Hhu.De/ Arbeitsgruppen/ Allgemeinepsychologieundarbeitspsychologie/Gpower.Html](https://www.Psychologie.Hhu.De/Arbeitsgruppen/Allgemeinepsychologieundarbeitspsychologie/Gpower.Html)).
- [21] Koca, N., Seferoğlu, M., “The evaluation of physicians’ attitudes toward the elderly”, *Family Practice and Palliative Care*, 5(1), 6-11, 2020. <https://doi.org/10.22391/fppc.661960>.
- [22] Şahin, S, Mandiracioglu A, Tekin N, Şenuzun F, Akçicek F., “Attitudes toward the elderly among the health care providers: reliability and validity of turkish version of the ucla geriatrics attitudes (UCLA-GA) scale”, *Archives of Gerontology and Geriatrics*, 55(1), 205-209, 2012. <https://doi.org/10.1016/j.archger.2011.08.015>.
- [23] Akdeniz, S., Deniz, M., “Merhamet ölççeği’nin türkçeye uyarlanması: Geçerlik ve güvenilirlik çalışması”, *The Journal Of Happiness Well-Being*, 4(1), 50-61, 2016. <https://acikerisim.karatay.edu.tr/xmlui/bitstream/handle/20.500.12498/1426/merhametolcegi2pdf.pdf?sequence=1&isAllowed=y>.
- [24] Hair, J., Black, W.C., Babin, B.J., Anderson, E.R. Multivariate data analysis. Pearson Education. 2010.
- [25] Çingöl, N., Çelebi, E., Zengin, S., Karakaş, M., “Bir sağlık yüksekokulu hemşirelik bölümü öğrencilerinin merhamet düzeylerinin incelenmesi”, *Klinik Psikiyatri Dergisi*, 21(1), 61-67, 2018. <https://doi.org/10.5505/kpd.2018.65487>.
- [26] Gündüzoğlu, N.Ç.“Hemşirelik öğrencilerinde merhamet düzeyi”, *Journal of Human Rhythm*, 5(2), 103-116, 2019. <https://dergipark.org.tr/tr/pub/johr/issue/45681/576229>.
- [27] Durkin, M., Gurbutt, R., Carson, J., “Qualities, teaching and measurement of compassion in nursing: a systematic review”, *Nurse Education Today*, 63, 50-58, 2018. <https://doi.org/10.1016/j.nedt.2018.01.025>.
- [28] Van Der Cingel, M., “Compassion in care: a qualitative study of older people with a chronic disease and nurses”, *Nursing Ethics*, 18, 672–85, 2011. <https://doi.org/10.1177/0969733011403556>.



- [29] Cingi, C.C, Erođlu, E., “Sađlık alıřanlarında merhamet yorgunluđu”, *Osmangazi Tıp Dergisi*, 41(1), 58-71, 2019. <https://doi.org/10.20515/otd.449810>.
- [30] Ünalın, D., Soyuer, F., Elmalı, F., “Geriatrı merkezi alıřanlarında yařlı tutumunun deđerlendirilmesi”, *Kafkas Tıp Bilimleri Dergisi*, 2(3), 115-20, 2012. <https://doi.org/10.5505/kjms.2012.15870>.
- [31] řirin, M., Yurttař, A., “Hemřirelik bakımının bedeli: merhamet yorgunluđu”, *Dokuz Eylöl Üniversitesi Hemřirelik Faköltesi Elektronik Dergisi*, 8(2), 123-130, 2015. <http://www.deuhyoedergi.org>.
- [32] Kulakı, H. “Hemřirelik lisans programı birinci ve dördüncü sınıf öđrencilerinin yařlılık ve yařlanmaya iliřkin düřüncelerinin ve görüřlerinin deđerlendirilmesi”, *Dokuz Eylöl Üniversitesi Hemřirelik Yüksekokulu Dergisi*, 3(1), 15-22, 2010. <http://hdl.handle.net/20.500.12397/4543>.
- [33] Bulduk, S., Ardı, E., “Hemřirelik öđrencilerinde öz- duyarlıđın incelenmesi”, *Hemřirelik Akademik Arařtırma Dergisi*, 1(2), 60-65, 2015. <https://doi.org/10.5222/jaren.2015.060>.
- [34] Msiska, G., Smith, P., Fawcett, T., “Exposing emotional labour experienced by nursing students during their clinical learning experience: A malawian perspective”, *International Journal Of Africa Nursing Sciences*, 1, 43-50, 2014. <https://doi.org/10.1016/j.ijans.2014.07.001>.
- [35] Pehlivan, T., Güner, P., “Merhamet yorgunluđu: bilinenler, bilinmeyenler”, *Journal of Psychiatric Nursing*, 9(2), 129-134, 2018. <https://doi.org/10.14744/phd.2017.25582>.
- [36] Cetrano, G., Tedeschi, F., Rabbi, L., Gosetti, G., Lora, A., Lamonaca, D., Amaddeo, F., “How are compassion fatigue, burnout and compassion satisfaction affected by quality of working life? Findings from a survey of mental health staff in Italy”, *BMC Health Services Research*, 17(1), 1-11, 2017. <https://doi.org/10.1186/s12913-017-2726-x>.
- [37] Mohammadi, M., Peyrovi, H., Mahmoodi, M., “The relationship between professional quality of life and caring ability in critical care nurses”, *Dimensions of Critical Care Nursing*, 36(5), 273-277, 2017. <https://doi.org/10.1097/DCC.0000000000000263>
- [38] Ayođlu, F.N., Kulakı, H., Ayyıldız, T.K., Aslan, G.K., Veren, F., “Attitudes of turkish nursing and medical students toward elderly people”, *Journal of Transcultural Nursing*, 25(3), 241-248, 2014. <https://doi.org/10.1177/1043659613515527>.
- [39] Darling, R., Sendir, M., Atav, S., Büyükyılmaz, F., “Undergraduate nursing students and the elderly: an assessment of attitudes in a Turkish University”, *Gerontology & Geriatrics Education*, 39(3), 283-294, 2018. <https://doi.org/10.1080/02701960.2017.1311883>.
- [40] Güven, ř.D., Muz, G., Ertürk, N., “Üniversite öđrencilerinin yařlı ayrımcılıđına iliřkin tutumları ve bu tutumların bazı deđerkenlerle iliřkisi”, *Anadolu Hemřirelik ve Sađlık Bilimleri Dergisi*, 15(2), 99-105, 2012. <https://dergipark.org.tr/tr/pub/ataunihem/issue/2657/34291>.
- [41] Usta, Y.Y., Demir, Y., Yönder, M., Yıldız, A., “Nursing students’ attitudes toward ageism in Turkey”, *Archives of Gerontology and Geriatrics*, 54(1), 90-93, 2012. <https://doi.org/10.1016/j.archger.2011.02.002>.
- [42] Bakırhan, S., Özkeskin, M., Aktar Reyhanođlu, D., Gülpınar, D., “Analysis of the attitudes and approaches of the physiotherapy and rehabilitation students towards the elderly”, *Türk Geriatri Dergisi*, 20(2), 125-34, 2017. [https://www.geriatri.dergisi.org/uploads/pdf/pdf\\_TJG\\_980.pdf](https://www.geriatri.dergisi.org/uploads/pdf/pdf_TJG_980.pdf).

- [43] Chi, M.J., Shyu, M.L., Wang, S.Y., Chuang, H.C., Chuang, Y.H., “Nursing students willingness to care for older adults in Taiwan”, *Journal of Nursing Scholarship*, 48(2), 172-178, 2016. <https://doi.org/10.1111/jnu.12197>.
- [44] Toygar, I., Kardakovan, A., “Factors affecting the attitudes of nursing students toward ageism”, *Nursing Practice Today*, 7(1), 38-44, 2020. <https://doi.org/10.18502/npt.v7i1.2298>.
- [45] Afarigan, B., Abedi, H.A., “Investigating the relationship between ageism and some demographic aspects in offering nursing care to elder patients of Al-Zahra Hospital, Isfahan”, *International Journal Of Medical Research & Health Sciences*, 5(12), 233-238, 2016. [www.ijmrhs.com](http://www.ijmrhs.com).
- [46] Sülüker, K., Türkoğlu, N. “Birinci ve ikinci basamakta çalışan hemşirelerin yaşlı ayrımcılığına ilişkin tutumlarının karşılaştırılması”, *Turkish Journal of Science and Health*, 2(1), 166-175, 2021. <https://dergipark.org.tr/tr/pub/tfsd>.
- [47] Yılmaz, E., Özkan, S., “Hemşirelik öğrencilerinin yaşlı ayrımcılığına ilişkin tutumları”, *Maltepe Üniversitesi Hemşirelik Bilim ve Sanatı Dergisi*, 3(2), 36-53, 2010.
- [48] Elbi, H., Altan, S., Rahman, S., Cengiz Özyurt, B., Şahin, S., Çam, F.S., “Tıp fakültesi öğrencilerinin yaşlılara karşı tutumları”, *Turkish Journal of Geriatrics*, 18(4), 299-304, 2015. <http://geriatri.dergisi.org/abstract.php?lang=tr&id=912>.
- [49] Başer, G., Cingil, D., “Üniversite öğrencilerinin yaşlılara karşı tutumlarının değerlendirilmesi”, *Sağlık ve Toplum Dergisi*, 2(29), 79-85, 2019. <https://ssyv.org.tr/wp-content/uploads/2019/09/10-%C3%9Cniversite-%C3%96%C4%9Frencilerinin-Ya%C5%9F1%C4%B1lara-Kar%C5%9F%C4%B1-Tutumlar%C4%B1n%C4%B1n-De%C4%9Ferlendirilmesi.pdf>.
- [50] Özkul, M., Kalaycı, I., Atasoy, M., “Yaşlıların toplumsal ilişki kurma biçimleri: sorunlar ve imkânlar”, *Akademik Sosyal Araştırmalar Dergisi*, 37, 77-97, 2019. <https://doi.org/10.16990/SOBIDER.5051>.
- [51] Kalaycı, İ., Özkul, M., “Geleneksel kalabilsem modern olabilsem: modernleşme sürecinde yaşlılık deneyimleri”, *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, 8(18), 90-110, 2017. <https://doi.org/10.21076/vizyoner.308309>.