

Nursing Student's Perceptions of the Clinical Learning Environment, Supervision and Nurse Teacher: A Cross-Sectional Study

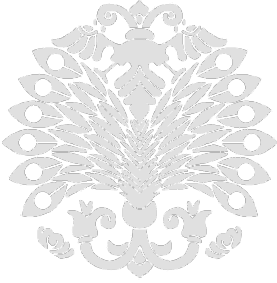
Hemşirelik Öğrencilerinin Klinik Öğrenme Ortamı, Denetim ve Hemşire Öğretim Elemanına İlişkin Algıları: Kesitsel Bir Çalışma

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ABSTRACT

Objective: This study aimed to determine nursing students' perceptions of the clinical learning environment, supervision and nurse teacher, and its affecting factors.

Methods: This cross-sectional and descriptive study was conducted with 205 students using the Student Information Form and the Clinical Learning Environment, Supervision and Nurse Teacher Evaluation Scale. The study included 1st, 2nd, 3rd and 4th year nursing students studying in the spring semester of 2020-2021. Data were collected by online method. Descriptive statistics (means, frequencies and percentages), Mann-Whitney U and Kruskal-Wallis analyses were used to analyze the data.

Results: The students of 59.5% stated their opinions were not taken during clinical practice placement, whereas 71.2% of them were placed in the compatible clinical environment. The students did not experience any problems during their clinical practice (77.6%) and they evaluated their satisfaction as "good" (37.6%). The lowest and highest sub-dimension scores from the scale were the "Pedagogical Atmosphere on the Ward (3.71±1.15)" and the "Premises of Nursing on the Ward (3.93±1.13)", respectively. The sub-dimension mean scores of the scale were significantly different from satisfaction with clinical practice, problems encountered during clinical practice, and placement in the compatible clinical environment ($P<.001$).

Conclusion: Nursing students had a good perception of the supervision, learning environment, and nurse teacher. A positive clinical environment for nursing students that allows them to take an active role in patient care and nursing practice should be developed and maintained.

Keywords: Clinical Supervision, Nursing Education, Nursing Students

ÖZ

Amaç: Bu araştırma, hemşirelik öğrencilerinin klinik öğrenme ortamı, denetim ve hemşire öğretim elemanına ilişkin algılarını ve etkileyen faktörleri belirlemek amacıyla gerçekleştirilmiştir.

Yöntemler: Kesitsel ve tanımlayıcı tipteki bu çalışma 205 öğrenci ile Öğrenci Bilgi Formu ve Klinik Öğrenme Ortamı, Denetim ve Hemşire Öğretim Elemanı Değerlendirme Ölçeği kullanılarak yürütüldü. Çalışmaya 2020-2021 bahar döneminde öğrenim gören 1., 2., 3. ve 4. sınıf hemşirelik öğrencileri dahil edildi. Veriler online yöntem ile toplandı. Verilerin analizinde tanımlayıcı istatistikler (ortalamalar, frekanslar ve yüzdeler), Mann-Whitney U ve Kruskal Wallis analizleri kullanıldı.

Bulgular: Öğrencilerin %59,5'i klinik uygulama yerleştirmesi sırasında görüşlerinin alınmadığını, %71,2'si ise uygun klinik ortama yerleştirildiğini belirtmiştir. Öğrenciler klinik uygulamaları sırasında herhangi bir sorun yaşamamış (%77,6) ve memnuniyetlerini "iyi" olarak değerlendirmişlerdir (%37,6). Ölçeğin en düşük ve en yüksek alt boyut puan ortalamaları sırasıyla "Klinikteki Öğrenme Ortamı (3,71±1,15)" ve "Klinikteki Hemşirelik Bakımı (3,93±1,13)"dır. Ölçeğin alt boyut puanları ile klinik uygulamadan memnuniyet, klinik uygulama sırasında karşılaşılan sorunlar ve uygun klinik ortama yerleştirilme arasında istatistiksel olarak anlamlı fark bulunmuştur ($P<.001$).

Sonuç: Hemşirelik öğrencileri denetim, öğrenme ortamı ve hemşire öğretim elemanı konusunda iyi bir algıya sahiptir. Hemşirelik öğrencileri için, hasta bakımı ve hemşirelik uygulamalarında aktif rol almalarına olanak tanıyan olumlu bir klinik ortam geliştirilmeli ve sürdürülmelidir.

Anahtar Kelimeler: Klinik Denetim, Hemşirelik Eğitimi, Hemşirelik Öğrencileri

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INTRODUCTION

Clinical learning environments (CLE) are defined as areas where nursing students perform real or simulated patient care and apply theoretical knowledge into practice to become competent, entry-level nurses and acquire the skills, attitudes, and decision-making abilities.¹⁻³ Clinical teaching enables students to integrate the psychomotor, cognitive, and affective abilities required for nursing practice.^{4,5} It also helps students develop skills such as research, critical thinking, problem-solving, independent decision-making, effective interpersonal communication, and a sense of self-confidence and responsibility in performing the nursing profession.^{6,7} The clinical environment is an important setting of learning for nursing students and plays a key role in the education of the future nursing workforce.⁸ Some studies highlighted nursing students tend to start work in clinical placement units where they had satisfactory experiences, so it was important to provide good learning environments in all clinical settings used in nursing education.⁹⁻¹¹ Therefore, understanding nursing students' clinical learning environment, supervision experiences, and relationships with other variables is necessary to create safe and supportive environments.^{2,12}

Clinical teaching is carried out in environments chosen in line with learning objectives, and it is not performed only between the instructor and the student. Clinical nurses, healthcare team members, school and hospital managers also have important roles in providing good learning environments.³ Clinical practice environments provide students with the opportunity to observe role models, practice by taking responsibility, act according to the patient's clinical picture, make decisions, and work as team members. It also helps to observe how members of different professions work together in harmony and embrace being a part of it.⁷ Nonetheless, tension and anxiety are common side effects of studying in a clinical setting for students. Nursing students frequently experience anxiety or vulnerability, particularly during the beginning of their clinical rotation. This might be associated with reality shock, anxiety about making mistakes, feelings of inadequacy and neglect, or embarrassment when speaking with other experts.¹³ Excessive anxiety compromises students' clinical performance and endangers their chances of success. Therefore, it is critical to create a supportive learning atmosphere for nursing students so they may succeed in their studies.¹⁴ A negative CLE might make it more difficult to meet learning objectives and worsen the international nurse shortage. Nurse graduates who are unprepared to work as nurses often leave the field within a year of practice due to stress and

burnout, worsening the global nursing shortage.²

The basis of the clinical learning process is the clinical learning environment, supervision, and nurse teacher. Clinical learning environment refers to the healthcare working environment in which students' clinical placements take place and form part of the education provided under nurse supervision. Supervision and/or mentorship is part of the teaching roles performed by nursing professionals that include teaching students practical skills, assessing students, supporting students during their clinical placements, and facilitating students' learning.¹⁵ Nurse teachers are often used by higher education institutions to facilitate theoretical and clinical learning, coordinate student assessment and learning, and provide support and lead mentors.¹² Clinical supervision and instructors play a key role in improving student learning in nursing education, helping students gain competency during placement experiences and their professional development.⁶

A 'good' or 'positive' clinical environment consists of many practical components (e.g. familiarization, meaningful learning, feedback, etc.) and provides an opportunity for professional development. Professional development is a broad socio-cultural process through which the individual acquires values, attitudes, moral understanding, knowledge, and skills. Good clinical learning environment can be defined as being characterized by a non-hierarchical structure and with staff demonstrating teamwork and good communication.¹⁶ In addition, a positive clinical learning environment is defined as practice areas where students are seen as adults, students are encouraged to ask questions by providing information during practices, timely and constructive feedback is given, and they enable them to reveal their abilities.⁴

Improvements can be made in the clinical environment by evaluating the feedback students provide about their experiences in the CLE.¹⁷ However, nursing program and healthcare facility administrators are responsible for evaluating both the CLE and the supervisory relationship to ensure that students can achieve their learning goals.¹⁵ Good CLE and supervision depend on having a clear understanding of the expectations that students have for their clinical experience. Improve the CLE, also gives supervisors and nursing instructors information on excellent clinical practices.^{1,18}

AIM

The aim of this study was to determine how nursing students felt about the clinical learning environment, supervision, and nurse teacher, as well as the factors that

influenced them. The study's findings could help improve clinical nursing education standards and make plans to lessen the variables that have a negative impact on them.

Research Questions

- How do perceptions of nursing students about clinical learning environment, supervision, and nurse teachers?
- Do the clinical learning environment, supervision, and nurse teacher scale scores differ according to the nursing students' characteristics and opinions about clinical practice education?

METHODS

Study Design

This study was conducted in a cross-sectional and descriptive design.

Setting and Sample

The study was carried out among students studying at the Nursing Department of the Faculty of Health Sciences of a foundation university in Istanbul between June and July 2021. The research population consists of 475 students enrolled in the 2020-2021 spring semester from the nursing department of the university. Participants in the study were 1st, 2nd, 3rd, and 4th graders. The sample selection was based on the sampling method with known population. The minimum number of the sample was calculated as 173, with a sampling error of $\pm 5\%$ and a 90% confidence interval ($\alpha=0.05$) accepting $P=.50$. The study was completed with 205 students who volunteered to participate and answered all questions completely.

Clinical Practice Process of Nursing Students

The nursing education curriculum in Turkey follows the European Union Nursing Standards and consists of a total of 4600 hours. The nursing education program lasts four academic years, including theory and clinical practice. Students in the undergraduate nursing program complete 2300 clinical and 2300 theoretical hours during their education.¹⁹ Clinical placements continue throughout undergraduate education, starting from the first year, with more in the third and fourth academic years. Students are supervised primarily by nurse teachers at the nursing school where the students are studying and by clinical nurses at hospital practice settings. The instructors of the course are primarily responsible for clinical education. In the clinic, they supervise students when planning nursing care, teach them how to communicate with patients, and accompany students throughout clinical practice in line with course objectives. Although clinical nurses are not directly responsible for clinical learning, students learn by observing nurses' communication with patients and their

clinical skills.^{17,19}

At the university where the study was conducted, students perform their clinical practice one day a week (8 hours) during the semester (14 weeks) within the program of the relevant courses. Before the students begin their clinical practice, quota information is requested from the relevant hospitals on the dates determined according to the number of students who will be practicing. Correspondence is made with the Provincial Health Directorate Education Unit for public hospitals and with the Education Unit for private hospitals. After the quota information, student details are directed to the institution to determine in which clinic the students will practice. The students continue their clinical education in the clinic where they are placed during the semester after the required documents are completed and insurance entries are made in accordance with the institutional procedures. In case the instructor of the course decides that it is appropriate, students are rotated to different clinics. Students are placed in inpatient floors, intensive care units, emergency unit, operating room and outpatient units. In each clinic, students are planned with a maximum of three or four student nurses. 4th grade students have practice four days a week as interns in the last spring semester. These students are placed in clinics in which they want to work when they graduate.

There is a charge nurse and two or three service nurses who supervise the students in the clinics. Students perform nursing interventions such as patient admission, nursing care interventions, drug administration, monitoring of vital signs, etc. with the nurses in the clinic or by the guidance of them. In every hospital, there is a nurse teacher who controls and directs the students, intervenes in their problems, checks their case assignments, acts as a bridge between the hospital and the educational institution, and receives feedback from the charge nurse or service nurses about the students. The number of students in the clinical setting per nurse teacher is between 10-30 students. The course instructor is responsible for both theoretical and clinical practice. At the end of the semester, the charge nurse and nurse teacher scores the clinical evaluation of each student in accordance with the criteria determined by the instructor of the course (care plan, case study, seminar presentation, etc.).

Data Collection

Data were collected with the online method. Students were asked to complete the surveys by sending the survey link to their school emails. A description of the purpose and duration of the study was included in the survey questionnaire. After carefully reading the explanation, each participant was asked to check the "yes" box to

indicate their willingness to participate in the study.

Student Information Form: This form created by the researchers using literature information^{4,13,20}, which consists of ten questions. Information about the students' personal characteristics (age, sex, working status, class) and clinical practice (hospital and unit where the practice takes place, placement in the compatible clinical practice, having problems during clinical practice, satisfaction with clinical practice, etc.) were included.

Clinical Learning Environment, Supervision and Nurse Teacher Evaluation Scale (CLES+T): The scale was created by Saarikoski et al.¹⁶ and is a valid and reliable tool for assessing student perceptions of the quality of nursing clinical education. The scale assesses the student nurses' opinions about the clinical placement's supervision and learning environment as part of an overall assessment of health education. The Turkish validity and reliability of the scale was conducted by Iyigun et al.²¹ CLES+T consists of 34 items and 5 subscales. Item 18 is not included in the scale evaluation. The sub-dimensions are the Pedagogical Atmosphere on the Ward (9 items), the Leadership Style of the Ward Manager (4 items), the Premises of Nursing on the Ward (4 items), the Supervisory Relationship (8 items), and the Role of the Nurse Teacher (9 items). Each scale item is rated on a five-point Likert type (ranging from 1=strongly disagree to 5=strongly agree). Participants tick up the option that best expresses them. There is no total score and sub-dimension total scores from the scale. The minimum and maximum values that can be obtained from each item changes between 1-5 points. Higher scores indicate agreement with the statements. The sub-dimensions of Cronbach's alpha internal consistency ratings in the Turkish version ranged from 0.76 to 0.93.²¹ Internal consistency coefficients for the sub-dimensions in this study were found to be 0.93-0.98.

Data Analysis

Descriptive statistics were used in the study to calculate means, frequencies, and percentages based on the data analysis. The Shapiro-Wilk test was utilized to investigate the normality of the scale scores. Since the sample's measurements were not normally distributed, non-parametric tests such as the Mann-Whitney U and Kruskal Wallis analyses were used.

Ethical Consideration

Biruni University Non-Interventional Clinical Research Ethics Committee (Date: 21.05.2021, Decision No: 2021/51-23) granted ethical permission for this study. If they agree to participate in the study, students may start filling out the survey questionnaires. All respondents were

assured of their privacy, confidentiality, and the freedom to withdraw from the research at any moment. The students were not asked for any identification information and it is not known to whom the results belong. Data were collected online during non-class hours and participation in the study was voluntary. There is no conflict of interest between the student and the instructor.

RESULTS

The personal characteristics of nursing students and their opinions about clinical practice are given in Table 1. Of student nurses, 59.5% stated their opinions were not taken during clinical practice placement and 71.2% of them were placed in the compatible clinical environment of the course. Additionally, 77.6% of students had no problems during clinical practice, while 37.6% evaluated their satisfaction with the clinical practice as "good".

Table 2 includes the mean scores obtained from the scales. The results from the sub-dimensions are as follows: The mean score of the Pedagogical Atmosphere on the Ward was 3.71 ± 1.15 , the Leadership Style of the Ward Manager mean score was 3.90 ± 1.16 , the Premises of Nursing on the Ward mean score was 3.93 ± 1.13 , the Supervisory Relationship mean score was 3.77 ± 1.25 , and the Role of the Nurse Teacher mean score was 3.83 ± 1.23 .

The charge nurses (51.2%) most frequently supervised the students and were supervised once or twice without an instructor during the clinical training period (41%). Student nurses answered most frequently with "The same supervisor had several students, she/he was more of a group supervisor than an individual supervisor" (31.7%). The comparison of the CLES+T subscale scores by variable is displayed in Table 3. There was no significant difference between the CLES+T subscales in terms of gender or working status ($P > .05$).

A significant difference was found between students' CLES+T subscale mean scores according to the class ($P < .05$). After the further analysis to determine from which groups the difference originated, it was found that the scores of first-year students in the Pedagogical Atmosphere on the Ward, the Leadership Style of the Ward Manager, and the Premises of Nursing on the Ward sub-dimensions were significantly higher than those of third-year students, with a highly significant difference ($P = .019$; $P = .002$; $P = .012$, respectively). The subscale scores according to grade level were highest in the 1st grade students, whereas they decreased to the lowest level in the 3rd grade and then increased again in the 4th grade.

Table 1. Personal Characteristics of the Participants and their Opinions about Clinical Practice (n=205)

| Variables | Groups | n | % |
|---|-----------------------------------|-----|------|
| Age average (year) | 20.41±1.46 | | |
| Gender | Female | 165 | 80.5 |
| | Male | 40 | 19.5 |
| Working status | Working | 43 | 21.0 |
| | Not working | 162 | 79.0 |
| Class | 1st class | 76 | 37.1 |
| | 2nd class | 66 | 32.2 |
| | 3rd class | 44 | 21.4 |
| | 4th class | 19 | 9.3 |
| The hospital where the clinical practice was performed* | Public Hospital | 154 | 75.1 |
| | Private hospital | 7 | 3.4 |
| | Both public and private hospitals | 44 | 21.5 |
| The unit where clinical practice was performed* | Inpatient floors | 155 | 75.6 |
| | Intensive care unit | 47 | 22.9 |
| | Operating room | 15 | 7.3 |
| | Emergency room | 40 | 19.5 |
| | Policlinic | 47 | 22.9 |
| | Others | 18 | 8.8 |
| Obtaining student opinions during clinical practice placement | Yes | 83 | 40.5 |
| | No | 122 | 59.5 |
| Placement in the compatible clinical environment | Yes | 146 | 71.2 |
| | No | 59 | 28.8 |
| Problems encountered during clinical practice | Yes | 46 | 22.4 |
| | No | 159 | 77.6 |
| Satisfaction with clinical practice | Bad | 16 | 7.8 |
| | Middle | 67 | 32.7 |
| | Good | 77 | 37.6 |
| | Perfect | 45 | 21.9 |

*Participants marked more than one option (line percentages were calculated because more than one response was given)

Table 2. Findings Regarding the Participants' Mean Scores from the Scale and Subscales and the Distribution of Subscale Scores in the Sample

| Scale and subscales | Minimum | Maksimum | Mean | Standard deviation | |
|--------------------------------------|--------------|----------|----------|--------------------|-------------------------|
| Pedagogical Atmosphere on the Ward | 1.00 | 5.00 | 3.71 | 1.15 | |
| Leadership Style of the Ward Manager | 1.00 | 5.00 | 3.90 | 1.16 | |
| Premises of Nursing on the Ward | 1.00 | 5.00 | 3.93 | 1.13 | |
| Supervisory Relationship | 1.00 | 5.00 | 3.77 | 1.25 | |
| Role of the Nurse Teacher | 1.00 | 5.00 | 3.83 | 1.23 | |
| Distribution of subscale scores | Shapiro-Wilk | Varyans | Skewness | Kurtosis | Coefficient of variance |
| Pedagogical Atmosphere on the Ward | .884 | 1.325 | -.9673 | .006 | 30.99 |
| Leadership Style of the Ward Manager | .847 | 1.336 | -1.118 | .391 | 29.7 |
| Premises of Nursing on the Ward | .829 | 1.272 | -1.277 | .881 | 28.8 |
| Supervisory Relationship | .865 | 1.555 | -.819 | -.426 | 33.2 |
| Role of the Nurse Teacher | .854 | 1.519 | -.872 | -.326 | 32.1 |

Table 3. Comparison of the Mean Scores of the Participants from the Subscales of the CLES+T Scale according to Variables

| Variables | Groups | Pedagogical Atmosphere on the Ward | | Leadership Style of the Ward Manager | | Premises of Nursing on the Ward | | Supervisory Relationship | | Role of the Nurse Teacher | |
|---|-------------------------------|------------------------------------|--------------------|--------------------------------------|-------------------|---------------------------------|-------------------|--------------------------|--------------------|---------------------------|------|
| | | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Gender | Female (n:165) | 3.74 | 1.14 | 3.93 | 1.13 | 3.97 | 1.09 | 3.81 | 1.19 | 3.84 | 1.20 |
| | Male (n:40) | 3.60 | 1.22 | 3.75 | 1.27 | 3.78 | 1.29 | 3.59 | 1.48 | 3.78 | 1.36 |
| | Test | z=3.061 | | z=3.028 | | z=3.102 | | z=3.114 | | z=3.293 | |
| | P | .477 | | .413 | | .552 | | .577 | | .983 | |
| Class | 1st class (n:76) ^a | 3.94 | 1.11 | 4.19 | 1.06 | 4.18 | 1.06 | 3.91 | 1.21 | 4.11 | 1.01 |
| | 2nd class (n:66) ^b | 3.79 | .94 | 3.94 | .99 | 3.95 | .98 | 3.64 | 1.10 | 3.47 | 1.23 |
| | 3rd class (n:44) ^c | 3.26 | 1.36 | 3.42 | 1.35 | 3.56 | 1.34 | 3.74 | 1.42 | 3.84 | 1.42 |
| | 4th class (n:19) ^d | 3.57 | 1.22 | 3.66 | 1.23 | 3.75 | 1.15 | 3.69 | 1.46 | 3.93 | 1.37 |
| | Test | KW=9.961 | | KW =14.443 | | KW=10.955 | | KW =3.564 | | KW =9.786 | |
| P | .019* | | .002** | | .012* | | .313 | | .020* | | |
| Working status | Working (n:43) | 3.56 | 1.34 | 3.76 | 1.32 | 3.80 | 1.32 | 3.51 | 1.49 | 3.62 | 1.45 |
| | Not working (n:162) | 3.75 | 1.10 | 3.93 | 1.11 | 3.97 | 1.07 | 3.84 | 1.17 | 3.89 | 1.17 |
| | Test | z=3.604 | | z =3.596 | | z=3.583 | | z=3.814 | | z=3.699 | |
| | P | .726 | | .741 | | .768 | | .333 | | .524 | |
| Obtaining student opinions during clinical practice placement | Yes (n:83) | 3.82 | 1.22 | 3.89 | 1.21 | 3.93 | 1.21 | 4.06 | 1.21 | 4.07 | 1.14 |
| | No (n:122) | 3.63 | 1.10 | 3.90 | 1.12 | 3.94 | 1.07 | 3.57 | 1.24 | 3.67 | 1.27 |
| | Test | z=1.928 | | z=0.308 | | z=0.563 | | z=3.253 | | z=2.381 | |
| | P | .054 | | .758 | | .574 | | <.001*** | | .017* | |
| Placement in the compatible clinical environment | Yes (n:146) | 4.00 | 1.05 | 4.11 | 1.08 | 4.11 | 1.08 | 3.99 | 1.18 | 4.05 | 1.12 |
| | No (n:59) | 2.99 | 1.09 | 3.37 | 1.17 | 3.48 | 1.13 | 3.21 | 1.23 | 3.29 | 1.34 |
| | Test | z=6.280 | | z=4.257 | | z=4.550 | | z=4.440 | | z=3.877 | |
| | P | <.001*** | | <.001*** | | <.001*** | | <.001*** | | <.001*** | |
| Problems encountered during clinical practice | Yes (n:46) | 2.72 | 1.20 | 3.01 | 1.29 | 3.21 | 1.30 | 2.95 | 1.33 | 3.12 | 1.42 |
| | No (n:159) | 4.00 | .96 | 4.15 | .98 | 4.14 | .98 | 4.00 | 1.12 | 4.04 | 1.10 |
| | Test | z=6.321 | | z=5.653 | | z=4.927 | | z=4.798 | | z=4.061 | |
| | P | <.001*** | | <.001*** | | <.001*** | | <.001*** | | <.001*** | |
| Satisfaction with clinical practice | Bad (n:16) ^a | 1.83 | .86 | 2.14 | 1.02 | 2.44 | 1.37 | 2.13 | 1.06 | 2.44 | 1.41 |
| | Middle (n:67) ^b | 3.29 | .95 | 3.59 | 1.05 | 3.70 | .98 | 3.32 | 1.20 | 3.35 | 1.17 |
| | Good (n:77) ^c | 4.08 | .83 | 4.18 | .89 | 4.15 | .94 | 4.10 | 1.01 | 4.13 | 1.03 |
| | Perfect (n:45) ^d | 4.39 | 1.03 | 4.48 | 1.03 | 4.44 | 1.01 | 4.45 | .96 | 4.52 | .89 |
| | Test | KW=79.677 | | KW=60.733 | | KW=47.449 | | KW=56.132 | | KW=50.793 | |
| P | <.001*** | | <.001*** | | <.001** | | <.001** | | <.001*** | | |
| | | a<b<c<d | | a<b<c<d | | a,b<c,d | | a<b<c,d | | a,b<c,d | |

SD: Standard Deviation, Z: Mann Whitney U test, KW: Kruskal Wallis test, *p<0.05, **p<0.01, ***p<0.001

In the study, the comparison of the mean scores obtained by nursing students from the CLES+T subscales was examined about their answers to the question, "Before clinical practice, are you asked for your opinion about which hospital you would like to choose?". The results showed that the scores of the sub-dimensions of the Supervisory Relationship and the Role of the Nurse Teacher were significantly higher in the students having their opinions about the hospital where they would be practicing compared to the students who did not have their opinions asked ($P<.001$; $P=.017$, respectively).

Regarding the question "Do you think you are placed in a clinical environment that is compatible with your courses?" the scores obtained in all sub-dimensions by those who answered "yes" were significantly higher than those who answered "no" ($P<.001$). For the question "Do you experience problems during clinical practice?", the scores of those who answered "no" in all sub-dimensions were significantly higher than those who answered "yes" ($P<.001$).

Comparing the scores obtained from the sub-dimensions regarding the student's satisfaction with clinical practice, showed a significant difference between the groups ($P<.001$). Further analyses to determine the groups from which the difference originated showed that in the sub-dimensions of Pedagogical Atmosphere on the Ward and Leadership Style of the Ward Manager, those who rated poor had significantly lower scores than those who rated moderate, those who rated moderate had significantly lower scores than those who rated good, and those who rated good had significantly lower scores than those who rated very good ($P<.001$).

DISCUSSION

The students' perceptions of clinical placement have a great impact on their learning process. Providing an effective CLE for nursing students is very important in the development of quality-based nursing practices.^{1,22} Assessing how students see their experiences in the clinical context might help CLE be improved. To guarantee that learning objectives are fulfilled and to better prepare students for clinical practice, administrators of nursing schools and healthcare facilities may assess CLE. The CLE needs to facilitate learning, enable the application of theoretical knowledge, and assist students in developing into qualified healthcare professionals.^{2,5}

The scores obtained by nursing students from the CLES+T subscales were between 3.71 and 3.93 (ranging from 1 to 5), and all subscale scores were above the average value.

While the majority of students were placed in compatible clinical environments and had no issues, over half did not have their opinions solicited during their clinical practice placement. A very small number of students evaluated their satisfaction with the practical training as poor. In addition, it was determined that as the level of satisfaction with the sub-dimensions of the scale increased, the satisfaction of the students with clinical practice was also found to increase. According to the findings, students gave their nurse teacher, supervisors, and clinical learning environment a good or favorable rating. Comparably, other research revealed that nursing students had a good learning experience and were happy with their clinical assignments.^{6,10,23,24} In a study evaluating nursing students' perceptions of clinical practice in Nepal, nursing students' overall satisfaction with their learning environment was high, but students in private hospitals rated their CLE significantly more negatively than students in public hospitals.¹⁸ The result of another study revealed students' clinical practices positively affected their learning, but they were dissatisfied with most of the clinical environments.¹⁸ CLE outcomes include the development of practice-related skills, knowledge, and behaviors, the student's gaining in self-confidence, and their satisfaction with the nursing profession by affecting the success of clinical learning outcomes. Therefore, healthcare organization leaders must encourage a culture that values future nurses and remember nurses' professional obligations. Students are more likely to encounter negative challenges and unprofessional behavior if the organization's culture does not value nursing education. These encounters may make it difficult to learn, undermine one's confidence, or even prompt one to look into alternative job paths.² The study's findings demonstrated that the Pedagogical Atmosphere on the Ward sub-dimension had the lowest score, while the Premises of Nursing on the Ward sub-dimension had the greatest score. Regarding clinical nursing care, the study found that students had good attitudes toward exchanging information about patient care, recording nursing implementations, and giving personalized nursing care to patients. However, there were fewer positive perceptions related to the pedagogical atmosphere, such as the interest of the staff in supervising the students, the student's feeling of comfort in the clinical environment, and the adequacy of learning. Therefore, an environment can be developed that enables students to express the issues in which they feel deficient, to communicate with patients, and to take an active role in patient care and nursing practices.

The results of the meta-analysis of nursing students'

evaluation of their clinical practice placements using the Clinical Learning Environment, Supervision and Nurse Teacher scale revealed that nursing students' evaluations were positive in terms of their placement experiences and satisfaction levels. The highest rated sub-dimension was the Supervisory Relationship, with the Role of the Nurse Teacher rated lower.²⁵ The other studies also reported results different from or similar to this study. Unlike the study, the sub-dimension of the Pedagogical Atmosphere on the Ward received the highest score^{15,16}, while the Leadership Style of the Ward Manager¹⁶ and the Role of the Nurse Teacher sub-dimensions had the lowest score.^{15,26} Ward managers should create a positive attitude toward students and their learning needs and create suitable conditions for a positive ward culture.¹⁶ Similar to our study, Zhang et al.¹¹ and Nepal et al.¹⁸ studies, the Pedagogical Atmosphere in the Ward sub-dimension had the lowest score, and the students were the most satisfied with the Leadership Style of the Ward Manager that was the second-highest-scoring sub-dimension in this study. A good learning environment is characterized by the ward manager's management style which is aware of students' physical and emotional needs, has a democratic leadership style, and encourages students' interest in clinical practice.¹⁶ In addition, ward managers should create a good clinical pedagogic atmosphere and encourage environments that enable the interconnection of theoretical knowledge and practical applications with effective feedback mechanisms.¹¹ These differences between studies may be due to changes in the CLE between countries, changes in the nursing education curriculum, or differences in structural and technological resources in the clinical practice.

Nurse teacher have an essential role in creating good clinical environments and establishing the connection between clinical practice and nursing schools. Integrating theory and practice, following, observing, and evaluating the student's development are among the other important roles of the nurse educator.^{21,23} In our study, the role of the nurse teacher was perceived positively and the score obtained was higher than the supervisory relationship. This result showed that students' perceptions of nurse teachers were better. The relationships between instructors and students were highly effective in students' learning experiences. Positive relationships between teachers and students enhance clinical performance and problem-solving abilities, boost the drive to learn and contentment with the clinical setting, and lessen anxiety. In addition to these, student learning is influenced by the feedback, support, and guidance they receive from instructors.¹⁷ In a study, the majority of the students stated the feedback was

generally negative, it was not given individually, the feedback and final grades did not match, the instructors reflected their personal feelings with the feedback and they shared their thoughts about the students with each other but this caused prejudice, the feedback was not given on time, and not enough time was allocated.²⁷ Therefore, instructors who do not have clinical teaching experience need to receive training, work with experienced instructors to gain experience, and improve their feedback skills.¹⁹ Considering the student-nurse-teacher relationship, half of the students met the nurse-teacher only once or twice during placement, which was concerning. Higher satisfaction levels, however, were directly correlated with the quantity of interactions between the student and the nursing instructor. This finding demonstrated that, in fostering successful learning in clinical practice, a nurse teacher's interpersonal and communication skills were just as crucial as their clinical knowledge and expertise.²⁸ Differently from the study, the students indicated that the lecturers mainly questioned theoretical knowledge, the constant visits caused stress, they could not focus on patient care and they felt intense pressure.²⁹

The current study there was found nursing students perceived a positive CLE and supervision relationship. However, more than half of the students stated the charge nurse supervised them, and the majority of them were supervised one-on-one by the supervisor, without the instructor, once or twice during their clinical training. They also indicated the supervisor had more than one student and they were supervised more as a group rather than individually. Similarly, in many studies, students rated their clinical placements and supervision by nurses as 'good'.^{11,15,24,30} In a different study, the majority of students agreed with the statement "Nurses contribute to the clinical education of students".²⁰ The percentage of nursing students who found the communication of the clinical educators insufficient was quite low, while the perceptions of the students who found the educators' communication sufficient were more positive about the CLE.⁴ In a study conducted on nursing and midwifery students in Ghana, the clinical experience was rated higher by students who received successful supervision compared to students who received unsuccessful or team supervision (where students are not assigned to a specific supervisor, but are supervised by qualified or registered nurses who are on call for the shift). Furthermore, frequent contact with the personal supervisor and successful supervision were associated with better evaluation of the clinical experience among students.²⁶ Likewise, the personalized supervision model was rated significantly higher than the staff supervision model by nursing students.³¹

Clinical teaching is not only a process carried out by the student and the instructor together, but also an educational process in which students have the opportunity to work with clinical nurses and requires the establishment of quality bonds with nurses.^{3,32} Clinical nurses have an important role in helping nursing students integrate theoretical knowledge and practical applications and provide them with a professional identity.²⁰ The inability of nurses to support students and communicate effectively with them in clinical education negatively affects the students' learning.¹⁹ The study conducted by Serçekuş and Başkale¹⁷, most of the participants stated the support of nurses affected their learning, but they were often excluded from their rooms, and the nurses did not see them as colleagues and did not support them.⁶ Nonetheless, throughout their clinical placement, students claimed to have completed ordinary tasks and non-nursing responsibilities.^{19,20,33} Therefore, a pedagogical atmosphere should be provided where students have the best possible learning chances and have clearly defined tasks to complete. A positive, cooperative, and respectful attitude toward students may be fostered and the assistance they require can be given by making sure teachers and staff understand the significance of their role in students' clinical learning.¹⁵ Indeed, Cebeci et al.²⁹ emphasized that nurses had a good approach in facilitating the learning process by supporting the students and that practicing one-on-one with nurses made it easier for them to learn and enhanced their practice. Also, they stated that practicing under the supervision of a nurse was safe for the patient and themselves.²⁹ Overall, students need support and supervision from nurses in the clinic. A poor communication with staff in the clinical setting may make students feel stressed and not feel like a member of the team, making learning difficult.

The study found that gender had no difference in nursing students' opinions on the CLE, supervision, and nurse teachers. Similarly, the other study showed there was no difference between the nursing students' mean scores regarding their perceptions of the CLE and their gender.⁴ On the other hand, male students in the delivery room experienced stress due to caring for female patients and being exposed to gender discrimination, according to research by Potur and Bilgin.³⁴ In this regard, programs should be implemented to inform the public that nursing is not a gender-specific profession. Akpınar et al.³⁵ found male students had more difficulties in the clinical practice of women's health and diseases nursing and were more rejected by the patient. In particular, it was stated that facilitating clinical practice for male students should be

planned.

In the study, first-year students' perceptions of the sub-dimensions of Pedagogical Atmosphere on the Ward, Leadership Style of the Ward Manager, and Premises of Nursing on the Ward were the highest. However, the students' perceptions of the clinical environment reached the lowest level in the third year, and it increased again in the fourth year. First-year students may feel safer because they are practicing for the first time and have more clinical facilitator support. They may also have less responsibility for the practices expected of them because they are in the clinical environment for the first time, which may lead to less stress and anxiety in students. In addition, the capacity of first-year students to evaluate the clinical environment may be more limited compared to other grades. By the second and third year, students have more knowledge and experience in both theoretical and clinical practice, so they are better able to evaluate and compare their environment. In the fourth year, students work as interns. This may have increased the students' perceptions of the clinical environment because it caused them to integrate with the team in the ward, to get to know the clinical environment better and to get one step closer to the profession. Similar to our study, nursing students with low levels of education were reported to experience a more positive CLE. Accordingly, nursing students with an advanced diploma experienced a more positive clinical learning environment than those with a bachelor's degree.¹¹ Consistent with previous research, fourth-year nursing students' perceptions of the CLE were found to be negative. This might be because as students go through the course, the learning objectives become increasingly complicated and challenging to meet.¹⁵ In another study, student perceptions on the CLE varied by grade level. First-year students were not as satisfied with their clinical placements as second and third-year students, even though they had more instructor support.²²

According to this study, the clinical nurse and nurse instructor were seen more favorably by the students whose opinions were collected during the clinical practice placement. Furthermore, students who felt they were in the right clinical setting and had no issues reported higher levels of satisfaction with their clinical experience. This indicates that there was a good rapport between the students and the instructors and nurses, that the students had enough help and direction, and that they were happy with the instructors and supervision throughout their clinical practices. Asking students for their opinions on clinical placement can make them feel valued. In addition, placing it in a clinical practice area close to their

settlements can satisfy the students and also prevent them from experiencing traffic problems and the stress of being late. In some other studies, increasing students' perceptions of the quality of the CLE and supervisor in which they performed their clinical placements positively affected student satisfaction¹⁵, and students who had successful supervision experiences were satisfied with their clinical placements.²³

Limitations

The study results cannot be generalized to students studying at universities that provide similar education because of the sample consisted of students studying at only one educational institution. Among the other variables that limited the study's generalizability was its small sample size. Participants may have given responses that they believed were suitable rather than ones that accurately reflected their experiences during their clinical placement because the study was based on students' self-report assessments.

The study indicated nursing students had favorable opinions of the CLE, supervision, and nurse teacher. First-year students' perceptions of the clinical environment were generally the highest, while they were the lowest in the third year. In the fourth year, their perceptions of the clinical environment increased again. It was also determined that nursing students who were placed in the compatible clinical environment, did not experience any problems, and were generally satisfied with the clinical practice had better perceptions of the clinical learning environment, supervision and nurse teacher.

Nursing students represent the future of the nursing workforce, and nursing education is an important investment in ensuring the quality of care. Therefore, supervisors, teachers, and other clinical staff should support an optimal learning environment that will contribute to students' positive experiences, ensuring their satisfaction and desire to work in their future careers. It is very important to take students' opinions about the problems they experience in the clinical environment and to offer solutions. Also, interventions should be implemented to ensure that students are satisfied and motivated in the clinical environment during the nursing education process. For this purpose, student requests can be taken into consideration by presenting options regarding the health institutions to be practiced before clinical placement and trainings can be given to introduce the area to be practiced and explain the rules to be followed. Moreover, ensuring the appropriate number of student placements in the clinical setting and rotating students to different clinics to gain experience in other

fields can ensure that students benefit from the clinical field at an optimum level. Additionally, it may be recommended that clinical guide nurses undergo a certain preparation program to contribute to education at the desired level.

Although the use of a validated and reliability-tested tool to determine students' CLE and supervision experiences was one of the strengths of the study, there was no open-ended question that could give more examples of student satisfaction. However, because the quantitative survey approach cannot fully explain some elements of components, such as "satisfaction" qualitative research can be performed. Student interviews, for instance, can offer further details about their experiences or provide some other information.

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