Nursing Students' Perception regarding Online Learning and its Relation to their Academic Satisfaction

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Abstract

Background: Online learning provides many opportunities for student to learn and achieve their goal so its important to study the relation between it and their academic satisfaction. **Aim**: This study aimed to assess nursing student's perception regarding online learning and its relation to their academic satisfaction.. **Subjects and Methods**: **study design** : Descriptive cross sectional design was used to carry out this study. **Setting:** This study was conducted at the Faculty of Nursing-Ain Shams University. **Subjects:** The subjects of this study included the first and fourth academic years from afore mentioned setting through the academic year (2021-2022). The subjects included 242 out of (688) nurse students. **Data collection tool:** two tools was used namely Perceived Online Learning Questionnaire and Undergraduate Nursing Students' Academic Satisfaction Scale**. The results**: showed that, more than two-thirds (69.4%) of the studied nursing students have moderate level of total online learning. Also, one-quarter (25.6%) of them have high level. While, only (5%) of them have low level. there was highly significant positive correlation between nursing students' perception regarding online learning and their total academic satisfaction at (P= < 0.01). **Conclusion**: the nursing students had moderate perception level and high satisfaction level regarding online learning, and there was a highly statistically significant positive relation between total nursing students' perciption regarding online learning and their total satisfaction levels. E-learning platforms are easily adjustable during abrupt crises, such as COVID-19 **Recommendations:** Assess relationship between using Interactive online learning techniques and student Social presence

Keywords: academic satisfaction, online learning, , student perception.

Introduction

The nationwide coronavirus (COVID-19) pandemic and the resultant lockdown has enforced schools and colleges temporarily shut to prevent the spread of the virus and this unprecedented change had created a big gap in the education system, the central and state government doing their best to provide support for online learning. Several institutions in the country are now initiated online classes to help students continue their education with ease from their homes (**Kumar etal., 2021).**

The potential impact of Online learning on all types of education has been emphasized by the development of Internet-based technologies, in particular the World Wide Web. Thus, the basic definition of Online learning is that the teacher and students are separated in the spatial dimension and that this distance is filled by the use of technological resources (**Al-Balas et al., 2020).**

Online learning establishes online communities of practice, teachers and students can readily tailor digital learning tools to match space and le6+vel, as well as any learning style

and ability. Learners, educators, professional communities, experts, practitioners, and interest groups can all benefit from using the Internet to share ideas and best practices. Can provide a personalized learning experience for all students, including those who are impoverished, disabled, extraordinarily gifted, have a specific curriculum or learning needs, or who live far away from their typical learning environment **(Peacock et al., 2020).**

Online learning, allows students to work at a time and location that is convenient for them. A number of instructors and students remarked on their ability to concentrate more on the course topic and less on difficulties like parking, traffic, and other issues that can occur in a traditional classroom setting. **(Gopal et al., 2021)**

Online learning has aided pupils in becoming autonomous learners. During class, students had the opportunity to try out new learning tools and platforms, which helped them build new skills and talents and accelerate their growth. Some students thrived in the active learning atmosphere established by online teachers, while others need more help with shifts and starts **.(Selvaraj et al., 2021).**

The academic satisfaction means also that "students with very high life happiness would have more favorable academic profiles than students with low life satisfaction, including more engagement, higher academic self-efficacy, reduced stress, more positive achievement goals, and higher GPAs"**(Rahmatpour et al., 2019)**

Academic satisfaction research, according to the authors, is critical for developing and refining institutional services and student-centered initiatives that qualify the educational process **(Ramos et al,2015).**

Student satisfaction and technology is a key factor in producing successful students. Simple changes, such as updating the design of your common spaces, setting up a safe place to receive packages, and publishing lectures online, instantly increase student satisfaction at your university. Improve your campus by implementing these changes. Incorporate these ideas into your university today to create a better learning environment for years to come. **(Zeng, 2021)**

Significance of the study:

Due to the unprecedented situation generated by the Coronavirus pandemic, the impact of the pandemic on education, universities, teachers and students, became a subject of great interest for researchers. Investigating students' perception about online learning during the Coronavirus,

(Allo,2020) showed that students had a positive attitude towards E-learning, considering it helpful and useful in the time of the crisis created by the pandemic.

Aim of the study

This study aims to assess nursing student's perception regarding online learning and its relation to their academic satisfaction.

Research Question

Is there a relationship between nursing students' perception regarding online learning and their academic satisfaction ?

Subjects and methods

Research Design:

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

Research Setting:

This study was conducted at the Faculty of Nursing-Ain Shams University. It contains nine scientific departments, namely, Medical-Surgical Nursing department (I, II), critical nursing department, Maternity and gynecology nursing department, Pediatric Nursing Department, Community Health Nursing Department, Psychiatric and Mental Health Nursing Department, and Nursing Administration Department .

Subjects:

The study subjects was determined by using a simple random sampling technique from the students enrolled in the first and fourth academic years from afore mentioned setting through the academic year (2021-2022). The subjects will include 242 out of (688)

Tools of the study:

Data were collected using two tools namely:

1- First tool: Perceived Online Learning Questionnaire (POLQ).

It aimed to assess perception of nursing student regarding online learning it was developed by the researcher based on literature review (Gray and Diloreto, 2016) It consists of two parts:

Part 1: It included data pertaining to the socio-demographic characteristics of the respondents including age, gender, residence place, residence type, nationality, marital status, academic year, educational qualification before college, previous working at nursing field, educational level of father and mother.

Part 2: It included (44) items and categorized under (8) dimensions.

Scoring system:

Each item of the scale was scored based on 5 points likert scale ranged from strongly agree, agree, uncertain, disagree, and strongly disagree. strongly agree was scored as "5", while strongly disagree was scored as "1".The negative words got reversed score. All items are summed up and a mean score is calculated. Study subjects had low psychological capital if total score was less than 60%. While it is considered moderate if score was ranged from 60-75% and it is considered high if total score was more than 75% (**Metwaley & Ahmed & Ahmed, 2020).**

▪ 2- Second Tool: Undergraduate Nursing Students' Academic Satisfaction Scale (UNSASS).

It aimed to assess undergraduate nursing students' academic satisfaction. The scale adopted from (**Abdalla,2018**) and was modified by the researcher .

: It included (55) items and categorized under (5) dimensions

Scoring System:

A 3 point likert scale, responses were scored as 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 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%, whileif the score ranged from 50% to75% considered as moderate satisfaction (**Hakim, 2015).**

Preparatory Phase:

It included review past, current, local and international related literature and theoretical knowledge of various aspects of the study using books, articles, internet, periodicals and magazines to develop tools for data collection.

Pilot Study:

A pilot study was under taken after the adaptation of the tools and before starting the data collection. It was conducted on (70) nurse interns representing about 10% of the main study sample. Pilot study examines sequence of items, applicability, feasibility and clarity of language. In addition, the nurse interns took 15 to 20 minutes to fill the two questionnaires. After obtaining the result of the pilot study, there were no modifications done. Those participants in the pilot study were excluded in the main study sample.

Content Validity:

To achieve the criteria of trustworthiness of the data collection tools to be used in this study, the tools were tested and evaluated for their face and content validity, and reliability. **Face and content validity**: was tested by five experts in the field of nursing administration and mental health nursing departments affiliated to   Ain Shams University (Three Assistant professors from nursing administration department),(Two professors from psychiatric mental health nursing department).**Reliability :**

Reliability of two scales was examined through assessing their internal consistency by Cronbach's Alpha

Data Collection Tools	No. of items	cronbach alpha
Perceived Online Learning Questionnaire	44	0.853
Undergraduate nursing student s' academic satisfaction scale .	55	0.94

Fieldwork:

The actual fieldwork of the study started at the end of february 2022 after securing the official approvals for conducting the study till the end of March 2022.students were asked to give oral agreement to participate in the study; the researcher explained the aim and objectives to the participants. The confidentiality of any obtained information was assured, and the subjects were informed about their right to participate or not in the study. The participants were also assured about confidentiality through anonymity of information, and that data will only be used for the purpose of the study, the researcher

checked each questionnaire sheets after being completed by each participant to ensure the completion of all information.

Ethical Considerations

Prior to study conduction, an ethical approval of the study protocol was obtained from the scientific research ethics committee of faculty of nursing Ain shams University.In addition to that oral informed consent was obtained from each participant. They were informed about all rights to refuse or withdraw from the study with no consequences. They were reassured about the confidentiality of the information collected, and that it would be used only for the purpose of scientific research.

Administrative Design:

An official letter was issued from the Faculty of Nursing to collect the data for the study.The letter explained the aim of the work, the tools, and process of data collection, and asked for permission to collect data from nurse interns.

IV.Statistical Design:

The data were collected and coded. Then the collected data were organized, analyzed using appropriate statistical significance tests using the Computer Statistical Package for Social Science (IBM SPSS), version 20.Data were presented using descriptive statistics in the form of frequencies and percentages for qualitatives variables, means, medians, standard deviations and interquartile ranges for quantitatives variables. Chi square test was used to compare the frequencies and the correlation between study variables. Using student t-test to

assess the statistical significance of the difference of a parametric variable between means of two study groups (two independent group means). statistical significant was considered at P<0.05.

Results

Table (1): reveals that, more than half (55%) of the studied nursing students have low level of perception regarding total online audio/video. While, the majority (83.5% and 84.7%) of the studied nursing students have moderate level of perception regarding total access and motivation, respectively. Also, around two-thirds (64.5% and 68.2%) of them have moderate level of perception regarding total technological skills and internet discussions, respectively. Moreover, more than half (55%) of them have moderate level of perception regarding total faculty support. In addition, the vast majority (97.5%) of the studied nursing students have high level of perception regarding total importance to success.

Figure (1): shows that, more than two-thirds (69.4%) of the studied nursing students have moderate level of total online learning. Also, one-quarter (25.6%) of them have high level**.** While, only (5%) of them have low level.

Table (2): clarifies that, more than half (50.4% and 56.2%) of the studied nursing students have moderate level of satisfaction with online teaching and online learning, respectively. Also, more than half (52.5% and 51.2%) of them have high level of satisfaction with the program and organizational culture, respectively. Moreover, less than half (45.5%) of them have high level of satisfaction with support and resources availability. **Figure (2):** shows that, more than half (52.1%) of the studied nursing students have moderate level of total academic satisfaction. Also, one-third (33.9%) of them have high level**.** While, only (14%) of them have low level.

Table (3): reveals that, there are highly significant positive correlation between nursing students' perception regarding online learning and their total academic satisfaction at (P= < 0.01).

Table (1): Distribution of the studied nursing students according to their perception level regarding online learning domains (n=242).

Domains of online learning	Low		Moderate		High	
	No.	%	No.	%	No.	%
Access	15	6.2	202	83.5	25	10.3
Technological Skills	18	7.4	156	64.5	68	28.1
Motivation	15	6.2	205	84.7	22	9.1
Online Audio/Video	133	55	91	37.6	18	7.4
Internet Discussions	34	14	165	68.2	43	17.8
Communication	10	4.1	54	22.3	178	73.6
Faculty support	5	2	133	55	104	43
Importance to success	0	0.0	6	2.5	236	97.5

Figure (1): Percentage distribution of the studied nursing students according to their perception regarding total online learning (n=242).
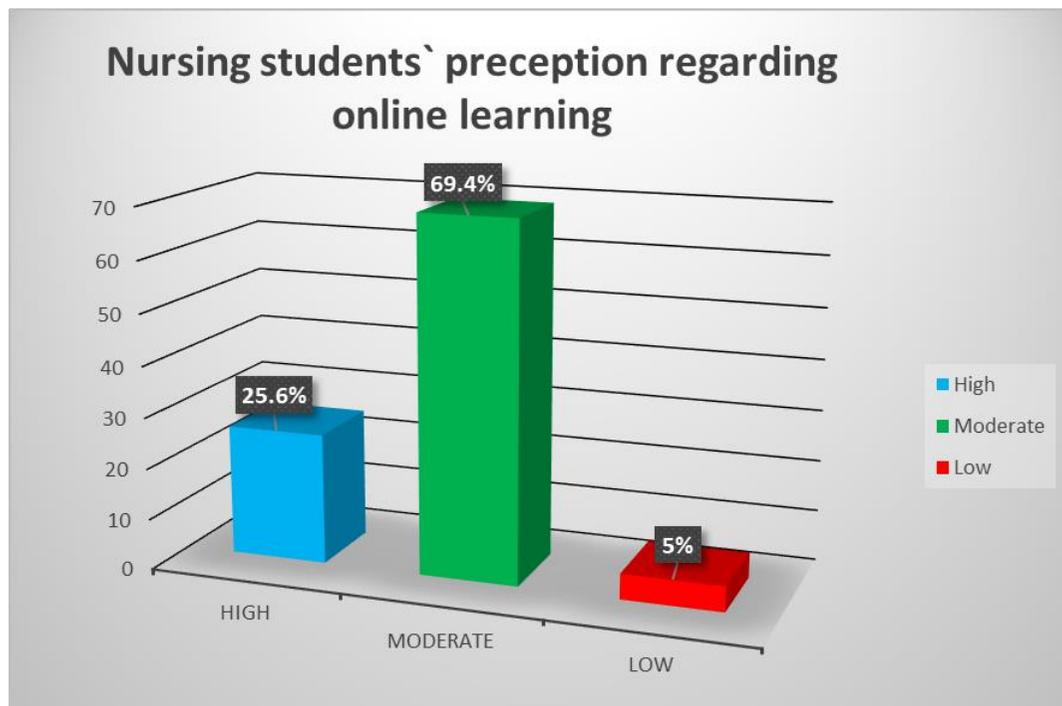

Table (2): Distribution of the studied nursing students according to their levels of academic satisfaction domains (n=242).

Domains of academic satisfaction	Low		Moderate		High	
	No.	%	No.	%	No.	%
Satisfaction with online teaching	64	26.5	122	50.4	56	23.1
Satisfaction with online learning	46	19	136	56.2	60	24.8
Satisfaction with the program	45	18.6	70	28.9	127	52.5
Satisfaction with organizational culture	30	12.4	88	36.4	124	51.2
Satisfaction with support and resources availability	42	17.3	90	37.2	110	45.5

Figure (2): Percentage distribution of the studied nursing students according to their levels of total academic satisfaction (n=242).
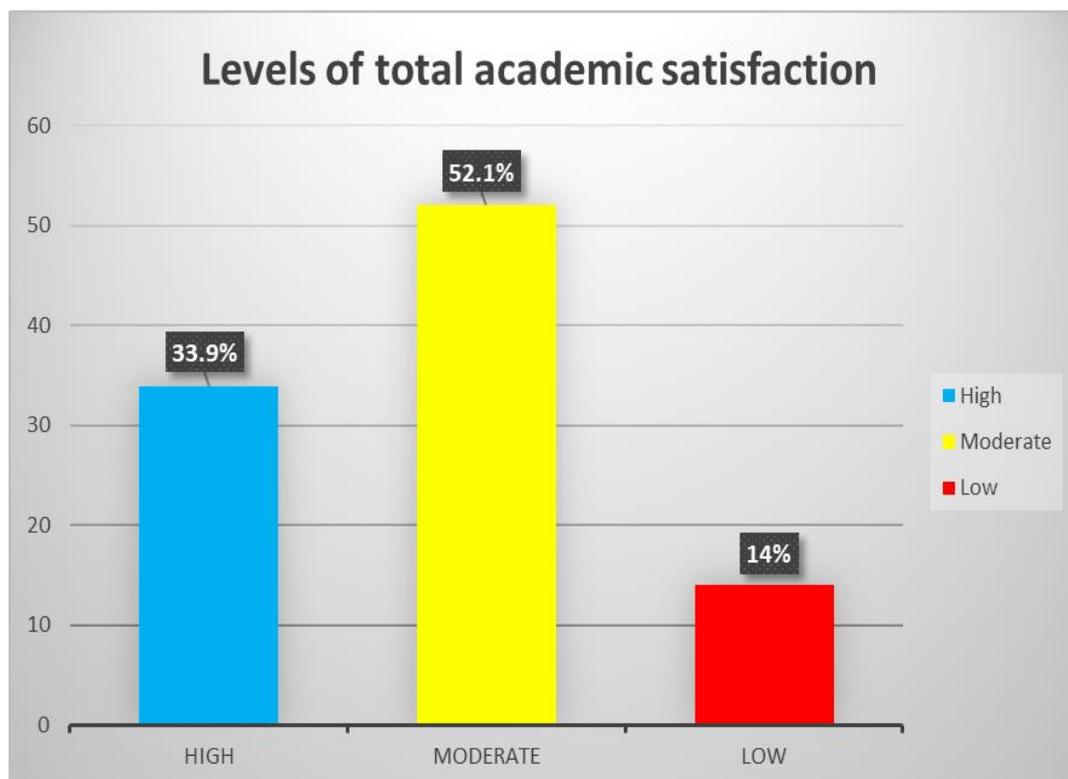

Table (3): Correlation between nursing students' perception regarding online learning and their total academic satisfaction (n=242).

Items	Total academic satisfaction
Total online learning	r = 0.830
	P = 0.000**

r= correlation coefficient test.　　P= p-value　　　**highly significant at p ‹ 0.01.

Discussion

In relation to the studied nursing students according to their perception regarding online learning domains, the findings of the current study indicated that more than half of the studied nursing students had low level of perception regarding total online audio/video. While, the majority of them had moderate level of perception regarding total access and motivation. Also, around two-thirds of them had moderate level of perception regarding total technological skills and internet discussions, respectively. Moreover, more than half of them have

moderate level of perception regarding total faculty support. In addition, the vast majority of them had high level of perception regarding total importance to success. These results might be due to the studied students have previous technological skills that facilitate dealing with the new learning methods except the new audio or video program for E-learning and they have good training about the new learning methods. These finding are consistent with **Ayed etal., (2022)** who reported that less than half of the academic nursing students had a moderate perception level toward online learning for technological skills, interaction and academic performance for success.

Apparently, for the studied nursing students levels of academic satisfaction domains, the present findings clarified that more than half of the studied nursing students had moderate level of satisfaction with online teaching and online learning. Also, more than half of them had high level of satisfaction with the program and organizational culture. Moreover, less than half of them had high level of satisfaction with support and resources availability. These findings could be due to more than two third of the studied students had moderate level of perception towards online learning that enhancing their level of satisfaction. These results agree with **Farsi etal., (2021)** at the study to determine the level of satisfaction on the quality of education and virtual education during the Covid-19 pandemic crisis in nursing students of Aja University of Medical Sciences in 2020 who clarified that more than half of students were satisfied with the quality of the training course. More than half of the students were relatively satisfied with virtual education, support and resources availability. On the contrast, a study done by **Natarajan& Joseph (2022)** to assess impact of

emergency remote teaching on nursing students' engagement, social presence, and satisfaction during the COVID-19 pandemic illustrated that the majority of students were not satisfied regarding online learning aspects and quality.

In relation to correlation between nursing students' perception regarding online learning and their total academic satisfaction, the current study illustrated that there was highly significant positive correlation between nursing students' perception regarding online learning and their total academic satisfaction. That's might be attributed to that the perception and awareness of the students make them able to cope with the new learning method and have satisfaction for ability to deal the new learning method. This result coincides with **Oducad etal., (2021)** who reported there was a significant positive correlation between perception of students with online learning satisfaction.

Conclusion

In the light of the present study findings, it can be concluded that the nursing students had moderate perception level and high satisfaction level regarding online learning, and there was a highly statistically significant positive relation between total nursing students' perciption regarding online learning and their total satisfaction levels. These findings answer the research question which stated that Is there relationship between student's perception and their satisfaction with online learning.

Recommendations

In the light of the findings of the current study the following recommendations are proposed:

1- Apply various evaluation techniques to assess student needs for dealing with online learning

2- Administrator should develop student training program for online learning to ensure successful application and improve competencies they need to face challenges.

3- Further research is proposed to assess relationship between using Interactive online learning techniques and student Social presence.

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