

# Caring Behaviour Perceived by Nursing Students; Gender Perspective

## Hemşirelik Öğrencilerinin Algıladığı Bakım Davranışı; Cinsiyet Perspektifi

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### ABSTRACT

**Objective:** This study aims to determine the care perceptions of nursing students according to the gender perspective.

**Methods:** This study is a cross-sectional, quantitative, and descriptive comparative study. In this study, the total sample of nursing students (n=495), consisting of Turkish students (n=334) and International students (n=161) from class/year one to four in the Faculty of Nursing were analysed. The data of the study were collected using the Student Assessment Forms and the Care Behavior Inventory and evaluated by IBM SPSS version 22.0. Nurses' and patients' caring behavior perceived by nursing students and other related factors were compared using both inferential and descriptive statistics.

**Results:** In this study, 69.9% of the participants were female, 30.1% were male. While the total score of the female nursing students was 5.23±0.69, the score of the male nursing students was 5.18±0.81. The difference between the total and subgroups' score of the students according to their gender was not statistically significant. But, there is significant difference in the sub-dimensions of the scale according to the gender of the participants with some characteristics.

**Conclusion:** In this study, no significant difference was found between gender and perception of care in the scale total mean score of the participants. However, when some subgroups were analyzed according to gender, significant differences were found. In addition, the mean scores of female students were higher than those of male students.

**Keywords:** Nursing, Nursing Care, Nursing Students, Gender

### ÖZ

**Amaç:** Bu çalışmanın amacı hemşirelik öğrencilerinin cinsiyete göre bakım algılarını belirlemektir.

**Yöntemler:** Bu çalışma kesitsel, nicel ve tanımlayıcı karşılaştırmalı bir çalışmadır. Bu çalışmada Hemşirelik Fakültesi'nde birinci sınıftan dördüncü sınıfa kadar öğrenim gören Türk öğrenciler (n=334) ve uluslararası öğrencilerden (n=161) oluşan toplam hemşirelik öğrencisi (n=495) örnekleme analiz edildi. Çalışmanın verileri Öğrenci Değerlendirme Formları ve Bakım Davranışı Envanteri kullanılarak toplandı ve IBM SPSS sürüm 22.0 ile değerlendirildi. Hemşirelik öğrencileri tarafından algılanan hemşirelerin ve hastaların bakım davranışları ve diğer ilgili faktörler hem çıkarımsal hem de tanımlayıcı istatistikler kullanılarak karşılaştırıldı.

**Bulgular:** Çalışmada katılımcıların %69,9'u kadın, %30,1'i erkektir. Kadın hemşirelik öğrencilerinin toplam puanı 5,23±0,69 iken, erkek hemşirelik öğrencilerinin puanı 5,18±0,81'dir. Öğrencilerin cinsiyetlerine göre toplam ve alt grupların puanları arasındaki fark istatistiksel olarak anlamlı değildir. Ancak bazı özellikler açısından katılımcıların cinsiyetlerine göre ölçeğin alt boyutlarında anlamlı fark vardır.

**Sonuç:** Bu çalışmada katılımcıların ölçek toplam puan ortalamalarında cinsiyet ve bakım algısı arasında anlamlı bir fark bulunmamıştır. Ancak bazı alt gruplar cinsiyete göre incelendiğinde anlamlı farklılıklar bulunmuştur. Ayrıca kadın öğrencilerin puan ortalamaları erkek öğrencilere göre daha yüksektir.

**Anahtar Kelimeler:** Hemşirelik, Hemşirelik Bakımı, Hemşirelik Öğrencileri, Cinsiyet



## INTRODUCTION

The concept of care is accepted as the basic element of nursing by nurses, who constitute the most crowded members of the health system.<sup>1</sup> It is believed that the care approach that nurses apply to their patients improves the health and well-being of patients and facilitates health promotion. Care is a difficult concept to define as it is a prime example of emotion, thought, and action that combines to provide both physical and emotional comfort.<sup>2</sup> When the concept of care is mentioned, nurses who provide professional care are the leading people who provide care as a profession. Since the emergence of humanity, nursing has changed and developed in parallel with the developing living conditions to improve and maintain health.<sup>3</sup> However, the only thing that does not change in the field of nursing is the concept of care giving. In this context, nursing care is the most basic role unique to nursing.<sup>4</sup> Nursing care is a basic structure founded on protecting and improving the health of individuals and curing existing diseases. Nursing care has a broad scope that includes feelings, moral values, professional knowledge, and skills. Roach has specified and explained the features of care as five "C". According to Roach, these features are Compassion, Competence, Confidence, Conscience, and Commitment.<sup>5</sup>

Although the concept of care does not contain a gender expression, it has historically been identified with the female gender. The nursing profession and nursing care which are one of these jobs is also known as a female profession in most societies.<sup>6</sup> Contrary to this popular belief, nurses have always been men throughout history, starting with helping the sick, injured, and destitute. During the Byzantine and Roman periods, male nurses were responsible for the health of especially knights and soldiers in the Middle Ages before that. They carried out the first organized patient care services in monasteries with men called "deacons" and women called "deaconesses".<sup>7</sup> During the American Civil War (1861), female nurses took charge alongside male nurses and took care of the wounded. After the end of the war, women began to become more interested in health and medicine. With the establishment of the Nursing Unions consisting of women in the US Army in 1941, the nursing profession has started to be completely dominated by women.<sup>8</sup> Florence Nightingale (1820-1910), who experienced this transformation in Europe during the First World War, became the most important figure of nurses, and nursing began to be perceived as a female profession. Thus, nursing has become an area dominated by women in social perception.<sup>9</sup>

Occupational distinctions and differences related to gender roles have persisted throughout history in every society around the world. However, in the contemporary era, gender discrimination in the nursing profession has disappeared, and men have the opportunity to freely practice this profession.<sup>10</sup>

Although there are many studies in the literature on how care is perceived by nursing students, only a few of these examined care perceptions by gender.<sup>11-14</sup> In some countries, gender is still one of the dominant criteria in the nursing profession. To have an in-depth examination of the dominant "female profession" perception in the nursing profession, this study could give insight into the caring literature.

## AIM

This study aims to determine the care perceptions of nursing students according to the gender perspective.

## METHODS

### Study Design

This study type is cross-sectional, quantitative, and descriptive.

### Study Setting

This faculty, which has the title of the first and only nursing faculty in Northern Cyprus, provides theoretical education in different branches such as Nursing Principles and Nursing Management, Child Health and Diseases Nursing, Internal Medicine Nursing, as well as providing education to students with its equipped laboratories and materials. It has 250 international students and 550 Turkish students. On the other hand, the faculty of nursing has an intercultural education opportunity with its faculty members from different countries. In this respect, the faculty offers both students and academic staff the opportunity to experience cultural differences as a unique advantage.

### Sample Selection

G\*Power 3.1.9.7 statistical program was used to determine the sample size of the study. In this process, when the significance level was calculated as .05, the power of 80% and the effect size as 0.25,<sup>15</sup> the sample number was determined to be 216. In this study, a total of 495 nursing students voluntarily agreed to participate in the study and the research was carried out. This study was conducted with (n=334) Turkish students and (n=161) international students, most of whom came from African countries.

## Data Collection

The data of the study were collected using the Student Assessment Forms and the Care Behavior Inventory. Questionnaires were filled face-to-face in the classroom within 15-20 minutes for both Turkish and international students according to their education at the Faculty of Nursing. In the study, "Student Assessment Forms" developed by the researchers in Turkish and English were presented to the participants. On the other hand, since the validity and reliability study of the "Care Behavior Inventory" scale was conducted in both languages, it was used in both languages as appropriate for the participants.

## Study Tools

### Student Assessment Forms

This form was developed by researchers through analysing the literature in both languages which are Turkish and English to identify the characteristics of the nursing students with five questions. These five questions were gender, age, nationality, marital status, family type, work experience, choice of being a nursing student, if have any option still to choose nursing, the person cared for, cared for someone before, confidence in understanding patients' feelings, have children.

### Caring Behaviors Inventory (CBI-24)

This scale prepared by Wu et al.<sup>16</sup> is the short form of "Care Behaviors Inventory-42 (Caring Behaviors Inventory-42)" containing 42 items suitable for bidirectional diagnosis by patients and nurses developed by Wolf et al.<sup>16,17</sup> The scale was adapted to Turkish by Şerife Kurşun and Nevin Kenan in 2012 and its validity and reliability study was carried out.<sup>18</sup>

The CBI- 24 including the four sub-groups consisting of 24 items 6-point Likert-type scale (1 = never, 2 = almost never, 3 = occasionally, 4 = usually, 5 = almost always, 6 = always) (Assurance; 8 items= 16,17,18,20,21,22,23,24, Knowledge and Skills; 5 items = 9,10,11,12,15, Respect; 6 items = 1,3,5,6,13,19) and Connectedness; 5 items = 2,4,7,8,14). As the score increases, the perception of care also increases. In this study, the total Cronbach alpha of the CBI – 24 was calculated as 0.95.

## Data Analysis

IBM SPSS version 22.0 (IBM SPSS Corp., Armonk, NY, USA) was used in the analysis of the data. The conformity of the data to the normal distribution was evaluated using the Shapiro-Wilks test and it was determined that the data were not normally distributed. Descriptive statistics: percentage and frequency and mean were used in the evaluation of the data. Mann-Whitney U analysis was used

to compare two groups and Kruskal-Wallis analysis was used to compare more than two groups. In this study, the level of significance was accepted as 0.05.

## Ethical Aspect

To proceed with this study, necessary institutional permissions were obtained from the Near East University Institute of Health Sciences (project no: NEU/2018/62-650) and the Faculty of Nursing (reference no:765/20158) to carry out this research.

Additionally, necessary permissions were obtained from the authors in order to use both the Turkish version and the original version of the Caring Behaviors Inventory (CBI – 24). In this study, the participants were informed before the research and their consent was obtained after they were informed that their data would be confidential. This research was conducted in accordance with the principles of the Helsinki Declaration.

## RESULTS

Table 1 is examined it was stated that; 69.9% of the participants were female, 30.1% were male, the mean age of women was  $21.12 \pm 2.92$  years, 30.50% of them are Turkish women, 15.95% of them are Turkish men, 68.88% were single women and 51.71% were women living in a nuclear family.

Table 2 is examined the total score of the female nursing students was  $5.23 \pm 0.69$ , the score of the male nursing students was  $5.18 \pm 0.81$ . The difference between the total and subgroups' score of the students according to their gender was not statistically significant ( $P > .05$ ).

Table 3 is examined, a statistically significant difference was found between caretaker and confidence in understanding patients' feelings by gender in women, and between the type of family and confidence in understanding patients' feelings by gender in men ( $P < .05$ ).

Table 4 shows the comparison between some characteristics of the participants, the sub-dimensions of the scale, and the total score. According to the table; a statistically significant difference was found in women, between having children and respect and connectedness scores; between caring for someone before and assurance and respect scores; between the choice of being a nursing student and respect and total scores; between all sub-dimensions except assurance and total scores with if have any option still to choose nursing and between confidence in understanding patients feelings and all sub-dimensions and total scores ( $P < .05$ ).

**Table 1. Distribution of Participants' Sociodemographic Characteristics (n=495)**

Variables		n	%
<b>Gender</b>	Female	346	69.9
	Male	149	30.1
<b>Age</b>	Female	21.12±2.92	
	Male	21.95±3.98	
<b>Nationality</b>			
Turkish	Female	151	30.50
	Male	79	15.95
Turkish Cypriot	Female	73	14.74
	Male	28	5.65
Nigerian	Female	59	11.91
	Male	22	4.44
Zimbabwean	Female	43	8.68
	Male	15	3.03
Others	Female	20	4.04
	Male	5	1.01
<b>Marital Status</b>			
Married	Female	5	1.01
	Male	6	1.21
Single	Female	341	68.88
	Male	143	28.88
<b>Family Type</b>			
Nuclear	Female	256	51.71
	Male	97	19.59
Extended	Female	66	13.33
	Male	35	7.06
Single parent	Female	24	4.84
	Male	17	3.43

According to the table, a statistically significant difference was found in men; between work experience and respect, connectedness and total scores; between the choice of being a nursing student and all sub-dimensions and total scores; between the type of family and all sub-dimensions except respect and total scores; between confidence in understanding patients feelings and respect, connectedness and total scores ( $P < .05$ ).

## DISCUSSION

Nurses, who are essential actors for the health system and constitute the largest group, are defined as professionals who play an important role in protecting and improving the health of individuals and giving care to them when they are sick. In this context, the essence of the nursing profession is giving care. Until recently, nursing was perceived as a profession specific to women with a gender perception. This perception partially continues today and is still effective although the change has begun.<sup>19</sup>

Through the analysis of the literature, it was determined that the students' perceptions of care behavior were at a good level in the study conducted by Konuk and Tanyar<sup>20</sup> with the participation of 530 nursing students, and in the descriptive study by Birimoğlu and Ayaz<sup>21</sup> involving 342 nursing students.<sup>20,21</sup> In addition, in the study by Aupia et al.<sup>22</sup> which nurses, patients, and students evaluated the perception of care, it was found that the student nurses perceived the care as quality.<sup>22</sup> In this study, when nursing students' perceptions of care behaviors were examined according to the mean score they received from the scale; considering that the highest score that can be obtained from the scale is "6"; it can be concluded that the mean score of the students is high and their gender affects this score within itself. When the perception of nursing care with student nurses was examined in the literature, it was stated that care behaviors did not change according to gender.<sup>23-25</sup> Similarly, in the study of Labrague et al.,<sup>26</sup> in which 467 student nurses from four countries were sampled, it was stated that gender did not have an effect on the perception of care.<sup>26</sup> In this study, in parallel with the literature, it was found that the gender factor did not affect the perception of care behaviors. This situation can be interpreted as nursing students can eliminate gender roles while giving care.

**Table 2. The Comparison of Students' CBI-24 Mean Scores by Genders**

Gender	Scale Total X±SD	Assurance X±SD	Knowledge and Skill X±SD	Respect X±SD	Connectedness X±SD
Female	5.23±0.69	5.36±0.73	5.14±0.84	5.30±0.72	5.05±0.85
Male	5.18±0.81	5.27±0.87	5.21±0.82	5.18±0.90	5.03±0.90
U*	25432.00	24879.000	24500.000	24158.000	25647.500
P	.893	.603	.377	.264	.929

U\*; Mann Whitney U, X; Mean, SD; Standard deviation



**Table 3. Comparison of Participants' Characteristics by Gender**

Variables		Female		Male	
		$\chi^2$	<i>P</i>	$\chi^2$	<i>P</i>
<b>Type of Family</b>	Nuclear	4.23	.37	9.32	<b>.02</b>
	Extended				
	Single Parent				
	Others				
<b>Caretaker (Whom Have Cared For)</b>	Mother	51.44	<b>.01</b>	18.15	.15
	Father				
	Grandmother				
	Grandfather				
<b>Confidence in Understanding Patients' Feelings</b>	Every time	9.14	<b>.01</b>	6.03	<b>.04</b>
	Sometime				
	Never				

$\chi^2$ : Kruskal Wallis

In the study conducted by Kılıç et al.<sup>27</sup> with the participation of 2nd year nursing students and using the same scale, it was determined that student nurses got the highest score in the knowledge and skill sub-dimension.<sup>27</sup> In another study conducted with nursing students, when the sub-dimension mean scores were examined, it was found that the highest mean score was in the knowledge and skill sub-dimension, and the lowest mean score was in the commitment sub-dimension.<sup>28</sup> Contrary to the literature, in this study, it was determined that the highest sub-score in both genders was in the assurance sub-dimension. The lowest-scored sub-dimension was found to be adherence, similar to the literature. The reason for the difference in the highest sub-dimension score compared to the literature can be interpreted by the fact that the sample of this study consists of students from Turkey and African countries, and the male-dominated structure in social life in these countries.

In the study conducted by Diğın and Kızılıcık Özkan<sup>28</sup> in 2021, it was determined that the mean score of the scale did not vary according to family type in undergraduate education.<sup>28</sup> Similarly, Birimoğlu and Ayaz<sup>21</sup> found in their study that perceptions of care behavior were not affected by family type.<sup>21</sup> Contrary to the literature, in this study, a statistically significant difference was found between family type and perception of care provided that it was only in males. On the other hand, in this study, unlike other studies, the variables of caretaker and confidence in understanding patients' feelings were also evaluated, and a significant difference was found for the caretaker variable only in women, and confidence in understanding patients'

feelings in both genders. When these results and the literature are examined, it is possible to state that there is a need for further studies to evaluate the effect of family type on the perception of care.

There are many factors affecting the perception of care in nursing.<sup>29</sup> These include topics such as having a child, working experience, and choosing a profession. In this study, a statistically significant difference was found between some factors affecting nursing students' perceptions of care and the total score of the Caring Behaviors Inventory. Of these factors; a statistically significant difference was found between if have any option still choose nursing between women only and total score; between work experience and type of family only between men and total score; between both genders and the total score in the factors of choice of being a nursing student and confidence in understanding patients feelings.

### Limitations

The study was limited to students in a single faculty and results may not be generalizable to a larger population. Furthermore, the fact that the research sample could not be evaluated in two separate groups as national and international students can be shown as another limitation of the study.

In this study, although the participants were from Turkey and African countries where the male-dominated cultural structure is dominant, no significant difference was found between gender and perception of care in the total score average of the scale. On the other hand, the fact that female students have higher average scores on the scale than male students reveals that the gender variable has an effect on the perception of care. Another conclusion of this study is that there is a significant difference in the sub-dimensions of the scale according to the gender of the participants with some characteristics. It is recommended to conduct further studies by using qualitative methods in order to determine the relationship between gender and perception of care in this area.

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**Informed Consent:** In this study, the participants were informed before the research and their consent was obtained after they were informed that their data would be confidential.

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## REFERENCES

1. Wolf ZR, Byrne D, Hanson-Zalot M. Undergraduate nursing students' caring behaviors: A cross-sectional study. *Int J Hum Caring*. 2018;22(4):199-208. <https://doi.org/10.20467/1091-5710.22.4.199>
2. Persaud S, Thornton M. Developing caring behaviors in undergraduate nursing students through simulation. *Int J Hum Caring*. 2018;22(2):26-33. <https://doi.org/10.20467/1091-5710.22.2.26>
3. Asmirajanti M, Hamid AY, Hariyati R, Sri T. Nursing care activities based on documentation. *BMC Nurs*. 2019;18(1):1-5. <https://doi.org/10.1186/s12912-019-0352-0>
4. Egenes KJ. *Issues And Trends in Nursing: Essential Knowledge for Today and Tomorrow*. 2nd ed. Burlington, MA: Jones&Martlett Learning; 2017.
5. Roach MS. *Caring: The human mode of being. Caring in nursing classics: An essential resource*. 2nd ed. New York, NY: Springer International Publishing; 2013.
6. Galbany-Estragués P, Comas-d'Argemir D. Care, autonomy, and gender in nursing practice: A historical study of nurses' experiences. *J Nurs Res*. 2017;25(5):361-367. <https://doi.org/10.1097/JNR.000000000000184>
7. Legath JW. *Sanctified Sisters: A History of Protestant Deaconesses*. 1st ed. New York, NY: New York University Press; 2019.
8. Choperena A, Fairman J. Louisa May Alcott and Hospital Sketches: An innovative approach to gender and nursing professionalization. *J Adv Nurs*. 2018;74(5):1059-1067. <https://doi.org/10.1111/jan.13510>
9. Pfettscher SA. *Nursing Theorists and Their Work*. 10th ed. St. Louis, MO: Elsevier; 2021.
10. Hodges EA, Rowsey PJ, Gray TF, et al. Bridging the gender divide: Facilitating the educational path for men in nursing. *J Nurs Educ*. 2017;56(5):295-299. <https://doi.org/10.3928/01484834-20170421-08>
11. Liu NY, Hsu WY, Hung CA, Wu PL, Pai HC. The effect of gender role orientation on student nurses' caring behaviour and critical thinking. *Int J Nurs Stud*. 2019;1(89):18-23. <https://doi.org/10.1016/j.ijnurstu.2018.09.005>
12. Ghadi IN, Bakar KA, Alwi NH, Talib O. Gender analysis of critical thinking disposition instrument among University Putra Malaysia undergraduate students. *JRTE*. 2012;33(1):7-33.
13. Khademian Z, Vizesfar F. Nursing students' perceptions of the importance of caring behaviors. *J Adv Nurs*. 2008;61(4):456-462. <https://doi.org/10.1111/j.1365-2648.2007.04509.x>
14. Laurella VB. *Gender Trait Differences And Nursing Caring*. Dissertation. University of Utah; 1997.
15. Faul F, Erdfelder E, Buchner A & Lang AG. Statistical power analyses using G\* Power 3.1: Tests for correlation and regression analyses. *Behav Res*. 2009;41(4):1149-1160. <https://doi.org/10.3758/BRM.41.4.1149>
16. Wu Y, Larrabee JH, Putman HP. Caring behaviors inventory: A reduction of the 42-item instrument. *Nurs Res*. 2006;55(1):18-25. <https://doi.org/10.1097/00006199-200601000-00003>
17. Robinson Wolf, Z, Dillon PM, Townsend AB, Glasofer A. Caring Behaviors Inventory-24 revised: CBI-16 Validation and Psychometric Properties. *Int J Hum Caring*. 2017;21(4):185-192. <https://doi.org/10.20467/1091-5710.21.4.185>
18. Kursun S, Kanan N. Validity and reliability study of the Turkish version of caring behaviors inventory-24. *J Anat Nurs Health Sci*. 2012;15(4):229-235. <https://dergipark.org.tr/tr/pub/ataunihem/issue/2659/34332>
19. Marć M, Bartosiewicz A, Burzyńska J, Chmiel Z, Januszewicz P. A nursing shortage—a prospect of global and local policies. *Int Nurs Rev*. 2019;66(1):9-16. <https://doi.org/10.1111/inr.12473>
20. Konuk, T, Tanyar, D. Investigation of nursing students' perception of caring behaviors. *J Caring Sci*. 2019;8(4):191-197. <https://doi.org/10.15171/jcs.2019.027>
21. Birimoğlu C, Ayaz S. Nursing Students' Perceptions of Caring Behaviors. *J Hacettepe Univ Fac Nurs*. 2015;2(3):40-48. <https://dergipark.org.tr/en/download/article-file/330801>
22. Aupia A, Lee TT, Liu CY, Wu SF, Mills ME. Caring behavior perceived by nurses, patients and nursing students in Indonesia. *J Prof Nurs*. 2018;34(4):314-319. <https://doi.org/10.1016/j.profnurs.2017.11.013>
23. Fenizia E, Navarini L, Scollo S, Gambera A, Ciccozzi M. A longitudinal study on caring behaviors of Italian nursing students. *Nurse Educ Today*. 2020;88(1):104377. <https://doi.org/10.1016/j.nedt.2020.104377>
24. Lambert-Davis JD. *Caring Behaviors of Nursing Students and their Attitudes Toward Older Adults*. Dissertation, Case Western Reserve University; 2017.
25. Trinidad MF, Pascual JL, García MR. Perception of caring among nursing students: Results from a cross-sectional survey. *Nurse Educ Today*. 2019;83(1):104196. <https://doi.org/10.1016/j.nedt.2019.08.014>

26. Labrague LJ, McEnroe-Petitte DM, Papathanasiou IV, Edet OB, Arulappan J, Tsaras K. Nursing students' perceptions of their own caring behaviors: a multicountry study. *Int J Nurs Knowl*. 2017;28(4):225-232. <https://doi.org/10.1111/2047-3095.12108>
27. Kilic M. Students' perceptions of nursing care: the case of a city of south Turkey. *Int J Caring Sci*. 2018;11(1):402. [https://internationaljournalofcaringsciences.org/docs/46\\_kilik\\_original\\_11\\_1.pdf](https://internationaljournalofcaringsciences.org/docs/46_kilik_original_11_1.pdf)
28. Diğın F, Kızılıcık Özkan Z. Determination of nursing students' perceptions of care behavior. *Gevher Nesibe Journal of Medical & Health Sciences*. 2021;6(10):16-21. <https://doi.org/10.46648/gnj.155>
29. Rasmussen P, Henderson A, Andrew N, Conroy T. Factors influencing registered nurses' perceptions of their professional identity: An integrative literature review. *J Contin Educ Nurs*. 2018;49(5):225-232. <https://doi.org/10.3928/00220124-20180417-08>