# Nursing Students' Perceptions Regarding Clinical Learning Environment and Supervision and its Relation to Their Academic Achievement at Najran University

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## Abstract

**Back ground:** Clinical practice is the most significant element in nursing education. It helps nursing students in using their cognitive, psychomotor and affective skills in combination. The worth on clinical learning environment is a valid indicator to confirm the value on nursing curriculum. **Aim:** The study was conducted to assess the effect of nursing students' perceptions regarding clinical learning environment and supervision and its relation to their academic achievement at Najran University. **Design:** a descriptive correlation study design was used. **Sample:** A purposive sample (92) of nursing students at Najran University was involved. **Tools:** two tools were used tool (1) nursing students' perception questionnaire; it included four parts. Tool (2) students' achievement score according to their academic GPA. **Results**: nearly three quarters of the nursing students (70.7%) expressed satisfaction with the clinical learning trainer, supervisor, training process and orgazitional aspects. While about two thirds of the students found the clinical learning environment is satisfactory. About two thirds (64.1%) of students were satisfied with the availability and adequacy of equipment and supplies. A substantial percentage (81.5%) of the students reported an overall satisfactory perception. **Conclusion** most of the students had positive perception regarding clinical learning environment and clinical supervision. The findings suggested that the total score was influenced by the total perception. **Recommendation:** Design an effective teaching and learning strategies to meet learning objectives based on quality standards of nursing education and practice.

**Key words:** Academic achievement, Clinical supervision, nursing students' perception, learning environment.

## Introduction

Clinical practice is an important aspect of nursing education that helps nursing students to use their cognitive, psychomotor, and affective skills in combination (**Akman et al., 2021**). The main reason why nursing students participate in a new clinical environment is to gain practical experience. They may feel anxious and uncertain when they are first exposed to the complex healthcare environment. They may also face many situations that require coping skills, such as systematic and dynamic clinical environments, a process on getting used to these environments, anxiety caused by lack of knowledge or skills, near on making mistakes, and neither caring nor different severely ill patients (**Cornine, 2020**).

Several studies showed that students experience stress due to several factors,

including lack on theoretical training, lack on skills in clinical practice to assume responsibility for patients, time pressure, lack of motivation and adjustment, social line, new responsibilities, and adaptation to new environment. This creates a sense of vulnerability, and inadequate support may adversely affect their learning **(Mccloughen et al., 2020).**

In clinical practice as well as in the educational system, nursing students increasingly face a number of difficulties. It can lead to serious gap between theoretical learning and its implementation during the educational process that can have impact on student performance and achievements. Nursing students have emphasized on education taught by preceptor during their training. Nursing students perform clinical practice in different clinical settings. **(Anzal & Gilani, 2019).**

The discipline on nursing in the 21st century requires competent nurses who have the ability to make the best clinical judgments and to think critically in order to solve the daily complexities on health care on the basis on evidence-based practice. As a practice-based profession, nursing requires a clinical learning environment that equips nursing students with professional skills through a combination on cognitive, psychomotor, affective skills and student mentoring **(Aksoy, 2022).**

Clinic learning environment is a complex social unit. This environment effectively influences the learning process. However, learning in the clinical environment has several advantages, but it can be challenging, unpredictable, stressful, and constantly changing. ignoring clinical experiences and the elements that contribute to learning from these experiences may waste a lot on time and energy, place a heavy financial burden on educational institutions, create psychological, family, and educational problems nor students, and compromise the quality of patient care **(Baraz et al., 2015).**

Considering the difficulties in the clinical experience on student nurses is very important. It has been found that there is a lack on a clear statement on what is expected from the student nurses in a clinical setting, as it is one on the biggest problems; they face in a clinical practice session. The negative clinical learning settings have played greater role in reducing the confidence on nursing students and massive change in their attitudes than the positive settings **(Papathanasiou et al., 2014).**

Most learning environments, despite their benefits to nursing students, do not provide a positive learning environment. The clinical learning environment can have both positive and negative effects on learning, and experiences in the clinical nursing environment can have a pronouns impact on student learning. Positive events like correct application on theory to practice, effective supervision, good interpersonal relationship and constructive feedback influence learning in the clinical learning setting. The quality of clinical education provided by nurse educators and the support received from clinical staff are the most important factors influencing learning **(Berhe & Gebretensaye, 2021).**

The clinical learning environment plays a pivotal role in shaping the educational journey on nursing students and significantly contributes to their academic achievements **(Baraz et al., 2015).**

The current study aimed to assess the effect of nursing students' perceptions regarding clinical learning environment and supervision and its relation to their academic achievement at Najran University.

**Aim of the study:**

The current study aimed to assess nursing students' perceptions regarding clinical learning environment and supervision and its relation to their academic achievement at Najran University.

**Methods**

**Study design**

Descriptive correlational study design was used in the current study.

**Study setting**

This study was conducted at the College of Nursing, Najran University, at Najran city, Saudi Arabia.

**Study sample**

Purposive sample was used to enroll 92 students from 330 based on the following equation

Np (1-p)]/ [(d$^2$/z$^2_{1-\alpha/2}$*(n-1) +p*(1-p)] at confidence level 90%

**Inclusion criteria**

− Students enrolled in bachelor of Nursing, fulltime basis at the College of Nursing, Najran University.

− Students' enrolled within the nursing clinical placements in different areas on clinical practices. Those who are in the fourth semester or above

− Absent rate less than 25%

**Data collection tools**

**1. Tool I: Students' perception Questionnaire Sheet**: it was developed by the researcher after reviewing the literatures that were conducted by (**Atay et al., 2018; Towfik et al., 2023**) to collect data. It was distributed through Google doc link. this questionnaire was consisted of four parts:

**Part one: socio demographic characteristics on the studied students:** it covered age, sex, academic year, training setting, residence place, and attendance workshops and orientation lecture about clinical training.

**Part two: Nursing students' perception of clinical learning trainer, supervisor and training process**. It included 16 items. It is a 5 point Likert scale ranged from strongly agree (5), agree (4), uncertain (3), disagree (2) and strongly disagree (1).

**Scoring system**:

The total score ranged from 16 to 80 points.

− Scores below 60% indicate unsatisfactory perception.

− Scores equal to or above 60% indicate satisfactory perception

**Part three: Nursing students' perception of learning environment.**

It included 10 items ranged from strongly disagree to strongly agree. The total score ranged from 10 to 50 points. It is a 5 point Likert scale ranged from strongly agree (5), agree (4), uncertain (3), disagree (2) and strongly disagree (1).

**Scoring system**:

− Scores below 60% indicate negative perception.

− Scores equal to or above 60% indicate positive perception.

**Part four: Nursing students perception of the organizational structure of clinical training, equipment and supplies.**

It included 9 items with two choices (1) for yes and (0) for no. The total score ranged from 0 to 9 points.

**Scoring system**

− Scores below 6 points indicate negative perception.

− Scores equal to or above 6 points

**Tool II: Students' achievement Score:**

Using academic GPA as a data collection method provides a quantitative measure on academic achievement and can offer valuable insights into student performance across

different academic domains. It was retrieved from the academic records and it was ranged from 1 to 5 where 1 is the lowest score

**Pilot study**

The pilot study was performed before data collection. The pilot study was done on ten percent (9 nursing students) from the College of Nursing, Najran University. A pilot study was conducted to assess the clarity, feasibility on the study and drawbacks on the questionnaire. Minimal modifications were done and the pilot subjects were excluded from the final study sample.

**Validity and reliability**

A panel of five Faculty members on Medical Surgical Nursing department reviewed the previous tools. The Cronbach's alpha value was 0.78. The data was collected from 9 -2022 to 6- 2023

**Ethical consideration**

The study was conducted with careful attention to the ethical standards of research. Students' consent was obtained prior to the administration of the questionnaire. The students were informed about the purpose of the study, and that they had the right to refuse to participate in the study. The research proposal approved from the ethical research committee at Najran University (reference no.: 012955-029277 -ds)

**Data analysis**

Data entry and statistical analysis were done using SPSS 24. For qualitative variables, descriptive statistics were employed, namely in the norm on percentages and Frequencies. Using the chi-square test, qualitative categorical variables were compared, and the spearman rank correlation was employed to evaluate the link between ranked and quantitative Factors. Ultimately, p-value <0.05 was used to determine statistical significance.

**Results**

**Table (1):** shows distribution of the undergraduate students according to their socio demographic data. The table revealed that about two thirds of the students are male (65.2%) and 34.8% are female. About three quarters of the participants (76%) were from 4th academic year. Regarding their residence 39.2% were living in city center, 34.7% in country side and the rest (26.1%) in village.

**Table (2):** presents distribution of the studied sample regarding clinical training. It was evident that the majority of the participants (84.7%) received their training practices in general governmental hospital. Most of the participants (87%) had workshop or orientation lectures before the clinical training process.

**Table (3):** illustrates perception of nursing students toward clinical learning trainer supervision and training process. It was regarded that most (63%) of nursing students had strongly agree responses toward the clinical trainer commitment to time, followed by 59% of them who had strongly agree responses regarding clinical trainer clinical skills and knowledge. More than half of the students (57%) had strongly agreed responses regarding clinical trainer provision opportunities to students to implement all procedures. On the others hand 52% of the nursing students had strongly agree responses toward the total perceptions of the clinical learning trainer, supervisor and training process.

**Table (4):** clarifies nursing students' perception regarding clinical staff and learning environment. It was evident that 50% of the participated students had strongly agree responses about the clinical training fields and the staff in the training fields is cooperative, followed by 48% had strongly agree responses

regarding the ease and speed of coordination in the clinical training fields. However, 37% of the students had strongly agree responses regarding the clinical training fields belong to the university. On the other hand more than two fifths (43%) of nursing students had strongly agree responses as regard to the total perceptions of clinical staff and learning environment.

**Table (5) :** Illustrates nursing students perception of organizational aspect . It was obvious that the majority of the students (96%) had strongly agree responses regarding the contribution on clinical training to raising and developing the necessary knowledge and skills that must be known and applied, followed by 93% of them who had strongly agree responses about the adequacy of the training requirements. The majority of the students (91%) had strongly agree responses as regard the total perceptions toward organizational aspect of clinical training.

**Table (6):** clarifies nursing students' perception about clinical equipment and supplies. This table revealed that the majority (93%) of nursing students had positive responses regarding the availability of tools, equipment and supplies that quite to meet the training objectives.

**Table (7):** demonstrates students' total perception, it was found that, less than three quarters of the students (70.7%) expressed positive perception with the clinical learning trainer, supervisor, and the overall training process.. while a substantial percent (64.1%) found the clinical learning environment satisfactory, it is noteworthy that 35.9% expressed dissatisfaction.  a significant percentage (70.7%) of the students had positive perception about the organizational aspect. A bout two thirds of the students (64.1%) satisfied with the availability and adequacy of equipment and supplies. nevertheless, 35.9% who expressed dissatisfaction signal a neither potential area nor attention, possibly related to resource adequacy or accessibility. regarding the total perception, after combining all aspects, a substantial percentage (81.5%) of the students reported an overall positive perception.

**Table (8)**: presents relation between socio-demographic characteristics and clinical training data of the participated students with total perception. It was found that there was a highly statistical significant association between academic year and perception (p < 0.001). The residence of the students had a statistical significant difference with students' total perception (p = 0.04). Students' attendance to workshop or orientation lectures before clinical training was significantly influences their perception (p < 0.006).

**Figure (1)**: shows that there was significant positive association between students' total perception regarding clinical training environment and their academic achievement (p < 0.005).

**Table (1): Percentage distribution of the studied students according to socio-demographic data (no.= 92).**

| Socio-demographic data on the students | no. | % |
|---|---|---|
| Gender | | |
| Male | 60 | 65.2 |
| Female | 32 | 34.8 |
| academic year | | |
| 2$^{nd}$ class | 14 | 15 |
| 3$^{rd}$ class | 8 | 9 |
| 4$^{th}$ class | 70 | 76 |
| Residence | | |
| city center | 36 | 39.2 |
| Countryside | 32 | 34.7 |
| Village | 24 | 26.1 |

**Table (2): Percentage distribution of the studied students according to clinical training (n=92).**

| clinical training of the students | no. | % |
|---|---|---|
| Setting of training | | |
| General hospitals | 78 | 84.7 |
| Health centers | 12 | 13.1 |
| Community clinical setting | 2 | 2.2 |
| Attendance of workshop or orientation lectures before the clinical training process? | | |
| Yes | 80 | 87 |
| No | 12 | 13 |

**Table 3: Nursing students' perceptions of the clinical learning trainer, supervisor and training process (n=92).**

| Items related to clinical trainers | strongly disagree | | disagree | | somewhat agree | | agree | | strongly agree | |
|---|---|---|---|---|---|---|---|---|---|---|
| | no. | % | no. | % | no. | % | no. | % | no. | % |
| **1.** Commitment to time | 2 | 2.2 | 4 | 4.3 | 12 | 13 | 16 | 17 | 58 | 63 |
| **2.** Has clinical skills | 2 | 2.2 | 0 | 0 | 10 | 10.9 | 26 | 28.2 | 54 | 58.7 |
| **3.** Has enough time | 0 | 0 | 0 | 0 | 14 | 15 | 24 | 26 | 54 | 59 |
| **4.** The clinical trainer has effective communication skills | 0 | 0 | 2 | 2 | 12 | 13 | 28 | 30 | 50 | 54 |
| **5.** The clinical trainer is providing opportunities to implement all procedures nor each student | 2 | 2 | 0 | 0 | 20 | 22 | 18 | 20 | 52 | 57 |
| **6.** Clinical trainer cares about students' feelings | 0 | 0 | 6 | 7 | 18 | 20 | 26 | 28 | 42 | 46 |
| **7.** Clinical trainer develops confidence and thinking in a new and innovative way in training | 0 | 0 | 0 | 0 | 18 | 20 | 26 | 28 | 48 | 52 |
| **8.** Clinical instructor distributes clinical training plan to students | 0 | 0 | 0 | 0 | 18 | 20 | 32 | 35 | 42 | 46 |
| **9.** The clinical instructor supervises the students while applying the procedures to the patient | 0 | 0 | 0 | 0 | 18 | 20 | 30 | 33 | 44 | 48 |
| **10.** The clinical instructor  to familiarize students with the fields on training and its policies | 0 | 0 | 0 | 0 | 16 | 17 | 32 | 35 | 44 | 48 |
| **11.** Continuously received feedback from my supervisor | 2 | 2 | 2 | 2 | 18 | 20 | 28 | 30 | 42 | 46 |
| **12.** The registered nurses were interested in teaching me | 0 | 0 | 2 | 2 | 22 | 24 | 22 | 24 | 46 | 50 |
| **13.** I am satisfied with the supervision I received during my practicum | 0 | 0 | 4 | 4 | 16 | 17 | 26 | 28 | 46 | 50 |
| **14.** I feel i received individual supervision | 0 | 0 | 0 | 0 | 24 | 26 | 20 | 22 | 48 | 52 |
| **15.** There are some restrictions on performing certain skills in clinical training places | 0 | 0 | 8 | 9 | 12 | 13 | 24 | 26 | 48 | 52 |
| **16.** Restrictions on students in training places from performing certain skills nor reasons related to responsibility accountability | 0 | 0 | 2 | 2 | 18 | 20 | 30 | 33 | 42 | 46 |

**Table (4): nursing students perception of clinical staff and learning environment (n=92).**

| Items | strongly disagree | | disagree | | somewhat agree | | agree | | strongly agree | |
|---|---|---|---|---|---|---|---|---|---|---|
| | no. | % | no. | % | no. | % | no. | % | no. | % |
| 1. Clinical training fields are crowded with students. | 2 | 2 | 4 | 4 | 18 | 20 | 22 | 24 | 46 | 50 |
| 2. The number on clinical trainers is sufficient in the training fields. | 0 | 0 | 4 | 4 | 18 | 20 | 30 | 33 | 40 | 43 |
| 3. The staff in the training fields is cooperative. | 0 | 0 | 4 | 4 | 18 | 20 | 24 | 26 | 46 | 50 |
| 4. Clinical training fields belong to the university. | 2 | 2 | 8 | 9 | 18 | 20 | 30 | 33 | 34 | 37 |
| 5. The student is allowed to apply all procedures to patients. | 0 | 0 | 12 | 13 | 14 | 15 | 30 | 33 | 36 | 39 |
| 6. Students are allowed to enter all departments | 0 | 0 | 8 | 9 | 14 | 15 | 30 | 33 | 40 | 43 |
| 7. Clinical training time is sufficient | 0 | 0 | 2 | 2 | 22 | 24 | 32 | 35 | 36 | 39 |
| 8. Ease and speed on coordination in clinical training fields | 0 | 0 | 0 | 0 | 14 | 15 | 34 | 37 | 44 | 48 |
| 9. Unregulated clinical training fields | 0 | 0 | 10 | 11 | 16 | 17 | 32 | 35 | 34 | 37 |
| 10. There is an opportunity to express my opinion in the department | 0 | 0 | 8 | 9 | 10 | 11 | 36 | 39 | 38 | 41 |

**Table (5): Nursing students' perception of the organizational aspect of clinical training. (n=92).**

| Items | no | | yes | |
|---|---|---|---|---|
| | no. | % | no. | % |
| 1. Clinical training areas agree and accepted with the period set by the college nor your training | 10 | 11 | 82 | 89 |
| 2. Doing and repeating routine unnecessary things | 10 | 11 | 82 | 89 |
| 3. Adequacy on training requirements | 6 | 7 | 86 | 93 |
| 4. The contribution on clinical training to raising and developing the necessary knowledge and skills that must be known and applied | 4 | 4 | 88 | 96 |
| 5. Students' commitment to always attend training places nor the duration on time specified by the college nor clinical training | 6 | 7 | 86 | 93 |
| 6. Providing a means of transportation nor students to travel to different training destinations | 14 | 15 | 78 | 85 |

**Table (6): Nursing students' perception of equipment and supplies (n=92).**

| Items | no | | yes | |
|---|---|---|---|---|
| | no. | % | no. | % |
| 1. The tools, equipment and supplies in the college are sufficient and modern on the level on the hospital equipment. | 14 | 15.2 | 78 | 84.8 |
| 2. The tools and equipment in the college are different from that on the practice setting | 8 | 8.6 | 84 | 91.4 |
| 3. Tools, equipment and supplies are available and quite enough to meet the training objectives | 6 | 6.5 | 86 | 93.5 |

**Table (7): distribution on the studied students regarding their total perception**

| Items | no. | % |
|---|---|---|
| Perceptions toward the clinical learning trainer, supervisor and training process | | |
| Positive | 65 | 70.7 |
| Negative | 17 | 29.3 |
| Perception level   on nursing students toward clinical learning environment | | |
| Satisfactory | 59 | 64.1 |
| Unsatisfactory | 33 | 35.9 |
| Perception level   toward the organizational aspect on clinical training (n=92). | | |
| satisfactory | 75 | 70.7 |
| un satisfactory | 17 | 18.5 |
| Perception level   on nursing students toward equipment and supplies (n=92). | | |
| Satisfactory | 69 | 64.1 |
| Unsatisfactory | 23 | 35.9 |
| Total perception | | |
| Satisfactory | 67 | 81.5 |
| Unsatisfactory | 25 | 18.5 |

**Table 8): Relation between demographic and clinical training data on the students with the total perception**

| Items | no. | satisfactory (67) | | unsatisfactory (25) | | $x^2$ | p |
|---|---|---|---|---|---|---|---|
| | | no. | % | no. | % | | |
| Gender | | | | | | | |
| Male | 60 | 44 | 73.3 | 16 | 26.7 | 0.07 | 0.7 |
| Female | 32 | 23 | 71.8 | 9 | 28.2 | | |
| Academic year | | | | | | 38.05 | 0.00001** |
| 2nd class | 14 | 2 | 14.2 | 12 | 85.8 | | |
| 3rd class | 8 | 3 | 37.5 | 5 | 62.5 | | |
| 4th class | 70 | 62 | 88.5 | 8 | 11.5 | | |
| Residence | | | | | | | |
| City center | 36 | 31 | 86.1 | 5 | 13.9 | 6.1 | 0.04* |
| Countryside | 32 | 19 | 59.3 | 13 | 40.7 | | |
| Village | 24 | 17 | 70.8 | 7 | 29.2 | | |
| Area of training | | | | | | 0.8 | 0.6 |
| General hospitals | 78 | 58 | 74.3 | 20 | 25.7 | | |
| Health centers | 12 | 8 | 66.7 | 4 | 33.3 | | |
| Community clinical setting | 2 | 1 | 50 | 1 | 50 | | |
| Workshop or orientation lectures before the clinical training process? | | | | | | 15.9 | 0.00006** |
| Yes | 80 | 64 | 80 | 16 | 29 | | |
| No | 12 | 3 | 25 | 9 | 75 | | |
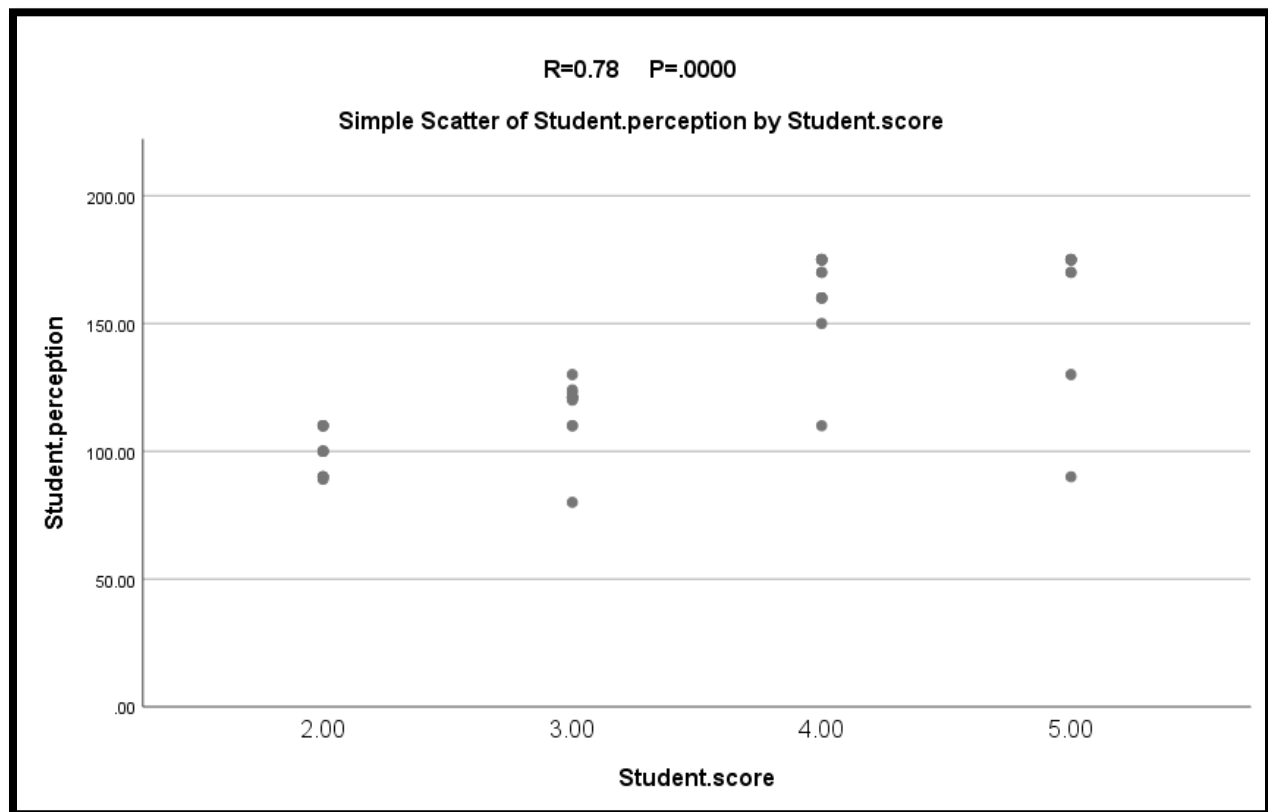
**Figure (1): correlation between the total score on students' perception and their academic achievement score**

### Discussion

Clinical teaching and learning are integral components of nursing education. Most clinical teaching and learning activities occur in the clinical setting where theory is translated into practice **(Saleh, 2019).** Therefore, this study aimed to assess the effect of nursing students' perceptions regarding clinical learning environment and supervision and its relation to their academic achievement at Najran University.

The current study revealed that two thirds of the particpated students were males. About three quarters of them were in the 4th grade. Regarding their residence more than one third of the participants were living in city center, one third in country side and the rest were living in village.

The results of current study showed that more than two thirds of the students expressed satisfaction with the clinical learning trainer, supervisor, and the overall training process.

This positive perception suggests a generally effective and supportive learning environment. While two thirds found the clinical learning environment satisfactory. It is noteworthy that one third expressed dissatisfaction. Two thirds of the participated students found the organizational aspect on clinical training satisfactory. However, one ninth reported dissatisfaction. Nevertheless, more than one third of the students expressed dissatisfaction with adequacy or accessibility of resources.

The results of the current study were supported by **Ekstedt Indblad & Lönmark (2019)** who reported that the majority of the students had positive experiences on the clinical learning environment and supervision in both supervision models. In the same line **(Alammar et al., 2020)** found that the Saudi nursing students had satisfactory perception about the clinical learning environment. On the other hand, **Amoo, (2022)** who conducted their study in Ghana was contradicted with the current findings. They reported that poor staff attitude, lack of equipment, poor student attitude, inadequate learning opportunities, and lack on clinical supervisors were perceived as challenges in the clinical environment. Universities in Saudi Arabia had human and financial resources more than Ghana especially regarding facilities in clinical training environment.

Regarding the availability of the equipment, the current study revealed that two thirds of the students were satisfied with the availability and adequacy of equipment and supplies. A study by **Jaganath, Bimerew & Mthimunye (2022)** supported the current findings as they found that the students had satisfactory perception regarding the availability of the equipment. Conversely, **Mokadem and Ibraheem (2017)** Found the student had unsatisfactory perception.

Regarding the total perception, after combining all aspects, four ninths of the students reported an overall satisfactory perception. This is a positive indication on the majority finding the clinical learning experience favorable. In the same line **Alammar et al., (2020)** revealed that the overall perception of the students was positive. On the other hand, **Ali & Saad, (2016)** reported that only about half of the students had satisfactory perception. The results of the current study might be due to low sample size.

The present study results indicated that the total perception was significantly influenced by the academic year, residence on the students and attendance on the orientation workshop. Another studies conducted in turkey by **Karaduman et al., (2022**) **Alshammari et al., (2023)** were in the same line with the current study findings.

The current study stated that there were significant association between students' achievement score according to the GPA and their total perception about clinical learning environment where p<.05. In the present study the students' GPA significantly associated with their perception about the clinical education environment. This finding is closely related to a study conducted in Saudi Arabia, which reported that academic achievement was a predictor for student performance and learning ability (**Alharbi etal., 2017**). Furthermore, another study conducted on Libyan nursing students' academic and clinical performance found that a student performing well in academics is most likely to perform well in a clinical setting (**Buhat-mendoza et al., 2014**).

## Conclusion and recommendations
## Conclusion
The findings of the current study underscore the paramount importance of the clinical practice environment in nursing education and its profound impact on students' academic achievement. the

majority of the nursing students at Najran university expressed satisfaction with various aspects on their clinical learning experience including the clinical learning trainer, supervisor, training process, learning environment, organizational aspects of clinical training, and the availability of equipment and supplies. Notably, the high percentage of the participated students reporting satisfaction with the overall clinical learning environment. The findings suggested that the total score was influenced by the total perception.

## Recommendations

−Design an effective teaching and learning strategies to meet learning objectives based on quality standards of nursing education and practice.

−Further researches are needed to identify factors affecting students' dissatisfaction with learning environment.

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