

## Investigation of Professional Perceptions and Caring Behaviors of Nursing Students Gülendam HAKVERDİOĞLU YÖNT<sup>1</sup>, Adile KORHAN<sup>1</sup>, Kübra ASLAN<sup>1</sup>, Dilara BAYRAM<sup>1</sup>

<sup>1</sup>İzmir Tınaztepe Üniversitesi, Sağlık Bilimleri Fakültesi, Hemşirelik Bölümü, İzmir, Türkiye  
Gülendam HAKVERDİOĞLU YÖNT, ORCID No: 0000-0003-4781-6501, Adile KORHAN,  
ORCID No: 0009-0002-6899-5609, Kübra ASLAN, ORCID No: 0009-0002-1488-004810, Dilara BAYRAM,  
ORCID No: 0009-0000-7457-1939

### ARTICLE INFO

*3rd International 7th National  
Basic Nursing Care Congress*

Received : 12.06.2025  
Accepted : 14.11.2025

#### Keywords

Nursing Student, Nursing Care,  
Caring, Perception of  
Profession, Nursing Education

\* Corresponding Author  
g.h.yont@gmail.com

### ABSTRACT

**Purpose:** Nursing students' perceptions of the nursing profession are significantly affected by their nursing education. This study was conducted with descriptive and cross-sectional design to determine nursing students' perception of profession and caring behaviors.

**Methods:** The population of the study consisted of 186 students studying in the department of nursing in the spring semester of 2023-2024 academic year. A Socio-demographic Characteristics Form, the Perception of Nursing Profession Scale (PNPS), and the Caring Assessment Report Evaluation Q-Sort (CARE-Q) were used to collect the data. Since the data were not normally distributed, Mann-Whitney U test and Kruskal-Wallis test were run. Spearman's rho correlation analysis was used to assess the correlation between the subscales of the scales and the other variables.

**Results:** The results of the study indicated that the mean age of the students was 21.63 years and 41.4% of them were 2<sup>nd</sup>-year students. The total mean scores of the nursing students were 5.29±0.08 in CARE-Q and 92.89±11.66 in PNPS. No significant difference was found between the students' perceptions of the nursing profession and caring behaviors and their university year ( $p > 0.05$ ). The correlation analysis demonstrated a positive moderate correlation ( $r=0.50$ ) between CARE-Q and PNPS scores of the participants.

**Conclusion:** It was determined that the level of students' perception of the nursing profession affected their caring behaviors and they had high levels of professional perceptions and caring behaviors.

## Hemşirelik Öğrencilerinin Meslek Algısı ve Bakım Davranışlarının İncelenmesi

### MAKALE BİLGİSİ

*3. Uluslararası 7. Ulusal Temel  
Hemşirelik Bakımı Kongresi*

Geliş: 12.06.2025  
Kabul: 14.11.2025

#### Anahtar Kelimeler

Hemşirelik öğrencisi,  
Hemşirelik bakımı, Bakım,  
Meslek algısı, Hemşirelik  
eğitimi

\* Sorumlu Yazar  
g.h.yont@gmail.com

### ÖZ

**Amaç:** Hemşirelik öğrencilerinin hemşirelik mesleğine ilişkin algıları hemşirelik eğitiminden önemli ölçüde etkilenmektedir. Bu çalışma, hemşirelik öğrencilerinin meslek algılarını ve bakım verme davranışlarını belirlemek amacıyla tanımlayıcı ve kesitsel desende yapılmıştır.

**Yöntemler:** Araştırmanın evrenini 2023-2024 akademik yılı bahar döneminde hemşirelik bölümünde öğrenim gören 186 öğrenci oluşturdu. Verilerin toplanmasında Sosyo-demografik Özellikler Formu, Hemşirelik Meslek Algısı Ölçeği (PNPS) ve Bakım Verme Değerlendirme Raporu Q-Sort (CARE-Q) kullanılmıştır. Veriler normal dağılım göstermediği için Mann-Whitney U testi ve Kruskal-Wallis testi yapılmıştır. Ölçeklerin alt boyutları ile diğer değişkenler arasındaki korelasyonu değerlendirmek için Spearman's rho korelasyon analizi kullanılmıştır.

**Bulgular:** Öğrencilerin yaş ortalaması 21.63 ve %41.4'ü 2. sınıf öğrencisidir. Hemşirelik öğrencilerinin CARE-Q toplam puan ortalaması 5.29±0.08, PNPS toplam puan ortalaması 92.89±11.66'dır. Öğrencilerin hemşirelik mesleği ve bakım verme davranışlarına ilişkin algıları ile üniversite yılları arasında anlamlı bir fark bulunmamıştır ( $p > 0.05$ ). Bakım Verme Değerlendirme Raporu Q-Sort ve Hemşirelik Mesleği Algısı Ölçeği puanları arasında pozitif orta düzeyde bir korelasyon ( $r=0.50$ ) olduğu saptanmıştır.

**Sonuç:** Öğrencilerin hemşirelik mesleğini algılama düzeylerinin bakım verme davranışlarını etkilediği ve mesleki algı ve bakım verme davranışlarının olumlu yönde olduğu belirlenmiştir.

## INTRODUCTION

Nursing care is a multifaceted phenomenon rooted in the communication between the patient and the nurse. Consequently, nurses are expected to address their patients' most fundamental needs holistically (1). In earlier times, nursing was often seen as a symbol of compassion and devotion, with nurses described as assistants to physicians, expected to follow their orders. However, reforms initiated by Florence Nightingale in the 19th century spurred a gradual evolution and expansion of their roles. Today, nurses require knowledge, skills, and expertise to provide comprehensive care to individuals (2,3). They deliver holistic care across all segments of society through disease prevention, collaboration, and management (1). Historically, nursing has been held in high regard for its altruistic, noble, caring, and compassionate attributes (4), often leading individuals to pursue it as a virtuous calling. However, despite significant progress within the field, many nursing students still harbor negative views about the profession. Society's perception of nursing, encompassing beliefs, ideas, and impressions, plays a vital role in its professional value and advancement (5). Individuals who choose nursing must be aware of, acknowledge, integrate, and internalize the essence of the profession. Students who consciously and willingly select nursing are more likely to deliver effective and high-quality care. For a profession to thrive and evolve, its members need a strong will and positive outlook, and crucially, they must be passionate and productive in their roles (6).

While the perception of a profession differs across societies and refers to an individual's understanding or view of something (7), a study by Lindberg et al. (2020) found that students held positive perceptions of nursing and anticipated their future roles as interesting (8). In contrast, the results of another study involving midwives and nurses indicated that despite liking their profession, their overall perception of it was not favorable, and they expressed dissatisfaction (9). Studies on the perception of the nursing profession in Turkey have yielded diverse results. One national study indicated that roughly half of the students held a partially positive view of the profession (10). In contrast, another study found that 64% of students considered nursing an ideal profession, and 68% perceived the societal image of nursing as positive (11). Notably, practicing nurses were observed to have a favorable perception of the nursing profession's image and demonstrated high levels of caring behaviors (12). The attitudes of nursing students toward the profession offer insights into the quality of care they are likely to provide to patients in the future (5), and these attitudes can change over the course of their education (13).

Occupational identity is understood as an individual's perception of themselves in relation to a profession and its members, encompassing their beliefs, attitudes, and experiences. Positive professional perceptions among students are crucial as they influence motivation, self-confidence, satisfaction in their future healthcare careers, and contribute to their professional growth (14). The development of professional perception begins during education and impacts the quality of care delivered throughout one's professional life (15). Factors such as the discrepancies between theoretical education and clinical practice in nursing education, societal undervaluation of nurses' education and innovative skills, and diverse public opinions about the image of nursing all affect the formation of nursing students' professional identity (16). Given the significant impact of professional identity on nurses' care practices, analyzing the perceptions of future nursing students regarding the nursing profession is considered important. Related studies have generally indicated that students have a good perception of caregiving behaviors (17, 18, 19, 20, 21, 22). Within the **CARE-Q** subscales, the highest scores were observed in "trusting relationships," "monitors and follows," and "comforts," while the lowest scores were in the "anticipates" subscale (20). However, Petrou et al. (2017) noted that nursing students hold diverse perceptions of caregiving behaviors (23). It has been reported that students exhibit positive caring behaviors, particularly in physically-oriented aspects of care (24). These studies suggest variations in students' caring behaviors, highlighting the need to identify factors influencing these differences so that students can properly internalize caring behaviors.

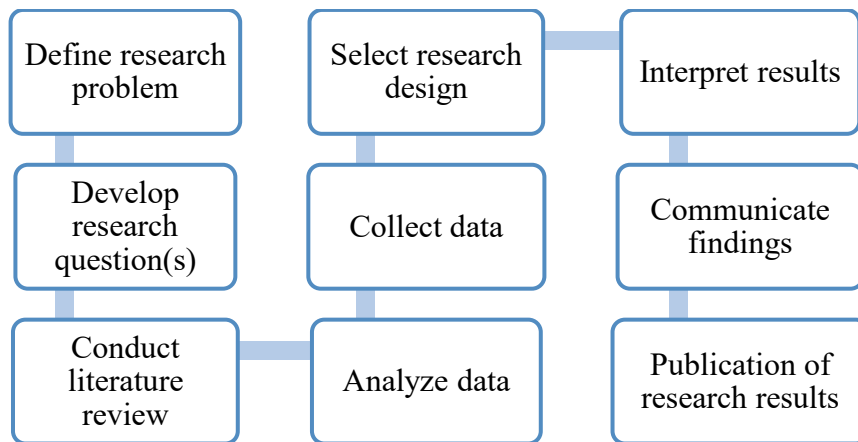
The importance of students' perceptions of both the profession and caregiving behaviors in nursing education, particularly in bridging the gap between theory and practice, is undeniable. It is believed that nursing students' perceptions of their profession as meaningful, valuable, and respected can directly influence their caregiving behaviors. Nursing students who internalize their profession and embrace human-centered values are expected to provide more effective, efficient, and ethical care. This study was designed as a descriptive, cross-sectional study to determine nursing students' perceptions of the profession and caregiving behaviors.

## MATERIAL VE METHOD

### Objective

The aim of this study was to determine the students' views on the qualifications of the nursing profession (intensive communication, use of technology, knowledge and skills, teamwork) and how they perceive the social status of the profession, and to identify their ability to exhibit caring behaviors such as planning the patient's care, managing care and treatment, focusing on the patient's care needs, using appropriate communication techniques, listening and informing to the patient, and helping the patient.

### Research process diagram



### Research Questions

- Is there a relationship between students' profession perceptions and care behaviors?
- Do students' positive profession perceptions positively influence their care behaviors?

### Inclusion Criteria

Nursing students in the 2nd, 3rd, and 4th years who agreed to participate in the study were included.

### Population and Sample

The population of the study consisted of 2nd, 3rd and 4th year students (186 students) studying at the Department of Nursing of a university located in the Aegean Region of Turkey. When the effect size was determined using Power Primer 0.5 with an average value of 0.5, Type I error level of 0.05, and power of 95% (power 0.95), the minimum sample size was determined as 150 as a result of the Power analysis performed using the G-Power software.

## Data Collection Methods

The researchers collected the data in three sessions by holding face-to-face interviews with the students. Written informed consent was obtained from the students. A Socio-demographic Characteristics Form, the Caring Assessment Report Evaluation Q-Sort (CARE-Q), and the Perception of Nursing Profession Scale (PNPS) were used to collect the data. The Institutional Review Board (IRB) approval date is March 28, 2024. Data were collected from March 29 to May 20, 2024.

**Socio-demographic Characteristics Form:** This form consists of questions about socio-demographic characteristics of the participants such as gender, age, family type, and cohabitants (12, 13, 17, 19).

**CARE-Q:** The scale was developed by Patricia Jean Larson. The Cronbach's alpha coefficient of the scale was found to be 0.97. It consists of 50 items and six subscales accessible (6 items), explains and facilitates (6 items), comforts (9 items), anticipates (5 items), trusting relationships (16 items), and monitors and follows (8 items)). Items of the scale are scored with 1 point to 7 points as never (1), almost never (2), rarely (3), sometimes (4), usually (5), almost always (6), and always (7). The individuals to whom the scale was applied scored each caring behavior from 1 (the least important caring behavior) to 7 (the most important caring behavior) according to the importance they perceived in line with their frequency of application (25). The scale total score is obtained by summing the item scores and dividing the result value by the number of items. The lowest and highest scores of the scale are 50 and 350, respectively. The total raw score is divided by the number of items (50 items) and score between 1-7 is obtained. (25). In our study, the Cronbach's alpha value for the CARE-Q scale was 0.97.

**PNPS:** The scale was developed by Eşer, Khorshid, and Denat (2006). This 5-point Likert-type scale consists of 22 items and two subscales (professional qualities and professional status). The Cronbach's alpha coefficient of the scale was found to be 0.83 (26). The statements used to determine the degree of perception are rated as strongly disagree (1 point), and strongly agree (5 points). The lowest and highest scores of the scale are 22 and 110, respectively. The lowest and highest scores of the "professional qualities" subscale (17 items) are 17 and 85, respectively. The lowest and highest scores of the "professional status" subscale (5 items) are 5 and 25, respectively. Higher scores indicate a positive perception of the profession. In our study, the Cronbach's alpha value for the Nursing Profession Perception Scale was 0.91.

## Data Analysis

Statistical analyses were performed using SPSS 26 software. The normality of data distribution was assessed using the Kolmogorov-Smirnov test. Descriptive analyses were presented as mean  $\pm$  standard deviation for normally distributed variables, and as median (interquartile range) and minimum-maximum values for non-normally distributed variables. Categorical variables related to sociodemographic and clinical characteristics were described using frequency and percentage values. The Mann-Whitney U test and Kruskal-Wallis test were used for data analysis. The correlation between the scales, their subscales and other variables was evaluated by Spearman's rho correlation analysis. Statistical significance level was accepted as  $p < 0.05$ .

## Ethical Considerations

Approval was obtained from the XX University Non-Interventional Ethics Committee of the related university to conduct the study (Approval no. MXKCX 20X4.X, dated 28.03.2024). After

the students included in the study were informed about the purpose and method of the study, their written consent was obtained for their participation.

## RESULTS AND DISCUSSION

The mean age of the students was  $21.63 \pm 1.37$  (min: 19, max: 26) and 80.6% were female. 64.5% of the students were graduates of Anatolian high school and 41.4% were second-year nursing students. Only 23.7% of the students had a chronic disease, 25.3% had been hospitalized before, 26.3% regularly used medication, and 46.2% provided nursing care to a family member/relative (Table 1).

**Table 1. Distribution of the Students' Descriptive Characteristics (n=186)**

Descriptive characteristics	n	%
<b>Age (<math>21.63 \pm 1.37</math>) (min: 19, max: 26)</b>		
<b>Gender</b>		
Women	150	80.6
Men	36	19.4
<b>Graduation school</b>		
Health vocational high school	29	15.6
Industrial vocational high school	11	5.9
Anatolian high school	120	64.5
Science high school	10	5.4
Regular high school	14	7.5
Associate Degree	2	1.1
<b>University Year</b>		
Second-year	77	41.4
Third-year	63	33.9
Fourth-year	46	24.7
<b>Employment status</b>		
Yes	33	17.7
No	153	82.3
<b>Presence of chronic disease</b>		
Yes	44	23.7
No	135	72.5
Don't know	7	3.8
<b>Regular medication use</b>		
Yes	49	26.3
No	137	73.7
<b>Hospitalization status</b>		
Yes	47	25.3
No	139	74.7
<b>Providing care to a family member/relative</b>		
Yes	86	46.2
No	100	53.8
<b>Total</b>	<b>186</b>	<b>100</b>

Moreover, 62.4% of the students stated that they preferred the profession willingly, 38.7% of them stated that they had positive thoughts about the nursing profession before starting their university education, and another 38.7% of them stated that their positive thoughts continued after their university education. It was found that the rate of those who had negative thoughts about the nursing profession before coming to the university (6.5%) increased after coming to the university (10.8%). Only 52.7% of the students stated that nursing care was important, while 19.9% stated that it was not important. In the clinical practice environment, 68.8% of the students stated that

they did not have negative experiences with patients and their relatives and 59.1% did not have negative experiences with nurses (Table 2).

**Table 2. Distribution of Students' Thoughts on Nursing Profession and Clinical Practices (n=186)**

	n	%
<b>Voluntary choice of profession</b>		
Yes	116	62.4
No	33	17.7
Partially	37	19.9
<b>Is care important in nursing</b>		
Yes	98	52.7
No	37	19.9
Partially	51	27.4
<b>Negative experience with the patient / patient's relatives in the clinic</b>		
Yes	58	31.2
No	128	68.8
<b>Negative experience with the nurse in the clinic</b>		
Yes	76	40.9
No	110	59.1
<b>Your thoughts about the nursing profession before choosing the profession</b>		
Positive	72	38.7
Partially positive	59	31.7
Undecided	33	17.7
Negative	12	6.5
Partially negative	10	5.4
<b>Your thoughts about the nursing profession after choosing the profession</b>		
Positive	72	38.7
Partially positive	53	28.5
Undecided	31	16.6
Negative	20	10.8
Partially negative	10	5.4
<b>Total</b>	<b>186</b>	<b>100</b>

The total mean score of the participants was 5.29±0.89 in the CARE-Q and 92.9±11.66 in the PNPS. Among the CARE-Q subscales, the highest mean score was detected in the monitors and follows (5.59±0.96) subscale and the lowest mean score was observed in the anticipates (5.01±1.27) subscale. Among the PNPS subscales, the mean score of professional qualities subscale was 74.45±9.5 and the mean score of professional status was 18.44±4.45 (Table 3).

**Table 3. Distribution of Mean Scores of CARE-Q and PNPS**

	Mean±SD	Min	Max
<b>CARE-Q</b>	5.29±0.89	1.28	7
Accessible	5.25±1.0	1.33	7
Explains and facilitates	5.03±1.23	1.17	7
Comforts	5.34±0.94	1.44	7
Anticipates	5.01±1.27	1	7
Trusting relationships	5.31±0.96	1.31	7
Monitors and follows	5.59±0.96	1.13	7
<b>PNPS</b>	92.89±11.66	28	110
Professional qualities	74.45±9.5	22	85
Professional status	18.44±4.45	6	25

The comparisons made between the descriptive characteristics of the students and the total scores of the scales indicated a statistically significant difference was found between the PNPS total score and gender ( $p=0.027$ ), regular drug use ( $p=0.013$ ), the status of providing nursing care to a family member/relative ( $p=0.031$ ), their thoughts about the nursing profession before choosing the profession ( $p=0.000$ ) and the importance of nursing care ( $p=0.026$ ). A statistically significant difference was found between the CARE-Q total score and the students' negative experience with the patient / patient relatives in the clinical practice environment ( $p=0.018$ ), their thoughts about the nursing profession before choosing the profession ( $p=0.000$ ) and after choosing the profession ( $p=0.005$ ) (Table 4).

**Table 4. Comparison of the Students' Scale Total Mean Scores According to Their Descriptive Characteristics**

	CARE-Q Mean±SD	PNPS Mean±SD
<b>Gender</b>		
Female	5.35 ±0.83	94.15±10.05
Male	5.06±1.07	87.69±15.96
	$Z= -1.875$ $p=0.061$	$Z= -2.217$ $p=0.027$
<b>Graduation School</b>		
Health vocational high school	5.18±1.16	92.14±14.78
Industrial vocational high school	5.12±0.66	90.45±6.18
Anatolian high school	5.26±0.83	93.01±11.89
Science high school	5.59±0.99	92.30±9.87
Regular high school	5.58±0.74	95.07±7.46
Associate Degree	6.50±0.00	98.50±4.95
	$H= 6.901$ $p=0.228$	$H= 3.497$ $p=0.624$
<b>University year</b>		
Second-year	5.27±0.82	94.03±10.25
Third-year	5.21±0.96	93.11±13.07
Fourth-year	5.43±0.89	90.72±11.80
	$H= 2.058$ $p=0.357$	$H= 2.268$ $p=0.322$
<b>Employment status</b>		
Yes	5.29±0.77	91.00±10.16
No	5.29±0.89	93.31±11.95
	$Z= -.401$ $p=0.688$	$Z=-1.345$ $p=0.179$
<b>Presence of chronic disease</b>		
Yes	5.25±0.77	92.00±7.62
No	5.33±0.93	93.24±12.88
Don't know	4.89±0.72	92.00±7.97
	$H= 2.508$ $p=0.285$	$H= 3.246$ $p=0.197$
<b>Regular medication use</b>		
Yes	5.18±0.83	90.59±8.99
No	5.33±0.91	93.72±12.41
	$Z= -1.129$ $p=0.259$	$Z= -2.489$ $p=0.013$
<b>Hospitalization</b>		
Yes	5.20±0.81	91.40±9.62
No	5.32±0.91	93.40±12.27
	$Z= -1.023$ $p=0.306$	$Z= -1.659$ $p=0.097$
<b>Providing care to a family member/relative</b>		
Yes	5.24±0.88	91.88±9.41
No	5.34±0.9	93.77±13.29
	$Z= -1.060$ $p=0.289$	$Z= -2.158$ $p=0.031$
<b>Negative experience with the patient / patient relatives in the clinic</b>		
Yes	5.01±1.01	89.95±14.54
No	5.42±0.8	94.23±9.87
	$Z= -2.376$ $p=0.018$	$Z= -1.790$ $p=0.073$
<b>Negative experience with the nurse in the clinic</b>		
Yes	5.24±0.88	92.30±12.31

No	5.33±0.89	93.31±11.23
	Z= -0.619 p=0.536	Z= -0.500 p=0.617
<b>Voluntary choice of profession</b>		
Yes	5.41±0.85	93.62±11.82
No	4.94±1.06	89.18±12.43
Partially	5.23±0.78	93.95±10.01
	H= 5.683 p=0.058	H= 3.637 p=0.162
<b>Your thoughts about the nursing profession before choosing the profession</b>		
Positive	5.64±0.78	95.96±9.37
Partially positive	5.14±0.85	93.83±13.06
Undecided	5.22±0.76	91.52±9.64
Negative	4.98±0.81	81.08±12.29
Very negative	4.33±1.28	84.10±11.45
	H= 22.600 p=0.000	H= 25.340 p=0.000
<b>Your thoughts about the nursing profession after choosing the profession</b>		
Positive	5.60±0.8	94.68±12.2
Partially positive	5.17±0.73	93.81±10.24
Undecided	5.22±0.8	89.35±11.69
Negative	4.93±1.09	92.10±10.89
Very negative	4.69±1.38	87.80±14.39
	H= 15.040 p=0.005	H= 8.190 p=0.085
<b>Is care important in nursing</b>		
Yes	5.44±0.84	94.13±11.84
No	5.02±0.96	88.43±11.47
Partially	5.20±0.87	93.76±10.86
	H= 5.799 p=0.055	H= 7.282 p=0.026

\*  $p < 0.05$  H= Kruskal Wallis; Z= Mann-Whitney U Test; Mean= Average; SD= Standard deviation

In the correlation analysis between the CARE-Q and PNPS total scores, a significant positive correlation was found at a moderate level ( $r=0.500$ ) (Table 5).

**Table 5. Correlation Analysis Between CARE-Q and PNPS**

Scales	CARE-Q Total Score	PNPS Total Score
CARE-Q Total Score	-	$r=0.500$ $p=0.000$
PNPS Total Score	$r=0.500$ $p=0.000$	-

\*  $p < 0.05$

The rise of technological and innovative developments in healthcare has reshaped the understanding of quality in health service delivery, leading to increasingly higher expectations from healthcare professionals. To provide quality service, these professionals are expected to possess professional power and competence, demonstrate professional behaviors, engage in continuous professional development, and exhibit expertise. A positive perception of their profession is crucial for enhancing the quality of the service they provide. Professional perception encompasses the beliefs, opinions, and understanding that students hold regarding their past and present educational experiences, as well as the image of the profession (27).

Human caring is fundamental to the nursing profession, which blends science and art in the direct care and treatment of patients. Negative perceptions of nursing or nurses can have detrimental effects on individuals who choose it as a career. Conversely, nursing students with positive perceptions of the profession are more likely to confidently fulfill their roles. A lack of readiness for the profession can lead to decreased self-confidence, impaired professional

communication with patients, and negative impacts on care management (28). A study by Marcinowicz et al. (2016) concluded that students' decision to enter nursing was linked to employment opportunities (29). However, Wilkes et al. (2015) found that nursing remains a preferred profession for both young and mature university entrants, offering a chance to help and care for others (30). Research in India suggested that job security and ease of entry could drive the preference for nursing (6). In Turkey, a study indicated that nursing was perceived as a low-status profession, dependent on doctors, and often chosen for financial reasons and job prospects (31). Elibol and Harmancı's (2017) study with nursing students revealed that a majority (91.8%) with family members in nursing (50.6%) had positive initial thoughts about the profession (32). New students' perceptions and thoughts about nursing are influenced by society's view and status of the profession. The present study found an increase in negative views about nursing after university education (10.8%) compared to before (6.5%), contrasting with Shabani and Osmanaga's (2021) finding of more positive perceptions in the first academic year (33). These results may be interpreted as an indication that students' professional perception is either resistant to change or that the educational process does not contribute as positively as expected. When the professional development of nursing and its perception by society over the years are evaluated, it is unfortunately not possible to speak of a static process. Similarly, although there have been positive changes in the professional education process of nursing over the years, it is also observed that many nurses working in clinical settings have varying educational backgrounds and graduation levels.

Practiced in various cultures and settings globally, the core aim of the nursing profession is to deliver high-quality nursing care. For the betterment of nursing practices and patient care, nurses must acknowledge and comprehend their professional values and harbor a positive perception of their field. A nurse's professional perception is influenced by factors such as education, culture, personal values, learned experiences, knowledge, and skills (34). As first-year students have limited exposure to the profession, their perceptions are initially molded by their personal experiences and societal viewpoints. However, as they learn and understand the profession and develop a professional lens during their education, their views can change over the years. Specifically, their positive and negative experiences in clinical settings, their communication with patients and healthcare colleagues, and ethical dilemmas they encounter play a significant role in shaping their professional perceptions. They must be aware of their own values alongside those of the patient, the institution, the profession, and society. Interestingly, the current study revealed that first-year students held more positive perceptions of the profession.

Students' perceptions of their profession are shaped throughout their education and tend to evolve over the years. These changes can be attributed to the fact that students often choose their university during adolescence, lacking extensive knowledge and experience about various professions, and may initially favor professions based on family and community perceptions. A recent qualitative study by Bozkul et al. (2022) reported that nursing students did not perceive nursing as a highly respected profession in society, although many stated their families viewed it positively, often due to having a healthcare professional within the family or close circle, which influenced their perspective (35). To cultivate qualified and professional nurses, it is crucial to foster a positive perception of their profession among nursing students during their education (36). Educators and mentors play a vital role in helping students develop a positive professional perception over time and learn quality patient care and caring behaviors, particularly in clinical practice. To deliver humane and quality care, nurses must translate theories into practice, identify and investigate issues arising from this practice, and develop theoretical standards. In this regard, the nursing education curriculum should be comprehensive enough to develop students' caring behaviors and their ability to provide quality patient care, effectively preparing them for the profession (37).

The level of education required to become a professional nurse varies from country to country (34). Nursing education consists of complementary theoretical and clinical practices and these practices constitute an important part of nursing education. During clinical practice, students develop professional competence, empathy, clinical decision-making and the ability to work with other team members during care delivery (38). The clinical practice environment and the healthcare team involved in education as from the first year may positively or negatively affect students' perceptions of their profession and care practices. In the present study, it was found that students (31.2%) had negative experiences with patients and their relatives and nurses (40.9%) during clinical practice. These negative experiences negatively affect students' perceptions of the profession and their caregiving behaviors. Nurses are active members of interdisciplinary groups. Their role in the healthcare team is to lead the care of the patient and family. In order for nursing students to exhibit quality caring behaviors, they need to have a positive perception of profession, knowledge, communication skills, and competence (37).

The students in this study demonstrated good average scores on the Perception of Nursing Profession Scale (PNPS) ( $92.9 \pm 11.66$ ), with the professional qualities subscale scoring  $74.45 \pm 9.5$  and the professional status subscale scoring  $18.44 \pm 4.45$ . The total mean score on the CARE-Q was  $5.29 \pm 0.89$ , with the "monitors and follows" subscale receiving the highest mean score ( $5.59 \pm 0.96$ ) and the "anticipates" subscale the lowest ( $5.01 \pm 1.27$ ). International literature reports generally positive perceptions of the nursing profession, often seen as an opportunity for service to humanity, personal growth, and economic and job security (7, 29, 39, 40). Similarly, an examination of national studies revealed high levels of professional perception among nursing students (41, 42). However, some other national studies indicated that nursing was viewed as a low-status profession dependent on doctors, sometimes chosen primarily for financial motivation and job opportunities (31).

In nursing education, it is important that students are informed about the purpose of existence of nursing, professional roles, professional values, ethical principles and the importance of nursing care for patients and their families. For this purpose, the theoretical and practical knowledge of students should be constantly updated and they should be motivated to be a better person and nurse in clinical Practice (37).

The negative perception of nursing as a career is influenced by the public image of nursing/nurses and this perception is recognized as an ongoing barrier to the recruitment and retention of nurses (43). The status of the nursing profession, its education, and its perception by students and society are related to the development level and health system of countries. Studies conducted in Türkiye have indicated that the image of nursing is perceived at a moderate level by the society (44,45). The perception of the society affects the image of the nursing profession, the professional position of nursing and the preference of nursing by students and is also one of the factors that determine students' decisions to continue or leave nursing education (27,46). Besides the perception of the community, the perception of family members/relatives is also thought to be important. In the present study, it was determined that there was a significant correlation ( $p=0.031$ ) between the status of providing nursing care to a family member/relative and the perception of the profession, and the perception of profession was more positive in students who did not provide care.

The study revealed a significant correlation between students' perception of the nursing profession and their gender ( $p=.027$ ), with female students demonstrating a more positive perception compared to their male peers. This contrasts with the findings of Shabani and Osmanaga (2021), who reported a positive overall perception among students but no significant correlation with gender (33). Considering the historical evolution of nursing, its focus on care, its historical ties to women, and its ongoing perception as a predominantly female profession are likely factors influencing the perception of the profession and the perceived importance of care. Although there was no statistically significant difference between students' willingness to choose

the nursing profession and their caregiving behaviors and perception levels of the nursing profession ( $p < 0.001$ ), it is noteworthy that the mean scores of the students who willingly chose the profession were higher. Nursing is a profession that should be pursued with intention and internalization. It is believed that adopting professional values starting from the years of education will have a positive impact on both caregiving behaviors and professional perception.

A positive moderately significant correlation ( $r = 0.502$ ) was found between the CARE-Q and the PNPS. In their study, Grinberg and Sela (2022) determined that there was a directly proportional correlation between the nursing image perceived by nurses and quality care (47). Another study reported that most of nursing graduates were reluctant to participate in bedside nursing and those who participated in this nursing type did not have the positive attitude towards the profession (48). Nursing care, which includes originality and has many dimensions, is affected by many social, political, economic and institutional factors as well as the professional and individual characteristics of nurses. Understanding the concept of nursing care and its philosophy is very important in terms of giving up practices that are not included in the concept of care (49). Therefore, for the future of the nursing profession, it is important that nursing students are well-equipped, positive and able to provide quality care (41).

The present study found a statistically significant difference ( $p = 0.018$ ) in the total CARE-Q scores of students based on whether they had a negative experience with a patient or a relative in the clinical practice setting. Students who reported a negative experience had lower average CARE-Q scores. Clinical practices are essential in nursing education for students to transition from theoretical knowledge to practical application and to develop professionalism. Through these experiences, students acquire vital clinical skills such as self-sufficiency, communication, decision-making, and teamwork, which are necessary for their professional development. However, negative experiences during clinical practice can undermine students' success and negatively influence their perception of the profession. Furthermore, such experiences can increase feelings of professional worthlessness, potentially leading to hopelessness and burnout in their careers after graduation.

It can be useful to introduce the nursing profession to the society and organize seminars in order for societies to perceive the nursing profession correctly. Thus, young people who are affected by the perception of the society can make a conscious choice of profession. The choice of the nursing profession as the last option, not working as a nurse after graduation or being seen as a means of changing classes may cause students not to want to fulfill their caring behaviors and roles in the clinical practice. In the light of all these factors, it is recommended that evaluations should be made with prospective studies starting from the education.

## CONCLUSION AND RECOMMENDATIONS

This study revealed that students' perception levels about the nursing profession affect their caregiving behaviors. The nursing students' perceptions of the nursing profession were positive and this situation positively affected the planning and management of patient care. Students' perceptions of the status of the profession (nursing being a respected profession in the society, being a profession appreciated by the society, and being a profession respected by other health professions) were more negative than the qualifications of the profession. The scores of the students on the explains and facilitates and anticipates subscales of CARE-Q were lower than scores of the other subscales. They had difficulty in informing the patient about the medical treatment and situation in the explains and facilitates subscale and in including the patients and their family in the care process in the anticipates subscale.

The nursing students' perception of profession and caring behaviors can be affected by their professional education, professional values, clinical practice environments and the perception of

the nursing profession by the family/society. Having positive perceptions of students about the nursing profession and indirectly changing their caring behaviors in a positive way requires nursing to be stronger and more visible in health institutions. This can be possible through continuous education on an individual and social basis and by nurses making better use of strategic positions such as case managers, nurse educators or specialist nurses and elevating their professionalism levels, thus making nursing care more visible in reality.

Incorporating the concept of care, which constitutes the essence of nursing, more extensively into nursing education curricula, discussing caring behaviors with students, conduct case studies, provide practical courses, facilitate role model observations, share patient stories, and engage in ethical discussions may support the internalization of care.

### Acknowledgements

We would like to thank all the participants who agreed to participate in the study.

### REFERENCES

1. Ambushe SA, Awoke N, Demissie BW, Tekalign T. Holistic nursing care practice and associated factors among nurses in public hospitals of Wolaita zone, South Ethiopia. *BMC Nurs.* 2023;18-22(1):390. <https://doi.org/10.1186/s12912-023-01517-0>
2. Kumar A, Kaur S, Singh H, Kaur G, Rani N, Diksha et al. Student nurses' perception about nursing profession: a comparative approach. *International Journal of Science and Healthcare Research.* 2021;6(3):149-53. <https://doi.org/10.52403/ijshr.20210701>
3. Turkowski Y, Turkowski V. Florence Nightingale (1820-1910): The founder of modern nursing. 2024; 5:16(8), e66192. doi: 10.7759/cureus.66192. <https://doi.org/10.7759/cureus.66192>
4. Avraham R, Wacht O, Yaffe E, Grinstein-Cohen, O. Choosing a nursing career during a global health event: A repeated cross-sectional study. *Nurse Educ.* 2023;48(4):116-21. <https://doi.org/10.1097/NNE.0000000000001392>
5. Roshangar F, Soheil A, Moghbeli G, Wiseman T, Feizollahzadeh H, Gilani N. Iranian nurses' perception of the public image of nursing and its association with their quality of working life. *Nurs Open.* 2021;8(6):3441-51. <https://doi.org/10.1002/nop2.892>
6. Swarna S. Nursing students perception towards profession and future intentions. *IOSR Journal of Nursing and Health Science (IOSR-JNHS).* 2015;4(5): 30-4. <https://doi.org/10.9790/1959-04513034>
7. Jothishanugam A, Mohammed A, Hamid HIAA, Ali MAA. Perception of nursing students about nursing profession. *Innovare Journal of Health Sciences.* 2019; 7(2):1-4.
8. Lindberg M, Carlsson M, Engström M, Kristofferzon ML, Skytt B. Nursing students' expectations for their future profession and motivating factors-A longitudinal descriptive study from Sweden. *Nurse Educ Today.* 2020;84:1-6. <https://doi.org/10.1016/j.nedt.2019.104218>
9. Taşkın Yılmaz F, Tiryaki Şen H, Demirkaya F. Hemşirelerin ve ebelerin mesleki algıları, beklentileri. *Sağlık ve Hemşirelik Yönetimi Dergisi.* 2014;3(1):130-39. <https://doi.org/10.5222/SHYD.2014.130>
10. Beydağ K, Gündüz A, Gök Özer F. Sağlık yüksekokulu öğrencilerinin eğitimlerine ve mesleklerine bakış açıları, meslekten beklentileri. *Pamukkale Tıp Dergisi.* 2008;1(3): 137-42.
11. Andsoy II, Güngör T, Bayburtluoğlu T. Karabük üniversitesi sağlık yüksekokulu öğrencilerinin hemşireliği tercih etme nedenleri ve mesleğin geleceği ile ilgili görüşleri. *Balıkesir Sağlık Bilimleri Dergisi.* 2012;1(1):124-30.

12. Efil S, Balaban Şahin S, Yarış Z. Nurses' images of the nursing profession and their caring behaviors. *J Educ Res Nurs*. 2022;19(4):416-21. <https://doi.org/10.5152/jern.2022.97992>
13. Neumbe IM, Ssenyonga L, Soita DJ, Iramiot JS, Nekaka R. Attitudes and perceptions of undergraduate nursing students towards the nursing profession. *PLoS ONE*. 2023; 18(7): e0280700. <https://doi.org/10.1371/journal.pone.0280700>
14. Cerit B, Çoşkun S. The effect of professional motivation level of nursing students on their professional perception. *Dokuz Eylül University, Faculty of Nursing E-Journal*. 2018;11(4):283-89.
15. Dimitriadou M, Papastavrou E, Efstathiou G, Theodorou M. Baccalaureate nursing students' perceptions of learning and supervision in the clinical environment. *Nursing and Health Sciences*. 2015;17(2):236-42. <https://doi.org/10.1111/nhs.12174>
16. Hoeve Y, Jansen G, Roodbol P. The nursing profession: public image, self-concept and professional identity. *J Adv Nurs*. 2014;70(2):295–309. <https://doi.org/10.1111/jan.12177>
17. Turk G, Adana F, Erol F, Akyil RC, Taskiran N. The reasons for choosing the career of the nursing students and their perceptions of care behaviours. *Gumushane University Journal of Health Sciences*. 2018;7(3):1-10.
18. Birimoglu C, Ayaz S. Nursing students' perceptions of caring behaviors. *Hacettepe University Journal of Nursing*. 2015;2(3):40-8.
19. Konuk T, Tanyar D. Investigation of nursing students' perception of caring behaviors. *J Caring Sci*. 2019;8(4):191-97. <https://doi.org/10.15171/jcs.2019.027>
20. Karaman F, Yerebakan A, Çakmak S. Nursing Students' Perceptions of Their Caring Behaviors and The Factors Affecting Their Perceptions. *Bangladesh Journal of Medical Science*. 2022;21(03):639-44. <https://doi.org/10.3329/bjms.v21i3.59579>
21. Tanyer D, Gözütok Konuk T. Investigation of nursing students' perception of caring behaviors. *J Caring Sci*. 2019;8(4):191-97. <http://doi.org/doi:10.15171/jcs.2019.027>
22. Erzincanlı S, Yuksel A. Analysis of attitudes and behaviors of nursing students towards care-focused nurse-patient interaction in terms of some variables. *Anatolian Journal of Nursing and Health Sciences*. 2018;21(1):10-7.
23. Petrou A, Sakellari E, Psychogiou M, Karassavidis S, Imbrahimet S, Savvidis G, Sapountzi-Krepia D. Nursing students' perceptions of caring: a qualitative approach. *Int J Caring Sci*. 2017;10(3):1148-57. <https://doi.org/10.15452/cejnm.2021.12.0005>
24. Labrague LJ, McEnroe-Petitte DM, Papathanasiou IV, Edet OB, Arulappan J. Impact of instructors' caring on students' perceptions of their own caring behaviors. *Journal of Nursing Scholarship*. 2015;47(4):338-46. <https://doi.org/10.1111/jnu.12139>
25. Eskimez Z, Acaroğlu R. Validity and reliability of the turkish care assessment scale. *Cukurova Medical Journal*. 2019;44(4):1172-80. <https://doi.org/10.17826/cumj.496287>
26. Eşer İ, Khorshid L, Denat Y. Validity and reliability study of the perception scale of nursing profession. *Çınar Journal*. 2006;10(1):31-9. <https://doi.org/10.56150/tjhs.1187323>
27. Ingwu JA, Ohaeri BM, Iroka OL. The professional image of nursing as perceived by nurses working in tertiary hospitals Enugu, Southeast Nigeria. *Afr J Health Nurs Midwifery*. 2016;4(1):595-602.
28. Köse Tosunöz İ. Professional readiness perceptions and causes of professional concerns of senior nursing students: A descriptive and cross-sectional study in Turkey. *Teach Learn Nurs*. 2024;19:385-89. <https://doi.org/10.1016/j.teln.2024.06.015>

29. Marcinowicz L, Owłasiuk A, Slusarska B, Zarzycka D, Pawlikowska T. Choice and perception of the nursing profession from the perspective of Polish nursing students: a focus group study. *BMC Med Educ.* 2016;16(1):243. <https://doi.org/10.1186/s12909-016-0765-3>
30. Wilkes L, Cowin L, Johnson M. The reasons students choose to undertake a nursing degree. *Collegian.* 2015;22(3):259-65. <https://doi.org/10.1016/j.colegn.2014.01.003>
31. Başkale H, Serçekuş P. Nursing as career choice: perceptions of Turkish nursing students. *Contemp Nurse.* 2015;51(1):5-15. <http://doi.org/10.1080/10376178.2015.1025469>
32. Elibol E, Harmanlı AK. Reasons nursing students choose the nursing profession and their nursing image perceptions: a survey study. *Nursing Practice Today.* 2017;4(2): 67-78.
33. Shabani Z, Osmanaga F. Students' perceptions about the profession of nursing. *Athens Journal of Health Medical Sciences.* 2021;8(2):135-48. <https://doi.org/10.30958/ajhms.8-2-4>
34. Sibandze BT, Scafile KN. Among nurses, how does education level impact professional values? A systematic review. *Int Nurs Rev.* 2018;65:65-77. <https://doi.org/10.1111/inr.12390>
35. Bozkul G, Karakul A, Andı S, Düzkaya Sönmez D, Eren Barış N, Çamcı G. mesleğin başında hemşirelik öğrencilerinin mesleki algıları: nitel bir çalışma. *Samsun Sağlık Bilimleri Dergisi.* 2022;7(2):587-602. <https://doi.org/10.47115/jshs.1149130>
36. Dimitriadou M, Papastavrou E, Efstathiou G, Theodorou M. Baccalaureate nursing students' perceptions of learning and supervision in the clinical environment. *Nurs Health Sci.* 2015;17(2):236-42. <https://doi.org/10.1111/nhs.12174>
37. Pérez-Vergara M, Cañas-Lopera EM, Ortiz JA, Rojas NA, Laverde-Contreras OL, Sánchez-Herrera B. Nursing care at the service of life: A model including charity, quality, and leadership. *Nurs Forum.* 2021;56(4):844-48. <https://doi.org/10.1111/nuf.12624>
38. Şendir M, Çelik S, Dişsiz M, Güney R, Açıksoz S, Kolcu M et al. A new approach to nursing education and practice: integration of nursing education and practice. *G.O.P. Taksim E.A.H. JAREN.* 2018;4(2):92-9. <https://doi.org/10.5222/jaren.2018.092>
39. Zulu C. A survey on perception of the image of the nursing profession in Zambia by nursing students. *Unified Journal of Nursing and Midwifery.* 2015;1(1):1-14.
40. Olubiyi SK, Fatimo IO, Omotoriogun M, Obafemi GF, Oyewumi Z. Students perception and choice of nursing profession as a career in Kwara State, Nigeria. *Islamic University Multidisciplinary Journal IUMJ.* 2020;7(1)
41. Yılmaz AA, Ilce A, Can Cicek S, Yuzden GE, Yigit U. The effect of a career activity on the students' perception of the nursing profession and their career plan: A single-group experimental study. *Nurse Educ Today.* 2016;39:176-80. <https://doi.org/10.1016/j.nedt.2016.02.001>
42. Ünsal A, Güven ŞD. Examining the perception of nursing students about the nursing profession. *IBAD Social Sciences Journal, Special Issue for the 100 th Anniversary of the National Struggle.* 2020;52-61. <https://doi.org/10.21733/ibad.756180>
43. Milisen K, De Busser T, Kayaert A, Abraham I, de Casterlé BD. The evolving professional nursing self-image of students in baccalaureate programs: A cross-sectional survey. *Int J Nurs Stud.* 2010;47(6):688-98. <https://doi.org/10.1016/j.ijnurstu.2009.11.008>
44. Özdelikara A, Boğa N, Çayan N. The image of nursing according to nursing students and non-health students. *Journal of Düzce University Health Sciences Institute.* 2015; 5(2):1-5.
45. Sis Çelik A, Pasinlioğlu T, Kocabeyoğlu T, Çetin S. Determining the image of the nursing profession in society. *F N Hem Derg.* 2013;21(3):147-53.

46. Elewa AH, Abed F. Nursing profession as perceived by staff nurses and its relation to their career commitment at different hospitals. *International Journal of Nursing Didactics*. 2017;7(1):13-22.
47. Grinberg K, Sela Y. Perception of the image of the nursing profession and its relationship with quality of care. *BMC Nurs*. 2022;21(1):57. <https://doi.org/10.1186/s12912-022-00830-4>
48. Patidar AB, Kaur Jasbir, Sharma SK, Sharma N. Future nurses' perception towards profession and carrier plans: A cross sectional survey in state Punjab. *Nursing and Midwifery Research Journal*. 2011;7(4):175-85. <https://doi.org/10.1177/0974150X20110404>
49. Akman Ö, Öztürk C. Care behaviors of nursing students and the influencing factors: a comparative study. *IGUSABDER*. 2021;14:182-200. <https://doi.org/10.38079/igusabder.867994>