

Educational Environment versus Nursing Students' Self- Esteem at Technical Institute of Nursing

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Abstract

Background: Nursing students in their educational environment develop more personal and social self-esteem. **Aim:** was to assess the relationship between educational environment and nursing students' self-esteem at the technical institute of nursing in Ain shams University. **Design:** a descriptive correlational design. **Subjects:** a sample of 268 students in first and second years. **Tools:** The data collected using two self-administered questionnaire sheets to assess students' self-esteem and their opinions regarding educational environment. **Results:** The study findings revealed that the nursing students in the study setting have high agreement upon poor educational environment regarding services and activities are provided by administration of institution (63.4%), relationship between students and institution administration (48.9%), the skills laboratories (45.5%), and classrooms (41.4%). The majority have moderate self- esteem (80.2%), which is not influenced by socio-demographic characteristics of nursing students. **Conclusion:** Agreement upon educational environment is correlated to nursing students' self-esteem. **Recommendations:** The study recommends that improvement the relationship between students and institution administration through periodic meeting to improve psychological environment and students' self-esteem.

Key words: Educational environment, Self-esteem, Nurse Student.

Introduction

Nursing is a practice-based discipline with clinical practice being central to nursing education. Clinical practice provides opportunities for the development of confidence and competence, focusing on students' learning needs rather than services needed by the health facility. The establishment of a good learning environment where theory and practice complement each other, is dependent on clinical staff and nurse educators as well as their knowledge of the intended learning outcomes for the students' clinical learning period. During clinical practice, both clinical staff and nurse educators are expected to collaborate in facilitating the students' learning experience and acquisition of clinical skills (Bvumbwe, 2015).

Clinical nursing instruction is the door to the real world of nursing. What students experience as they step through the door will impact the view they see and the future world they create. Nursing and midwife training is a planned process aimed at achieving changes of behavior in students regarding their profession. This interaction has an important effect on the students' level of self-awareness and self-evaluation. As a result of the experience, students learn how to enter into interaction using their own thoughts and feelings, become aware of their own real feelings, and how events around them affect them. An individual's behavior is formed both by hereditary and by the environment (Berryessa et al., 2013).

The student is a key stakeholder for the nursing education institution, their perceptions of the clinical learning environment would be very important in

identifying areas that could optimize learning for nursing students in the clinical environment. Many external and internal factors influence outcomes and competence of nursing students such as, but not limited to, the socio economic environment, cultural, financial matters, internal motivation and drive of students, educational background and level of schooling, lack of positive practice environment in the hospitals, classroom teaching and the clinical learning environment where theory and practice should be integrated (**Frances, 2013**).

Student learning is affected not only by the student's Learning style but also by the environment where the learning is taking place. The learning environment does not only affect the student's approach to learning but also the student's academic outcome, level of motivation, level of self-esteem, and degree of learning effectiveness. In addition, an assessment of the learning environment is considered a crucial aspect in delivering high quality education. Consequently, a considerable amount of research has been conducted to assess students' perceptions of their educational environment (**Muhamad and Yusoff, 2015**).

An educational environment achieves required changes in behaviors in the areas of how one should behave and think. If individuals can interact with their own feelings and thoughts, if they know themselves, they will also be able to know others. Each person is born with a biological entity, distinguishes himself from others through a process of socialization (**Tashiro et al., 2013**). According to (**Coopersmith, 2012**) the concept of self is a structure developed on the foundations of an individual's interest, skills and goals. The academic concept of self is the judgment of how skilled one is relative to other students resulting from a specific academic effort. Hence, nurse students who use reflection can be better positioned to provide excellent patient care.

General self-esteem is the aspect of self-esteem that refers to individuals overall perceptions of their own worth, social self-esteem refers to individuals perceptions of the quality of their own relationships with peers; and personal self-esteem refers to individuals most intimate perceptions of self-worth. Individuals who feel good about themselves are confident, take pride in their work; and demonstrate respect and concern for patients and colleagues. It has been suggested that the roots for building high self-esteem may lie in the educational process (**Stuart, 2014**).

"Positive self-esteem is the immune systems of the spirit, helping an individual face life problems and bounce back from adversity." So high self-esteem is crucial during the turbulence of teenage. High positive self-esteem enables them to deal effectively with the problems and challenges in life. Self-esteem can be influenced by many factors such as anxiety, depression and stress. So if students are unable to deal with anxiety it may significantly lower the self-esteem disturbances and anxiety is a major cause of concern for students in nursing profession (**Sok, 2014**).

Significance of the Study

Educational environment plays an important role on students' self-esteem. Hence self-esteem affects all aspects of an individual's life, such as academic achievement, job success, as well as social and professional development. Self-esteem is an important academic construct in the process of education. It is recognized as one of the major factors in learning outcomes of students. As Students with high self-esteem participate enthusiastically in the learning process, they are more confident, active and motivated to learn and perform better in examination. Conversely, low self-esteem students do not participate actively in learning, remain passive and are likely to affect patient care in a negative manner.

Gibbons et al. (2009) stated that; creating a caring educational environment and providing diverse support networks to student's increases self-esteem, promotes success and satisfaction, and increases the number of professional nurses available to deliver high-quality health care for global populations.

So this study is an attempt to investigate the relationship between educational environment and nursing students' self-esteem level.

Aim of the study

This study aims at assessing educational environment and nursing students' self-esteem through

- Assessing educational environment from nursing student's point of view.
- Assessing nursing students' self-esteem level.
- Finding out the relationship between educational Environment and nursing student's self-esteem level at Technical institute of nursing.

Research Question

What is the relationship between educational environment and nursing students' self-esteem level?

Subjects and methods

This study was conducted to assess educational environment and nursing students' self-esteem through, assessing educational environment from nursing student's point of view, assessing nursing students' self-esteem level, and finding out the relationship between educational environment nursing self-esteem level at technical institute of nursing. The methodology pursued will be detailed according to the following designs:

- Technical design
- Operational design
- Administrative design
- Statistical design.

Technical design

The technical design for this study will include the research design, setting of the study, subjects and sample, and tools of data collection.

Research design

Descriptive correlational design was used in carrying out the study.

Setting

The study was conducted at technical institute of Nursing, Ain Shams University. The institute contains two floors, two laboratories skills, and 4 classes.

Subjects

Subjects of the study will include 268 nurse students out of 400 students. Those students will be randomly selected and divided into (134) student in both first and second year in technical institute of Nursing at the academic year 2016-2017.

Sample size for first year: will be calculated according to this formula;

$$n = \frac{N}{((\alpha) \times^2 N) + 1}$$

$$n = \frac{200}{((0.05) \times^2 200) + 1}$$

$$= 134 \text{ students}$$

Sample size for second year: will be calculated according to this formula;

$$n = \frac{N}{((\alpha) \times^2 N) + 1}$$

$$n = \frac{200}{((0.05) \times^2 200) + 1}$$

= 134 students

Tool of data collection

Data for this study was collected by; using two questionnaire sheets namely educational environment questionnaire and Rosenberg self-esteem questionnaire sheet.

First tool: Educational environment questionnaire consists of two parts:

Part 1: Nursing students' demographic data.

This part will collect students' demographic data such as: educational grade, age, gender, social status, and residence ...etc.

Part 2: Educational environment questionnaire.

This tool was developed by (Gamal, 2012) to measure educational environment from point of view nursing student, and will be modified by the researcher. It included 103 items categorized under three main dimensions namely learning, physical, and psychological environment.

1-Learning environment (24 items) classified as:

- Nursing curriculum (nursing courses and supportive courses): 14 items such as "Lectures are suitable for the school day," etc.

- Students' evaluations: 10 items such as "Lecturer explain the goal of student assessment," etc.

2- Physical environment (31 items) classified as:

- Classrooms: 7 items such as "Classroom is suitable for students numbers." etc.

- Skills laboratories: 13 items such as "Laboratory space is suitable for students number," etc.

- Clinical settings (hospitals for nursing students' training): 7 items such as "Students are informed with practical training schedule," etc.

3- Psychological environment (48 items) classified as follows:

- Relationship between nursing students and their teachers: 15 items such as "Faculty members deal respectfully with the students," etc.

- Relationship between nursing students and their peers: 6 items such as "Student deal with each other as a team," etc.

- Relationship between nursing students and health team members: 7 items such as "Due to the presence of the students in clinical training areas in the hospital, satisfaction is shown by health worker," etc.

- Relationship between nursing students and institution administration: 6 items such as "Administration members offer social assistance to needy students," etc.

- Services provided by administration to students: 14 items such as "There are sufficient places for students comfort and wellbeing," etc.

-Responses of the students will be measured on a five points Likert scale ranging from 5 strongly agree to 1 strongly disagree. The total score will be dividing into 3 levels as poor, satisfactory, and good.

Second tool: Self-Esteem questionnaire sheet:

This scale was adopted from investigator based on **Sorenson self-esteem questionnaire (2006)** to measure self-esteem of nursing students. It includes 20 items including 4 reversed items. The scale is divided into three sub-scales as namely: positive, negative, and social personality.

- First subscale "positive personality", it consists of 7 items such as: " I feel that I have a number of good qualities".

- Second subscale "Negative personality", it consist of 6 items such as: " I feel I do not have much to be proud of".

- Third subscale "Social personality", it consist of 7 items such as: " I generally feel anxious in new social situations".

Responses to statements are scored on a five points Likert scale (strongly agree, agree, I do not know, disagree, and strongly disagree). The scoring of strongly agree is 4, agree scored 3, I do not know scored zero, disagree scored 2, and strongly disagree scored 1, in case of negative statements, the score was reversed. The total score was ranged from 20 to 80, with score representing higher self-esteem. Total score was divided into:

- Low self-esteem= 20- 40
- Mild self-esteem= 40- 60
- High self-esteem= 60 – 80

(Sorenson, 2006).

Operational design

This design covers the preparatory phase, the pilot study, and the actual fieldwork for data collection.

Preparatory phase

The researcher will review the current and past, national and international related literature using text books, articles, periodicals, journals, and internet to prepare the scientific background and literature review section of the thesis. This helped in the preparation of the literature review section and in the selection and preparation of the data collection tools.

Tools validity: The prepared questionnaires were translated into Arabic, and then content and face validity were established by a jury of five experts, four professors from faculty of Nursing at Ain-Shams university, and one professor from Assuit university. The validation process included seeking experts' opinions about the relevance of each item of the tools to elicit content validity. It also involved face validity to elicit their general or overall opinion about the form regarding its clarity, applicability, comprehensiveness, understanding, and ease for implementation as well as their suggestions for any additions or omissions of items. According to their opinions all recommended modifications were performed by the researcher.

Tools reliability: Testing reliability of proposed tools was done using Cronbach alpha test. The result was (0.89) for educational environment questionnaire and (0.91) for self-esteem questionnaire.

Pilot study

A pilot study was carried out at technical institute of nursing. The total number of respondents represented 10% of the sample of nursing students (27 students)

divided equal from each academic grade selected randomly and excluded from the main study sample. The purpose of the pilot study was to examine the practicability of the tools, the clarity of the language of the tool, and the time consumed to fill in the questionnaire sheet. Data obtained from the pilot study were analyzed and accordingly the necessary modifications were done. As a result of the pilot study, some items were omitted and others were added, and some unclear items were reworded.

Fieldwork

The actual fieldwork started at the beginning of April 2017, and was completed by the end of May 2017. Researcher collected data by through meeting the subjects (students of first year in one day between lectures and another day for second year students), data collection was done at the classrooms and explaining the purpose of the study to them in the study setting. They were reassured about the anonymity of the information collected, and that it would be used only for the purpose of scientific research, and would be strictly confidential. The questionnaire sheets were distributed and completed by respondents. The researcher was present all the time during filling the forms to answer any questions, and also to avoid discussions among students that would affect their opinions. The time needed by respondents to complete the tool was 20-30 minutes.

Administrative Design

To carry out the study, the necessary approvals was obtained from director of technical institute of Nursing at Ain Shams University. Individual oral consent was also obtained from each participant in the study.

Ethical consideration:

Prior study conduction, ethical approval was obtained from the scientific research ethical committee of faculty of nursing – Ain Shams University. In addition, oral consent was obtained from each study subject. All participants in the study were secured for confidentiality of the data and they were assured that the right to withdraw from the study at any time would be guaranteed.

Statistical design

Data entry and analysis were done by using (SPSS) version 16.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of the tools through their internal consistency.

Qualitative categorical variables were compared by using chi-square test and ANOVA (F) test was also used for comparisons between more than groups dependent quantitative variables.

Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones in order to identify the independent predictors of self-esteem and environment factors score, multiple linear regression analysis was used after testing for normality, and analysis of variance for the

full regression models were done. Statistical significance was considered at p-value <0.05 and highly significant at p-value <0.01. Correlation Coefficient (r) test was used to test the closeness of association between two variables.

Result

Table (1): Socio demographic characteristic of the study subject (n= 268) regarding age, gender, educational grade, social status, residence and housing.

Items	Nurse students (268)		
	No 268	% 100%	
Age (in Years)	17 < 20	174	64.9
	20 < 23	92	34.3
	23	2	0.7
	Mean ± SD	18.98±1.45	
Gender	Male	103	38.4
	Female	165	61.6
Educational grade	First year	134	50.0
	Second year	134	50.0
Social status	Single	243	90.7
	Married	25	9.3
Residence	Cairo	229	85.4
	Other governorates	39	14.6
Housing	With family	230	85.8
	Private house for expatriates students	38	14.2

Table(1): shows that student's age between 17 and 23 years with mean 18.98 years. Slightly more than half of the sample consisted of female students (61.6 %). The number of student is divided evenly between first and second year in educational grade. The majority of the student were singles (90.7%), from Cairo (85.4) and house with their family (85.8).

Table (2): Comparison between scores of educational environment dimensions among educational grade nursing students (n= 268).

Items	First year n=134				Second year n=134				X ²	P value				
	Poor<60%		Satisfactory 60%-75%		Poor <60%		Satisfactory 60%-75%							
	N	%	N	%	N	%	N	%						
Learning environment	24	9.0	53	19.8	57	21.3	76	28.4	34	12.7	24	9.0	44.63	<0.00**
Physical environment	50	18.7	25	9.3	59	22.0	85	31.7	18	6.7	31	11.6	18.93	<0.00**
Psychological environment	35	13.1	59	22.0	40	14.9	75	28.0	33	12.3	26	9.7	24.86	<0.00**
Total educational environment	50	18.7	18	6.7	66	24.6	95	35.4	7	2.6	32	11.9	30.60	<0.00**

(*) Statistically significant at p<0.05(**) High Significant at P < 0.01

Table (2): demonstrates high significant differences among the two academic year in students' agreement upon educational environment in all items of learning, physical, psychological environment and total educational environment (p= 0.00). In all these areas, the percentage of poor educational environment for the second year was (35.4%) more than the first year (18.7%), on the

other hand, the percentage of agreement for satisfactory and good educational environment for the second year were (2.6%, 11.9%) lower than the first year (6.7%, 24.6%).

Table (3): Comparison between score of self-esteem dimensions among nursing students (n= 268).

Items	First year n=134						Second year n=134						X ²	P value
	Low <60%		Moderate 60%-75%		High > 75%		Low <60%		Moderate 60%-75%		High > 75%			
	N	%	N	%	N	%	N	%	N	%	N	%		
Positive Personality	9	3.4	61	22.8	64	23.9	18	6.7	65	24.3	51	19.0	4.60	>0.05
Negative Personality	96	35.8	37	13.8	1	0.4	75	28.0	58	21.6	1	0.4	7.22	<0.05*
Marital or Social Personality	74	27.6	55	20.5	5	1.9	39	14.6	90	33.6	5	1.9	19.3	<0.00**
Total self-esteem	25	9.3	104	38.8	5	1.9	19	7.1	111	41.4	4	1.5	1.16	>0.05

(*) Statistically significant at $p < 0.05$ (**) High Significant at $P < 0.01$

Table (3): demonstrates statistically significant differences among the two academic year in students' agreement upon self-esteem in the dimensions of positive personality ($p > 0.05$), negative personality ($p < 0.05$), social personality ($p < 0.00$) and in the total self-esteem ($p > 0.05$). In all these areas, the percentages of total self-esteem in second year student's agreement were higher than first year student's agreement in moderate agreement and lower than first year in low and high agreement.

Table (4): Correlation between total educational environment dimension and self-esteem dimension (n= 268).

Educational environment dimension	Spearman's rank correlation coefficient			
	Positive Personality	Negative Personality	Marital or Social Personality	Total self-esteem
Learning environment	.199**	-.006-	-.011-	.153**
Physical environment	.167**	.035	-.016-	.122**
Psychological environment	.320**	-.002-	.014	.256**
Total Educational environment	.177**	.023	-.021-	.125**

**Correlation is significant at the 0.01 level (2-tailed).

Table (4): demonstrates that high positive significant correlation between positive personality, total self-esteem and all educational environment dimensions.

Discussion

The aim of the present study was to determine the relationship between educational environment and nursing students' self-esteem at the Technical

Institute of Nursing in Ain shams University. The study findings indicates generally high agreement for the poor educational environment factors in most of its areas among the nursing students. This result may be due to students' dissatisfaction with services and activities are provided from

administration of institution, no recreational activities, and deficient instruments for student training in skills laboratories, and bad ventilation in student's classrooms with shortage in the number of seats. The finding is in agreement with **(Abd Elkareem, 2012)** who study in Alexandria showed high agreement for poor educational environment.

The current study revealed that some of the nursing students' characteristics significantly influenced their opinions concerning the educational environment factors. Thus, older age and, second year students seem to have higher agreement for poor educational environment and lower agreement for satisfactory and good educational environment upon most of the areas.

This result could be due to more maturity in addition to continuous administration trails to develop educational environment and solve students' problems. In agreement with this, a study among nursing students in Oman revealed lower satisfaction with the clinical learning environment among senior students **(D'Souza et al., 2015)**.

The current study revealed that the high percentage of moderate self-esteem was for the second year. This is certainly related to some positive aspects such as having a positive feeling and being satisfied with self. The finding is in agreement with the results of a study carried out in Nepal where the majority of the nursing students were shown to have a high level of self-esteem **(Shrestha, 2013)**. Moreover, **Papazisis et al. (2014)** in a study in Greece reported that almost three-fourth of the participating nursing students were having high self-esteem.

However, the highest percentage of the students mentioned that they have the feeling that others are better than self. This result could be due to the fact that some of these students may have been forced to study

nursing because of their lower grades at the end of secondary school education although their first priority was not nursing.

Added to this is the deeply-rooted negative look to the nursing profession in the community although the picture has greatly improved in the last two to three decades. Therefore, **Van Eckert et al. (2012)** in a study in Germany found that nurses with an academic degree displayed a significant higher level of self-esteem than nurses without academic education, and concluded that the type of professional training may have a direct effect on the self-esteem, thus offering a myriad of potential benefits to both nurses and patients.

Moreover, the current study demonstrated a positive significant correlation between students' self-esteem scores and their agreement upon many of the areas of the educational environment. This indicated that students' good feeling of the educational environment would enhance their feeling of self-esteem.

This result could be due to that the educational environment affect student's academic outcome, level of motivation, degree of learning effectiveness, quality health care, self-confidence and level of self-esteem. The finding is in agreement with **Elsayed, (2015)** whose study in Zagazig showed a significant relationship between the educational environment and nursing students' self-esteem.

Conclusion

The study findings lead to the conclusion that the nursing students in the study setting have lower agreement upon the good educational environment regarding services and activities are provided by administration of institution, relationship between students and institution administration, the skills laboratories, and classrooms. The majority of the students are

having moderate self-esteem. Age, gender, educational grade and social status were independently predicted for self-esteem. Students' self-esteem is influenced by their agreement upon the educational environment concerning items of learning, physical, and psychological environment.

Recommendation

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

1- For the institution administration and nurse teachers:

- The relationship between students and institution administration should be enhanced through periodic meeting to improve psychological environment and students' self-esteem.
- The skills laboratories needs to be equipped with better facilities in terms of quality and quantity commensurate with the numbers of students and training laboratory specialist to help students.
- The institution administration should take care of classrooms to be well ventilated and be equipped with sufficient numbers of seats suitable ergonomically for the students.
- The recreational facilities such as the cafeteria, and resting areas need more attention from the institution administration.
- The nurse teachers should allow students' self-evaluation during practical training with no bias for some students than others during evaluation.
- The relationship between students and health team and hospital administration should be improved by nurse teacher's collaboration to enhance students' self-esteem.
- The institution administration should provide subsidies to poor students and emotional rewards to students

participating in recreational activities, in addition to better residential areas for students not living in Cairo.

- Provision of training and counseling services are needed to foster students' self-esteem.

2- For hospitals administration:

- Provision of training for health team to deal well with nurse students in hospitals and to avoid criticism in front of the patients or others.
- The hospital administration should provide a suitable room for students and teacher discussion before and after practical training.

3- For teachers and self-esteem

- The institution administration should make workshops to improve self-esteem for teachers and students.

4- Further research

- Further research is suggested to assess the effect of educational environment of nursing students on their academic achievement.
- Further research is suggested to assess the effect of educational environment of nursing students on their problem solving.

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