Research Article

Nursing Students' Satisfaction with Online Learning Experiences During Covid-19 Pandemic at Albaha University, Saudi Arabia

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Abstract

Background: The teaching process in universities had faced several challenges during the COVID-19 pandemic. As most universities have shifted to online learning, this study aimed to assess nursing students' satisfaction with online learning during the pandemic.

Methods: This is a descriptive cross-sectional study; it was conducted among nursing students during the COVID-19 pandemic. The authors used an adopted online questionnaire to assess students' satisfaction. The data were analyzed by SPSS software.

Results: The study found that nursing students age was mainly between 22-24 years (78.9%), both male (46.1%) and female (53.9%) students. The nursing students' satisfaction with online learning during COVID-19 was moderate (23.68%) to high (64.47%). A significant relationship was observed between students age and sex with satisfaction levels in online learning with a p-value less than 0.05.

Conclusions: The study showed that the nursing students were satisfied with an online learning experience. Female students and those who are between 22-24 years have significantly higher levels of satisfaction.

Keywords: nursing students, satisfaction, COVID-19, pandemic, Saudi Arabia

1. Introduction

The effect of the COVID-19 pandemic is not limited to the population's health and economics, rather it extends to the education system of affected countries [1]. The response of the educational system in many countries was to maintain the educational process at an optimal level due to advanced technologies and development [2, 3].

However, the emergence of e-learning as a solution to ensure sustainability of teaching and learning, faced several issues during the transition from traditional learning to online learning during the pandemic [4, 5]. Furthermore, nursing education faced additional challenges due to the nature of the clinical subjects which require students to be in direct contact with patients [6].

The countries had applied specific protective measures to control the spread of COVID-19 among students, and many colleges have shifted the classes online [7-10]. Many universities in Saudi Arabia, including Albaha University, have used the Rafid platform (Blackboard) to provide online teaching. [11-13]. Nursing students have provided online learning for theoretical courses and face-to-face learning for practical and clinical courses.

As stated, satisfaction of students is specifically described as their perception developed from the perceived value of education and experience gained [14]. Although, it is difficult to identify factors that influence satisfaction due to its complexity [15], despite the fact, it is needed to assess satisfaction to get benefits in terms of decision-making processes [16].

The nursing students' satisfaction levels toward different types of learning were investigated at Albaha University [17-19]; however, no traced studies were conducted on the level of satisfaction toward online learning. Thus, the purpose of this study is to assess nursing students' satisfaction toward online learning during COVID-19 pandemic at Albaha University, Saudi Arabia.

2. Materials and Methods

2.1. Study design and setting

This is a descriptive cross-sectional study; it was conducted among nursing students at Albaha University during COVID-19 pandemic. It is one of the main governmental universities in the kingdom which is located in Aqiq city, AL-Baha, Saudi Arabia.

2.2. Sampling and sample size

A simple random sampling technique was used among nursing students in the academic year 2020/2021. The author explained the study process and send the link of online questionnaire through WhatsApp groups, the response rate was acceptable, and the sample size was 76 nursing students from both male and female sections.

2.3. Data collection tool and technique

The author adopted the online questionnaire for e-learning satisfaction from one of the previous publication [20]. It was approved by three associate professors in nursing at Albaha University and its reliability was approved.

2.4. Scoring system

The satisfaction was measured using Likert scale of five, 1 for strongly disagree and 5 for strongly agree. The total score was calculated based on responses of students, where unsatisfactory for those taken 50% or less, moderate satisfaction for those scored more than 50% and less than 75%, and high satisfaction for those scored 75% or above.

2.5. Data analysis

The data were analyzed using SPSS software, version 22. The collected data were encoded into variables. The author used descriptive and inferential analysis by the program.

3. Results

3.1. Results summary

The study findings have been presented in tables and figures. Table 1 shows the nursing students age at Albaha University was mainly between 22-24 years (78.9%), and they lived in Al-Baha region (94.7%), majority of them were unmarried (97.4%), and there were both male (46.1%) and female (53.9%) students.

The nursing students' level of satisfaction toward online learning provided during COVID-19 pandemic was highly satisfactory (64.47%), moderate satisfaction level (23.68%), and those who were not satisfied represented only (11.84%), as shown in Figure **1**.

The details of nursing students' level of satisfaction were presented in Table 2 as three main domains were included; first section was preferences and acceptance of online learning itself where students reflected strong agreement with provided statements related to the online learning. Second section was about technical issues related to online learning since students also showed high satisfaction and agreement with the

related statements. Lastly, the third section was about interaction and collaboration where the students reported agreement with most of the related statements.

Table 3 showed the relationship between demographic characteristics (age, residence marital status, and gender of nursing students) with the level of satisfaction toward online learning. The significant relationships were reported between students age with satisfaction level with a p-value less than 0.05, nursing students' satisfaction was higher at age 22 years and above. The second significant relationship was observed between the students' gender and satisfaction level, female students were more satisfied compared with male students toward online learning.

TABLE 1: Demographic characteristics of nursing students at Albaha University, $n = 76$.

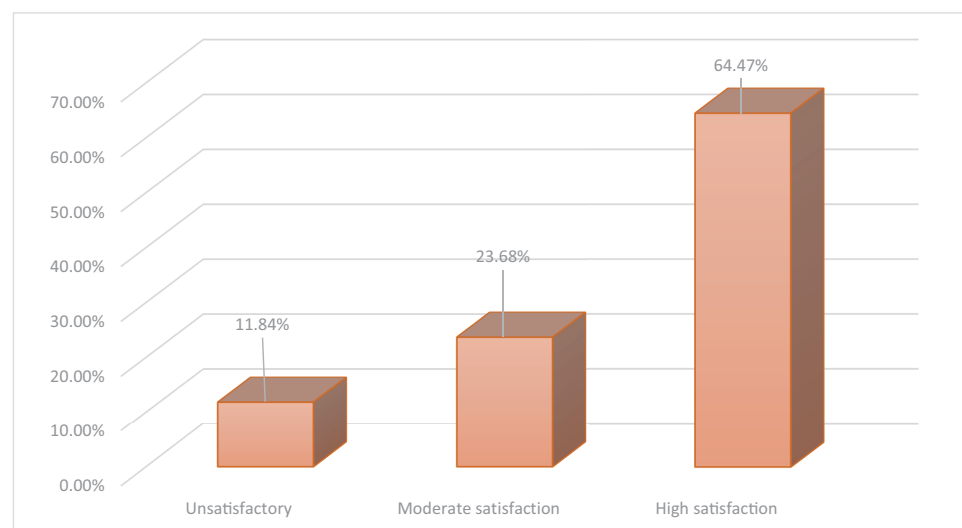| Age group (yr)	Frequencies	Percentage
<20	0	0.0
20–22	12	15.8
22–24	60	78.9
>24	4	5.3
Residence		
Al-Baha region	72	94.7
Outside Al-Baha region	4	5.3
Marital status		
Married	2	2.6
Unmarried	74	97.4
Gender		
Male	35	46.1
Female	41	53.9

Figure 1: The level of satisfaction of nursing students toward online learning during COVID-19.

TABLE 2: Level of satisfaction of nursing students towards online learning during COVID-19, *n* = 76.

Satisfaction parameters	Strongly disagree	Disagree	Uncertain	Agree	Strongly Agree
	1	2	3	4	5
Preferences and acceptance of online learning approach					
I am confident about using e-learning technology	10.5	15.8	13.2	34.2	34.2
2. The quality of lectures and videos provided, helped me in my learning	7.9	9.2	17.1	23.7	23.7
3. It was easy to download and print e-learning materials	3.9	6.6	11.8	32.9	32.9
4. I would prefer if the lectures used in the e-learning have other collaborative tools	5.3	14.5	7.9	25.0	25.0
5. I prefer using e-learning classes instead of traditional classes	1.3	5.3	18.4	22.4	22.4
Technical issues of online learning					
1. The response time of my e-learning system is fast	6.6	9.2	21.1	27.6	35.5
The browser speed of e-learning platform is fast	7.9	14.5	18.4	27.6	31.6
The browser is fast even during peak usage time	14.5	15.8	3.9	26.3	39.5
It was easy to navigate through the e-learning platform	13.2	7.9	9.2	30.3	39.5
Interaction and collaboration					
I was able to interact with the instructor during e-learning class	5.3	15.8	18.4	31.6	28.9
I was able to interact with my classmates during use of e-learning platform	9.2	27.6	14.5	30.3	18.4
I need collaboration and discussion with other students	15.8	7.9	11.8	30.3	34.2
It was easy to collaborate with my students' colleagues during the class	10.5	9.2	19.7	22.4	38.2
The design of collaborative tools (chatroom and discussion board) was suitable for my needs	17.1	30.3	5.3	15.8	31.6
Total satisfaction level	**9.2**	**13.5**	**13.6**	**27.2**	**36.5**

4. Discussion

The nursing students' satisfaction level toward online learning is a fundamental part of the quality of teaching and learning, this study focused on the level of satisfaction of nursing students at Albaha University. The current study findings reflected that the nursing students are satisfied with the following approach of online learning during the pandemic of COVID-19. The participated nursing students were either highly satisfied

TABLE 3: Relationship between demographic characteristics of nursing students at Albaha University and their level of satisfaction, $n = 76$.

Age group (yr)	Unsatisfactory	Moderate satisfaction	High satisfaction	P-value
<20	0	0	0	0.003*
20–22	3 (25%)	5 (41.7%)	4 (33.3%)	
22–24	10 (16.7%)	18 (30%)	32 (53.3%)	
>24	1 (25%)	1 (25%)	2 (50%)	
Residence				
Al-Baha region	17 (23.6%)	23 (31.9%)	32 (44.4%)	0.07
Outside Al-Baha region	1 (25%)	1 (25%)	2 (50%)	
Marital status				
Married	0 (0%)	1 (50%)	1 (50%)	0.4
Unmarried	16 (21.6%)	25 (33.8%)	33 (44.6%)	
Gender				
Male	12 (34.3%)	13 (37.1%)	10 (28.6%)	0.04*
Female	14 (34.1%)	12 (29.3%)	15 (36.6%)	

or had moderate satisfaction level compared to only less than 12% who reflected their unsatisfaction.

The current study findings were similar to the previous studies conducted in other countries [21] and in Spain where findings showed that students had satisfaction moderate to high in both teaching methodologies [22]. Furthermore, in an integrative review on nursing students' satisfaction with e-learning during the pandemic, it was shown that they had high satisfaction levels during their learning experiences [23]. On the other hand, the current study contradicts findings with other studies, which showed students are dissatisfied with online learning [24]. Another study conducted in Iran showed that more than 88% of nursing students were satisfied with online learning [25]; furthermore, findings from the study conducted in Iran showed that universities were not completely successful in satisfying students in online learning [26].

Nursing students showed their satisfaction in online learning preferences and acceptance of online learning, technical issues related to online learning, and interaction and collaboration. Similarly, in Bali, Indonesia, the nursing students mentioned that online learning is fairly good in terms of convenience, accessibility, and accuracy of used methods [27].

The study showed a significant correlation between students age with the level of satisfaction toward online learning where students aged between 22-24 years had higher satisfaction. Likewise, another study was conducted on students readiness and

satisfaction on distance learning which showed a significant relationship between students age and value of readiness for distance learning [28]. There was also a significant relationship between students' gender and satisfaction level, female students were more satisfied in online learning compared with male students. This, might be because the female students preferred to study from their home during the pandemic and related restrictions.

However, this was the first study investigated on nursing students' satisfaction in Albaha region during the era of COVID-19 pandemic. It had some limitations, such as it was conducted among a convenience sample which limited its generalizability, another limitation was that it was conducted only on nursing students; it would be more appropriate to investigate instructor's perceptions and satisfaction.

5. Conclusion

The current study was conducted to assess the nursing students' satisfaction for the online learning. The findings showed that the nursing students were satisfied in online learning in the three assesses sections preferences and acceptance of online learning, technical issues related to online learning and interaction and collaboration. Female students who were between 22-24 years old expressed significantly higher levels of satisfaction compared to others.

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Ethical Considerations

None.

Competing Interests

The authors declare that they have no conflict of interest.

Availability of Data and Material

Anonymous data are available.

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