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Assessment of Obstacles in the Learning Process among Nursing Students in the Faculty of Nursing at Helwan University

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ABSTRACT

Background: learning obstacles describe problems that hinder learning and lead to learning deficits. Additionally, clinical education is an essential part of the nursing education program; **Aim of the study**: This study aimed to assess obstacles in the learning process among nursing students in the Faculty of Nursing at Helwan University. **Research Design**: A descriptive correlation design was utilized. **Setting**: This study was conducted at the Faculty of Nursing, Helwan University campus. **Subjects**: A convenient sample of (437) nursing students in 3rd & 4th grades. **Data Collection Tools**: Two tools were used to collect data in this study. The first tool was the Learning Process Obstacles Structured Interview Questionnaire. The second tool was the Learning and Clinical Environment Obstacles Structured Interview Questionnaire. **Results**: 61.6% of the studied nursing students perceived a mild level of learning process obstacles, and 57.9% perceived mild learning and clinical environment obstacles. **Conclusion**: There was a highly statistically significant relation between learning process obstacles and learning & clinical environment obstacles. Additionally, there was a highly statistically positive correlation between learning process obstacles and learning & clinical environment obstacles among the studied nursing students. **Recommendations**: Develop a nursing curriculum in which the nursing students are actively involved in their education and training plans. As well as arranging an advisory committee for the teaching staff and the clinical partners' leaders to discuss how the academia and practice can work together optimally to improve the nursing students' education, training, and experience.

Keywords: Clinical environment, Learning process, Nursing students, Obstacles

INTRODUCTION

Nursing students face various obstacles in the learning process, which can impact their academic achievement, clinical performance, and professional development. In addition, nursing students also face specific obstacles related to their learning environment (1).

Learning is a behavior change (knowledge, attitudes, and/or skills) that can be observed or measured and occurs at any time or place resulting from exposure to environmental stimuli. The learning environment (LE), referred to, encompasses everything surrounding students in the learning space, including physical location, and social and psychological contexts (2).

The learning environment affects the transfer/acquisition of knowledge and skills needed in training medical students (3). The analysis of the

learning environment from the perspective of the students is deemed an effective indicator of the quality of both learning and teaching processes in undergraduate studies in the field of health studies **(4).**

Learning obstacles describe problems that hinder learning and lead to learning deficits. The focus has been more on barriers and factors that impede learning than on determining the nature of learning deficits and their manifestations. Additionally, learning obstacles are used to describe any delay in improving school performance, and a major source of stress for nursing students **(5).**

Essa (2022) assessed students' perceptions of the learning environment and showed that although feedback is an integral and important part of the teaching and learning environment in the medical field, all students are not satisfied with the quality and quantity of teacher feedback **(6).**

Additionally, the most common obstacles regarding clinical education are the lack of instructors with high academic and clinical skills, unpunctual presence of the instructor at the patient's bedside, instructor's poor communication skills, instructor's inattention to students' educational needs and impossibility of instructor evaluation by students were considered as the main barriers related to clinical education instructors from student's standpoint **(7).**

Therefore, clinical education is an essential and integral part of the nursing education program. Since nursing is a performance-based profession, clinical learning environments play an important role in the acquisition of professional abilities and training of nursing students to enter the nursing profession and become qualified registered nurses **(8).**

Many nursing educators confirm that adult learning takes place not by the teacher initiating and motivating the learning process but rather by the teacher removing or reducing obstacles to learning and enhancing the process after it has begun **(9).**

The role of nursing education is to improve qualitative nursing practice. So, training competent nurses to preserve people's health is consistently one of the goals of nursing education Additionally, indicated that a high appreciation for clinical instructors could be seen as a motivation to push the clinical learning process for nursing students **(10).**

Additionally, *Imen et al., (2022)* documented that examining the environment in academic teaching in nursing education is very insightful. Students' success and satisfaction are two indicators of the quality of the educational environment. Their assessment can guide schools and teachers to apply self-analysis and incorporate the best strategies to improve the learning environment **(11).**

AIM OF THE STUDY

This study aimed to assess Obstacles in the Learning Process among Nursing Students in the Faculty of Nursing at Helwan University through the following objectives:

1. Assess learning process obstacles among the studied nursing students.

2. Assess the learning and clinical environment among the studied nursing students.

Research Questions:

1. What are the learning process obstacles among the studying nursing students in the nursing faculty?

2. What are the obstacles regarding learning and clinical environment among the studied nursing students in the nursing faculty?

SUBJECT AND METHODS

I - Technical Item:

Research Design:

A descriptive correlation design was used to achieve the aim of the current study.

Setting:

The current study was conducted at the Faculty of Nursing, Helwan University campus. The 3rd grade

nursing students were located on the 2ⁿᵈ floor and the 4ᵗʰ grade nursing students were located on the 3ʳᵈ floor.

Subjects:

A convenient sample was used in this current study including nursing students in 3ʳᵈ & 4ᵗʰ grades, in the previously mentioned setting and who were present at the time of data collection.

(437) nursing students who joined from the 3ʳᵈ and 4ᵗʰ grades at the Faculty of Nursing- Helwan University, with the following criteria.

- Both genders

- Nursing Students who studied at the Faculty of Nursing, Helwan University in the 3ʳᵈ and 4ᵗʰ academic year (2022-2023).

- The 3ʳᵈ & 4th-grade nursing students were chosen for this study, as they were more knowledgeable and experienced about the learning process obstacles faced them through their studying years in this faculty.

- Nursing students who were available at the time of data collection and had the will/agreed to participate in this study.

Data Collection Tools:

Two tools were used to collect data in this study:

1ˢᵗ Tool: Learning process obstacles structured interview questionnaire:

It was developed by a researcher based on the literature review conducted by (*Baraz, et al., 2015; Bar, 2019*) Additionally, it was used to assess learning process obstacles among nursing students. Moreover, it consisted of two parts concerned with demographic data of nursing students in addition to learning process obstacles **(12,13)**.

1ˢᵗ Part: Demographic Data of Nursing Students:

It involved age, sex, academic year/grade, previous education, residence in addition to previous academic achievement.

2ⁿᵈ Part: Nursing Students' Learning Process Obstacles:

It consisted of (146) items classified into nine dimensions concerned with preparation for learning, building background, content, comprehensive input, presenting new information, interaction, practice/application, review/ assessment in addition to reflection.

1. Preparation for learning:

   This dimension included two sections of sharing objectives and reviewing learning plus curricular targets with a total of (27) items.

2. Building background: This dimension involved (5) items.

3. Content: It involved (16) items.

4. Comprehensive input: This dimension involved (6) items.

5. Present new information: This dimension included two parts with a total of (27) items.

6. Interaction: This dimension included two parts with a total of (29) items.

7. Practice / Application: this dimension included (8) items.

8. Review / Assessment: this dimension included (21) items.

9. Reflection: this dimension included (7) items.

The Scoring System:

They used a 5-point Likert scale that rated students' responses as (1) strongly disagree, (2) disagree, (3) neutral, (4) agree and (5) strongly agree. 1-2 on the 5-point Likert scale ($< 60\%$) are classified as mild, 3 on the 5-point Likert scale ($\geq 60\%$ to $< 75\%$) as moderate, and 4 & 5 on the 5-point Likert scale ($\geq 75\%$) as severe and (statistics) **(14).**

Tool II: learning and clinical environment obstacles structured interview questionnaire:

It was developed by a researcher based on the literature review conducted by (*Henderson, & Eaton, 2017; Beigzadeh et al., 2019; El-Husseini, & El-Gohary, 2021*) **(15,16, and 17).** Additionally,

it is used to assess learning and clinical environment obstacles among nursing students. Moreover, it consisted of (86 items) classified into five dimensions:

1. Learning environment. The 1st dimension included (4) items regarding the learning schedule.
2. Physical environment. The 2nd dimension concerned (34) items classified into five sections.
3. Clinical environment. The 3rd dimension concerned (29) items classified into two sections.
4. The administrative factors. The 4th dimension concerned (13) items.
5. Situational Variable Factors. The 5th dimension concerned (6) items. (18).

The total scoring system

learning process obstacles structured interviewed questionnaires consisted of (146 items) with a total score of (730). While learning and clinical environment obstacles structured interviewed questionnaires consisted of (86 items) with a total score of (430). The total grades for each item were summed up and then converted into a percentage score. They were classified into three levels **(18).** and (statistics).

The 1st. is a mild level, which means slight and not extreme **(19).** Additionally, it is computed if the total score is less than 60%.

The 2nd. is moderate level, which means average neither too much nor too little **(20).** Additionally, it was computed if the total score was equal or more than 60 % to less than 75%.

The 3rd. was severe level, which means extreme and too much **(19).** Additionally, it was computed if the total score was equal to or more than 75 %.

II – Operational Item:

Preparatory phase:

It included reviewing past, current, national, and international related literature, and theoretical knowledge of various aspects of the study using books, articles, the internet, periodicals, and magazines to develop tools for data collection, during this phase, the investigator also visited the selected place to get acquainted with the personal and the study settings.

A) Validity:

The developed tool was formulated and submitted to five experts. The experts distributed as the following; (1 assistant professor, curricula & strategies, faculty of education, El Diaa University), (2 assistant professors, curricula & strategies, faculty of Education, Cairo University), (1 lecturer, nursing administration, Faculty of Nursing, Helwan University) in addition to (1 lecturer, adult nursing, Faculty of Nursing, Helwan University who is responsible for thesis statistics) to assess the content validity, needed modifications were done.

Reliability:

Is the consistency of measuring instruments. Moreover, it is the degree to which the used tools measure what was supposed to be measured in the same way each time & under the same conditions with the same subjects.

Pilot study:

The pilot study was done on 10% (44) of the nursing students to examine the clarity of questions and time needed to complete the study tools. There wasn't any modification. So, subjects included in the pilot study were included in the study.

Ethical considerations:

Before the study was conducted, research approval was obtained from the Scientific Research Ethical Committee in the Faculty of Nursing, Helwan University. In addition, approval was obtained from the heads of the departments (nursing administration, nursing obstetrics in addition to nursing pediatrics). Also, informal oral consent was sought and obtained from each participating subject before data collection, they were informed about the purpose and expected outcomes of the study, and

they were assured that the study was harmless, their participation was voluntary, and they had the right to withdraw from the study at any time without any reason. They also ensured that anonymity and confidentiality were guaranteed; as well the gathered data was used for research purposes only. Ethics, values, culture, and beliefs were respected.

Field Work:

- Data was collected over one month starting from February 27, 2023. to March 26, 2023. Before beginning to collect data from the study subjects, the researcher met with the heads of the following departments (Nursing administration, nursing obstetrics in addition to nursing pediatrics) to get formal permission and to determine the most suitable time to collect the data.

- The researcher introduced herself and explained the aim, objectives, and research questions of the study to the nursing students and informed them that their information would be treated confidentially and to be used only for the research. Additionally, each participant was notified about the right to accept or refuse to participate in the study.

- The study was carried out by assessing the learning process obstacles among nursing students in the Faculty of Nursing at Helwan University by using learning process obstacles in addition to learning and clinical environment obstacles structured interview questionnaires. The suitable time for filling out these questionnaires was 30 to 45 minutes. The researcher attended (5) times weekly for one month in different suitable free times to collect the data.

- The researcher asked for assistance from the responsible lecturer for each assigned student group for more organization and control. Moreover, all subjects were asked to fill out the questionnaires in the presence of the researcher to ascertain that all questions were answered. Later, the researcher checked the questionnaires for any missing data.

III- Administrative Item:

Approval to carry out this study was obtained from the Dean of the Faculty of Nursing at Helwan University campus and individual oral consent was obtained from each nursing student who participated in the study.

IV -Statistical Item:

Data entry and analysis were performed using SPSS statistical package version 25. Categorical variables were expressed as numbers and percentages while continuous variables were expressed as (mean ±SD). Chi-Square ($x2$) was used to test the association between row and column variables of qualitative data.

ANOVA, (F) test was used to compare the mean in normally distributed quantitative variables in more than two groups. Pearson correlation was done to measure the correlation between quantitative variables. For all tests, a two-tailed p-value ≤ 0.05 was considered statistically significant, P-value ≤ 0.01 was considered highly statistically significant. While p-value > 0.05 was considered not significant.

Results

Table (1): Frequency Distribution of the Studied Nursing Students according to their Demographic Data (n=437).

| Items		N	%
Age (year)	▪ 20 < 22 years	263	**60.2**
	▪ 22 < 24 years	166	38.0
	▪ ≥ 24 years	8	1.8
	▪ **Mean± SD**	**21.61 ± 0.634**	
Gender	▪ Male	148	33.9
	▪ Female	289	**66.1**
	▪ **Male to Female ratio**	**0.5:1**	
Academic Year	▪ 3rd year	226	**51.7**
	▪ 4th year	211	48.3
Previous Education	▪ Technical Institute	127	29.1
	▪ Secondary school	310	**70.9**
Residence	▪ Urban	322	**73.7**
	▪ Rural	115	26.3
Previous Academic Achievement	▪ Excellent	37	8.5
	▪ Very good	176	40.3
	▪ Good	192	**43.9**
	▪ Pass	23	5.3
	▪ Failed	9	2.1

Table (1) shows that 60.2% of the studied nursing students' ages ranged from 20 to < 22 years, with a total mean SD = 21.61 ± 0.634. Moreover, 51.7% of the studied nursing students were in their third academic year. In addition, 70.9% & 73.7% held secondary school degrees and were from urban areas respectively. Finally, 43.9% were graded as good concerning previous academic achievement.
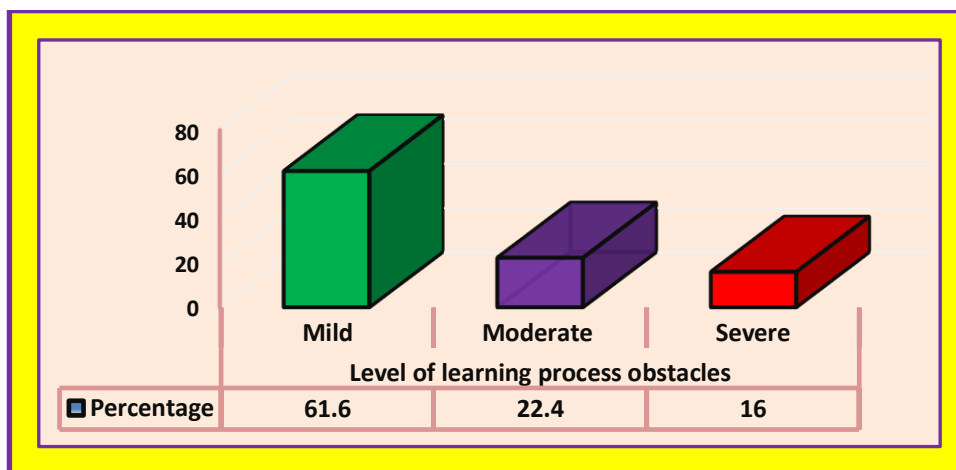
$$\chi^{2=159.3, P= 0.004}$$

Figure (1): Percentage Distribution of Learning Process Obstacles among the Studied Nursing Students (n= 437).

Figure (1): shows that 61.6% of the studied nursing students perceived a mild level of learning process obstacles followed by a moderate level with a percentage of (22.4%). While 16% of them had severe learning process obstacles. In addition, there was a highly statistically significant difference between mild, moderate, and severe (Studied nursing student responses) at P value = 0.000.

$\chi^{2}=159.3, P= 0.004$
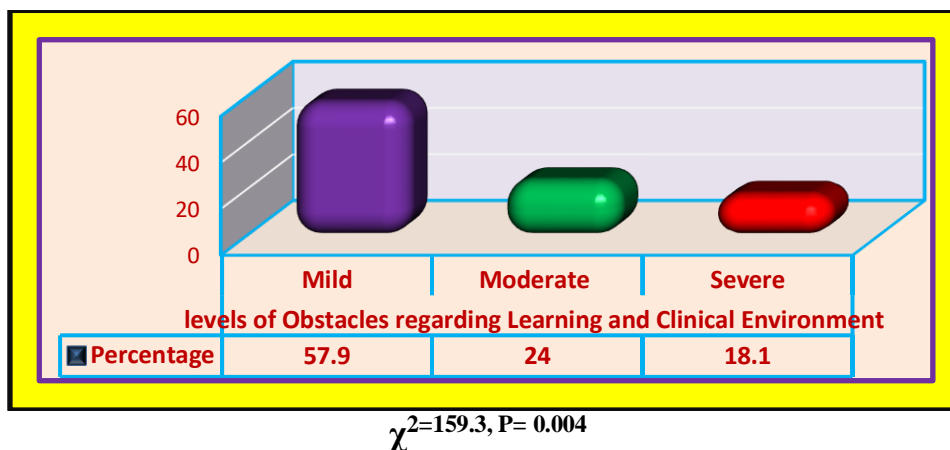
Figure (2): Percentage Distribution of Learning and Clinical Environment Obstacles among the Studied Nursing Students (n= 437)

Figure (2) illustrates that 57.9% of the studied nursing students perceived mild learning and clinical environment obstacles followed by moderate levels with a percentage of (24%). While 18.1% of them had severe learning and clinical environment obstacles. In addition, there was a highly statistically significant difference between mild, moderate, and severe (Studied nursing student responses) at P value = 0.000.

Table (2): Relation between Learning Process Obstacles and Demographic Data among the Studied Nursing Students (n= 437).

Items		Z.	Low 269 / 61.6		Moderate 98 / 22.4		High 70 / 16		χ2	P-Value
			N	%	N	%	N	%		
Age (year)	20 < 22 Yrs.	263	138	31.6	85	19.5	40	9.2	81.7	0.000**
	22 < 24 Yrs.	166	131	30.0	13	3.0	22	5.0		
	≥ 24 years	8	0	0.0	0	0.0	8	1.8		
Gender	Male	148	28	6.4	69	15.8	51	11.7	172	0.000**
	Female	289	241	55.1	29	6.6	19	4.3		
Academic Year	3rd year	226	115	26.3	63	14.4	48	11.0	22.8	0.000**
	4th year	211	154	35.2	35	8.0	22	5.0		
Previous Education	Technical	127	17	3.9	57	13.0	53	12.1	181	0.000**
	Secondary	310	252	57.7	41	9.4	17	3.9		
Residence	Urban	322	254	58.1	53	12.1	15	3.4	177	0.000**
	Rural	115	15	3.4	45	10.3	55	12.6		
Previous Academic Achievement	Excellent	37	32	7.3	2	0.5	3	0.7	245	0.000**
	Very good	176	164	37.5	4	0.9	8	1.8		
	Good	192	70	16.0	88	20.1	34	7.8		
	Pass	23	3	0.7	3	0.7	17	3.9		
	Failed	9	0	0.0	1	0.2	8	1.8		

*Significant p ≤ 0.05   **Highly significant p ≤ 0.01

Table (2): clarifies that there was a highly statistically significant relation between learning process obstacles and demographic data concerning age, gender, academic year, previous education, residence, and previous academic achievement among the studied nursing students at p= 0.000).

Table (3): Relation between Learning and Clinical Environment Obstacles and Demographic Data among the Studied Nursing Students (n= 437).

Items		Z	learning & clinical environment obstacles						χ2	P-Value
			Low		Moderate		High			
			253	57.9	105	24.0	79	18.1		
			N	%	N	%	N	%		
Age (year)	20 < 22 Yrs.	263	122	27.9	92	21.1	49	11.2	88.3	0.000**
	22 < 24 Yrs.	166	131	30.0	13	3.0	22	5.0		
	≥ 24 years	8	0	0.0	0	0.0	8	1.8		
Gender	Male	148	13	3.0	75	17.2	60	13.7	221	0.000**
	Female	289	240	54.9	30	6.9	19	4.3		
Academic Year	3rd year	226	100	22.9	69	15.8	57	13.0	36.5	0.000**
	4th year	211	153	35.0	36	8.2	22	5.0		
Previous Education	Technical	127	17	3.9	48	11.0	62	14.2	168	0.000**
	Secondary	310	236	54.0	57	13.0	17	3.9		
Residence	Urban	322	238	54.5	69	15.8	15	3.4	179	0.000**
	Rural	115	15	3.4	36	8.2	64	14.6		
Previous Academic Achievement	Excellent	37	32	7.3	2	0.5	3	0.7	265	0.000**
	Very good	176	164	37.5	4	0.9	8	1.8		
	Good	192	54	12.4	95	21.7	43	9.8		
	Pass	23	3	0.7	3	0.7	17	3.9		
	Failed	9	0	0.0	1	0.2	8	1.8		

*Significant p ≤ 0.05   **Highly significant p ≤ 0.01

Table (3) clarified that there was a highly statistically significant relation between learning & clinical environmental obstacles and demographic data with age, gender, academic year, previous education, residence, and previous academic achievement among the studied nursing students at p= 0.000).

Table (4): Correlational Matrix between Learning Process Obstacles and Learning and Clinical Environment Obstacles among the Studied Nursing Students (n= 437).
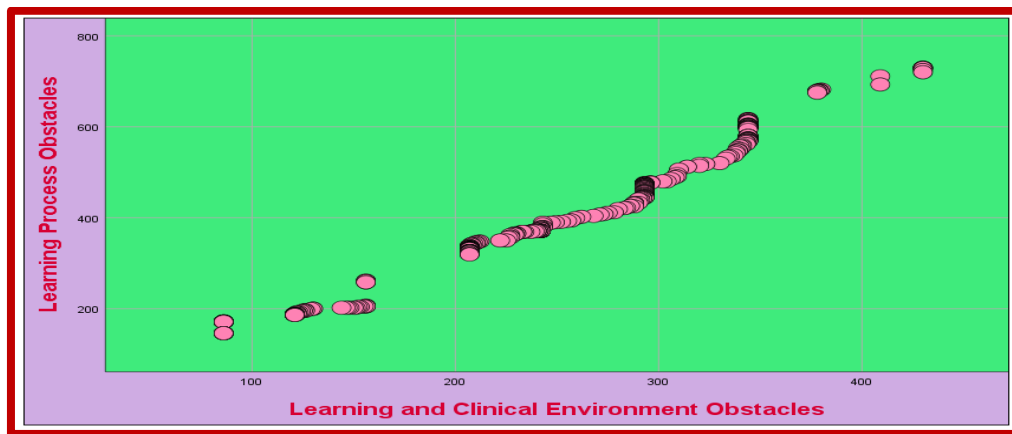
Variable		learning process obstacles	Learning and clinical environment obstacles
learning process obstacles	r		0.987
	p		0.000**
Learning and clinical environment obstacles	r	0.987	
	p	0.000**	

*Significant p ≤ 0.05   **Highly significant p ≤ 0.01

Table (4) illustrates the correlational matrix between learning process obstacles and learning & clinical environment obstacles among the studied nursing students. It clarifies that there was a highly statistically positive correlation between learning process obstacles and learning & clinical environment obstacles among the studied nursing students at (r= 0.987 & p= 0.000).

Figure (3): Scatter Dot between Learning Process Obstacles and Learning and Clinical Environmental Obstacles among the Studied Nursing Students (n= 437).

Figure (3) Scatter Dot between learning process obstacles and learning & clinical environment obstacles among the studied nursing students. It clarifies that there was a highly statistically positive correlation between learning process obstacles and learning & clinical environment obstacles among the studied nursing students at (r= 0.987&p= 0.000)

DISCUSSION

Regarding the demographic data of the studied nursing students, the present study findings indicated that about two-thirds of the studied nursing students' ages ranged from twenty to less than twenty-two years, with a total mean SD = 21.61 ± 0.634. This might be due to most of the nursing students regularly upgrading.

Additionally, the present study found that more than two-thirds of them were female, with a Male to Female ratio of 0.5:1. This might be because the Faculty of Nursing was only accepting females at first and then started to admit both sexes in nursing education, due to the need of the Egyptian society for both sex from nursing specialty in different health settings. Moreover, in our community females are more interested in being involved in nursing studies, which might be related to the nature of the natural extension of women as motherhood, likewise social construction of what it means to be a nurse typically means caring besides economic issues.

In addition, regarding the academic year, the present study found that more than half of the studied nursing students were in their third academic year, and nearly three-quarters held secondary school degrees and were from urban areas. Finally, concerning previous academic achievement, more than two-fifths of them were graded as good.

The present study findings follow a cross-sectional study conducted by *Nelson et al., (2021)* who used the Dundee Ready Education Environment Measure (DREEM) inventory to assess the attitude of undergraduate medical students toward the teaching-learning process during their course in a teaching hospital of South Kerala, and reported that the most studied students were female, their age ranged between twenty to less than twenty-two years, and more than half were involved in the third-year academic year **(21).**

Concerning learning process obstacles among the studied nursing students. The present study results illustrated that more than two-thirds of the studied nursing students perceived mild learning process obstacles. While nearly one-fifth of them perceived severe levels of learning process obstacles.

This might be due to these nursing students not having the support they need from their families, friends, or instructors. This can make it difficult to cope with the challenges of nursing education.

In the same direction, the study findings agreed with the study result by *Noreen et al., (2018)* Students' Perception of Learning Environment using Dundee Ready Education Environment Measure (DREEM) inventory, concluded that A DREEM inventory score of 107.5/200 is moderate **(22)**. This means that the students perceive some level of learning obstacles in their learning environment, but these obstacles are not severe enough to significantly interfere with their ability to learn. As well, the study findings followed a cross-sectional study conducted by *Palomo-López, et al.,* who studied student perceptions of the education environment in a Spanish medical podiatry school, Podiatric medical students and declared (58.2% of maximum score), a moderate level **(23)**.

Concerning total learning and clinical environment obstacles among the studied nursing students, the present study results explored that about three-fifths of the studied nursing students perceived mild learning and clinical environment obstacles followed by moderate levels. While one-fifth of them had severe learning and clinical environment obstacles. From the researcher's point of view, nursing students were not able to fully engage in the learning process or to develop the skills and knowledge they need to be successful nurses, this could be due to the clinical environment was not supportive of learning, also the students felt overwhelmed by the workload, and they lacked access to the experienced nurses who can provide them with guidance and mentorship.

At the same time, the study result conducted at Addis Ababa University by *Alammar et al., (2020)* evaluated nursing students' perception of the clinical learning environment and documented that Saudi nursing students perceived their clinical learning environment positively and confirmed a moderate learning process, which expressed as 35.7% for lack of resources, 32.7% for lack of support from instructors, 27.4% for uncomfortable working conditions, and 31.6% for lack of opportunities to practice skills **(24).**

The study data in the same direction as *Berhe & Gebretensaye (2021)* who reviewed nursing students' challenges in the clinical learning environment at the School of Nursing and Midwifery in Addis Ababa University, found that the level of learning process obstacles was moderate to high and expressed by (52.4% Lack of resources),(46.2% Lack of support from clinical instructors), (42.8% Difficult patient interactions), (39.6% Uncomfortable working conditions), (37.2% Lack of opportunities to practice skills)**(25).**

Regarding correlation, the present study findings clarified that there was a highly statistically significant relation between learning process obstacles and demographic data concerning age, gender, academic year, previous education, residence, and previous academic achievement among the studied nursing students.

From the researcher's point of view, the older nursing students had more family and work commitments, which made it difficult for them to devote enough time to their studies. Female nursing students might be more likely to experience gender discrimination in the clinical setting. Furthermore, nursing students in earlier academic years might be more likely to experience learning process obstacles because they were still new to the nursing programs and the clinical settings.

Moreover, nursing students who lived in rural areas might be more likely to experience learning process obstacles because they had less access to resources, such as libraries and clinical placement sites. Also, nursing students with high previous academic achievement might have better study skills and a stronger academic foundation, which makes it easier for them to succeed in the nursing programs.

The study findings were in the same line, as a descriptive cross-sectional study conducted by *Imen et al., (2022)* who analyzed a study aimed at assessing nursing students' perception of the learning environment. The study indicated that there was a significant statistical relation between learning

environment and gender, residence, previous academic achievement, and academic years **(11).**

Considering correlation, the present study findings clarified that, there was a highly statistically significant relation between learning & clinical environmental and demographic data concerning age, gender, academic year, previous education, residence, and previous academic achievement among the studied nursing students. This indicated that nursing students' demographic characteristics were strongly associated with their experience of learning and clinical environmental obstacles.

Also, the study findings were compatible with the results conducted by **Mohamed et al., (2019)** who studied clinical learning environment challenges among nursing students and reflected that there was a high statistical relation between demographic characteristics with age and gender and clinical learning environment challenges **(18).**

Additionally, this data was supported comparative study done by **Safan & Ebrahim (2018)** who studied a thesis entitled Problems and Obstacles Facing Nursing Interns and its Relation to Their Performance in Clinical Setting and reflected that there was a high statistical relation between age and Clinical setting challenges **(26).**

Concerning the correlational matrix between the total score of learning process obstacles and the total score of learning & clinical environment obstacles among the studied nursing students. The study results indicated that there was a highly statistically positive correlation between the total score of learning process obstacles and the total score of learning & clinical environment obstacles among the studied nursing students.

From the researcher's point of view, the learning process and learning & clinical environment were interactive networks of forces that impacted the learning outcomes in the real world. In this phase, the nursing students were expected to learn the basic nursing courses while they were in the academic environment. While in hospitals and other healthcare facilities, the nursing students applied relevant concepts to clinical practice with their faculty preceptors which in turn reflected in the achievement of learning outcomes. Additionally, the learning environment was a behavioral determinant and the student's understanding of the environment was very effective in learning and was very important in clinical education.

On the same line, the study findings were compatible with descriptive correlational study results conducted by **Fath-Elbab et al., (2020)** who evaluated the relationship between nurse educators' empowerment and nursing students' clinical competence and concluded that there was a positive correlation between nurse educators' empowerment and nursing students' clinical competence **(27).**

The study data followed the study result by **Ahmad et al., (2018)** who evaluated challenges in the clinical environment: the Saudi student nurses' experience and indicated that resolving clinical obstacles is crucial in helping student nurses to achieve positive learning outcomes **(28).**

CONCLUSION

Based on the findings of the research questions, it was concluded that; 61.6% of the studied nursing students perceived a mild level of learning process obstacles, and 57.9% of the studied nursing students perceived mild learning and clinical environment obstacles. Moreover, there was a highly statistically significant relation between learning process obstacles and learning & clinical environment obstacles additionally; there was a highly statistically positive correlation between learning process obstacles and learning & clinical environment obstacles among the studied nursing students.

RECOMMENDATIONS

In light of the findings of the current study, the following recommendations can be suggested:

- Recommendations for the Faculty of Nursing at Helwan University:

- Develop a nursing curriculum in which the nursing students are actively involved in their education and training plans.
- Arranging an advisory committee for the teaching staff and the clinical partners' leaders to discuss how academia and practice can work together optimally to improve the nursing students' education, training, and experience.

- Recommendations for Students:

- Academic counseling unit provides appropriate services to nursing students especially those with learning difficulties to enhance their academic and overall performance.
- Psychological counseling unit provides services to nursing students who get stressed about their emotional and psychological development.

- Recommendations for Further Studies:

- Further research by performing regular qualitative follow-up studies for nursing students (under and post-graduates) to assess their learning obstacles and challenges as a reference point for improvement and repetition of faculty accreditation.

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Conflict of Interest: None

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