Nursing Students’ Experience and Satisfaction with the Clinical Learning Environment

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ABSTRACT

Background: Clinical training is an essential and fundamental aspect of nursing. Nursing student satisfaction is a significant outcome of clinical training setting efficiency and influences student learning outcomes in clinical placements. Aim: To evaluate nursing students’ experiences and satisfaction with the clinical learning environment Design: A descriptive correlation design was used for the purpose of the study at college of Nursing in the Port Said city at Egypt, with 176 undergraduate nursing students.

Methods: Clinical Learning and Supervision plus Nurse Teacher (CLES+T) scale was used as a research tool.

Findings: The results showed the highest student satisfaction was with ward atmosphere (49.35%). More than half (52.3%) of students were satisfied with their learning placement, and the female students had a higher satisfaction level than male students (p = 0.000).

Conclusion: It is crucial to evaluate the clinical training environment for nursing students, as a practical aspect is enhanced, which supports the theoretical part, and then assess the nursing teaching curriculum. Also, there was a strong correlation between all sub-dimensions of Clinical Learning and student satisfaction. Recommendation: Based on the findings, further studies are needed to analyze the effect of the clinical learning environment on the practice of nursing students to improve clinical experience for nursing students and promote the professional nursing practice.

Keywords: Clinical Practice, learning Environment, Nursing Students, Satisfaction
students can influence their experiences in clinical learning placement. Clinical learning is the core of the professional practice and is essential to train nursing students to acquire the needed skills, values, and attitudes for future professional practice, preparing them to function as skilled and developed nurses and navigating the theory-practice gap newly qualified nurses often face in practice (Oermann, De Gagne, NPD-BC, & Phillips, 2021).

Students’ satisfaction is a complex and multifactorial issue (Papathanasiou, Tsaras & Sarafis, 2014). Relevant studies revealed positive links between students’ satisfaction and the quality of nursing care (Papastavrou, Lambrinou, Tsangari, Saarikoski & Leino-Kilpi, 2010), the ward’s educational atmosphere and leadership style (Warne et al., 2010), the sense of belonging (Levett-Jones, Lathlean, Higgins, McMillan, 2009), the peer support (Brynildsen, Bjørk, Berntsen & Hestetun, 2014), and the motivation level (Dimitriadou, Papastavrou, Efstathiou & Theodorou, 2015). And the high levels of satisfaction have been reported when students had someone to ensure that their learning needs were addressed, when the clinical staff were well briefed. Other issues on which students expressed satisfaction concerned effective levels of mentor expertise and guidance (Hamshire, Willgoss & Wibberley, 2012), continuous feedback on their professional performance (Mattila, Pitkäjärvi & Eriksson, 2010), frequent clinical conferences with their mentor and nurse teacher (Sundler et al., 2014), and the concurrence of clinical practice with theory (Lee, White & Hong, 2009).

Nursing faculty members must assess student satisfaction relative to clinical expertise to reinforce educational attainment and achieve learning goals (Papathanasiou et al., 2014). Training in clinical learning environment allows students to convert theoretical knowledge into practical skills to provide quality care to patients (Nepal et al., 2016). The clinical training setting includes nursing educators and health teams as the focal point of nursing students’ experiences (Ross et al., 2022). The role of nursing teachers in nursing education is critical, and they perform an essential function within the training process framework for educated nursing students. Poor clinical learning setting and supervision directly undermine educational objectives and perceptions of the nursing profession, feeding into subsequent low professional satisfaction when nursing students become practicing registered nurses, undermining health system efficiency (Fernández-García, Moreno-Latorre, Giménez-Espert, Prado-Gascó, 2021).

The clinical learning environment and the relationship between mentors and students is critical for developing emotionally safe educational opportunities, which directly affect the quality of patient services delivered by students (Steven, Magnusson, Smith, & Pearson, 2014). According to Tomietto, Comparicini, Saarikoski, Simonetti, and Cicolini (2014) the clinical learning environment (CLE) is a multilevel position composed of a pedagogical atmosphere, the quality
of integration of the ward manager with the team, nursing teacher quality, the degree of personalization of nursing care, and the clarity of nursing documentation and mentor-student relationship. From a student’s perspective, the pedagogical sensation is the most significant portion that contributes to effective practical training. Ali, El-Banan, and Al Seraty (2015) assured that nursing students would be motivated to learn where they have shared appreciation, thereby the educational climate relates to the department’s psychosocial environment. Additionally, in the clinical learning environment, the departmental supervisor’s guidance, quality of nursing care, relationship with supervisors, and nursing educators’ role and clinical expertise are pivotal factors in an appropriate learning environment.

**Significant of the study:**

Evaluation of clinical learning environment as perceived by nursing students is significant for improvement of the effectiveness of clinical nursing practice and better nursing educational experiences. Also, the evaluation of the nursing students’ clinical learning environment will provide an opportunity for collaboration and development of collegial relationship between the educational institution and nursing services in the clinical site. Feedback from students’ clinical placement evaluation will be shared with nursing services to better facilitate students’ clinical placement through planning, resources allocation and monitoring of clinical placements. Therefore, to provide useful insight into the undergraduate student clinical placement, the current study aims to evaluate the nursing students’ experiences and satisfaction with their clinical learning environment.

**Study aims**

This study aims to evaluate the nursing student experiences and satisfaction with their clinical learning environment.

**Research objectives were:**

- To assess the nursing students’ experience in clinical learning environment.
- To identify nursing students’ satisfaction with the experience in clinical learning environment.
- Find out the relationship between nursing student experience and satisfaction with their clinical learning environment.

**Methods**

**Design**

A descriptive correlational design was used to conduct this study.

**Setting**

The study was conducted at the Faculty of Nursing at Port Said University, Egypt, it was established in 1991, as the High Institute of Nursing. It adopted international approaches of education, which is problem-based learning (PBL), community-based learning and self-learning. The College of Nursing offers a four-year bachelor’s degree in the nursing program, comprising 150 credits hours divided into eight semesters, plus an internship year. The college includes male and female students.

**Study sample**

The study planned to examine the atmosphere of the learning setting for all nursing students of the undergraduate enrolled in clinical practice courses.
in their third and fourth academic year during 2020-2021 were included (N=176) in the third (72) and fourth academic year (104), with purposed sampling. The third- and fourth-academic year students were chosen as they are exposed to prior clinical training, possess more autonomy, and better view the learning environment (Moattari, 2007).

**Data collection tool**

**Tools of data collections:** one tool were used to collect data for this study.

The Clinical Learning Environment, Supervision, and Nurse Teacher (CLES+T) Scale: This tool consisted of two parts:

**Part one:** Students characteristics of the study sample such as age, gender, academic year

**Part two:** This scale was developed by Saarikoski, Isoaho, Warne, & Leino-Kilpi, (2008). In English version of the (CLES+T) scale was translated into Arabic language by the researchers, It was evaluating the climate of learning environments in the clinical setting from nursing students’ viewpoints. It consisted of 34 statements and is further divided into five sub-dimensions, with an additional general question measuring students’ total satisfaction: The educational atmosphere on the ward (9 items), leadership style of the ward manager (4 items), premises of nursing in the ward (4 items), supervisory relationship (8 items), role of nurse teacher (9 items).

The total score for each item is 5, scored using a five-point Likert scale where: one (fully disagree), two (disagree to some extent), three (neither agree nor disagree), four (agree to some extent), and five (fully agree). The researcher estimated the level of satisfaction based on the following fixed scale: 0-50% = low level of satisfaction, 50-74% = moderate level of satisfaction, and 75-100% = high level of satisfaction.

**Tools validity:**

The instruments were verified for content validity by five experts specialists in the fields of nursing and evaluated the questionnaire to produce a well-rounded form and the tools of the study were considered as a good content validity.

**Tools Reliability:**

The study tools were subjected to an Alpha Cronbach reliability analysis. It was discovered that the tool’s was high internal consistency in the present study results for total CLES+T (Cronbach’s alpha coefficient for the present study = 0.94) indicates its reliability. And each of the five subscales of the used tool ranged from 0.85 to 0.91. Also, the study tools of the original English-language tools, five subscales tested before and ranged from 0.77 to 0.96 (Warne et al., 2010).

**Pilot study:**

A Pilot study was carried out on 20 nursing students who represented 10% of the total sample before starting the data collection (8 students from third year and 12 from fourth year) and were excluded from the entire sample of the research study. The purposes of the pilot study were to test the clarity, applicability, and the feasibility of the study tools and to estimate the time needed to fill in the tools. Moreover, it helped to find out any obstacles and problems that might interfere with data collection.
**Ethical considerations**

Before starting any step in the study, an official letter was taken from the dean of the faculty of nursing and vice dean for post-graduate studies. The coordinator of the third and fourth of academic years was contacted and informed in order to obtain permission to include the nursing students in the present research. Additionally, an agreement was taken from nursing students who participated in the study, after a clear and simple explanation of the aim and the objectives of the study. Also, the researcher assured that the respondents about the anonymity of the answers and the information will be used for scientific research only and will be treated as confidential.

**Fieldwork:**

The actual study was conducted during the period from March 2021 to April 2021. Collection of data was performed as the following:

- Before embarking in the fieldwork, the records of the studied nurses were reviewed.
- The data were distributed and collected by the researcher. Researcher met with the coordinate of third and fourth of academic years to explain the objectives of the study and to gain their cooperation.
- Data were collected by the researcher at two days per week for 8 weeks and were collected from third and fourth academic in parallel. Each nurse takes 15 to 20 minutes in filling the two tools.

- Provided oral informed consent. With inclusion criteria included students who had completed a minimum of two weeks of clinical environment to fulfill the CLES+T scale criteria.

**Statistical analysis**

- Data entry and statistical analysis were done using SPSS statistical software package. The normality of data was first tested with one-sample Kolmogorov-Smirnov or Shapiro-Wilk test. Frequency and percentages are used for describing and summarizing qualitative and categorical data by using suitable graphs and tables. Descriptive statistics were used to determine the mean and standard deviations from students’ characteristics.
- T-test are used to compare the significant difference of frequencies for categorical data and found the relation between two variables. The significant test was done at the 5% level.
- Added to that, Pearson correlation coefficient test was used to find the correlation between study variables.
- Statistical significance was considered at P-Value \( \leq 0.05 \), and a highly statistical significance at P-value \( \leq 0.001 \) throughout all statistical test within this study.

**Findings**

Table 1 personal and academic characteristics of nursing students in the study sample. 176 student nurses are participated in the study, 40.9 % in third a cadmic year and 59.1 % in fourth a cadmic year less than three quarter of them (71.6 %) were at age group more than 20 years old, with the mean of
1.71±.45 years and more than half of them were female.

Table 2 represents the students’ experiences in a clinical learning environment. The mean score for the educational atmosphere of the ward was Mean ± SD 31.34 ± 5.91. This result, 81.8% of the students had access to the staff, 72.7% felt comfortable when discussing during the department meeting, 70.4% viewed the training environment as positive, and 61.4% were addressed by their names by instructors.

The mean score for the leadership style of the ward manager was Mean ± SD 13.33± 2.15. This result shows that 55.7% of students considered the team manager a key resource, 67.1% appreciated the individual effort of the employees. However, 44.3% reported that they did not perceive the manager as a member of the team.

The mean score for premises of nursing in the ward was Mean ± SD 14.48± 2.46. This finding explains that 68.2% of students believe that the definition of the nursing department's philosophy is clear, 78.4% claim that patients receive individualized nursing care, and 75.0% of them confirmed the clarity of daily nursing documentation.

The mean score for the supervisory relationship was Mean ± SD 28.94± 5.27. This is emphasized by the fact that 77.3% of students say that they regularly receive comments from their supervisor, 73.9% are satisfied with the supervision they received, and 72.8% felt trust with their supervision relationship.

The mean score of the nurse teacher Mean ± SD was 30.78± 5.20. It was found that 62.5% of the students believed that the nurse teacher could activate the educational goals of clinical training, and 61.4% of them believed that the nursing teacher worked with the team to support education. Over half acknowledged that the nursing teacher can integrate theoretical knowledge and daily nursing practice and is considered a member of the team; and that they feel comfortable when they meet with the nursing teacher and mentor.

Table 3 shows that less than half of the students in the present study were highly satisfied with the educational atmosphere of the ward, which indicates a need to improve the clinical learning environment. Less than three-quarters of the students were moderately satisfied with the leadership style of the ward manager. The results showed that more than half of the students had an average satisfaction with the nursing premises in the ward, the supervisory relationship, and the role of the nurse teacher. More than half (52.3%) of students were satisfied with their learning placement, 40.9% were neither satisfied nor dissatisfied, and only 6.4% were unsatisfied with their learning placement (Figure 1). Overall student satisfaction was positively correlated with all CLES+T sub-dimensions (p < 0.000) (Table 4).

Table 5: shows significant differences between male and female students related to CLES+T sub-scales (p = 0.000). Specifically, the female students had a higher satisfaction level than the male students (p= 0.000). The ward’s educational atmosphere was an essential subscale
for the female students, with a mean score of 35.39±3.23, while the nurse teacher role was an essential subscale for males, with a mean score of 26.29±3.78. The ward manager’s leadership style was the least essential sub-scale for both, with a mean score of 14.34±1.93 in females and 11.80±1.47 in males.

Table (1): Personal and academic characteristic of nursing students (no = 176)

<table>
<thead>
<tr>
<th>Personal characteristics</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third academic year</td>
<td>72</td>
<td>40.9</td>
</tr>
<tr>
<td>Fourth academic year</td>
<td>104</td>
<td>59.1</td>
</tr>
<tr>
<td>Age (years):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;=20</td>
<td>50</td>
<td>28.4</td>
</tr>
<tr>
<td>&gt; 20</td>
<td>126</td>
<td>71.6</td>
</tr>
<tr>
<td>Mean ± SD</td>
<td>1.71±0.45</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>70</td>
<td>39.8</td>
</tr>
<tr>
<td>Female</td>
<td>106</td>
<td>60.2</td>
</tr>
</tbody>
</table>

Table (2): Nursing students’ experience on CLES+T sub-dimensions

<table>
<thead>
<tr>
<th>Sub-dimensions</th>
<th>Fully agree/ agree to some extent</th>
<th>Neither agree nor disagree</th>
<th>Disagree to some extent/ fully disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The educational atmosphere of the ward Mean±SD 31.34 ± 5.91</td>
<td>81.8</td>
<td>13.6</td>
<td>4.5</td>
</tr>
<tr>
<td>1. The staff members were easy to approach.</td>
<td>72.7</td>
<td>20.5</td>
<td>6.8</td>
</tr>
<tr>
<td>2. During staff meetings (e.g. before shifts), I felt comfortable taking part in the discussion</td>
<td>48.9</td>
<td>14.8</td>
<td>36.4</td>
</tr>
<tr>
<td>3. I felt comfortable when going to the ward at the beginning of my shift.</td>
<td>70.4</td>
<td>20.5</td>
<td>9.1</td>
</tr>
<tr>
<td>4. There was a positive atmosphere in the ward.</td>
<td>44.3</td>
<td>19.3</td>
<td>36.4</td>
</tr>
<tr>
<td>5. Staff were generally concerned with student supervision.</td>
<td>61.4</td>
<td>19.3</td>
<td>19.3</td>
</tr>
<tr>
<td>6. The staff learned to know the students by their names.</td>
<td>39.7</td>
<td>44.3</td>
<td>15.9</td>
</tr>
<tr>
<td>7. There were sufficient meaningful learning situations on the ward.</td>
<td>36.4</td>
<td>27.3</td>
<td>36.4</td>
</tr>
<tr>
<td>8. The learning situations were multidimensional in terms of content.</td>
<td>46.5</td>
<td>21.6</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Leadership style of the ward manager Mean±SD 13.33± 2.15

<table>
<thead>
<tr>
<th>Sub-dimensions</th>
<th>Fully agree/ agree to some extent</th>
<th>Neither agree nor disagree</th>
<th>Disagree to some extent/ fully disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. The ward manager regarded the ward staff as a key resource.</td>
<td>55.7</td>
<td>31.8</td>
<td>12.5</td>
</tr>
<tr>
<td>11. The ward manager was a team member.</td>
<td>31.8</td>
<td>23.9</td>
<td>44.3</td>
</tr>
<tr>
<td>12. Feedback from the ward manager could easily be considered a learning situation.</td>
<td>32.9</td>
<td>51.1</td>
<td>15.9</td>
</tr>
<tr>
<td>13. The effort of individual employees was appreciated.</td>
<td>67.1</td>
<td>10.2</td>
<td>22.7</td>
</tr>
</tbody>
</table>

Premises of nursing in the ward Mean±SD 14.48± 2.46

<table>
<thead>
<tr>
<th>Sub-dimensions</th>
<th>Fully agree/ agree to some extent</th>
<th>Neither agree nor disagree</th>
<th>Disagree to some extent/ fully disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. The ward’s nursing philosophy was clearly defined.</td>
<td>68.2</td>
<td>18.2</td>
<td>13.6</td>
</tr>
<tr>
<td>15. Patients received individualized nursing care.</td>
<td>78.4</td>
<td>13.6</td>
<td>8.0</td>
</tr>
<tr>
<td>16. There were no problems in the information flow related to patients’ care.</td>
<td>38.6</td>
<td>23.9</td>
<td>37.5</td>
</tr>
<tr>
<td>17. Documentation of nursing (e.g. nursing plans, daily recording of nursing procedures, etc.) was clear.</td>
<td>75.0</td>
<td>12.5</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Supervisory relationship Mean±SD 28.94± 5.27

<table>
<thead>
<tr>
<th>Sub-dimensions</th>
<th>Fully agree/ agree to some extent</th>
<th>Neither agree nor disagree</th>
<th>Disagree to some extent/ fully disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>18. My supervisor showed a positive attitude towards supervision.</td>
<td>45.5</td>
<td>15.9</td>
<td>38.6</td>
</tr>
<tr>
<td>19. I felt that I received individual supervision.</td>
<td>50.0</td>
<td>23.9</td>
<td>26.1</td>
</tr>
<tr>
<td>20. I continuously received feedback from my supervisor.</td>
<td>77.3</td>
<td>13.6</td>
<td>9.1</td>
</tr>
<tr>
<td>21 Overall, I am satisfied with the supervision I received.</td>
<td>73.9</td>
<td>17.0</td>
<td>9.1</td>
</tr>
<tr>
<td>22. The supervision was based on a relationship of equality and promoted my learning.</td>
<td>54.5</td>
<td>15.9</td>
<td>29.5</td>
</tr>
<tr>
<td>23. There was a mutual interaction in the supervisory relationship.</td>
<td>54.6</td>
<td>29.5</td>
<td>15.9</td>
</tr>
<tr>
<td>24. Mutual respect and</td>
<td>51.2</td>
<td>22.7</td>
<td>26.2</td>
</tr>
</tbody>
</table>
Role of the nurse teacher (NT) 
**Mean±SD 30.78± 5.20**

<table>
<thead>
<tr>
<th>Role of the nurse teacher(NT)</th>
<th>Dimension</th>
<th>Male</th>
<th>Female</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. In my opinion, the NT was capable of integrating theoretical knowledge and everyday nursing practice</td>
<td>Satisfaction with clinical placement</td>
<td>.441**</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>27. The NT was capable of operationalizing the learning goals of this clinical placement</td>
<td>Leadership style of the ward manager</td>
<td>.416**</td>
<td>.000</td>
<td>.003</td>
</tr>
<tr>
<td>28. The NT helped me to reduce the theory-practice gap</td>
<td>Premises of nursing in ward</td>
<td>.309**</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>29. The NT was like a member of the nursing team</td>
<td>Supervisory relationship</td>
<td>.552**</td>
<td>.017</td>
<td>.000</td>
</tr>
<tr>
<td>30. The NT was capable of giving his or her pedagogical expertise to the clinical team</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. The NT and the clinical team worked together to support my learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. The joint meetings between myself, mentor and NT were comfortable experiences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. Climate of the meetings was congenial</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. Focus on the meetings was in my learning needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (3): Distribution of levels for nursing students’ satisfaction with their clinical learning environment.

<table>
<thead>
<tr>
<th>Dimensions (CLES+T)</th>
<th>levels of satisfaction</th>
<th>Male</th>
<th>Female</th>
<th>T-test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational atmosphere of the ward</td>
<td>High</td>
<td>41</td>
<td>38</td>
<td>43.2</td>
<td>9</td>
</tr>
<tr>
<td>Leadership style of the ward manager</td>
<td>Moderate</td>
<td>15.9</td>
<td>65</td>
<td>73.9</td>
<td>9</td>
</tr>
<tr>
<td>Premises of nursing in the ward</td>
<td>Low</td>
<td>37.3</td>
<td>51</td>
<td>58.0</td>
<td>4</td>
</tr>
<tr>
<td>Supervisory relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of the nurse teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure (1): The degree for nursing students’ satisfaction with their clinical learning environment

Table (4): Correlation matrix of the dimensions CLES+T and student satisfaction

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>CLES+T</th>
<th>Male students</th>
<th>Female students</th>
<th>T-test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational atmosphere of the ward</td>
<td>Mean</td>
<td>25.20</td>
<td>35.394</td>
<td>-50.77</td>
<td>.000</td>
</tr>
<tr>
<td>Leadership style of the ward manager</td>
<td>SD</td>
<td>2.978</td>
<td>3.234</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Premises of nursing in ward</td>
<td>Mean</td>
<td>13.68</td>
<td>15.00</td>
<td>-50.81</td>
<td>.000</td>
</tr>
<tr>
<td>Supervisory relationship</td>
<td>SD</td>
<td>1.36</td>
<td>2.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Role of the nurse teacher</td>
<td>Mean</td>
<td>26.29</td>
<td>33.75</td>
<td>-56.27</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>3.78</td>
<td>3.65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

Nursing programs endeavor to prepare students with the technological knowledge and skills to prepare them for practice in various settings. Clinical practice is a critical component and the most crucial part of nursing education, enhancing nursing students’ professional knowledge, skills, and values in preparation for their transition to being professional registered nurses (Ralph, Walker, & Wimmer, 2019). Global standards reference that practice should be at least 50% of nursing education (WHO, 2019).

Failure to balance theory and practice in professional nursing education leads to nursing graduates not understanding their roles and being inadequately qualified to provide adequate nursing care. Most nursing regulatory agencies direct education providers worldwide to set minimum requirements in theory and practice in nursing education (Brownie, Docherty, Al-Yateem, Gadallah, & Rossiter, 2018).

Therefore, determining the criteria for proficiency in nursing and the minimum number of practical hours represents an essential step for determining the scope of practice and setting the regulations that govern the balance between theory and practice. In Egypt, the challenges facing nursing education and providing adequate numbers of the nursing workforce are the lack of resources, the deficit in practical training opportunities, and outdated curricula (Hill & Abhayasinghe, 2022). Nursing is the most critical healthcare system discipline due to the fundamentally important role of nurses and the fact that they spend the most time delivering services to patients; they profoundly influence health services outcomes and are core care partners (Brownie, Hills, & Rossiter, 2014).

To enhance their potential in Egypt, nurses must be fully empowered to practice and emphasizing competencies in critical thinking, problem-solving, leadership, patient safety, and ethical practice (Brownie et al., 2018). As Florence Nightingale observed, “The essential practical lesson may be given to nurses is to teach them what to observe – how to follow – what symptoms indicate improvement – what the reverse which is of importance – which is of none” (WHO, 2019).

The current results showed that closely differences in the level of nursing students’ satisfaction between the five CLES+T dimensions within their practice environment: the pedagogical atmosphere of the ward, leadership style of ward manager, premises of nursing in the ward, supervisory relationship, and the role of the nurse teacher. The department atmosphere represents a crucial role in students’ satisfaction (D’Souza, Naily, Parahoo, & Venkatesaperumal, 2015).

The dimension of the department constitutes the learning environment, and for satisfaction to prevail among high-level students, the ward atmosphere should be comfortable (Onuoha, Prescott, & Danniel, 2016). The present study showed the highest student satisfactory for the ward atmosphere, like the previous findings (D’Souza et al., 2015).
Training areas for nursing students that are not suitable learning environments cause learners to lack confidence in the clinical setting, and participants reported that clinical staff members did not encourage and support the learning experience, and nursing students in such circumstances view clinical nurses as incompetent to provide enough guidance and supervision to them.

Also, the students reported that meaningful learning situations on the ward were insufficient. Consequently, changes in clinical instruction are essential, with the requirement to move from time-based didactic strategies to focus on skills and competencies and accomplish clear learning outcomes (Muraraneza, Mtshali, & Mukamana, 2017). Success in addressing these issues depends on analogous faculty development investments centered on new pedagogical approaches.

The present study results show that student satisfaction varies according to the individual elements of the factors that fall under the learning environment in clinical settings. In support of this result, the students reported they felt comfortable when discussing during the department meeting, and they had access to the staff, who dealt with them directly by their names. To confirm previous results, reports showed that student satisfaction with learning in a practice environment is not broad. That is why some studies have made efforts to improve the quality of clinical sites in several sites (Brynildsen, Bjørk, Berntsen, & Hestetun, 2014).

Less than quarter of students had high satisfaction with the leadership style of the ward manager, in the context of mainly moderate satisfaction with this component. Nearly half of the students fully agree that the ward manager considered the departmental staff to be a significant resource, and nearly two-thirds considered that the manager appreciated the employees’ effort. Also, the results showed that the comments received by students from the manager were not considered sufficiently educational, and they did not perceive the manager as a member of the team.

This corroborates D’Souza et al.’s (2015) finding that less than quarter of students strongly agreed that they were satisfied with the leadership style of the ward director, with points of agreement on comfortable participation in discussion sessions, and comments from the head nurse being considered educational. That is why it is evident from these results that the ward leadership style represents the relationships between department managers, staff, and students, which in turn affects the quality of the clinical learning environment for the nursing students.

The present results indicated that more than half of the participants had a moderate level of satisfaction with the nursing premises in the ward. More than two-thirds of students believe that the definition of the nursing department’s philosophy is clear; over three-quarters of them claim that patients receive individualized nursing care, and they confirmed the clarity of the daily nursing documentation.
D’Souza et al. (2015) reported that nursing students had a satisfactory agreement with the premises of learning on the ward and premises of nursing care. Another study by Papastavrou, Dimitriadou, Tsangari, and Andreou (2016) found a significant and robust correlation between the pedagogical atmosphere and premises of nursing care, indicating that student satisfaction was higher when learners were actively involved in individual patient care, with clear information flow and precise documentation of nursing care, in the context of a welcoming and educationally supportive environment.

Antohe, Riklikiene, Tichelaar, and Saarikoski (2016) showed the importance of having a good supervisory relationship and its impact on students’ experiences in the clinical learning environment. In addition, relationships between supervisory and students, the structure of the organization, ward regulation and experience and knowledge had significant impacts on clinical learning environment experiences (Courtney-Pratt, Fitzgerald, Ford, Marsden, Marlow, 2012).

The concurrent results on the supervisory relationship represented that more than half of the participants had a moderate level of satisfaction. This is emphasized because around three quarter of students said they regularly received comments from their supervisors, around three quarter were satisfied with the supervision they received, and around three quarter felt trust in supervision relationships.

Parm, Asberg, and Aro (2018) mentioned that the lowest levels were assessed for individual supervision experiences and assessing the clinical learning environment. The nurse teacher’s role is very noticeable in the clinical learning environment, and clinical instructors or mentors should provide additional support and encouragement to students to enhance their self-confidence and independence and strengthen their clinical competence (Ralph et al., 2019).

Students who had successful supervision reported being more satisfied with the dimensions of the relationship with the mentor, suggesting the concept of students ‘experiences in their relationships and dealing with them as distinct individuals that support their learning and enhance their sensitivity to patients’ needs. For this reason, nursing students prefer individual supervision.

The nursing teacher acts as a corroborator to the mentor, and together they regulate students’ clinical learning so that each has the opportunity to take part in the learning situation (Papastavrou et al., 2016). The nursing teacher is accountable for the accurate planning of the clinical placement. Regular visits foster students’ clinical experiences, thereby ensuring that they successfully attain educational goals in an appropriate time (Lazcano et al., 2022).

The presence of the nursing teacher to provide ongoing guidance to the ward staff concerning the anticipated performance level at the student’s particular stage of learning is essential, as an educator in a clinical setting and a link between
the university and clinical places. Nursing teachers also induce nursing staff to engage themselves in students’ learning process (Sundler et al., 2014).

In addition, nursing students are expected to be familiar with various fields such as disease diagnosis, medication, treatment, investigations, diagnostic tests, communication skills, patient-nurse interaction and collaboration, and collaboration in multiple areas, and learning in these areas can be activated at the instigation of their teachers (Chen & Hung, 2014).

Regarding to role of the nurse teacher, over a third of students were highly satisfied with the role of the nurse teacher in the clinical practice environment and two-thirds believed that a nursing teacher could activate learning goals for clinical training and works with the team to support education. Over half acknowledged that a nursing teacher could incorporate theoretical knowledge and daily nursing practice, and they are considered a member of the team, plus they feel comfortable joining meetings with a nursing teacher mentor.

Our findings revealed that there was a highly statistically significant correlation between supervisory relationship and the educational atmosphere on ward. Rosenberg et al. (2019) study in Norwegian nursing homes investigating nursing students’ experiences in a clinical learning environment and learning opportunities for students were similar to our findings. Also coherent with those of Doyle et al. (2017) who highlighted that nursing students appreciate a welcoming workplace atmosphere, in which staff and supervisors are happy to help and have a positive attitude towards students in the wards.

Notable gender differences were identified in the present study; specifically, female students had a higher satisfaction level than male students. The ward’s pedagogical atmosphere was an essential subscale for female students, while the nurse teacher role was necessary for males. In the same vein, the ward manager’s leadership style is the least essential sub-scale for both of them. This can be clarified by the male students are influenced the most by the condition in the clinical wards where there are no male patients, and they perform clinical skills on female patients. Nurse teachers must keep this in mind. Also, the cultural background really affects male nursing in training places, and males must adapt to the situation appropriately to provide nursing care to female patients in particular. To do this, male students must be supported during clinical training to fully participate in nursing care.

In one study, female students described their negative feelings in more detail during clinical training and demonstrated a more reversible attitude (González-García, Lana, Zurrón-Madera, Valcárcel - Álvarez, & Fernández-Feito, 2020). This reality could be linked more easily to expressing feelings among women. In contrast, men may have similar experiences or thoughts, but express different feelings.

In addition, papers that compared clinical practice experiences by gender is scarce. Studies often include participants’ gender under general personal characteristics, but do not undertake any
comparative analysis of gender associations, despite their importance in nursing care. Previous research has reported differences between male and female nursing students about professional and personal values, career choice, and other post-graduation effects. In addition, socially constructed traditional gender criteria can set expected behaviors and attitudes in both male and female students in the case of a traditionally female profession (Fernández-Feito, Basurto Hoyuelos, & Palmeiro Longo, 2019; Luciani et al., 2020).

Buthelezi, Fakude, Martin, and Daniels (2015) reported that a positive relationship between clinical supervisors and students could positively affect the self. Females who prevail over the nursing profession should not arouse male feelings about their belonging to the work of nursing. Moreover, the refusal and distrust of the female patients of the male nursing students may limit the chance for male students to carry out nursing skills and become competent in the nursing profession. When male students meet with rejection from patients in clinical settings, this comprises a severe challenge.

Over half of participants experienced a satisfactory clinical learning environment. Alenazi (2016) also reported a generally moderate level of satisfaction in clinical placement, but Osei (2018) showed that nursing students are not satisfied with the clinical learning setting. Nepal et al. (2016) deduced that students were generally satisfied with the CLES+T, and the most influencing factor in the interpretation of satisfaction was the educational atmosphere. Angelin, Emily, Amala, and Grace (2018) revealed that around one third of the students perceived their CLES+T was very good, and around one third were highly satisfied with their clinical experience. Ba (2019) demonstrated that the overall mean score of satisfaction among nursing students was moderate.

Implications of the study: -

Teaching and learning
- The skills and competencies of nurses and all healthcare providers are shaped by nursing education. The current study results may encourage decision-makers in nursing colleges to apply nursing education models and methods like peer learning in the clinical education process, simulation, and nursing processes to promote critical thinking and mitigate the fear of harming patients. Furthermore, nursing staff can organize new orientations program for training to educate students about the contents of training courses, evaluation methods, and lesson plans according to the nature of the clinical environment. This orientation program can prepare the students psychologically and emotionally to deal with the challenges they faced in a clinical setting, especially male students.

Administration
- The stakeholders such as patients, policymakers, the public, employers, educators, and researchers are directly affected by the workplace and workforce issues. This research can help health care workers gain the knowledge needed to provide adequate healthcare and foster
a collaborative work environment so that they are directed to introduce future patient care delivery systems. Therefore, drastic action and strong leadership are being called to avoid healthcare crises, address the nursing shortage, and build a thriving workforce to tackle such problems.

Research

Evidence-based practice has become an integral part of nursing healthcare, empowering nurses to deliver care and develop professionalism. The present study results can be used as baseline information for future research to evaluate the effect of the clinical learning environment on nursing students' experiences in more depth. Further study is needed to analyze the students' nurse expectations, barriers, and satisfaction pre and post their clinical training, especially concerns and challenges with male students in various specialties', to evaluate the application of the nursing program curricula to actual nursing practices.

Clinical

This study gives a vision to educators, nurses, professionals, and clinical supervisors to provide a suitable learning environment and allow students to practice nursing skills according to their learning goals. In addition, they can create an appropriate neutral learning environment, allocate tasks, and provide equal learning opportunities assigned to students regardless of gender. The present result also helps to overcome the unpleasant atmosphere of the clinical setting by providing professionals in clinical healthcare and promoting effective communication between nursing students and clinical educators to improve students' learning.

Conclusion

The current study clarifies there is a difference in the levels of nursing student satisfaction between the five CLES+T dimensions within their practice environments. The highest student satisfaction was with the ward atmosphere. More than half of the students were satisfied with their learning placement. And clarifies many positive and negative aspects of the clinical training experience as perceived by the nursing students. A supportive clinical learning environment characterized by collaborative learning, trust and mutual respect. Furthermore, nursing students should be given chances to express their opinions about the positive and negative clinical training experiences. Measurement of nursing students’ satisfaction about clinical learning environment can be used to satisfy the needs of nursing students. Therefore, clinical instructors should focus on effective measures that enhance effectiveness of clinical learning environment and promote nursing students’ satisfaction. This study explores that male nursing students are experiencing challenges in a clinical setting compared to female ones, and the female students had a higher satisfaction level than male students.

Recommendations

Based on the findings of this study, the following recommendations are suggested:

- Measurement of nursing students’ satisfaction about the Clinical Learning Environment should
be conducted in a beneficent and nonthreatening manner.

- Staff development programs for clinical instructors are needed to promote their skills in providing effective clinical training for nursing students.
- Opportunities should be allowed for nursing students to express their opinions about effectiveness of Clinical Learning Environment.
- The clinical instructors should assist nursing students to solve the problems facing them in the Clinical Learning Environment.
- Further researches are needed such as: developing a training program for an improvement strategy to enhance the effectiveness of Clinical Learning Environment.
- Further studies are needed to analyze the effect of the clinical learning environment on the practice of nursing students to improve the clinical experience for nursing students and promote the professional nursing practice.

References


