The Relationship between Ageism, Willingness to Care for Older Adults and Care Behaviors of Nursing Students: A Cross-Sectional Study

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ABSTRACT:

Purpose: This study was conducted to determine nursing student attitudes towards ageism, their willingness to care for older adults, their level of care quality perception, and to examine the relationships between them.

Material and Methods: This was a descriptive cross-sectional study. The study was conducted at four different universities in Turkiye. The population for the research consisted of fourth-year students studying in the nursing departments of four different universities in 2020 – 2021 academic year. Data were collected using the Student Information Form, Ageism Attitude Scale, Elderly Patient Care Inventory, and Caring Behaviors Inventory-24. In the data analysis, independent samples t-test, ANOVA and Spearman Correlation were used.

Results: Students had positive attitudes towards ageism. There were positive relationships between ageism with perception of care quality and willingness to care for older adults. It was determined that there was a positive and statistically advanced relationship between the willingness to care for the elderly and the attitude of ageism (r=0.48; p<0.001). It was determined that there was a positive and significant relationship (r=0.49; p<0.001) between age discrimination and the level of perception of quality of care. There was no statistically significant relationship between students' willingness to care for the elderly and their caring behaviors (r=0.18; p>0.05), but there was a significant relationship between the sub-dimension of commitment (r=0.24; p<0.05).

Conclusion: The increases in students' positive attitudes towards ageism, their perception of the quality of care and willingness to care for the elderly are positive in parallel.

Keywords: Ageism, attitude, behavior, nursing student, older adult

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INTRODUCTION

The elderly population is increasing rapidly due to the prolongation of life expectancy and decrease in fertility rates. While the elderly population was approximately 727 million worldwide in 2020, it is predicted that this number will reach 1.5 billion in 2050 (United Nations Department of Economic and Social Affairs, 2020). It is not clearly known to what extent these predictions will be affected due to the COVID-19 pandemic ongoing since 2019. The need for long-term care of the elderly arises due to reasons such as the increase in chronic diseases in old age, weakening of physical health, becoming semi- or fully dependent for daily living activities, and increases the demand for health institutions (Ayaz Alkaya and Birimoglu Okuyan, 2017; Lan et al., 2019). Nurses, who play an important role in the health care team, are the health personnel who communicate with the patient most frequently and they have responsibilities such as education, care, counseling, organizing studies, being a representative of change, and being a resource for

the individual with chronic disease. Knowledge, skills and beliefs of nursing students, as well as their attitudes towards aging and elderly individuals, affect the quality of health services provided to the elderly (Kaplan Serin and Tuluce, 2021). For this reason, the need for nurses who are willing to care for the elderly is critical (Lan et al., 2019).

The old age period is a natural part of the life process, so it is a period that every person will experience. Despite this, attitudes and behaviors towards the elderly may change due to the physiological, psychological, social and economic changes that occur in old age, in other words, age discrimination occurs (Vefikulucay Yilmaz and Terzioglu 2011). Having a negative attitude towards the elderly causes the elderly to adopt negative attitudes about themselves, reduces their self-confidence and causes them to assume a passive role in treatment. Thus, it affects the caregiver's willingness to provide care and the quality of care provided to the patient is negatively affected (Rachel and Cozort 2008).

Care and behavior in nursing are two intertwined concepts (Altiok et al., 2011). Care behaviors and attitudes in nursing affect the quality of the health service provided. One of the most important indicators of health service quality is patient satisfaction. Patients' perceptions of care behavior and their expectations from care are factors that affect patient satisfaction (Gul and Dinc, 2018). The perceptions of care behaviors of patients and nurses and their expectations from care may differ. In a study, it was reported that while giving effective care is important according to nurses, positive attitudes and knowledge of nurses are important according to patients (Von Essen and Sjoden, 2003). As a result of another study; It is reported that the availability of nurses is an important care behavior for patients and nurses (Zamanzadeh et al., 2010). The nurse's attitude and behavior towards the patient are among the most important factors affecting patient satisfaction (Buber and Baser, 2012; Kabaroglu et al., 2013).

Ageism is a multidimensional concept that includes different attitudes, prejudices, behaviors and actions shown to an elderly person only because of their age, for or against them (Bulut and Cilingir, 2016). At this point, the importance of positive attitudes towards ageism and the willingness to care for the elderly is notable. There are studies about ageism in the literature (Bozdogan Yesilot et al., 2020; Karadag et al., 2012; Ozdemir and Bilgili, 2016; Suluker and Turkoglu, 2021; Yardimci Gurel, 2019). Care behaviors and attitudes in nursing affect the quality of the health service provided (Gul and Dinc, 2018). It is of great importance to evaluate the attitudes towards ageism, willingness to care for the elderly, and to examine the effects on care behaviors among nursing students who are the nurses of the future. In this respect, it is thought that there is a need to evaluate care behaviors for the elderly of nursing students. The attitude towards the elderly may also affect the nurses' willingness to deal with the elderly. Although nursing students' attitudes towards ageism are positive, there are differences between their caregiving status and this attitude (Karadag et al., 2012). Although nursing students' attitudes towards the elderly are positive, it is recommended to examine how effective these attitudes can be in elderly care (McKinlay and Cowan 2003; Jang et al., 2019). In the literature, there are studies on nursing students' attitudes towards ageism and their willingness to care for the elderly (Hancerlioglu and Karadakovan, 2016; Vefikuluçay Yılmaz and Terzioğlu, 2011). However, no study has been found that examines the effects of nursing students' attitude towards ageism, their willingness to care for the elderly, and their care behaviors. For this reason, it is thought that investigating the reflection of attitude towards ageism and willingness to care for the patient within care behavior will be useful in terms of evaluating the quality of care.

MATERIAL and METHODS
Purpose and Type of the Study
The purpose of this study was to determine the attitudes of fourth-year nursing students towards ageism, their willingness to care for the elderly, their level of perception of quality of care and to examine the relationship between them. This study was designed as a descriptive cross-sectional study. The research questions for the study were "Is there a relationship between the willingness of fourth year nursing students to care for the elderly and their

attitudes towards ageism?", "Is there a relationship between willingness to care for the elderly, attitudes towards ageism, and levels of perception of quality of care with socio-demographic status of nursing fourth year students?", "Is there a relationship between fourth year nursing students' willingness to care for the elderly and their levels of perception of care quality?" and "Is there a relationship between the level of perception of quality of care and quality of care with age discrimination attitudes of fourth year nursing students?"

Sampling and Participant

The population for the research consisted of 550 fourth-year students studying in the nursing departments of four different universities in the 2020-2021 academic year, in the province of Istanbul. The sample size was calculated using the appropriate sampling method (5% margin of error, 80% power of the study). It was used the formula for the sample size for a mean estimate [$N=(SD/SE)^2$]. The sample comprised 15.8% of the population and the study was completed with 87 students. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guide was followed in the writing of the article.

Data Collection Tools

Data were collected using the Student Information Form, Ageism Attitude Scale (AAS), Elderly Patient Care Inventory (EPCI), and Caring Behaviors Inventory-24 (CBI-24).

Student Information Form: This form included questions about gender, place of birth, high school, number of siblings, living/not living with elderly people, and the desire to live with parents.

Ageism Attitude Scale (AAS): Attitudes towards ageism were evaluated using the Ageism Attitude Scale (AAS) (Vefikulucay Yilmaz and Terzioglu, 2011). The AAS consists of 23 items, 9 positive and 14 negative. Responses are graded on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Positive items are scored from 5, 4, 3, 2 and 1, respectively; negative items are scored from 1, 2, 3, 4 and 5, respectively. The scale

has three subdimensions of restricted elderly life (REL; 1st, 5th, 12th, 14th, 17th, 19th, 21st, 22nd, 23rd items), positive ageism (PA; 2nd, 4th, 6th, 7th, 8th, 9th, 13th, 20th items) and negative ageism (NA: 3rd, 10th, 11th, 15th, 16th, 18th items). The lowest and highest scores that can be obtained from the scale are 9-45 for REL; 8-40 for PA; and 6-30 for NA; while the total scores for the scale are 23-115. A high score indicates positive aspects of ageism, and low score indicates negative aspects. The Cronbach-α coefficient of the scale was 0.80 (Vefikulucay Yilmaz and Terzioglu, 2011). In this study, the Cronbach-α coefficient was determined as 0.76.

Elderly Patient Care Inventory (EPCI): Willingness to care for the elderly of nursing students was evaluated using the Elderly Patient Care Inventory (EPCI). The Cronbach-α coefficient of the scale was 0.70 (Aday and Campbell, 1995). The EPCI was translated into Turkish and confirmed to have structural validity and internal consistency (Hancerlioglu and Karadakovan, 2016). The scale consists of 12 items. Responses are graded on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The lowest score obtained from the scale is 12, and the highest score is 60. As the score obtained from the scale increases, the level of willingness to give care also increases. The Cronbach-α coefficient of the scale was 0.682 (Hancerlioglu and Karadakovan, 2016). In this study, the EPCI Cronbach-α coefficient was found to be 0.67. When correlations were examined between the items on the scale, it was determined that the 1st, 10th and 12th items had negative correlation compared to the other items on the scale. For this reason, calculations related to scale were repeated in this study. The overall score of the scale was calculated by reversing the scores for the 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th and 11th items, and statistical evaluations were made using this version of the scale. As a result of this evaluation, the Cronbach-α coefficient of the scale was determined as 0.74. In this context, it was shown that the scale is a usable scale. The obtained results were consistent in the expected direction.

Caring Behaviors Inventory-24 (CBI-24): The CBI-42

was developed to evaluate the nursing care process (Wolf et al., 1994). The CBI-42 was initially developed and then the short form CBI-24 was created (Wu et al., 2006). The CBI-24 was translated into Turkish and was confirmed to have structural validity and internal consistency. The Cronbach-α coefficient of the scale was 0.96 among nurses (Kursun and Kanan, 2012). The scale consists of 24 items. Responses are graded on a six-point Likert-type scale ranging from 1 (never) to 6 (always). The scale has four sub-dimensions of assurance (16th, 17th, 18th, 20th, 21st, 22nd, 23rd, 24th items), knowledge and skill (9th, 10th, 11th, 12th, 15th items), respect (1st, 3rd, 5th, 6th, 13th, 19th items) and connectedness (2nd, 4th, 7th, 8th, 14th items). The mean scores for the scale and for each sub-dimension are calculated. The lowest and highest scores that can be obtained from the scale and its sub-dimensions are 1-6. As the score obtained from the total and sub-dimensions of the scale increases, the level of perception of quality of care also increases. In this study, the Cronbach-α coefficient was determined as 0.97.

Data Collection

Students were reached through a phone application that nursing students use to communicate within the school. From here, students were first presented with an explanation text that gave information about the purpose and content of the research. Research forms were prepared electronically with the Google Form program. Then, the online link address for the Student Information Form, AAS, EPCI and CBI-24 was sent to the students. Students were asked to answer the questions on these forms completely. The answers from the students reached the researcher automatically through the system and were recorded by entering data into the computer.

Statistical Analysis

The SPSS (Statistical Package Social Sciences of Windows) version 22.0 software was used for statistical analysis. Data are presented as mean, standard deviation, median, minimum, maximum, percentage and number. Normal distribution of continuous variables was evaluated with the Shapiro Wilk-W test and the Kolmogorov Smirnov test. In the comparisons between two independent groups, the Independent Samples T test was used when the normal distribution condition was met, and the Mann Whitney U test was used if it was not. In the comparison of continuous variables in more than two independent groups, the ANOVA test was used when the normal distribution condition was met, and the Kruskal Wallis test was used when it was not. In determining the relationship between two quantitative variables, if the normal distribution condition was met, and Pearson correlation was not valid, then the Spearman correlation test was used. The internal consistency between the items on the scales was presented as Cronbach-α value. Statistical significance value was accepted as $p < 0.05$. Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guide was followed in the writing of the article.

Ethical Approval

Ethical approval was obtained from the scientific research ethics committee of the university (Number: 2019/195; Date: January 07, 2020) for the study. Institutional approval was obtained from the departments of nursing at the universities. Verbal and written consent was obtained from the nursing students.

RESULTS

Demographic Characteristics

A total of 87 students participated in the study. Of students, 82.8% were female, 78.2% were born in the city, 52.9% had three or more siblings, and 5.2% graduated from health vocational high school. Of participants, 50.6% had lived in the same house as elderly people before. It was determined that 63.6% of those living in the same house with elderly people lived together for three years or more. Of students, 68.9% did not want to live with their parents after starting a family. The reasons for not wanting to live with parents were the desire to be free for 76.7% and disruption to the order *in the house for 23.3*% (Table 1).

Findings about student attitudes towards ageism, willingness to care for the elderly, and care behaviors

The student AAS total score average was 87.30±8.30;

with values of 38.40±3.70 for the REL sub-dimension, 30.20±4.50 for the PA subscale, and 18.60±3.30 for the NA subscale. These findings revealed that student attitudes towards ageism were positive. The mean EPCI score of the students was found to be 39.56±5.88. The EPCI point average showed that the students had high level of willingness to care for the elderly. The average of the student CBI-24 total score was 5.10±0.0; with values of 5.20±0.70 for the assurance sub-dimension, 5.10±0.80 for knowledge and skill sub-dimension, 5.10±0.70 for the respect sub-dimension, and 5.10±0.70 for the connectedness sub-dimension. The scores obtained from the total and sub-dimensions of the scale revealed that the students had high level of care quality perception.

Table 1. Individual characteristics of students (n=87)

Individual characteristics		n	%
Gender	Female	72	82.8
	Male	15	17.2
Place of birth	Countryside	19	21.8
	City	68	78.2
Number of siblings	One	22	25.3
	Two	19	21.8
	Three or more	46	52.9
Graduated high school	Public high school	63	72.4
	Health vocational high school	5	5.7
	Other high schools	19	21.8
Lived in the same house as elderly people before	Yes	44	50.6
	No	43	49.4
If yes, how many years? (n=44)	One year	12	27.3
	Two year	4	9.1
	Three years or more	28	63.6
Willingness to live with parents after getting married	Yes	27	31.1
	No	60	68.9
Reason for unwillingness to live with parents (n=60)	Desire to stay free	46	76.7
	Deterioration of lifestyle at home	14	23.3

Correlation between student individual characteristics and attitudes towards ageism, willingness to care for the elderly, and care behaviors

The values related to the mean scores of AAS, EPCI and CBI-24 according to the individual characteristics of the students are shown in Table 2. No statistically significant difference was found between most of the individual characteristics and the mean scores for the AAS, EPCI and CBI-24 (p>0.001). When the students' willingness to live with their parents after starting a family was examined, the AAS (p<0.05) and PA sub-dimension (p<0.001) score averages of the students who answered yes were higher than the students who answered no, and this difference was statistically significant. When the reasons were compared for those who did not want to live with their parents after starting a family, those who stated the desire to be free had higher AAS score averages than those who stated that they wanted to be free, and this difference was statistically significant (p<0.05). The EPCI score average of the students with one or more siblings was higher than the students with two siblings, and this difference was statistically significant (p<0.05). When the situation of wanting to live with a parent after starting a family was examined, the students who answered yes had higher CBI-24, assurance sub-dimension, respect sub-dimension, and connectedness sub-dimension score averages

compared to other students, and this difference was statistically significant (p<0.05). There was no statistically significant difference in the mean scores for the knowledge and skill sub-dimension (p>0.05). When the reasons were compared for those who did not want to live with their parents after starting a family, there was no statistically significant difference between the mean scores of the CBI-24, assurance sub-dimension, knowledge and skill sub-dimension, and respectful sub-dimension (p>0.05). The connectedness sub-dimension mean score was found to be lower for students who stated their reason was the desire to be free, and this difference

was statistically significant (p<0.05).

Correlation between attitudes towards ageism, willingness to care for the elderly, and care behaviors

When the average scores of the students regarding the EPCI and AAS and the dimensions of the scale are examined, there were positive and statistically advanced relationships between EPCI with AAS, REL and NA sub-dimensions (p<0.001). There was a positive and statistically significant relationship between EPCI and PA sub-dimensions (p<0.05) (Table 3).

Table 2. AAS, EPCI and CBI-24 average scores of students according to their individual characteristics (n=87)

Individual characteristics		AAS Mean ± SD	EPCI Mean ± SD	CBI-24 Mean ± SD
Gender	Female	87.00±8.30	39.27±5.80	5.19±0.68
	Male	89.26±8.37	40.93±6.23	5.09±0.84
		t=0.960; p=0.34	t=-0.99; p=0.32	Z_{MWU}=-0.2; p=0.82
Place of birth	Countryside	87.21±8.83	39.21±6.60	5.03±0.85
	City	87.44±8.23	39.66±5.89	5.21±0.66
		t=-0.11; p=0.92	t=-0.29; p=0.77	Z_{MWU}=-0.5; p=0.60
Number of siblings	One	86.18±8.23	41.13±4.51	5.16±0.76
	Two	86.00±9.77	36.26±5.84	5.10±0.61
	Three or more	88.54±7.70	40.17±6.66	5.20±0.73
		F=0.9; p=0.39	F=4.33; **p=0.01**	χ^2=0.9; p=0.63
Graduated high school	Public high school	87.69±8.45	40.03±5.61	5.19±0.74
	Health vocational high school	88.00±7.48	39.80±5.01	5.43±0.56
	Other high schools	86.21±8.37	37.94±6.89	5.04±0.64
		F=0.25; p=0.78	F=0.91; p=0.40	χ^2=1.8; p=0.39
Lived in the same house with elderly people before	Yes	87.11±8.85	39.63±6.67	5.27±0.63
	No	87.67±7.82	39.48±5.03	5.06±0.77
		t=-0.31; p=0.75	t=0.11; p=0.90	Z_{MWU}=-1.02; p=0.30
Willingness to live with parents after getting married	Yes	90.82±7.44	41.89±6.43	5.44±0.66
	No	85.76±8.26	38.45±5.31	5.04±0.70
		t=2.75; **p=0.007**	t=2.45; p=0.10	Z_{MWU}=-2.7; **p=0.005**
Reason for unwillingness to live with parents (n=60)	Desire to stay free	87.08±8.33	38.97±5.10	5.12±0.69
	Deterioration of lifestyle at home	81.78±6.58	36.92±5.70	4.83±0.70
		t=2.18; **p=0.03**	t=1.27; p=0.24	Z_{MWU}=-16; p=0.10

SD: standard deviation, t: Independent samples t-test, F: ANOVA, Z_{MWU}: Mann Whitney U Test, χ^2: Kruskal Walls H-Test

Table 3. Correlation between student attitudes towards ageism and their willingness to care for the elderly

	EPCI	
	r	P
AAS	0.48	**<0.001**
REL	0.31	**<0.001**
PA	0.33	**0.002**
NA	0.35	**<0.001**

AAS: Ageism Attitude Scale, REL: Restricted Elderly Life subscale, PA: Positive Ageism subscale, NA: Negative Ageism subscale, EPCI: Elderly Patient Care Inventory. Data were analyzed with the Spearman's Rho test.

Table 4. Correlation between student care behaviors with their attitudes towards ageism and willingness to care for the elderly

	EPCI		AAS		REL		PA		NA	
	r_s	p	r_s	p	r_s	p	r_s	p	r_s	p
CBI-24	0.18	0.11	0.49	**<0.001**	0.48	**<0.001**	0.37	**<0.001**	0.18	0.08
Assurance subscale	0.16	0.14	0.41	**<0.001**	0.42	**<0.001**	0.27	**0.010**	0.19	0.06
Knowledge and Skill subscale	0.08	0.48	0.44	**<0.001**	0.41	**<0.001**	0.33	**0.002**	0.18	0.09
Respectful subscale	0.19	0.09	0.49	**<0.001**	0.49	**<0.001**	0.38	**<0.001**	0.15	0.14
Connectedness subscale	0.24	**0.03**	0.52	**<0.001**	0.48	**<0.001**	0.45	**<0.001**	0.15	0.15

AAS: Ageism Attitude Scale, REL: Restricted Elderly Life subscale, PA: Positive Ageism subscale, NA: Negative Ageism subscale, EPCI: Elderly Patient Care Inventory, CBI-24: Caring Behaviors Inventory-24, r_s: Spearman's Rho test

When the student EPCI and CBI-24 average scores are examined, there was a positive and statistically significant relationship between EPCI and the connectedness sub-dimension average scores of the CBI-24 only (p<0.05). When the relationship between student AAS and CBI-24 average scores is examined, positive and statistically significant relationships were found between CBI-24 with REL and PA sub-dimensions of AAS (p<0.05) (Table 4).

DISCUSSION

With the aging world population, the need for health personnel to care for the elderly is increasing. In order to meet this increasing need all around the world, the integration of various robot models into nursing care for the elderly has been considered (Baloglu et al., 2019). However, humans are a whole with physiological, social, spiritual and psychological dimensions, and the lack of one of these dimensions affects the other dimensions. Nursing care therefore requires a holistic approach (Bayindir and Bicer, 2019). Nurse attitudes towards the elderly, their

willingness to care for the elderly and their care behaviors are important for the quality of care for elderly patients (Baysal et al., 2019). In the literature, there are some studies showing the attitudes of nursing students towards ageism, factors affecting these attitudes, and willingness to work with elderly patients (Ayaz Alkaya and Birimoglu Okuyan, 2017; Carlson and Idvall, 2015; Chi et al., 2016; Darling et al., 2018). However, there is no study examining the relationship between the attitudes and willingness of nursing students with their care behaviors. Although the attitudes of nursing students towards the elderly are positive, it is recommended to examine how effective these attitudes are in the care of the elderly (Jang et al., 2019). For this reason, in this study, along with the attitudes of fourth-year nursing students towards ageism, their willingness to care for the elderly and their caring behaviors were also evaluated.

In studies examining nursing student attitudes towards ageism in the literature, the mean scores of AAS dimensions are in parallel with the findings of

this study. It is noteworthy that the mean AAS score of nursing students was between 68.6 and 87.2 in the literature (Altay and Aydin, 2015; Bozdogan Yesilot et al., 2020; Bulut and Cilingir, 2016; Kaplan Serin and Tuluce, 2021; Salin et al., 2020; Yardimci Gurel, 2019). In this study, student attitudes towards ageism were found to be higher than the literature. All students in the nursing department were evaluated in most of the studies. The class differences of students can change the attitude towards ageism (Olak and Tumer, 2018). It is thought that the high AAS score average in this study may be related to the increase in the education of the students who were in fourth year and, in this context, the increase in their theoretical knowledge and experience with patients.

In this study, no significant relationship was found between the mean scores of AAS and dimensions and the individual characteristics of the students. However, a significant correlation was found between AAS and PA sub-dimension mean scores between students who wanted to live with their parents after starting a family and those who did not. Most of the students stated that they did not want to live with their parents after starting a family, and they mostly cited their desire to be free as the reason for not wanting this. In our society, the family structure has transformed from an extended family structure to a nuclear family structure over time. In the study, the students' unwillingness to live with their parents after starting a family may be due to changes in the family structure of society. It was reported that more than half of nursing department students wanted to live with their parents after marriage, and those who did not want to live with their parents wanted to live alone (Bulut and Cilingir, 2016). It was shown that after graduation, students mostly do not want to live with family members (Yardimci Gurel, 2019). The fact that only fourth-year students were examined in this study may have affected the results.

The students' willingness to care for the elderly was at a high level with an average of 39.56±5.88 points. In another study, in which the same scale was used in the literature, the mean score for willingness of nursing students to care for the elderly was reported as 40.19±4.69 (Galzignato et al., 2021). The result of the study is consistent with the study using the same scale in the literature. In the literature, there are also studies that evaluated the willingness of nursing students to care for the elderly by using different data collection tools and revealed different results (Chi et al., 2016; Jang et al., 2019; Liu et al., 2022; Zhang et al., 2016).

A significant relationship was found between the individual characteristics of the students only for the number of siblings and their willingness to care for the elderly. The number of siblings is not questioned in the literature. However, it is reported that other characteristics do not significantly affect the willingness to care for elderly patients (Carlson and Idvall, 2015; Chi et al., 2016). The results of this study are compatible with the literature. In the literature it is seen that nursing students who spent time with the elderly, grew up with their grandparents, have more communication with the elderly, and want to live in the same house with the elderly have a higher level of willingness to care for. In addition, it is emphasized that students who are experienced in elder care have a higher level of willingness to care for the elderly (Chi et al., 2016; Dai et al., 2021; Galzignato et al., 2021; Jang et al., 2019; Zhang et al., 2016). In this study, no relationship was found between the fourth year nursing students living in the same house as elderly people and their willingness to care for the elderly. This difference between the results of the study and the literature may be due to the possibility that the students who spent time with the elderly are also experienced in elderly care. The students' level of care quality perception was found to be high. There was no study in the literature examining the relationship between nursing students' level of care quality perception and elderly care. In the study, no relationship was found between the individual characteristics of the students and the level of perception of quality of care. However, the scores for the CBI-24, assurance, respectful and connectedness sub-dimensions for students who wanted to live with their parents after starting a family were found to be higher than the scores for students who did not want to live with their parents after starting a family. The high level of perception of quality of care of students who wanted to live with their parents suggests that they can

provide quality care to the elderly. As a result of the study, the level of care quality perception of the students with a positive attitude towards ageism was also found to be high. The connectedness sub-dimension mean score on the CBI-24 for students who did not want to live with their parents after starting a family was expected to be lower than the average score of the students who did not want to live with their parents due to the disorder in the house. The average score for the connectedness sub-dimension of students who preferred not to live with parents due to wanting freedom was is higher than the other group. The respect for the elderly in our society, the acceptance of the elderly as the elders in the family and the importance given to the elderly may have affected this result.

In the literature, study could not be found evaluated the relationship between attitudes about ageism and willingness to care for the elderly. However, it was reported that students with a positive attitude towards the elderly are more willing to work with elderly patients and have higher willingness to care for the elderly (Chi et al., 2016; Galzignato et al., 2021; Jang et al., 2019; Zhang et al., 2016). The result of this study is compatible with the literature. The high level of care quality perception of students with positive ageism is important in terms of providing quality care to the increasing elderly population. There is no study in the literature examining the relationship between the attitudes about ageism and the perception of quality of care. However, it was predicted that the attitude of ageism is important in order for nursing students, who are the nurses of the future, to provide quality care to the increasing elderly population (Baysal et al., 2019; Jang et al., 2019; Rathnayake et al., 2016; Uysal et al., 2020). A significant relationship was found between the students' willingness to care for the elderly and the connectedness sub-dimension of CBI-24. There is no study in the literature examining the relationship between willingness to care for the elderly and caring behaviors. However, it was reported that nursing students who voluntarily serve the elderly have a higher level of willingness to care for the elderly (Chi et al., 2016). The connectedness sub-dimension of the CBI-24 includes items that reflect the individual's behaviors such as "sparing time for

the patient", "being patient and understanding with the patient" and "helping the patient's development". The care behaviors of individuals with high willingness to care for the elderly may also be affected in the clinical setting. However, it is thought that the connectedness sub-dimension in caring behaviors may reflect the volunteering of students for elder care. In this respect, the results of the study support the literature.

CONCLUSION

As a result of this study, it was determined that the students' attitudes towards the elderly were positive, and their willingness to care for the elderly and their level of perception of quality of care were high. The increase in students' positive attitudes towards ageism, their perception of the quality of care and their willingness to care for the elderly may be in parallel.

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Conflict of Interest

No conflict of interest has been declared by the authors.

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