

**Relationship between Clinical Learning Environment and Self-Esteem among
Secondary Nursing Schools Students at Ismailia City**

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Abstract

Background: A supportive clinical learning environment is very important for the transfer of learning in a clinical context .As well as it has critical effects on trainees and educators, skills, knowledge, create self- esteem and values. **Aim of the study:** was to assess the relationship between clinical learning environment and self-esteem among secondary nursing schools students at Ismailia City. **Design:** A descriptive correlational design was used in the study. **Setting:** the current study was conducted at all secondary nursing schools at Ismailia City. **Sample:** 243 nursing students. **Tools for data collection:** Data were collected using clinical learning environment questionnaire and Rosenberg self- esteem scale. **Results:** there was positive opinions toward total learning environment (89.7%). As well as, There was a positive statistical significant correlation between total opinions of student nurse about clinical learning environment and their total self-esteem levels as well as positive statistical significant correlation between total self-esteem levels and Premises of care in ward among student nurse. **Conclusions:** there was a statistical significant positive correlation between total student opinions about clinical learning environment and their total self-esteem levels. **Recommendations:** Encouraging students for discussion and acquiring knowledge and skills during clinical training. Ensuring clinical instructor involvement in monitoring practice and assessment of student competence and providing training courses for nursing student about motivating to learn, communicate and how to be self-confident during clinical training.

Key words: Clinical learning environment, Secondary nursing students and Self-esteem.

1. Introduction

Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life. Nurses may be differentiated from other health care providers in clinical environment by their approach to patient care, training, and scope of practice. Nurses practice in many specialties with differing levels. Nurses comprise the largest component of most clinical environment(DiMattio and Hudacek 2020).

Nursing students have characteristics that differentiate them. They are entrenched in technology, prefer to work at their own pace, seek a great deal of feedback, and can be anxious during training in clinical environment(Kalyani, Jamshidi et al. 2019).

Clinical learning environments (CLE) involve three key elements: clinical work; learning; and environment. Early definition focused on the climate and overall ambiance of the nursing education environment highlighted the importance of the climate in which learning occurs. The CLE has been described as foundation of postgraduate nursing education by “the social, cultural and material context in which residents learn while they work(Nordquist, Hall et al. 2019).

The concept self-esteem has been a common household word. The word self-esteem cut across all age brackets, starting from infants to

late adulthood. Therefore, self-esteem is the totality of one’s self evaluation. And also, it is a cognitive process of evaluating one’s abilities, values, knowledge and overall capacity. Described identity as the individual attempt to define himself or herself as a unique person. People who are perceived with positive self-esteem demonstrated the following signs: confidence, self-direction, non-blaming others, demonstrates personal strength, optimism, ability to solve problems and ability to control emotions (Rahmanian, Salari et al. 2019).

Nursing students’ self-esteem is negatively affected by stress during the education period. Self-confidence and self-esteem are essential factors in coping with stress. In contrast, high self-esteem is associated with effective approaches to solving problems. Specifically, nursing students with high self-esteem use more “problem solving” and less “avoidance” coping strategies. Additionally, it is well established that social support is an important variable when coping with stress because it decreases anxiety levels and facilitates eagerness to utilize new stress coping strategies(Emmerling, Liu et al. 2017). Added that Clinical practice is an essential component in preparing nursing students to practice in the “real world it is important to prepare the nursing students to be confident and able to interact with the patients, colleagues, doctors and other staff that are some of the

important factors for self-esteem among nurses (Sator, Horner et al. 2019).

Nursing education aims to help nursing students learn the knowledge, clinical skills, acumen, and professionalism needed for patient care. Learning standards for nursing students must be uniformly high because the public expects to receive the best possible healthcare, nursing clinical instructors play an important role in the education of nursing students. One of the roles of the nursing clinical instructor is to facilitate the development of critical thinking skills and self-esteem in student nurses in a clinical learning environment (CLE), such as at the bedside in a hospital. Critical thinking is not only a requirement in the curriculum, it is important to maintain patient safety. Inadequately prepared nurses are more prone to make significant errors and jeopardize patient safety (McGaghie and Harris 2018)

2. Subject and method

Study design:

A descriptive correlational design was used in the study.

Study setting:

The study was conducted at all secondary nursing schools at Ismailia City (seven schools) namely, Eltal Ekabeer Secondary Nursing School, Ismailia Secondary Nursing School for Male, Ismailia Secondary Nursing School for Female, Elmostakbal Secondary Nursing School, Elkantar West Secondary Nursing School, Fayed

Significance of the study:

The clinical setting is a significant learning environment for nursing students. However, the learning that occurs in this environment presents challenges that may cause students to experience stress and anxiety. High levels of anxiety can affect students' clinical performance, self-esteem, presenting a clear threat to success in a clinical rotation. Various studies have indicated that not all practice settings are able to provide student nurses with a positive learning environment. (Chan, 2012). So it is very important to study the effect of clinical learning environment on student nurses self-esteem because of the clinical learning environment not valid and not Prepared well it can affect student's self-esteem negatively.

Secondary Nursing School, and Oncology Secondary Nursing School affiliated to ministry of health (MOH) at Ismailia City. The admission requirement is general preparatory certificate with a grade point average not less than 70%. These schools provide nursing students with knowledge and skills for preparing graduates able to provide comprehensive care for patients and community

The sample of the study:

A Simple random sampling of nursing student (n=270) from all three study years' at all

secondary nursing schools at Ismailia City. Sample size calculated according to this formula (Yamane, 2013).

$$n = \frac{N}{1+Ne^2}$$

n = sample size

N= total population

E= error = 0.05

Confidence level 95%

n = 270

The study Sample was 270 secondary nursing students they divided into (87) nursing students from the first Study year (86) from the second Study year and (97) from the third Study year.

Tool of data collection:

Tool (1):- Clinical learning environment questionnaire (CLEQ)

It consisted of two parts as follows: Part I: it included socio-demographic characteristics of students; such as; student name, age, sex, school name, study year, place of practical training, training department. Part II: It adopted from Musa, (2017) to assess the student's opinions about clinical learning environment. It included (29 items) which classified into 4 factors namely; Ward atmosphere(11 items) such as; High preceptor/resource nurse worked negatively impacted your experience at this agency/department, Premises of nursing care on the ward (4 items) such as; the ward nursing philosophy was clearly defined, Premises of learning on the ward (6 items) such as; There was sufficient meaningful learning in the ward and Learning opportunities(8 items) such as;

You feel overwhelmed by the demands of your role in this environment.

Scoring System:

All items of the four factors were based on five points Likert scale ranging from strongly agree (5) to strongly disagree (1). Total score of the questionnaire classified into positive and negative opinions, positive opinions scored at 60 % and more, while negative opinions at less than 60 % (Musa, 2017).

Tool (2) Rosenberg self- esteem scale: (RSES)

It adopted from AbdElkareem, (2012) to assess level of nursing student self-esteem. It includes ten statements, five statements of them are positive such as (Question 1,3,4,7, and 10) on the whole, I am satisfied with myself, I feel that I have a number of good qualities, I am able to do things as well as most other people, I feel that I am a person of worth, at least on an equal plane with others and I take a positive attitude toward myself and the other five are negative such as (Questions 2, 5, 6, 8, 9) At times I think I am no good at all, I feel I do not have much to be proud of I certainly feel useless at times, I wish I could have more respect for myself and All in all, I am inclined to feel that I am a failure.

Scoring System:

Responses to the statements are arranged in four points likert scale ranging from (1) strongly disagree, to strongly agree (4) in case of negative statements, the score will be reversed. Items 2, 5, 6, 8, 9 are reverse scored. Give "Strongly Disagree" 1 point, "Disagree" 2 points, "Agree"

3 points, and “Strongly Agree” 4 points. Sum scores for all ten items. Keep scores on a continuous scale. The total scores of self-esteem scale were divided into three levels of self-esteem; low self-esteem if the percentage score was less than 20%, moderate self-esteem, if percentage score was from 20% to less than 30% and high self-esteem, if percentage score was 30% and more (Rosenberg, 2015).

Tools Validity:-

The study tools were previously validated by its developer.

Tools Reliability:-

The reliability Alpha co-efficient for clinical learning environment questionnaire was ($\alpha=0.892$), Score between (15-25) are considered average internal consistency for the RSE range from 0.77 to 0.88. Test-retest reliability for the RSE range from 0.82 to 0.85. Criterion validity=0.55. Construct validity=correlated with anxiety (-0.64), depression (-0.54) and anomie (-0.43) (Rosenberg, 2015)

Pilot study:

A pilot study will be done including 10% of study sample ($n=27$) to test the feasibility and clarity of the study tools. There was no modifications done according to the obtained results. It will be excluded from the study sample.

Field work:

Date was collected in three months from beginning of January, 2019 to ending of March,

2019. During study year's 2018/2019 Firstly, the researcher obtained permission to conduct the study through meeting with responsible authorities of the secondary nursing schools and the clinical settings where students receive their training to clarify the aim of the study. The researcher was present all the time for any questions, and collected the filled forms after revising them for completeness. The study tools were collected from students in groups by using structured interview after having their agreements to participate in the study and explaining the nature of the study, study tools took from 20-30 minutes to be completed.

Administrative design:

An official letter obtained from the dean of faculty of nursing at Suez Canal University to administration authorities of the secondary nursing schools for helping the researcher to collect the data from secondary nursing students. This letter included the aim of the study and copy from data collection tools in order to get their permission.

Ethical considerations:

Informed written consent obtained from nursing students to be involved in the study using proper channels of communication. Any individual included in the study has the right to refuse to participate in the study or withdraw from the study at any time. The confidentiality of the participants' responses guaranteed by the anonymity of the questionnaires.

Statistical design:

At the end of the fieldwork, data were organized, revised, tabulated and analyzed using mean and standard deviation. Statistical analysis was done by computer using statistical package of social science (SPSS) program, version 20. Statistical Package for the Social Sciences (SPSS) 19.0 for windows was used for statistical analysis. All continuous data were normally distributed and were expressed in mean standard deviation (SD). Categorical data were expressed in number and percentage. Chi-square test was used for comparison of variables with categorical data (levels). ANOVA test was used for comparison of variables with continuous data. Correlation coefficient test was performed to evaluate the correlation between continuous variables. Statistical significance was set at $p < 0.05$, and 0.01 level.

3. Results

Table (1) Shows distribution of socio-demographic characteristics of secondary nursing students. It was found that Al-Mostakbal School record the highest percentage (22.6%) of nursing students, whereas Oncology School record the least percentage (9.1%). Female students record the highest percentage (88.5%), than Male students (11.5%). the Third grade record the highest percentage (35.4%), than other grades. General hospital the highest percentage for Training (45.3%), whereas outpatient chemo the least percentage (2.91%). The student nurses

mean age was 16.95 with standard deviation of 1.067.

Table (2) shows nursing student's opinions about clinical learning environment. It was found that the highest percentage of student nurses (90.9%) had positive opinions toward Ward atmosphere, while (18.1%) had negative opinions toward premises care, and (89.7%) had positive opinions toward total learning environment.

Table (3) shows secondary nursing student's degree of self-esteem. It was found that the highest percentage (74.1%) of nursing student's had moderate level of their total self-esteem.

Table (4): Shows Linear Regression analysis of learning environment opinions and self-esteem and socio demographic characteristics .It illustrated that there was significant positive correlation between nursing student's self-esteem and premises of care in ward, training hospital and total learning environment.

Table (5) Shows correlation between secondary nursing student's opinions about clinical learning environment and degree of self-esteem, it was found that there was a positive statistical significant correlation between total opinions about clinical learning environment and total self-esteem, there was a positive statistical significant correlation between total self-esteem and Premises of care in ward.

4. Discussion

Regarding socio-demographic characteristics of secondary nursing student, the current study revealed that Al-Mostakbal School record the

highest percentage of nursing students, whereas Oncology School record the least percentage. Female students record the highest percentage than Male students. The Third grades record the highest percentage, than other grades. General hospital record the highest percentage for Training.

This study was agreement with **Pitkänen, et al., (2018)** who conducted entitled "Healthcare students' evaluation of the clinical learning environment and supervision—a cross-sectional study" and found that majority of nursing students were female, majority of participants were at the third grade than other grade. Conversely, this study was disagreement with **Tecza, et al., (2018)** who conducted entitled "Incivility toward nursing students in clinical rotations: Measuring the incidence and testing interventions" and found that majority of participants were trained at health insurance hospital.

Regarding total scores of secondary nursing student's opinions about clinical learning environment, the current study revealed that the highest percentage of student nurses had positive opinions toward Ward atmosphere, while had positive opinions toward total learning environment, this result may be due to nursing student were very interested with clinical areas environment.

This study was agreement with **Perry, Henderson, & Grealish, (2018)** who

conducted entitled "The behaviors of nurses that increase student accountability for learning in clinical practice" and found that majority of nursing students had positive opinions toward total learning environment. Conversely, this study was disagreement with **Thomson, Docherty, & Duffy, (2017)** who conducted entitled "Nursing students' experiences of mentorship in their final placement" and found that majority of nursing students had positive opinions toward Ward atmosphere.

Regarding total scores of secondary nursing student's degree of self-esteem, the current study revealed that the highest percentage of nursing student's had moderate level of their total self-esteem, this result may be due to higher educational level of nursing students that give them more power and increase their self-esteem. This study was congruence with **Uhlig, et al., (2018)** who conducted entitled "Inter professional practice and education in clinical learning environments" and found that majority of participants had moderate level of their total self-esteem. Conversely, this study was disagreement with **Sheehan, et al., (2017)** who conducted entitled "Clinical learning environments: place, artifacts and rhythm" and found that majority of participants had high level of their total self-esteem.

Regarding Linear Regression analyses of learning environment opinions and self-esteem and socio demographic characteristics, the

current study revealed that there was significant positive correlation between nursing student's self-esteem and premises of care in ward, training hospital and total learning environment.

This study was agreement with **Seong, & Nam, (2017)** who conducted entitled "Influence of Stress Coping Style, Relationship Ability and Self-Esteem on Smartphone Addiction in Nursing Student" and found that there was significant positive correlation between nursing student's self-esteem and nursing student's demographics. Also, this study was agreement with **Perry, Henderson, & Grealish, (2018)** who conducted entitled "The behaviors of nurses that increase student accountability for learning in clinical practice" and found that there was significant positive correlation between nursing student's total learning environment and nursing students demographics.

Regarding correlation between secondary nursing student's opinions about clinical learning environment and levels of self-esteem, the current study revealed that there was a positive statistical significant correlation between total opinions about clinical learning environment and total self-esteem, there was a positive statistical significant correlation between total self-esteem and Premises of care in ward.

This study was accordance with **Greeno, Ting, & Wade, (2018)** who conducted entitled "Predicting empathy in helping professionals: Comparison of social work and nursing students" and found that that there was a positive statistical significant correlation between total opinions about clinical learning environment and total self-esteem. Also, this study was supported with **Ahn, (2018)** who conducted entitled "The influence of nursing professional value and career decision self-efficacy on senior nursing students' job seeking stress-perspectives of convergence" and found that there was a positive statistical significant correlation between total self-esteem and Premises of care in ward.

5. Conclusion

The finding of the present study concluded that there was different degrees of student's opinions about clinical learning environment and self-esteem among secondary nursing schools students at Ismailia City. However, most of nursing student's had positive opinions toward ward atmosphere, while had negative opinions toward premises care, and had positive opinions toward total learning environment, and the majority of nursing student's had moderate level of their total self-esteem. It illustrated that there was significant positive correlation between nursing student's self-esteem and premises of care in ward, training hospital and total learning environment, there was a positive statistical significant correlation

between total opinions of nursing students about clinical learning environment and their total self-esteem levels.

6. Recommendations

- Be highly visible in practice. Visibility of lectures in practice is recognized as having an impact on the confidence of students being able to put their learning into practice.
 - Ensure clinical instructor involvement in monitoring practice and assessment of student competence.
 - Encourage students for discussion and acquiring knowledge and skills during clinical training.
 - Facilitate classroom reflection on the learning achieved in the clinical learning environment.
 - Work based assessment plays an important role in the education process,
- so it is necessary to assess the learning environment from different perceptions.
- Analyzing the gap between the actual and desired characteristics of the clinical learning environment and providing the necessary facilities to bridge this gap.
 - Provide training courses for nursing student about motivating to learn, communication and how to be self-confident during clinical training.

Further research

- Compare between the actual and preferred characteristics of clinical learning environment by nursing students.
- Study clinical learning environment and its effect self-esteem among nursing student.

Table (1): Distribution of Socio-Demographic Characteristics of Secondary Nursing Students (n=243)

		N	%
School	Al-Kantra	30	12.3
	Al-Tal Al-Kabeer	53	21.8
	Fayed	28	11.5
	Ismailia (Females)	27	11.1
	Ismailia (Males)	28	11.5
	Almostakbal	55	22.6
	Oncology	22	9.1
Gender	Male	28	11.5
	Female	215	88.5
Study year	First study year	78	32.1
	Second study year	79	32.5
	Third study year	86	35.4
hospital	General hospital	110	45.3
	El-Tal Al-kabeer	53	21.8
	Faied	28	11.5
	Oncology Hospital	22	9.1
	Al-Kantara	30	12.3
Training department/ units	Surgery	10	4.1
	Emergency	40	16.5
	Operations	25	10.3
	Orthopedics	29	11.9
	Outpatient	42	17.3
	NICU	17	7.0
	Inpatient chemotherapy	12	4.9
	ICU	18	7.4
	Dialysis	41	16.9
	Outpatient chemotherapy	7	2.9
Age	Mean ±Std. Deviation	16.95 ±1.067	

Table (2): Total Scores of Secondary Nursing Student's Opinions about Clinical Learning Environment n= (243).

Items	Negative (<60%)		Positive (60% and more)	
	N	%	N	%
Ward atmosphere level	22	9.1%	221	90.9%
Premises care level	44	18.1%	199	81.9%
Premises learning level	43	17.7%	200	82.3%
Learning opportunity level	30	12.3%	213	87.7%
Total learning Environment	25	10.3%	218	89.7%

Table (3): Total Scores of Secondary Nursing Student's Degree of Self-Esteem n=(243).

Total self-esteem	Low (20%)		Moderate (20%to<30%)		High (>=30%)	
	N	%	N	%	N	%
Total Self-esteem level.	63	25.9%	180	74.1%	0	0.0%

Table (4): Linear Regression Analyses of Learning Environment Opinions and Self-Esteem and Socio Demographic Characteristics

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Ward atmosphere	-0.015-	0.039	-0.033-	-0.373-	0.710
Premises of care in ward	0.214	0.067	0.248	3.169	0.002
Premises of learning in ward	0.019	0.060	0.031	0.324	0.746
Learning opportunity	-0.030-	0.045	-0.060-	-0.667-	0.505
Total Learning environment	0.023	0.011	0.131	2.049	0.042
Age	-0.261-	0.261	-0.105-	-1.002-	0.317
Gender	-0.277-	0.555	-0.033-	-0.499-	0.618
Grade	0.078	0.334	0.024	0.234	0.815
Training hospital	0.272	0.128	0.145	2.125	0.035
Training department	0.122	0.064	0.122	1.920	0.056
a. Dependent Variable: self-esteem					

Table (5): Correlation between Secondary Nursing Student's Opinions about Clinical Learning Environment and Degree of Self-Esteem (n=243).

Items	Word atmosphere	Premises of care in word	Premises of learning in word	Learning opportunity	Total learning Environment	Total Self-esteem
Ward atmosphere	1					
Premises of care in ward	0.497**	1				
	0.000					
Premises of learning in ward	0.624**	0.515**	1			
	0.000	0.000				
Learning opportunity	0.587**	0.405**	0.671**	1		
	0.000	0.000	0.000			
Total learning Environment	0.864**	0.677**	0.855**	0.842**	1	
	0.000	0.000	0.000	0.000		
Total Self esteem	0.101	0.199**	0.114	0.059	0.131*	1
	0.118	0.002	0.076	0.361	0.042	

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