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# The Relationship Between Nursing Students' Privacy Consciousness and Attitudes Towards Patient Privacy: A Cross-Sectional and Correlational Study

Hemşirelik Öğrencilerinin Mahremiyet Bilinçleri ve Hasta Mahremiyetine Yönelik Tutumları Arasındaki İlişki: Kesitsel ve İlişkisel Bir Çalışma

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**ABSTRACT Objective:** This study aims to determine the relationship between nursing students' privacy consciousness and attention to patient privacy. Material and Methods: This is a cross-sectional study involving 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup>-year nursing students of a state university. The data collection process was carried out using the Socio-Demographic Data Form, Privacy Consciousness Scale and Patient Privacy Scale. Results: The mean age of 361 students who participated in the study was  $20.89\pm1.38$  years, 75.1% (n=271) were female and 24.9% (n=90) were male. The mean score level of the students' privacy consciousness (4.52±0.51) was high, while the mean score of the Patient Privacy Scale (120.41±13.28) was at a very high level. The mean scores of female students on both the Privacy Consciousness Scale (p=0.006) and the Patient Privacy Scale were higher than those of male students (p=0.032). Patient Privacy Scale scores were higher in 3rd-year students than 2<sup>nd</sup>-year students (p=0.016), in those who took a patient rights course than those who did not (p=0.028), and in students who voluntarily chose the department compared to those who did not (p=0.040). There was a moderate positive correlation between the mean scores of the Privacy Consciousness Scale and the Patient Privacy Scale (r=0.495; p<0.001). Conclusion: Nursing students' privacy consciousness is at a high level and the attention they pay to patient privacy is at a very high level. It can be said that as the privacy awareness of nursing students increases, the privacy they show to the patient increases.

**Keywords:** Patient privacy; nursing students; privacy consciousness

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ÖZET Amaç: Bu çalışma, hemşirelik öğrencilerinin mahremiyet bilinçleri ve hasta mahremiyetine gösterdikleri önem arasındaki ilişkinin belirlenmesini amaçlamaktadır. Gerec ve Yöntemler: Bu kesitsel çalışma, bir devlet üniversitesi hemşirelik bölümü öğrencilerinin 2., 3. ve 4. sınıflarını içermektedir. Veri toplama süreci; Sosyodemografik Veri Formu, Mahremiyet Bilinci Ölçeği ve Hasta Mahremiyeti Ölçeği kullanılarak gerçekleştirilmiştir. Bulgular: Çalışmaya katılan 361 öğrencinin vas ortalaması 20,89±1,38 olup, bu öğrencilerin %75,1'i (n=271) kadın ve %24,9'u (n=90) erkektir. Öğrencilerin mahremiyet bilinci skor ortalaması (4,52±0,51) yüksek düzeyde, Hasta Mahremiyeti Ölçeği skor ortalaması (120,41±13,28) çok yüksek düzeydedir. Kız öğrencilerin hem Mahremiyet Bilinci Ölçeği (p=0,006) hem de Hasta Mahremiyeti Ölçeği skor ortalamaları erkek öğrencilere kıyasla daha yüksek bulunmuştur (p=0,032). Hasta Mahremiyeti Ölçeği skorları, 3. sınıf öğrencilerinde 2. sınıflardan (p=0,016), hasta hakları dersi alanlarda almayanlardan (p=0,028) ve bölümü gönüllü seçenlerde seçmeyenlerden daha yüksekti (p=0,040). Mahremiyet Bilinci Ölçeği ile Hasta Mahremiyeti Ölçeği skor ortalamaları arasında orta düzeyde pozitif korelasyon olduğu saptanmıştır (r=0,495; p<0,001). Sonuç: Hemşirelik bölümü öğrencilerinin, mahremiyet bilinçleri yüksek düzeyde ve hasta mahremiyetine gösterdikleri önem çok yüksek düzeydedir. Hemşirelik öğrencilerinin mahremiyet bilinci artıkça hastaya gösterdikleri mahremiyetin arttığı söylenebilir.

Anahtar Kelimeler: Hasta mahremiyeti; hemşirelik öğrencileri; mahremiyet bilinci

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An independent individual makes and implements decisions with free will and consciousness. Privacy both limits personal space and is also a reflection of freedom through the ability to create identity and control one's environment. It is a concept that has not only physical but also informational, social, and psychological dimensions. Patient privacy, which has an important place in patient rights, is increasingly brought to the agenda with the rapid developments in health services. The fact that patients are autonomous individuals imposes important responsibilities on healthcare professionals to protect their private lives. The protection of patient privacy is both an ethical and legal responsibility as well as a cornerstone of successful healthcare.

Actions to protect privacy reflect an individual's awareness of privacy on behalf of self and others.<sup>6</sup> The ability to maintain privacy is a fundamental reflection of personal autonomy and plays a critical role in directing one's own life and protecting one's dignity.<sup>7</sup> Privacy consciousness is one of the most important concepts, especially in the field of health services where privacy is an intense issue. Therefore, it is of great importance that healthcare professionals have a high level of privacy consciousness which can be defined as the level of awareness of their own and others' privacy.<sup>8</sup>

Since the protection of privacy is a fundamental human right, it has become one of the basic concepts of nursing. In patient care, the lack of awareness of the nurses regarding the patient's individual privacy preferences may lead to some privacy violations. As a fundamental ethical principle since the Hippocratic Oath, patient privacy is under increasing threat as healthcare moves into the digital domain and healthcare delivery shifts toward patient-centered solutions. Advances in technology, changes in communication channels and increasing workload may cause some problems related to the privacy of patients in nursing services. As a fundamental ethical principle since the Hippocratic Oath, patient privacy is under increasing threat as healthcare moves into the digital domain and healthcare delivery shifts toward patient-centered solutions. Advances in technology, changes in communication channels and increasing workload may cause some problems related to the privacy of patients in nursing services.

Considering the critical role of the privacy concept in nursing services, it is extremely important for healthcare professionals as well as nursing students to develop attitudes toward the protection of privacy and to gain privacy consciousness both during their student and professional lives. <sup>13</sup> Considering that nurs-

ing students, who are trained as future professionals, may have different values and perspectives from the nurses of today, it is of great importance to understand their approaches to privacy. <sup>14</sup> During their education, nursing students' accurate understanding of the concept of privacy and the acquisition of skills to protect privacy will support the maintenance of high ethical standards and the assurance of patient safety in their future professional practice. In this context, it is necessary to determine the privacy consciousness of students as the nurse candidates and the healthcare professionals of the future, and their attention to patient privacy and to support them regarding these issues when necessary.

In the literature, studies on nursing students' levels of privacy consciousness and attitudes towards patient privacy are limited. Especially considering different cultural contexts and educational systems, more research is needed on this issue. Further studies may provide valuable information to overcome this deficiency and contribute to the strengthening of patient privacy in nursing education and practice. In addition, this study helps to understand students' awareness and attitudes towards privacy during the nursing education process, allowing them to predict how they will protect patient privacy in their future professional practice. In this study, it was aimed to reveal the privacy consciousness of nursing students and the attention they pay to patient privacy and the relationship between them.

# MATERIAL AND METHODS

#### **ETHICAL CONSIDERATIONS**

Approval for the study was obtained from Bolu Abant İzzet Baysal University Social Sciences Human Research Ethics Committee (date: November 4, 2021; no: 2021/415). The study was designed in accordance with the principles of the Declaration of Helsinki. Written and verbal informed consent was obtained from all volunteer participants.

#### STUDY UNIVERSE AND SAMPLE

This study was conducted with 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup>-year students from the nursing department of a state university who had started clinical practice in their professional courses. 1<sup>st</sup>-year students were not included

in the study since they did not participate in the clinical practice where patient care services were provided. Necessary institutional permission was received for the study. The data of the study were obtained through face-to-face questionnaire technique in March-May 2022. In the study, a total of 361 volunteer students who completed the forms and questionnaires were included. Students take a course called "ethics in nursing" in the 3<sup>rd</sup> year.

#### DATA COLLECTION TOOLS

#### Socio-Demographic Data Form

The form was created by the researcher in order to obtain descriptive information about the students. It consists of 5 questions inquiring about the students' gender, age, grade, taking a course on professional ethics, deontology, etc. including the subject of patient rights, and their voluntary preference for the nursing department.

#### Privacy Consciousness Scale (PCS)

The Scale was developed by Tabata and Hirotsune to measure privacy consciousness.6 It was adapted to Turkish by Öztürk et al.<sup>13</sup> The scale consists of three subscales: "consciousness and behaviors regarding privacy of the self", "consciousness regarding privacy of others", and "behaviors regarding privacy of others". Consisting of 11 items, the scale is a fivepoint likert scale, with a maximum score of 55 and a minimum score of 11. The scale is evaluated by comparing the mean scores of the items representing the total score and each sub-dimension score. Since the scale does not have any cut-off point, a score close to 1 is interpreted as low privacy awareness, while a score close to 5 is interpreted as high privacy awareness. The Cronbach's alpha value for the whole scale was found to be 0.77.13 In this study, Cronbach's alpha value was determined as 0.81.

#### Patient Privacy Scale (PPS)

The scale developed by Ozturk et al. is used to evaluate whether the privacy of hospitalized patients is protected. The scale, which consists of a total of 27 items, is evaluated on a 5-point Likert scale. 12 The scale consists of "confidentiality of personal information and private life", "sexual privacy", "the privacy of those unable to protect themselves",

"physical privacy", and "ensuring a favorable environment" sub-dimensions. The total score range of the scale is 27-135. A high score indicates that nurses pay attention to patient privacy. Additionally, a score of 1.00-1.79 indicates "very low", 1.80-2.59 "low", 2.60-3.39 "moderate", 3.40-4.19 "high" and 4.20-5.00 "very high" level of attention paid to privacy in the scale evaluation. The Cronbach alpha value is 0.93. In this study, the Cronbach alpha value was found to be 0.96. 12

#### STATISTICAL ANALYSIS

SPSS 22.0 (IBM Corp., Armonk, NY) software was used for data analysis. The results are expressed in descriptive values such as mean, standard deviation, number, and percentage. Skewness and kurtosis values and Kolmogorov-Smirnov test were used for normal analysis of the data. The Mann-Whitney U test was used for the comparisons of two groups and the Kruskal-Wallis H test and "post hoc" Dunn's test were used for the comparisons of three or more groups. The relationship between the scale scores was calculated through the Spearman correlation coefficient. The relationship level of the correlation coefficient was evaluated according to the related literature. <sup>15</sup> p<0.05 was considered statistically significant.

## RESULTS

In this study, the mean age of the students is  $20.89\pm1.38$ . Of the participants, 75.1% (n=271) were female, 24.9% (n=90) were male, 34.9% (n=126) were  $2^{\text{nd}}$ -year, 34.6% (n=125) were  $3^{\text{rd}}$ -year and 30.5% (n=110) were  $4^{\text{th}}$ -year students (Table 1).

The mean total score of the PCS of nursing students was  $4.52\pm0.51$  and the median value was 4.64. The mean total score of the PPS was  $4.62\pm0.54$  and the median value was 4.81 (Table 2, Table 3).

In the comparison of the PCS in terms of variables, the mean scores of all subscales except for the "Consciousness regarding privacy of others" subscale and the total mean score of the scale were found to be higher for female students compared to male students. It was found that 3<sup>rd</sup>-year students had a higher mean score for the "Consciousness regarding privacy of others" subscale compared to 4<sup>th</sup>-year students.

|        | (n=334). |          |           |
|--------|----------|----------|-----------|
|        |          | Vari     | ables     |
| Age    |          | X±SD: 20 | 0.89±1.38 |
|        |          | n        | %         |
| Gender |          |          |           |
| Female |          | 271      | 75.1      |
| Male   |          | 90       | 24.9      |
| Crado  |          |          |           |

126

125

110

34.9

34.6

30.5

**TABLE 1:** Descriptive characteristics of nursing students

4th-year

Taking a course on professional ethics, deontology, etc. including the subject of patient rights

 Yes
 243
 67.3

 No
 118
 32.7

 Volunteer preference for the nursing department
 232
 64.3

 No
 129
 35.7

SD: Standard deviation.

2<sup>nd</sup>-year

3<sup>rd</sup>-year

The students who voluntarily preferred the nursing department had higher mean total scores in the "Consciousness regarding privacy of others" and "Behaviors regarding privacy of others" subscales compared to those who did not voluntarily prefer the department (Table 4).

In the analysis of the PPS in terms of variables,

it was determined that the mean scores of all subscales except for the "Confidentiality of personal information and private life" subscale and the mean total score of the scale were higher for female students compared to male students. 3rd-year students had higher mean scores in the "Confidentiality of personal information and private life" subscale and in the total scale compared to 2<sup>nd</sup>-year students. It was found that 3<sup>rd</sup>-year students had higher mean scores in the "Sexual privacy" and "Ensuring a favorable environment" subscale than 2<sup>nd</sup> and 4<sup>th</sup>-year students. It was determined that the mean total scores and subscale mean scores of the students who received training on patient rights were higher than those who did not receive training, except for the "Sexual privacy" and "Ensuring a favorable environment" subscales. The students who voluntarily preferred the nursing department were found to have higher mean scores in the "Sexual privacy" and "Ensuring a favorable environment" subscale and higher mean scores in the total scale compared to those who did not voluntarily prefer the department (Table 5).

It was also found that there was a moderate positive correlation (r=0.495; p<0.001) between the mean score of the PCS and the mean score of the PPS of nursing students. Other correlation values for the subscales are presented in Table 6.

| TABLE 2: Descriptive characteristics of the Privacy Consciousness Scale and subscales. |           |        |               |               |  |  |  |  |
|----------------------------------------------------------------------------------------|-----------|--------|---------------|---------------|--|--|--|--|
| Scale                                                                                  | X±SD      | Median | Minimum value | Maximum value |  |  |  |  |
| The Privacy Consciousness Scale                                                        | 4.52±0.51 | 4.64   | 2.18          | 5.00          |  |  |  |  |
| Consciousness and behaviors regarding privacy of the self                              | 4.71±0.47 | 5.00   | 1.25          | 5.00          |  |  |  |  |
| Consciousness regarding privacy of others                                              | 4.55±0.61 | 4.75   | 2.00          | 5.00          |  |  |  |  |
| Behaviors regarding privacy of others                                                  | 4.23±0.81 | 4.33   | 2.00          | 5.00          |  |  |  |  |

SD: Standard deviation.

| TABLE 3: Descriptive characteristics of the Patient Privacy Scale and subscales. |           |        |               |               |  |  |  |  |
|----------------------------------------------------------------------------------|-----------|--------|---------------|---------------|--|--|--|--|
| Scale                                                                            | ₹±SD      | Median | Minimum value | Maximum value |  |  |  |  |
| Patient Privacy Scale                                                            | 4.62±0.54 | 4.81   | 1.15          | 5.00          |  |  |  |  |
| Confidentiality of personal information and private life                         | 4.55±0.60 | 4.70   | 1.40          | 5.00          |  |  |  |  |
| Sexual privacy                                                                   | 4.46±0.66 | 4.60   | 5.00          | 5.00          |  |  |  |  |
| The privacy of those unable to protect themselves                                | 4.73±0.58 | 5.00   | 4.00          | 5.00          |  |  |  |  |
| Physical privacy                                                                 | 4.74±0.62 | 5.00   | 4.00          | 5.00          |  |  |  |  |
| Ensuring a favorable environment                                                 | 4.74±0.59 | 5.00   | 4.00          | 5.00          |  |  |  |  |

SD: Standard deviation.

| TABLE 4: Comparison of privacy consciousness scores of nursing students in terms of socio-demographic characteristics. |                            |                                                           |           |                                           |           |                                       |           |                                    |         |  |
|------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------------------------------------------|-----------|-------------------------------------------|-----------|---------------------------------------|-----------|------------------------------------|---------|--|
|                                                                                                                        |                            | Consciousness and behaviors regarding privacy of the self |           | Consciousness regarding privacy of others |           | Behaviors regarding privacy of others |           | The Privacy<br>Consciousness Scale |         |  |
|                                                                                                                        |                            | X±SD                                                      | p value   | X±SD                                      | p value   | X±SD                                  | p value   | X±SD                               | p value |  |
| Gender                                                                                                                 | Female 4.75±0.44 4.59±0.57 | 0.067                                                     | 4.28±0.78 | 0.044*                                    | 4.56±0.48 | 0.006*                                |           |                                    |         |  |
| Geridei                                                                                                                | Male                       | 4.58±0.54                                                 | 0.001*    | 4.41±0.73                                 | 0.007     | 4.06±0.88                             | 0.044     | 4.38±0.57                          | 0.000   |  |
|                                                                                                                        | 2 <sup>nd</sup> -year      | 4.66±0.55                                                 | 0.368     | 4.59±0.55                                 | 0.035*    | 4.28±0.73                             | 0.155     | 4.53±0.48                          | 0.125   |  |
| Grade                                                                                                                  | 3 <sup>rd</sup> -year      | 4.78±0.34                                                 |           | 4.67±0.45a                                |           | 4.33±0.72                             |           | 4.62±0.37                          |         |  |
|                                                                                                                        | 4 <sup>th</sup> -year      | 4.67±0.50                                                 |           | 4.35±0.78 <sup>b</sup>                    |           | 4.05±0.96                             |           | 4.38±0.64                          |         |  |
| Taking a course on professional ethics, deontology etc. including                                                      | ·   165   4.75±0.47        | 0.120                                                     | 4.53±0.65 | 0.896                                     | 4.22±0.83 | - 0.837                               | 4.52±0.53 | - 0.537                            |         |  |
| the subject of patient rights                                                                                          | No                         | 4.66±0.48                                                 | 0.120     | 4.58±0.55                                 | 4.23±0.78 | 0.001                                 | 4.52±0.47 | 0.557                              |         |  |
| Volunteer preference for the                                                                                           | Yes                        | 4.71±0.47                                                 | 0.832     | 4.61±0.56                                 | 0.037*    | 4.30±0.77                             | 0.031*    | 4.56±0.47                          | - 0.120 |  |
| nursing department                                                                                                     | No                         | 4.70±0.48                                                 | 0.002     | 4.44±0.69                                 |           | 4.09±0.87                             |           | 4.44±0.57                          |         |  |

<sup>\*</sup>p<0.05; SD: Standard deviation.

|                                                                  |                       |            |                           |                        | Sexual those una privacy prote themsel |           | able to   |           |                        | Ensuring a favorable environment |           | Patient<br>Privacy Scale |         |
|------------------------------------------------------------------|-----------------------|------------|---------------------------|------------------------|----------------------------------------|-----------|-----------|-----------|------------------------|----------------------------------|-----------|--------------------------|---------|
|                                                                  |                       | ₹±SD       | p value                   | ₹±SD                   | p value                                | X±SD      | p value   | X±SD      | p value                | ₹±SD                             | p value   | ₹±SD                     | p value |
| Gender                                                           | Female                | 4.59±0.54  | 0.195                     | 4.53±0.58              | 0.011*                                 | 4.79±0.44 | 0.003*    | 4.80±0.48 | 0.025*                 | 4.80±0.47                        | 0.006*    | 4.67±0.44                | 0.032*  |
| Gender                                                           | Male                  | 4.43±0.74  | 0.195                     | 4.27±0.83              |                                        | 4.54±0.84 | 0.003     | 4.57±0.89 | 0.025                  | 4.56±0.84                        |           | 4.46±0.76                |         |
|                                                                  | 2 <sup>nd</sup> -year | 4.46±0.66ª | 6ª                        | 4.43±0.67b             | 0.010*                                 | 4.64±0.67 |           | 4.66±0.73 | 0.085                  | 4.68±0.68b                       | -         | 4.54±0.60a               | 0.016*  |
| Grade                                                            | 3 <sup>rd</sup> -year | 4.62±0.55b | 0.027*                    | 4.58±0.59 <sup>a</sup> |                                        | 4.78±0.50 | 0.068     | 4.81±0.89 |                        | 4.82±0.49a                       |           | 4.70±0.49b               |         |
|                                                                  | 4 <sup>th</sup> -year | 4.59±0.56  |                           | 4.37±0.71b             | 4.78±0.54                              |           | 4.76±0.60 |           | 4.70±0.57 <sup>b</sup> | 1                                | 4.62±0.53 |                          |         |
| Taking a course on professional                                  | Yes                   | 4.62±0.51  | 0.000*                    | 4.50±0.63              | 0.069                                  | 4.78±0.49 |           | 4.80±0.52 | 0.044*                 | 4.78±0.50                        | 0.077     | 4.67±0.47                | 0.000*  |
| ethics. deontology. etc. including the subject of patient rights | No                    | 4.41±0.73  | 0.008* 4.38±0.72 0.068 4. | 4.61±0.71              | 0.008*                                 | 4.63±0.77 | 0.041*    | 4.64±0.73 | 0.077                  | 4.50±0.66                        | 0.028*    |                          |         |
| Volunteer preference for the                                     | Yes                   | 4.58±0.58  | 0.58 0.148 4.52±          | 4.52±0.62              | 0.020*                                 | 4.76±0.52 | 0.442     | 4.79±0.55 | 0.068                  | 4.79±0.54                        | 0.012*    | 4.66±0.50                |         |
| nursing department                                               | No                    | 4.51±0.62  | 0.140                     | 4.36±0.72 0.030*       | 4.67±0.67                              | 4.66±0.71 | 0.068     | 4.65±0.66 |                        | 4.55±0.61                        | 0.040*    |                          |         |

<sup>\*</sup>p<0.05; SD: Standard deviation.

The letters (a,b) represent statistically different groups based on the analysis results (p<0.05).

| TABLE 6:         Correlation analysis between nursing students' privacy consciousness and attitude scores toward patient privacy. |                                                           |         |                                       |                                 |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|---------|---------------------------------------|---------------------------------|--|--|--|--|--|--|
| Scales                                                                                                                            | Consciousness and behaviors regarding privacy of the self |         | Behaviors regarding privacy of others | The Privacy Consciousness Scale |  |  |  |  |  |  |
| Confidentiality of personal information and private life                                                                          | 0.392**                                                   | 0.367** | 0.335**                               | 0.428**                         |  |  |  |  |  |  |
| Sexual privacy                                                                                                                    | 0.375**                                                   | 0.377** | 0.333**                               | 0.423**                         |  |  |  |  |  |  |
| The privacy of those unable to protect themselves                                                                                 | 0.341**                                                   | 0.343** | 0.262**                               | 0.368**                         |  |  |  |  |  |  |
| Physical privacy                                                                                                                  | 0.374**                                                   | 0.398** | 0.316**                               | 0.426**                         |  |  |  |  |  |  |
| Ensuring a favorable environment                                                                                                  | 0.389**                                                   | 0.449** | 0.362**                               | 0.464**                         |  |  |  |  |  |  |
| The Patient Privacy Scale                                                                                                         | 0.433**                                                   | 0.442** | 0.387**                               | 0.495**                         |  |  |  |  |  |  |

<sup>\*\*</sup>Correlation is significant at 0.01 level (2-way).

## DISCUSSION

Nurses, as a group of the healthcare professionals closest to the patient, are obliged to create an ethical medical environment based on understanding and using various practices to protect the privacy of the patients that they are responsible for.<sup>16</sup> Privacy is a right arising from the right to respect for the individual, which is accepted as one of the basic ethical principles of nursing, and therefore, patient privacy and privacy consciousness should be emphasized more in nursing education.<sup>17</sup> The findings of the study revealed that nursing students have a high level of privacy consciousness. Similarly, it was also determined that nursing students had a high level of privacy consciousness. 18 The high level of privacy consciousness of nursing students indicates that they are sensitive about ensuring personal and other people's privacy and that they respect this important ethical principle. Besides, the result obtained indicates that nursing students are more conscious about fulfilling their ethical and legal responsibilities regarding privacy. In this context, nursing students' high consciousness of privacy is very important in terms of their actions to protect the privacy of patients to whom they will provide health services in clinical practices during their educational process and in their future professional lives.

Patient privacy is a concept that plays a critical role in terms of a safe therapeutic interaction under the responsibility of nurses and all other healthcare professionals and the confidentiality that patients value.<sup>19</sup> Although personal sovereignty is more limited in healthcare settings, nurses may sometimes have to intervene in the privacy spaces of the patients. Due to this close interaction between nurse and patient, nurses are primarily responsible for ensuring and maintaining patient privacy.<sup>20</sup> Since the protection of privacy is quite important in health services, it is emphasized that nursing students as the healthcare professionals of the future should bear the same responsibility as qualified healthcare professionals in protecting patient privacy.<sup>21</sup> It is understood from the research findings that the attention paid by nursing students to patient privacy is at a very high level. Küçükkelepçe et al. stated that the attention paid by nursing students to patient privacy was also at a high level.<sup>17</sup> The concept of privacy includes basic quality indicators such as recognizing and respecting the rights of the individual and is closely related to protecting self-esteem, maintaining personal control, improving relationships, comfort and patient satisfaction.<sup>22</sup> In the context of the results of the study, the fact that nursing students pay a very high level of attention to patient privacy indicates their commitment to the basic principles of the nursing profession and their ability to provide patient-centered care. Additionally, attention to patient privacy is highly valuable in gaining patients' trust, encouraging participation in treatment, increasing patient satisfaction, and providing ethically appropriate health services.

According to the results of the study, the mean scores of all subscales except for the "Consciousness regarding privacy of others" subscale and the mean total score of the scale were higher for female students compared to male students. Similarly, Aslan et al. found that female students had higher levels of consciousness regarding the privacy of others, maintenance of privacy, and general privacy consciousness than male students.<sup>23</sup> In another study, female students were found to have higher levels of consciousness regarding privacy of the self and total privacy consciousness compared to male students.<sup>24</sup> Küçükkelepçe et al. did not find any significant difference between the gender and the privacy consciousness of students.<sup>17</sup> The obtained results suggest that female students pay more attention to privacy, are more sensitive to this issue and tend to internalize professional core values more.

3<sup>rd</sup>-year students were found to have a higher consciousness regarding privacy of others compared to 4<sup>th</sup>-year students. Küçükkelepçe et al. stated that the "Consciousness regarding privacy of others" and "Behaviors regarding privacy of others" subscales differed according to the grades of nursing students.<sup>17</sup> It was reported that the "Consciousness regarding privacy of others" was higher in 3<sup>rd</sup>-year students than the students in other grades.<sup>24</sup> According to the results of the study, the fact that 3<sup>rd</sup>-year nursing students have high privacy consciousness suggests that the "Ethics in nursing" course taken in the 3<sup>rd</sup> year during the educational process in the context of our

sample may have raised students' consciousness regarding this issue. Therefore, it demonstrates that the consciousness of students regarding privacy increased during the period when the training on privacy was received. Furthermore, this result clearly indicates the importance of education and continuous information for privacy consciousness.

It was reported that students who voluntarily preferred the nursing profession had stronger professional values.<sup>25</sup> According to the results of the study, the students who voluntarily preferred the nursing department had higher mean scores in the "Consciousness Regarding privacy of others" and "Behaviors regarding privacy of others" subscales compared to those who did not voluntarily prefer the department. In contrast to these results, a study reported that nursing students' preference for the nursing profession did not significantly affect their privacy consciousness.<sup>24</sup> Within the context of the obtained results, it can be said that students who voluntarily prefer the nursing department show more interest in the core values of this profession and therefore internalize the concept of privacy at a higher level. It also suggests that voluntary career preference and motivation increase the interest of students in privacy.

According to the results of this study, the attention of female students to patient privacy is higher than that of male students. Aktan et al. reported that female intern students pay more attention to the issue of privacy.<sup>15</sup> Öztürk et al. stated that women were more sensitive about privacy than men in their study conducted with emergency service workers.<sup>26</sup> On the contrary, Karabey, et al. reported that there was no sex-related difference in the attention of nurses in intensive care units regarding patient privacy.<sup>27</sup> It was also found that female nurses had high perceptions of professional values related to confidentiality, privacy, moral and legal rights.<sup>28</sup> Additionally, it was revealed that female students represented a nurse profile that was more committed to ethical values, conducted research and improved the quality of care. Considering that professional values are based on sociocultural values, it is suggested that there may be sexual differences in the perception of professional nursing values.<sup>29</sup> Thus, the results of this study regarding privacy are socially attributed to the fact that women are generally more sensitive and empathetic, as well as their role as caregivers.

3<sup>rd</sup>-year students pay attention to "Confidentiality of personal information and private life" and to the total of the scale at a higher level than 2<sup>nd</sup>-year students and to "Sexual privacy" and "Ensuring a favorable environment" than 2<sup>nd</sup> and 4<sup>th</sup>-year students. Contrary to the results of this study, some studies did not find any difference in the PPS scores of nursing students in terms of grade variable.<sup>17,30</sup> It is thought that this difference in the results of the study may be due to the fact that the course on ethics in nursing was provided to students in the 3<sup>rd</sup> year and the awareness of students regarding this issue increased.

According to the results of the study, students who received a course on patient rights pay higher attention to "Confidentiality of personal information and private life", "The privacy of those unable to protect themselves", "Physical privacy" and the total of the scale than those who did not receive such a course. It is emphasized that those who received a course on patient privacy pay more attention to patient privacy and that there is a relationship between education and the attention paid to privacy. 15 On the other hand, it was reported that attending a special course or seminar on patient privacy did not affect the attention paid to patient privacy.<sup>31</sup> It is stated that education has an indispensable role in the development of the attention paid to privacy.<sup>32</sup> In conclusion, it is reflected that training on patient privacy can provide students with more knowledge and awareness about patient privacy. Therefore, it can be predicted that the presence of courses regarding issues such as patient rights and privacy issues in the educational process will contribute to the professional development of nursing students and ethical practices.

The students who voluntarily preferred the nursing department paid a higher level of attention to sexual privacy and ensuring a favorable environment than those who did not voluntarily prefer the department. On the other hand, Karabey et al. reported that occupational satisfaction did not affect the attention of nurses in intensive care units regarding patient privacy.<sup>27</sup> It is explained that receiving nursing educa-

tion voluntarily is a clear indication that it reveals love for the profession and develops professional values.<sup>33</sup> In the context of the research results, it is suggested that students who voluntarily prefer the nursing profession may be inclined to learn the subjects they are interested in more thoroughly, which may lead to a tendency to pay more attention to professional values and to develop a more positive attitude toward patient privacy.

According to the results of the study, a moderate positive correlation was found between the PCS scores of nursing students and their attention to patient privacy. There is also a statistically significant positive relationship between the subscales. This relationship indicates that as the consciousness of nursing students regarding privacy increases, they pay attention to patient privacy and develop a more positive attitude toward this issue. In a study conducted with health information managers, it was revealed that there was a relationship between awareness, attitudes and practices toward ensuring privacy.<sup>34</sup> A high level of awareness regarding an issue enables a person to develop a positive attitude toward that issue. In other words, the level of awareness is one of the factors shaping one's attitudes and, in parallel, attitudes are the main factors affecting one's behaviors.35 Considering that privacy attitudes are positively affected as privacy consciousness develops, the positive relationship obtained from the study is noteworthy. Since confidentiality is one of the basic elements of nursing services, it is of great importance to develop these factors in order to pay attention to patient privacy in the educational process and professional life.

#### STUDY LIMITATIONS

This study has some significant limitations. Firstly, the obtained results are limited to the sample of this study and cannot be generalized to all nursing students. Secondly, self-report scales were used to investigate students' levels of privacy consciousness and attitudes towards patient privacy.



### CONCLUSION

Privacy consciousness and attention to patient privacy are very important for the professionalization of nursing students. Therefore, it is necessary to increase the sensitivity and awareness of nursing students toward patient privacy during their educational process. In the context of the study's results, several suggestions can be made regarding nursing students' privacy awareness and patient privacy. Special training programs or seminars can be organized to increase consciousness, especially among male students. Considering that students who voluntarily choose the nursing department place greater importance on patient privacy, encouraging conscious choices for the nursing profession can be beneficial. Given that students who take courses on patient rights attach higher importance to patient privacy, such courses could be made compulsory in the nursing curriculum, and their content could be made more comprehensive. Additionally, studies on ethical decision-making processes and cases related to patient rights could be included in these courses. Projects and working groups focusing on patient privacy in hospital environments can be created to help students better understand privacy consciousness.

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#### Conflict of Interest

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

#### Authorship Contributions

This study is entirely author's own work and no other author contribution.

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