

The Relationship between Nursing Students' Engagement and their Satisfaction regarding Bachelor Nursing Program

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Abstract

Background: Engagement and satisfaction of higher education is important in the students' college journey, students' engagement is defined as participation in educationally effective practice both inside and outside the classroom which leads to a significant measurable outcome which is students' satisfaction. **Aim of the study:** Is to assess the relationship between students' engagement and their satisfaction regarding bachelor nursing program. **Research design:** A descriptive cross-sectional design was used to carry out this study. **Setting:** The study was conducted at Faculty of Nursing Ain Shams University. **Subjects:** 194 nursing students from third and fourth academic years. **Tools:** Data were collected by using National Survey of Student Engagement (NSSE) and Undergraduate Nursing Students' Academic Satisfaction Scale (UNSASS). **Results:** Nursing students' had a moderate engagement level considering the level of academic challenge as highest dimension mean and high satisfaction level regarding bachelor nursing program considering the in-class teaching domain as highest domain mean. **Conclusion:** There was a highly statistically significant relationship between students' engagement and their satisfaction regarding bachelor nursing program. **Recommendations:** Maintenance of nursing students' engagement and satisfaction through assess nursing students' engagement and satisfaction periodically through conducting regular surveys and used these information as indicators of success to identify areas which need improvement, faculty staff should foster positive relationships through professional role modeling within the learning environment, and allow students to participate in developing faculty mission, philosophy, vision, and goals including personal goals.

Keywords: Students' engagement, Students' satisfaction, Bachelor nursing program.

Introduction

Students' engagement in college leads to students' satisfaction, the students who reported the greatest number of hours participating in college activities, and participating in number of co-curricular activities to which they belonged, and the greatest level of engagement in college ultimately reported the greatest satisfaction with their experiences when assessed. All

colleges and universities offer students the opportunity to become engaged in college, clubs, and other students' activities, early committed membership in activities that offer the student a sense of engagement in college life which leads students to report greater satisfaction with their college experience overall (Rice, 2017).

Engagement and involvement are used synonymously, students' engagement is defined as that students are involved and

connected to the college, peers, college staff and classes and interested in their learning. Students' engagement refers to how involved or interested students appear to be in learning and how they are connected in classes, college and with peers **(Olson & Peterson, 2015)**. Students' engagement is consistent with the broad definition is the time and effort students devote to academic and non-academic activities that are eventually linked to desired outcomes of college, in light of this definition the responsibility of students' engagement is with both the students and the college **(Pascarella & Terenzini, 2015)**.

Students' engagement is defined as the quality of effort the students devote to educationally purposeful activities that contribute directly to desired outcomes. Students' engagement in academic activities such as attending class, preparing for class or working on assignments, studying or doing homework and using a personal computer; these activities lead to many positive academic outcomes such as graduating, increasing in cognitive and effective skills, also positively lead to students' satisfaction **(National Survey of Student Engagement " NSSE", 2016)**.

Satisfaction refers to the feeling of pleasure resulting from comparing perceived performance in relation to the expectation .Students' satisfaction is a positive antecedent of students' loyalty and is the outcome of an educational experience and system. Students' satisfaction is defined as students' disposition by subjective evaluation of educational outcomes and experience; therefore students' satisfaction can be defined as a function of relative level of experiences and perceived performance about educational service provided by the college **(Mukhtar, Anwar, Ahmed & Baloch, 2015)**.

Students' satisfaction in universities is greatly influenced by quality of classroom, quality of feedback, lecturer-student relationship, and interaction with fellow students, course content, available learning equipment, library facilities and learning materials. In addition to the teaching ability, flexible curriculum, university status and prestige, caring of college, student's growth and development, student's centeredness, college climate, college effectiveness and social conditions, which have been identified as major factors which impacted on the students' satisfaction in higher education colleges **(Yen, 2015)**.

Students' satisfaction could be predicted by how students are satisfied with various aspects of college and interpersonal relationships. If students have greater level of engagement and interpersonal relationships in college lead students to be more satisfied with the college experience. Generally existed positive correlation between students' engagement and satisfaction **(Hanssen & Solvoll, 2015)**.

Significance of the Study

By understanding the needs of students, educational leaders can provide the right support for student success. Understanding the student experience and the impact of engagement provides administrators window into developing policies and practices for positive student outcomes. Understanding the needs of students, and the challenges they face while trying to succeed at colleges will help educators develop the right conditions on campuses for student success. Nursing needs the interested students with the special ability, because of student apathy in employment at the profession lead to adverse impact on the quantity and quality of nursing care services **(Carr, 2016)**.

Hence nursing students are exposed to extra effort during studying bachelor nursing program due to long study day which include practicing hours and also include theoretical lectures at the same day so the students spent long hours of study within faculty and too much curriculum of some courses offered by faculty which may lead to diminish student satisfaction regarding bachelor nursing program so the intent of this study is to explore the relationship between students engagement and their satisfaction regarding bachelor nursing program.

Aim of the study

This study aims to assess the relationship between students' engagement and their satisfaction regarding bachelor nursing program.

Research question

Is there a relationship between student's engagement and their satisfaction regarding bachelor nursing program?

Subjects and methods

Research design:

A descriptive cross-sectional correlational design was used to carry out this study.

Setting:

The study conducted at Faculty of Nursing Ain Shams University.

Subjects:

The subjects for the study was include the students enrolled at the third and fourth academic years at The Faculty of Nursing Ain Shams University through

the academic year (2018-2019). They number was 194 nursing students out from 389. The nursing students were selected by stratified random sampling technique (Thompson, 2012).

Tools of data collection:

Tool I: National Survey of Student Engagement (NSSE) 2008 it was used for collecting the data for this study. It consists of two main parts:

- **Part 1:** This part was intended to collect data related to socio-demographic characteristics of nursing students.

- **Part 2:** This part was intended to assessing nursing students' engagement level regarding bachelor nursing program. It was adapted by (Kuh, 2001) and modified by researcher. It had (71) statements under following these dimensions:

- 1- Level of academic challenge.
- 2- Active and collaborative learning.
- 3- Student faculty interaction.
- 4- Enriching educational activities.
- 5- Supportive campus environment

Scoring system: the items in the students' engagement questionnaire were scored on a 3 point likert scale: very little (1), somewhat (2), and very much (3) for the items of the first four dimensions of the present questionnaire, while the items of last dimension were scored as disagree (1), somewhat (2), and agree (3). For each dimension and subdimension and for the whole scale, the items were summed-up and the total divided by the number of the items for giving mean scores. The high level of

engagement considered to be high if the percent mean score was more than 75% and low if it was 25% or less, while if the score ranged from more than 25% till 75% considered as moderate engagement (Appleton, Christenson, Kim & Reschly, 2017).

Tool II: Undergraduate Nursing Students' Academic Satisfaction Scale (UNSASS)

Was intended to assessing nursing students' satisfaction levels regarding bachelor nursing program. It was adopted by (Dennison, 2010). It had (62) statements under following these domains:

- 1.Satisfaction with clinical teaching.
- 2.Satisfaction with in-class teaching.
- 3.Satisfaction with the program.
- 4.Satisfaction with the organizational culture.
- 5.Satisfaction with the support and resources available for students within the program.

Scoring system: the items in the students' satisfaction questionnaire were scored on a 3 point likert scale: disagree (1), somewhat (2), and agree (3). For each domain and subdomain and for the whole scale were summed-up & the total divided by the number of the items for giving mean scores. The high level of satisfaction considered to be high if the percent score was more than 75% & low if was less 50%, while the score if ranged from 50% till 75% considered as moderate satisfaction (Hakim, 2013).

Preparatory phase

During this time, the researcher reviewed the national and international related literature concerning the topic of the study. This was through the use of text books, scientific journals and internet search. This helped in the preparation of the first data collection tool (NSSE) and in the write-up of the literature review. While the second tool (UNSASS) was adopted based on (Dennison, 2010).

Tool validity

Once the first data collection tool (NSSE) was prepared in a preliminary form, was presented to panel of experts in nursing science for face and content validation. This included professor from nursing administration department Cairo University and six professors from different scientific departments except medical surgical departments 1&2 from Faculty of Nursing Ain Shams University. They reviewed the first data collection tool (NSSE) for relevance, comprehensiveness, clarity, and applicability, and some modifications were done according to their opinions.

Tool reliability

Reliability of the first data collection tool (NSSE) was examined through assessing their internal consistency and measured by Cronbach's alpha coefficient.

Cronbach's alpha	N of items
.923	72

While face and content validity of the second data collection tool (UNSASS), was done also based on the written feedback from panel of judges, reliability was examined through assessing their internal consistency and measured by

Cronbach's alpha for the entire scale was .957 (Dennison, 2010).

Pilot study

A pilot study was conducted, it was done on 10% of the study subjects (20) nursing students & before starting field work and data collection. Necessary modification based on pilot study was done so subjects who participated in the pilot study were excluded from the main study sample. The pilot study helped to estimate the time needed to complete the data collection forms. They took around 30 minute to fill in the tools. It also done for testing the clarity & feasibility of the data collection tools & to assess their reliability.

Fieldwork

Once permissions were obtained and the questionnaires were finalized, the researcher met (10-15) students per day. This meeting with the nursing students was before beginning of lectures and between lectures. The researcher introduced herself and explained to them the study aim and invited them to participate in the study, the researcher was present during the process of filling the questionnaires to clarify any ambiguities, and after completion of the form the researcher checked it for completeness of all information, the filling of the questionnaires took about 25-30 minutes. The field work extended from the second week of December 2018 till the first week of January 2019, it took one month approximately.

Ethical considerations

The study proposal was approved by scientific research and ethics committee of the Faculty of Nursing Ain Shams University. In addition, approval was obtained from each participant, the

researcher clarified the aim of the study and its implications to the nursing students included in the study, they were assured that anonymity and confidentiality would be guaranteed and were informed about their right to refuse or withdraw from the study at any time, the study procedures do not entail any harmful effects on participants.

Statistical design

Collected data was revised, coded and entered using computer software PC. Data entry and statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) Version 23. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables and total score of each dimension/domain of both questionnaires. Chi-square test (χ^2) and p value were used for the relation among socio-demographic data, engagement and satisfaction. Spearman rank, multiple liner regression, ANOVA and Pearson correlation tests were used to test the closeness of association between two study variables. Correlation coefficient test was also used between students' engagement dimensions and their satisfaction domains. Using student T-tests to assess statistical significant difference of study variables levels between two study academic years.

Results

Table (1): demonstrates that the demographic characteristics of the studied nursing students, as regards to age more than half of them (71.2%) were less than 22 years with total mean 19.4 ± 0.9 , and (58.8%) of them were females. While (73.7%) of study subjects were from

urban area & (81.5%) from them live in a family house. Regarding to the nationality, the highest percentage of them were Egyptians (97.9%). As regards to marital status, the highest percentage of study subjects is unmarried (95.9%). As regards to educational level of both study subjects' parents is diplom or high school as (54.2%)for their fathers &(58.8%) for their mothers.

Table (2): indicates that the educational qualifications before college of the study subjects were secondary education with more than two thirds of them (78.9%), and in relation to academic year, slightly more than half of them were from third year (51.5%). Also (67.5%) of study subjects were not previously working at nursing field. Moreover more than two thirds of them (89.2%) and (81.4%) were not participated as membership of a college youth care activities and membership of a college sports team.

As **table (3)** displays that approximately more than half of the studied nursing students had moderate level regarding to all dimensions of the engagement with bachelor nursing program, table 3 points to highly statistically significant difference between student's engagement dimensions ($P<0.01$).

Figure (1): clarifies that around less than two thirds of the studied nursing students (65.5%) had moderate engagement level with their bachelor nursing program. While the other one third of them (31.4%) had high level of engagement.

Table (4): shows that more than half of the studied nursing students had high level of all domains of satisfaction, except the organizational culture domain slightly less than half of them (48.5%) satisfied of it. Also, it shows that there is a highly statistically significant difference between students' satisfaction domains ($P<0.01$).

As clarified in figure (2), more than half of the studied nursing students (55.7%) had high satisfaction level. While more than one third of them (39.2%) had moderate satisfaction level.

Table (5): illustrates that there was a highly statistically significant positive correlation between total nursing students' engagement and their total satisfaction levels.

Figure (3): illustrates that there was positive correlation between total nursing students' engagement and their total satisfaction levels.

Table (1): Demographic characteristics of nursing students (No=194).

Age	No	%
20-<22	138	71.2
22-<24	48	24.7
24- >24	8	4.1
Mean	19.4±0.9	
Gender		
Male	80	41.2
Female	114	58.8
Residence place		
Urban	143	73.7
Rural	51	26.3
Residence type		
Family house	158	81.5
Student university city	36	18.5
Nationality		
Egyptian	190	97.9
Others	4	2.1
Marital status		
Unmarried	186	95.9
Married	8	4.1
Educational level of father		
Illiterate	29	14.9
Diplom or High school	105	54.2
Baccalaureate	55	28.4
Master degree	3	1.5
PHD	2	1
Educational level of mother		
Illiterate	38	19.6
Diplom or high school	114	58.8
Baccalaureate	40	20.6
Master degree	2	1
PHD	0	0

Table (2): Study characteristics of nursing students (No=194).

Educational qualification before college		No	%
Secondary education		153	78.9
Technical nursing institute		41	21.1
Academic year			
3 rd year		100	51.5
4 th year		94	48.5
Specialty			
Pediatric		50	25.8
Obstetric		50	25.8
Psychiatric		47	24.2
Community		47	24.2
Previous working at nursing field			
Yes		63	32.5
No		131	67.5
Membership of a college youth care activities			
Yes		21	10.8
No		173	89.2
Membership of a college sports team			
Yes		36	18.6
No		158	81.4

Table (3): Nursing students' engagement levels according to dimensions of engagement (No=194).

Dimensions of students engagement	Nursing students engagement levels							χ^2 Test	p-value
	High >75%		Moderate >25%-75%		Low ≤25%		Mean		
	No	%	No	%	No	%			
Level of academic challenge	70	36	110	56.7	14	7.3	41.30	636.31	.000**
Active and collaborative learning	57	29.4	129	66.5	8	4.1	31.91		
Student faculty interaction	70	36.1	117	60.3	7	3.6	24.94		
Enriching educational activities	67	34.5	115	59.3	12	6.2	22.32		
Supportive campus environment	63	32.5	118	60.8	13	6.7	31.17		

(**) highly statistically significant at P <0.01.

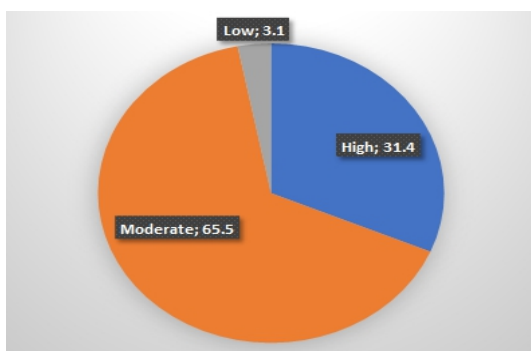


Figure (1): Total nursing students' engagement levels regarding bachelor nursing program (No=194).

Table (4): Nursing students' satisfaction levels according to domains of satisfaction (No=194).

Domains of students' satisfaction	Nursing students' satisfaction levels						Mean	χ^2 Test	p-value
	High >75%		Moderate 50%-75%		Low <50%				
	No	%	No	%	No	%			
Clinical teaching	109	56.2	78	40.2	7	3.6	18.9	373.88	.000**
In class teaching	110	56.8	70	36	14	7.2	36.7		
The program	104	53.6	82	42.2	8	4.2	27.7		
Organizational culture	94	48.5	90	46.4	10	5.1	21.1		
Support and resources available for students within the program	107	55.1	70	36.1	17	8.8	20.2		

(**) highly statistically significant at P < 0.01.

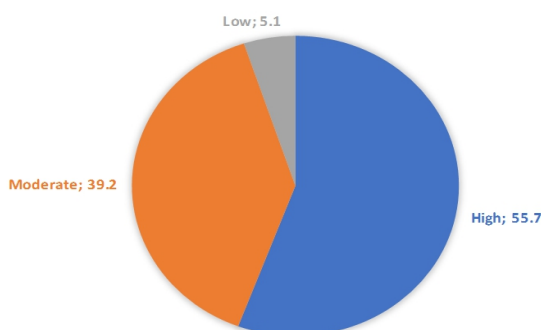


Figure (2): Total nursing students' satisfaction levels regarding bachelor nursing program (No=194).

Table (5): Correlation between total nursing students' engagement levels and their total satisfaction levels.

Item	Total satisfaction	
	Calculated R (pearson)	P value
Total engagement	0.638	0.000**

(**) highly statistically significant at $P < 0.01$.

Table (6): Correlation coefficient between students' engagement dimensions and their satisfaction domains.

Engagement dimensions		Academic challenge	Active and collaborative learning	Student faculty interaction	Enriching educational activities	Supportive campus environment
Satisfaction domains						
Clinical teaching	r	.594	.874	.641	.946	1.36
	P	.027*	.000**	.002**	.010**	.001**
In class teaching	r	.751	.497	.871	1.01	.970
	P	.000**	.019*	.020*	.004**	.011**
The program	r	.941	.841	.879	.701	1.84
	P	.002**	.020*	.000**	.030*	.001**
Organizational culture	r	.946	1.01	.601	.231	.920
	P	.010**	.004**	.021*	.041*	.000**
Support and Resources available for students within the program	r	.741	.420	.632	.634	.270
	P	.005**	.040*	.020*	.004**	.041*

(**) highly statistically significant at $P < 0.0$ (*) statistically significant at $P < 0.05$.

Table (6): shows that there is positive correlation between all dimensions of students' engagement and all domains of students' satisfaction.

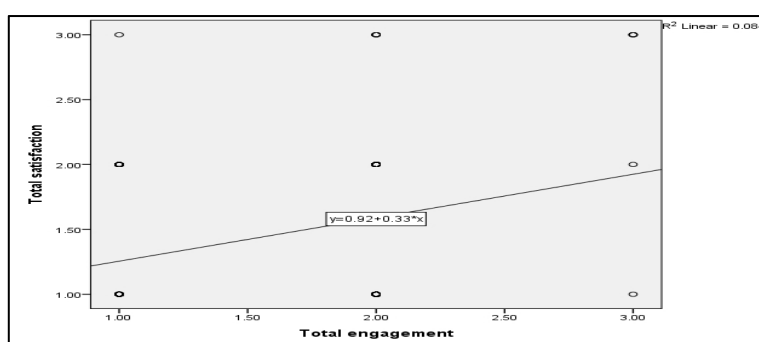


Figure (3): Correlation coefficient between total nursing students' engagement levels and their total satisfaction levels (N=194).

Discussion

Students' engagement involves positive students' behaviors such as attendance lectures, paying attention and participation inside and outside class activities as well as the psychological experience of identification with faculty and feeling that one is cared for, respected and part of the faculty environment (**Gallup, 2013**). Students' engagement is necessary for students to gain knowledge and skills to succeed in college program, prepared for future careers and lead to improve students' level of enjoyment with college educational experience, which is defined as students' satisfaction (**Wang & Eccles, 2012**). These two elements are engagement and satisfaction of higher education and are very important in the students' college journey (**Deil-Amen, 2011**).

The present study aims at assessing the relationship between students' engagement and their satisfaction regarding bachelor nursing program through assessing nursing students' engagement level regarding bachelor nursing program, assessing nursing students' satisfaction level regarding bachelor nursing program and finding out the relationship between nursing students' engagement level and their satisfaction level regarding bachelor nursing program.

Concerning students' engagement levels, the present study results revealed that more than half of nursing students had moderate engagement levels of all dimensions. On the same line, a study done by **Khaira, (2016)** reported that nursing students scored average levels of all the NSSE dimensions' and educationally effective colleges and universities score average on all five

NSSE dimensions' in a manner that is consistent with their mission and students' aspirations and educational goals. From the researcher point of view, this may be due to that the nursing students received continuous feedback from faculty staff, did class presentation, and worked with other students on assignments or projects and so on; all of these issues lead to enhancement and maintenance of students' engagement with their college.

The present study findings revealed regarding to nursing students' satisfaction levels, that more than half of nursing students had high satisfaction levels. This is an agreement with the study done in Iowa State University which reported high levels of students' satisfaction with learning environment and educational experience (**Korobova, 2012**). Conversely, the aforementioned findings are contrary to **Hakim, (2013)** who studied nursing students' satisfaction in department of nursing Ahvaz Jundishapur University of Medical Science Iran, found that most subjects had little satisfaction of learning environment and clinical training environment, they were little satisfied from instructors clinical training, mentors clinical teaching and had very little satisfaction from evaluation process of mentors.

In addition, the present study results are congruent with **Pinugu, (2013)** who studied academic satisfaction among college students and found that the mean scores for academic satisfaction fall in the high end of the range, indicating high levels. Also supported by **Sweeney, (2015)** who studied students' satisfaction and found that there is an overall high level of satisfaction among students in higher education in Ireland.

The present study findings revealed that more than half of nursing students had high satisfaction levels of all domains, except organizational culture domain which is slightly less than half of them. This may be due to the nursing students who are satisfied with their timetables and the organization of their studies, clinical teaching and in-class teaching and nursing program, college administrators' attitude towards students, teaching staff attitude, faculty facilities and resources. Also the facilities such as class rooms, clinical labs and computers which facilitate students' learning, computer and clinical labs are well equipped, adequately staffed and are readily accessible, which lead to report high levels of satisfaction.

Also, this results may be related to the inclusion of orientation period in the nursing course syllabus prior to students' clinical placement where all issues related to clinical teaching, such as course aim and intended learning outcomes, procedures to be acquired, time for training, duties, plan of clinical areas, evaluation process, and also students received learning support from their clinical instructors.

Regarding the relation between nursing students' engagement levels and their satisfaction levels, the present study results revealed that there was a highly statistically significant positive correlation between total nursing students' engagement levels and their total satisfaction levels. These results are supported by **McCormick, (2011)** who mentioned a significant relation between NSSE dimensions and satisfaction with the entire educational experience. Thus, as NSSE dimensions increase the satisfaction with educational experience also increases, particularly students enrolled in college with a higher level of academic challenge had higher satisfaction compared to students enrolled in college with a lower level of academic challenge and so on.

In the same direction **Bell, (2017)** explained in the study carried out in Arizona, Grand Canyon University, there was a significant relation between individuals' engagement and satisfaction. Also, **Khaira, (2016)** explained in the study carried out in University of Toronto when students academically engaged, move forward from semester to semester, and spend more time participating in a greater number of academic and co-curricular activities, finally students feel more satisfied, productive and confident.

From opinion of the researcher in this matter, the students who contributed to class discussion, worked with other students or faculty staff with project inside or outside class, participated in community project, discussed grades with faculty staff, talked about future career plans with faculty staff, and attended campus events and activities... etc, all of this engagement issues lead to improve the students' performance and satisfaction with entire educational experience.

Conclusion & Recommendations

In the light of the present study findings, it can be concluded that the nursing students had moderate engagement level and high satisfaction level regarding bachelor nursing program, and there was a highly statistically significant positive relation between total nursing students' engagement and their total satisfaction levels. These findings answer the research question which stated that is there a relationship between students' engagement and their satisfaction regarding bachelor nursing program?

In the light of the present study findings, the following recommendations are suggested:

A- Faculty management

- Assess nursing students' engagement and satisfaction periodically through conducting regular surveys and used these information as indicators of success to identify areas which need improvement.

B- Faculty staff

- Foster positive relationships through professional role modeling to maintain students' engagement and satisfaction within the learning environment.

C- Nursing students

- Allow students to participate in developing faculty mission, philosophy, vision, goals including personal goals that will increase their level of engagement and satisfaction.

D- Future research

- Studying the factors affecting nursing students' engagement and satisfaction.

Financial support

- No funding was received.

Conflict of interest

- No.

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