

Perception, Satisfaction, and Obstacle of Online Learning Faced by Academic Nursing Students during COVID-19 Pandemic

Manal Mohamed Ahmed Ayed ⁽¹⁾, Amel abd Elaziem Mohamed ⁽²⁾, Manal Abd Elsalam Amin ⁽³⁾, Esteer Ibrahim ⁽⁴⁾, Noha Mohamed Rashed⁽⁵⁾, Sanaa Mostafa khalifa Ali ⁽⁶⁾, Fatma El Zahra Kamal ⁽⁷⁾

1) Pediatric Nursing, Faculty of Nursing, Sohag University

2) Community Health Nursing, Beni-Suef University

3) Fellow of Nursing, PHD in Community Health Nursing, Ain Shams University Hospital

4) Gerontological Nursing, Faculty of Nursing, Sohag University

5) Nursing Administration, Nursing College, Misr University for Science and Technology

6) Lecture of Psychiatric Nursing, Faculty of Nursing, Sohag University, Egypt

7) Pediatric Nursing, Faculty of Nursing, Sohag University

Abstract

Background: During COVID-19, academic nursing students face many challenges as a result of online learning. During the COVID-19 pandemic, the greatest disruption of learning in history and had a global impact on learners and teachers. **The study aimed to** recognize perception, satisfaction, and obstacle of online learning faced by academic nursing students during COVID-19 pandemic. **Subjects and Methods: Design:** A descriptive research design was used in this study. **Setting:** The study was applied in the Faculty of Nursing, Sohag University. **Sample:** A convenient sample of 230 including all the third academic nursing students' years in the previously mentioned setting. **Four tools of data collection: (I)** an online questionnaire was used. It consisted of two parts; (1) demographic characteristics of academic nursing students, (2) educational platforms were used, (II) online learning obstacles faced by academic students, (III) learner satisfaction with online – learning, (IV) students' perception toward online learning assessment sheet. **Results:** The revealed that the most used platform among academic nursing students was the Microsoft platform for online learning. The most obstacles faced by the students during online learning concern the Learners' characteristics dimension, as well as less than two-thirds of the studied academic nursing students, face a high level of obstacles. Also, about two-thirds of students were unsatisfied with their online learning experience. There is a positive statistically significant correlation between total perception and obstacles for online learning. **Conclusion:** It was found that academic nursing students were unsatisfied with continuing online learning during COVID-19 and faced many obstacles that interfere with their education. **Recommendations:** Educating the younger generation of academic nursing students about how to use online learning platforms to transform them into the future through various media and faculties to help academic them become more knowledgeable and skilled

Keywords: Academic nursing students, Perception, Online learning obstacles, Satisfaction, COVID-19 pandemic.

Introduction:

The Coronavirus Disease 2019 (COVID-19) pandemic began in China and was contained there until February 2020, when it abruptly expanded to become a global pandemic on March 11, 2020 (Koirala et al., 2020; Lu et al., 2020; WHO, 2020). Because of the restraining techniques used to prevent and manage the outbreak, it has had an impact on physical health, lifestyle, stock market, business, and education systems all over the world (Verma et al., 2020; Gautam & Sharma, 2020). In response to the broad spread of COVID-19, the government has taken several steps to prevent or slow the spread of the disease, particularly in education

to protect students (Bedford et al., 2020). Over 80% of the world's understudy population is affected by the closure of schools and instructional education in at least 150 countries (UNESCO, 2020). The COVID-19 epidemic, in particular, caused colleges to shift their whole traditional instructional method to an alternative online distance learning approach (Liguori & Winkler, 2020).

The COVID-19 Pandemic had a significant impact on schools, teachers, students, and all educational establishments around the world (Adnan & Anwar, 2020; Almanthari et al., 2020), with approximately 212,348,831 confirmed cases and 4, 441,210 deaths from the beginning of the pandemic

until August 22, 2021 (**Adnan & Anwar, 2020; Almanthari et al., 2020**). Between 14 February 2020 and 22 August 2021, there were 286,168 confirmed cases in Egypt, with 16,663 deaths (**WHO Health Emergency Dashboard, 2021**). Due to the epidemic, schools, colleges, and universities were obliged to close their campuses from March to July 2020 to conduct final exams, and then postpone the start of the academic year until October 2020.

With the start of the second wave of the pandemic, the study was halted for two months, beginning in January 2021 and ending in February 2021, to allow students to adhere to social distancing policies (**Toquero, 2020**) and to encourage academic experts to consider distance learning as a viable alternative to traditional face-to-face learning to overcome the problem and complete courses that should be taught throughout the academic year (**Kaur, 2020**).

The pandemic had an impact on practical training since students' training periods in hospitals were shortened, shrunk, and eventually vanished. The university teaching campuses, which account for 73 universities and institutes, both governmental and non-governmental (**Egypt Ranking Web of Universities-Web metrics, 2021**), compensated for this by creating case scenarios and increasing practical periods in the laboratories, which influenced the academic level of the graduates and appreciated the presence of learning and education obstacles. Some students prefer online learning to avoid the inconvenience of travel, while others prefer traditional learning because it is the more common method of instruction.

Common obstacles students face in an online learning included lack of access to technology, the rise of online learning has added new items to students' school supply lists, difficulty learning to use new technology, difficulty concentrating, difficulty managing time, and isolation (**Egypt Ranking Web of Universities-Web metrics, 2021**).

Students become more responsible for their learning as a result of online learning, which alters the educational process from a teacher-centered to a student-centered one? The abrupt shift to online learning has become a

barometer of organizational adaptability, with most academic institutions focused on bringing educational content to the digital realm rather than on online teaching and traditional delivery techniques (**Hanafy et al., 2021**).

The course information is distributed through the Internet in online learning. Online learning is frequently student-centered and requires active participation. Students decide classroom dynamics in student-centered or active learning by individually analyzing information, posing questions, and seeking clarification from the instructor. The teacher, not the student, is the one who is listening, formulating, and responding in this sort of learning (**Paul & Jefferson, 2019; Smith & Brame, 2020**).

Online learning can be delivered synchronously or asynchronously. In the synchronous method, online learning takes place at the same time as offline learning, and students and instructors engage in real-time, as in video conferencing and live chats. While the asynchronous technique uses electronic media to facilitate online learning via emails, discussion boards, or text messaging, it does not happen at the same time as the synchronous method (**Brashear, 2020**).

Significance of the study:

The prolonged shutdown due to the COVID-19 pandemic transformed the learning in conventional classrooms into online learning due to the nature of the pandemic. During the pandemic educational institutions are exploring numerous teaching software for academic nursing students to facilitate online learning (**Nassoura, 2020**).

Online learning has advantages and disadvantages, so that, it is important to identify the obstacles that are facing academic nursing students in online learning. Because their responses can help educational institutions to design better ways concerning online learning and course structures after the COVID-19 pandemic, because online learning may become the new normal way of education. Hence, the researchers conducted this study to recognize online learning obstacles faced by academic nursing students during the COVID-19 pandemic.

Aim of the study:

The study aimed to recognize perception, satisfaction, and obstacle of online learning faced by academic nursing students during COVID-19 pandemic through:

- Assessing the educational platforms was used in online learning during the COVID-19 pandemic.
- Identify online learning obstacles faced by academic nursing students during the COVID-19 pandemic
- Assessing academic nursing students' satisfaction with online learning during COVID-19 pandemic.
- Assessing academic nursing students' perception with online learning during COVID-19 pandemic.
- Determine the correlation between academic nursing students' perceptions of online learning and the obstacles they confront.

Research question

- 1- What are types of educational platforms were used in online learning during the COVID-19 pandemic among academic nursing students?
- 2- What are the online learning obstacles faced by academic nursing students during the COVID-19 pandemic?
- 3- Are the academic nursing students satisfied with online learning during the COVID-19 pandemic?
- 4- What is level of academic nursing students' perception of online learning during the COVID-19 pandemic?
- 5- Is there a correlation between obstacles faced by academic nursing students and their perception of online learning?

Subjects and methods:**Research design:-**

A descriptive research design was used in this study. This type of research can be used to describe characteristics that exist in a community, but not to determine cause-and-effect relationships between different variables.

This method is often used to make inferences about possible relationships or to gather preliminary data to support further research and experimentation (**Chikaodili et al., 2020**).

Settings:

The study was applied in the Faculty of Nursing, Sohag University, Egypt, in July 2021.

Subjects:

A convenient sample of 230 was used in the current study including all the academic nursing students in the third year in the Faculty of Nursing, Sohag University during the academic year 2020/2021, through Google form spreadsheet, it included all male and female, and agree to participate in this study.

Tools for data collection:

Tool (1):- An online questionnaire was used and developed to collect data pertinent to this study which was designed by the researchers after literature search and based on the most recently available information from the (**World Health Organization, 2020, 2020; Yildiz, et al., 2020; and Rajab et al., 2020**). It included (yes/no, multiple-choice, and open-ended questions), which covered the study's objectives. It consisted of two parts as follows:

Part I: It included three items related to the demographic characteristics of the academic nursing students as age, gender, and residence.

Part (2): It consisted of (5) items about educational platforms were used such as Zoom platforms, What App, Emails, Google platforms, and Microsoft platforms.

Tool (II): Online learning obstacles faced by academic students; It is used to assess online learning obstacles faced by academic nursing students. It was adopted from (**Diab & Elgahsh, 2020**). It consisted of 35 questions to identify obstacles confronting the university nursing students during using distance learning throughout the COVID-19 pandemic. The tool was tested for reliability by measuring its internal consistency using Cronbach's alpha coefficient method. It contains five dimensions

Dimension I was concerned about the Learners' characteristics and included (7 items) asked about sufficient knowledge and skill, learning devices, lack of confidence and shyness, no internet connection, and lack of time management skills to keep up with the pace of the course, among other things, inability to communicate with colleagues via the distance-learning platform, as well as a lack of language and typing abilities for distance learning.

Dimension II dealt with technical and management support and included seven items: system errors, network slowness while learning, a lack of support services such as tutors, the system being unavailable the majority of the time, technical support from the college for using distance learning, compatibility of university books with distance learning, and a lack of technical assistance to handle technological problems.

Dimension III dealt with infrastructure and technology and included (7 items) inquiries about faulty bandwidth connections, proper training before using a distance-learning platform, the cost of internet fees/charges, counseling while taking courses, the flexibility of system design to use, erratic power supply at home, and the difficulty of rules and program directions when using a distance-learning platform.

Dimension IV dealt with curriculum content and included (7 items) questions about the alignment of available learning resources with the curriculum, the ability to access distance resources at the platform while at home, the ability to learn the contents of subjects using distance learning, the ability to understand the contents of the subject using distance learning, the disproportion of distance learning with curriculum content, and concerns about the practical nature of distance learning (flash animations, simulations, videos, audios, etc.).

Dimension V is concerned with the characteristics of the instructors and includes (7 items) such as sufficient knowledge and skill to use distance learning, confidence in using distance learning, clear instructions from the teacher, timely feedback from teachers, teachers prefer traditional ways of learning and

research, teacher's delay in submitting distance learning courses on time and its effect on students' performance, and Difficulty contacting academic staff when at home.

Scoring system: The nursing students' comments were graded on a five-point Likert scale ranging from "1" (strongly disagree) to "5" (strongly agree) (strongly agree). The items' scores were added together and the total divided by the number of items, yielding a mean score for each dimension of online learning difficulties. The lowest and highest scores were 35.00 and 175.00, respectively. These numbers were then transformed into a percentage. Low hurdles were defined as those with a score of less than 60%, moderate obstacles as those with a score of 60% to 80%, and high obstacles as those with a score of more than 80% when using distance learning.

Tool (III) Learner satisfaction with online – learning, it comprised of two (2) items about the satisfaction of academic nursing students with online learning. It was created by **Arbaugh (2000)** to assess learner satisfaction with online – learning. It consists of nine items with response possibilities of strongly disagrees, disagree, uncertain, agree, and strongly agree. Positive items received a score of one (strongly disagree) to five (strongly agree), whereas negative ones received a score of one (strongly disagree) to five (strongly agree). Unsatisfied learners received 60% of the overall score on the online-learning satisfaction scale, whereas satisfied learners received 60% of the total score.

Tool (IV): Perception of academic nursing students toward online learning. It was modified by the researchers from (**Kumar et al., 2020; Hanafy et al., 2021**). The distance and traditional learning questionnaire were composed of the same 17 questions, asked about the university students' perception toward each type of the used online learning. The questions were classified as well as the importance of each learning type that included five questions ask about each type of learning concerning the ability to (improve the students' collaboration and share in teamwork actions on the assigned tasks?, improve student mode and make the education behavior better?, improve

brainstorming and critical thinking?, increase the students' sense of guidance and support?, and help in solving of administration problems?); the cooperation that included four questions about(improve the student share in learning and student activities? improve student shares in community activities and volunteer work during curfew? the time consuming and decrease the time lost during learning? a belief that a complete course can be given by on learning method without difficulty?), benefits of each learning type that included four questions ask about (believe that learning whether learning inside or outside the class is more motivating ?, students motivated by the material inside the class, or in distance learning, material in the class is better prepared than a distance class or vice versa, and sharing ideas with colleagues is easy or no), students' motivation for each type that included two questions ask about (the ability of the students to ask their teachers questions and receive a quick response during the class?, and which type of class cost low?), and obstacles faced each learning type, that was included two questions ask about (Lack of concentration occurs most common with which type of learning?, and which Learning environment is better in learning than other ?).

The scoring system: The students' responses were graded on a five-point Likert scale ranging from "1" (strongly disagree) to "5" (strongly agree) (strongly agree). The total points were divided by the number of elements, yielding a mean score for part of the traditional learning and part of the distance learning, as well as mean overall scores. These results were converted into a percentage. The minimum and highest scores were 17.00 and 85.00, respectively. The low perception was defined as a score of less than 60%, the moderate perception was defined as a score of 60% to 80%, and high perception was defined as a score of more than 80%.

Validity and reliability:

Face and content validity of the tools for clarity, comprehensiveness, and appropriateness was tested by a board of five experts' professors, two professors from the pediatric nursing department, one professor in the nursing administration department, one professor from the

geriatric department, and one professor from community health nursing department with more than ten years of experience from the field were assessed. The internal reliability for the tool was tested using Cronbach's alpha coefficient was 0.82.

Pilot study:

A pilot study was carried out on 23 academic nursing students (10% of the sample). Clarification and estimation of the time needed for filling the study tools, and testing the feasibility of the research process and no modifications were carried out. The pilot study was included in the study.

Data collection:

Before starting this study, administrative approval was taken from authorities in the setting. The average time spent for students completing the questionnaire was approximately 10-15 minutes. The study was conducted during the second term of the academic year 2020-2021. The data was collected from the beginning of July to the end of July 2021 within 25 days through an online Arabic questionnaire. The researchers used the online Google form spreadsheet to create the research. The online questionnaire was designed in English and translated into Arabic. Consent through MS message was obtained by the researchers from the students to participate in the study, that is because the link of the online questionnaire was sent to students via electronic communication media (email, Imo, or WhatsApp messenger), through their educational electronic communication groups.

At the beginning of the questionnaire, there was a statement informed the students on the first page of the online questionnaire about the background and objectives of the study. Then, there was another statement that includes the researchers' names and contact details through E-mail, phone numbers, Facebook messenger, or WhatsApp to allow students to contact the researchers if they had any concerns regarding the questionnaire.

All academic nursing students at this academic year through Sohag university were studying through online learning in which they studied all courses either theory or practice. The experience and express their perceptions regarding the online learning method, in addition to obstacles faced them through distance learning was assess.

Ethical consideration:

Official approval was done and obtained through an issued letter from the Dean of Faculty of Nursing, Sohag University to conduct this study. Each student was informed about the aim and benefits of the study. Each student informed them that participation in the study was voluntary and that they had the right to withdraw from the study at any time before completing the questionnaire with no consequences, without giving any reason and that their responses would be held confidentially. Before starting this study the researchers were obtaining verbal consent from the included academic nursing students. The telephone number and WhatsApp application number, in addition to the electronic professional emails of the researchers, were available to all the study participants.

Statistical analysis:

The data were collected, coded, and tabulated into the computer of the researchers. Statistical analysis was done using Statistical Package for Social Science (SPSS/version 21). Quantitative data were expressed as mean and standard deviation ($X \pm SD$). Qualitative data were expressed as numbers and percentages. A comparison was performed using a t-test. Correlation between variables was evaluated using Pearson's correlation coefficient (r) a P-value at 0.05 was used to determine the level of significance.

Results:

Table 1 portrayed the demographic characteristics of the studied academic nursing students. It showed that the academic nursing student's age ranges from 18 to 28 years old with a Mean \pm SD of 21.13 ± 1.65 , as well as 44% of the students aged ≤ 20 years old. 58% are female academic nursing students, 53% live in urban areas. Regarding devices used for online learning activities; 72% used their personnel mobile, followed by 22.0% of the students use stable computers. 71% of the students have internet facilities at home.

Figure 1 showed that the most used platform among academic nursing students was the Microsoft platform (26%) for online learning, whereas 25% of them used a WhatsApp group, followed by 24 % Zoom platform.

From table 2 demonstrated the ranking of the obstacles among the studied academic nursing

students regarding online learning. It was observed that the Mean \pm SD of the obstacles faced by the academic nursing students during online learning was (105.60 ± 20.62) , which reflected a high level of obstacles. The obstacles faced by the academic nursing students were ranked as the first one was concerned the Learners' characteristics dimension, followed by the second one was concerned the infrastructure and technology dimension, the third one was concerned the Technical and Management support dimension, the fourth one was concerned with the curriculum content dimension, and the fifth and final one was related to the instructors' characteristics dimension.

Figure 2 revealed that 63% of the studied academic nursing students face a high level of obstacles, followed by 25 % of the students faced a moderate level of obstacles, and then 12% of them faced a low level of obstacles.

Figure 3: represented the satisfaction levels among the studied academic nursing students. As noticed about two-thirds of students (66%) were unsatisfied with their online learning experience wherever only 34% were satisfied with the online learning experience.

Table 3 showed the perception of the studied academic nursing students regarding online learning. It illustrated that the academic nursing students' total perception toward online learning was (56.33 ± 14.17) , with the high perception Mean+SD directed toward online learning. But regarding the importance of learning; online learning was Mean \pm SD (15.33 ± 4.77) . Concerning the students' total cooperation was Mean \pm SD (16.02 ± 3.48) and total benefits Mean \pm SD was (13.41 ± 3.97) through online learning. Regarding the students' total motivation toward online learning was Mean \pm SD (5.72 ± 2.27) . In addition, the students' total obstacles of online learning were Mean \pm SD (5.72 ± 1.89) .

Figure 4 revealed, the percentage distribution of the studied academic nursing students concerning their total perception toward online learning. The figure demonstrated that 42% of the academic nursing students have a moderate perception level toward online learning, 30% of the studied academic nursing students have a high perception level, and 28% of them have a low perception level.

Table 4 illustrated a positive statistically significant correlation was detected between total perception score and total obstacle score among studied academic nursing students for online learning.

Table 5 shows, positive and significant correlation between total perception of the

studied academic nursing students regarding online learning and demographic characteristics concerning the students' sex and residence, but there is a negative and non-significant correlation was found between the age of the academic nursing students and their perception toward online learning.

Table (1): Distribution of studied academic nursing students regarding their demographic characteristics (N=230).

Items	No	%
Age		
≤ 20	101	44
21- 22	76	33
≥ 23	53	23
Min- Max	18-28	
Mean ±SD	21.13±1.65	
Gender		
Male	97	42
Female	133	58
Residence		
Rural	108	47
Urban	122	53
Devices for distance learning activities:		
Computer	51	22.0
Mobile	166	72
Laptop	9	4
Tablet	4	2.0
Internet facility at home:		
No	67	29
Yes	163	71

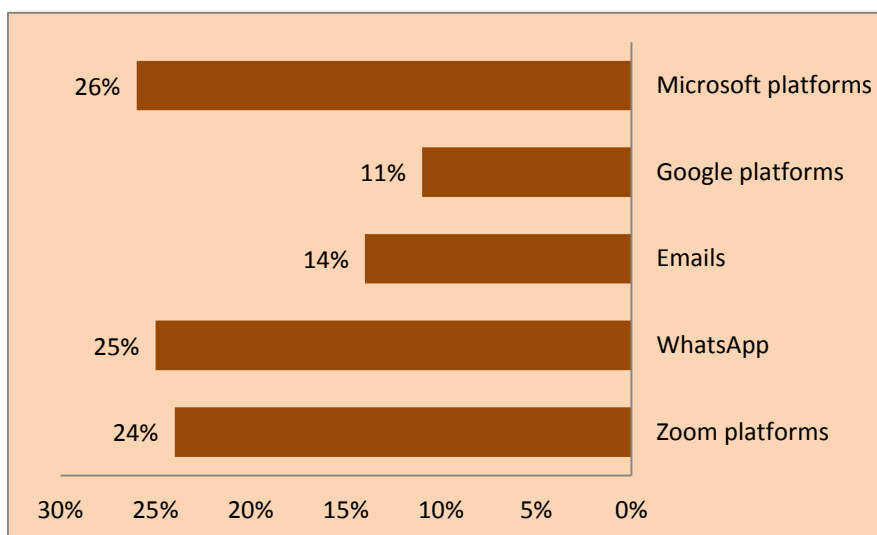


Figure 1: Distribution of studied academic nursing students regarding their online platforms used

Table (2): Obstacles ranking among the studied academic nursing students regarding online learning (N=230).

Items	Minimum	Maximum	Mean ± SD	% Score	Ranking
Learners' characteristics dimension	7.00	35.00	22.54±5.65	64.2	1
Technical and Management support dimension	7.00	35.00	21.16±5.63	60.4	3
Infrastructure and technology dimension	7.00	35.00	22.43±5.57	64.1	2
Curriculum content dimension	7.00	35.00	20.48±5.42	58.8	4
Instructors' characteristics dimension	7.00	35.00	19.04±5.46	54.4	5

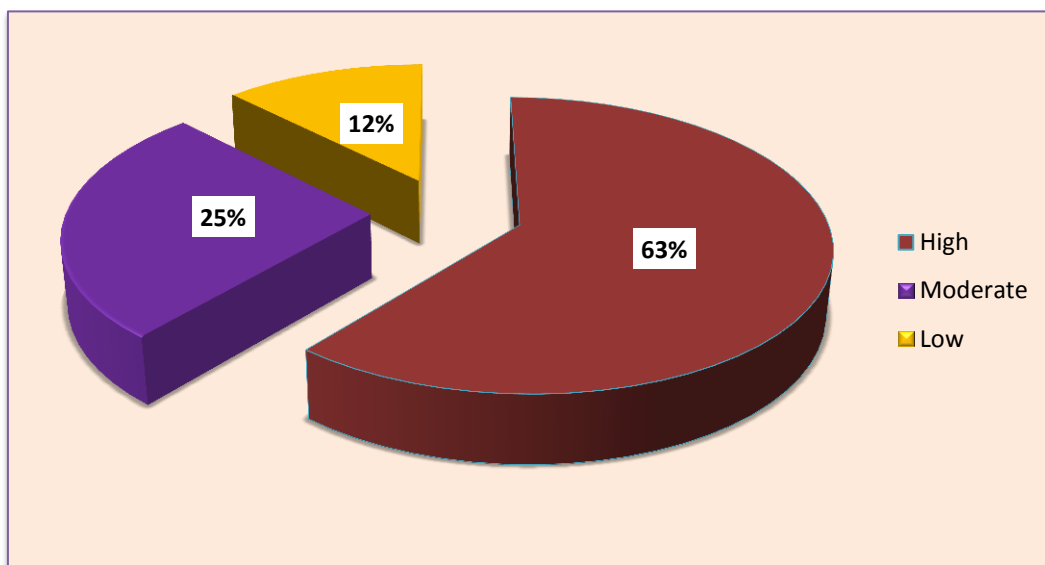


Figure (2): Distribution of the studied academic nursing students regarding total online learning obstacles (N=230).

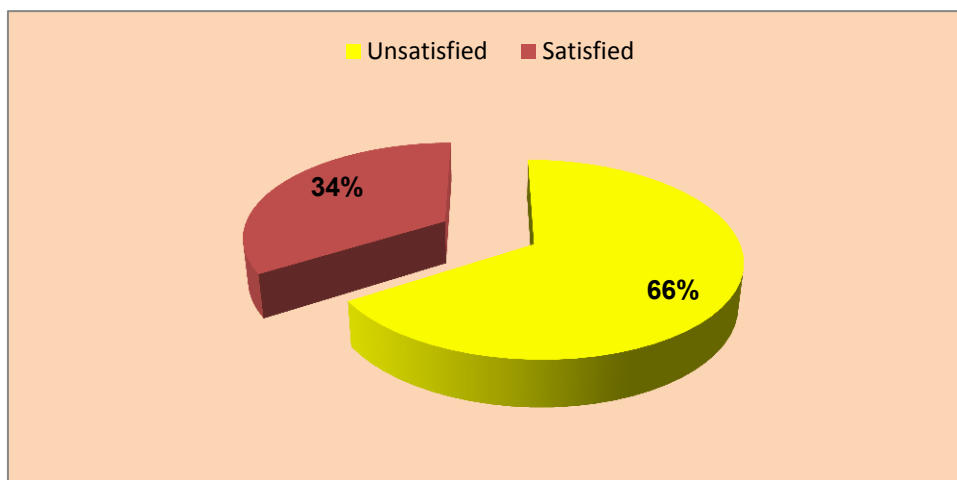
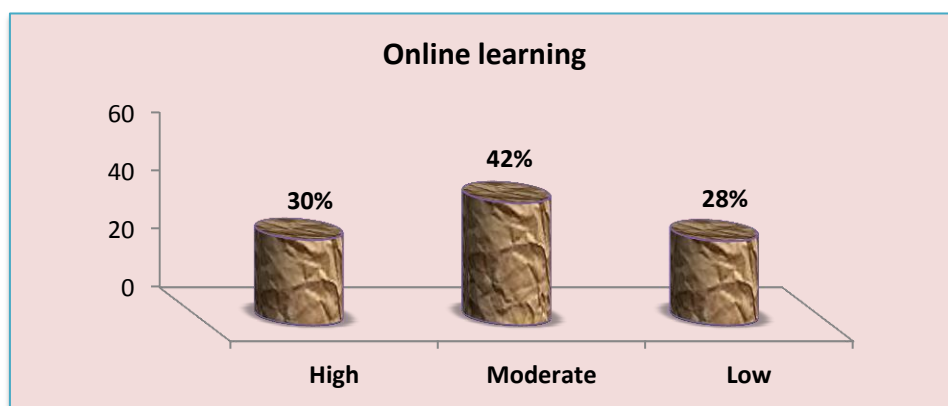


Figure (3): Satisfaction levels among the studied academic nursing students regarding online Learning (N=230).

Table (3): Perception of the studied academic nursing students regarding online learning (N=230).

Variables	Min	Max	distance learning
			Mean \pm SD
Total importance	5	25	15.33 \pm 4.77
Total cooperation	4	20	16.02 \pm 3.48
Total benefits	4	20	13.41 \pm 3.97
Total motivation	2	10	5.72 \pm 2.27
Total obstacles	2	10	5.72 \pm 1.89
Total	17	85	56.33\pm14.17

**Figure (4):** Percentage distribution of the studied academic nursing students regarding their total perception toward online learning (N=230).**Table (4):** Correlation between total perception score and total obstacle score among studied academic nursing students toward online learning

Items	Total perception	
	R	p-value
Total obstacle	0.724	0.018*

Table (5): Correlation between total perception and demographic characteristics among studied academic nursing students regarding online learning

Demographic characteristics	Total perception	P-value
	R	
Age	-.079	.119
Sex	.216	.022*
Residence	.543	.005*

*Statistically significant at $p < 0.001$

Discussion:

As the COVID-19 pandemic spreads by March 2020, with no way of knowing when it would be over, educational institutions around the world were forced to employ and develop online learning with students from all academic fields (Kaur, 2020). As a result of the pandemic's numerous challenges, a rapid transition to online learning has occurred, with various obstacles

encountered in its implementation (Crawford, et al., 2020).

In technologically advanced countries, online learning is effective and widely applicable (Basilaia and Kvakadze, 2020). However, lack of money in academic institutions hampered students' ability to participate in electronic online learning due to poor internet connectivity and a lack of advanced technologies. Answers to

research questions about university nursing students' perceptions of online learning, obstacles faced by nursing students with online learning, and the correlation between obstacles faced by academic nursing students and their perceptions of online learning are all part of the university discussion (**Zhong, 2020**).

Regarding devices used for online learning activities; the present study revealed that Less than three quarters used their personnel mobile. From the researchers' point of view, the availability of mobile phones with advanced services among the majority of academic nursing students, as well as the capacity to use these services sooner, could be related to the usage of personal mobile phones in online learning.

These results are supported by **Mohammed et al., (2021)** who conducted a study titled "Challenges towards Online Classes during COVID-19 Pandemic" and found that the majority of the studied students are using mobile phones for online learning.

Similarly, in Egypt a study done by (**Diab and Elgahsh, 2020**), titled the Obstacles Faced with E-learning During COVID-19 Pandemic and its effect on students' attitudes, and reported that more than three-fifths of the students used their mobiles for their online learning and had an Internet facility at home.

The results of the present study indicated that the most used platform among academic nursing students was the Microsoft platform followed by a WhatsApp group. These results are not in the same line with **Mohammed et al., (2021)** who studied in India "Challenges towards Online Classes during COVID-19 Pandemic" and observed that Google meets followed by WhatsApp group.

The present study showed that The obstacles in online learning faced by the academic nursing students were ranked as the first one was concerned the Learners' characteristics dimension, followed by the infrastructure and technology dimension, then the Technical and Management support dimension, the curriculum content dimension, and finally the instructors' characteristics dimension. These findings could be linked to students' ineffective preparation for using models and program for the application of online learning assigned by the ministry of higher

education, as well as the staff's preparation for using these program and well-trained on their application with instructions to prepare courses and curriculums electronically before the start of the academic year, giving educational staff enough time to prepare.

This result is in the same line with **Vershitskaya et al., (2020)** who performed a study about " Present-day management of universities in Russia: Prospects and challenges of e-learning" and observed that lack of infrastructure and poverty are the main challenges of online -learning. Also, **Aljaraideh and Al Bataineh, (2019)** studied "Barriers of Utilizing Online Learning among Jordanian Students" and reported that the major barrier with online learning is the poor infrastructure.

Similarly, **Ali, et al., (2018)** who done a study titled " A conceptual framework highlighting e-learning implementation barriers " and found that the main barriers of online -learning are technical difficulties including lack of technical support, inefficient computer systems, and connectivity issues. In addition, (**Mohammad Zadeh et al., 2017**) studied "Critical Success Factors for Electronic Learning from the Perspectives of Faculty Members and Experts in Tehran University" and found that technical support services can motivate, or hinder the continuity of e-learning based on its efficiency.

According to the findings of this study, over two-thirds of students were dissatisfied with their online learning experience. According to the researchers, this could be because the learner is more separated from other pupils in the virtual learning environment. Students do not have the opportunity to interact physically with their peers. Students may feel left in the dark due to a lack of face-to-face connection unless they communicate with the educator and obtain timely responses. The difficulties of time and effort are also prevalent concerns for many online students.

This result is matched with a study done by **Singleton, Song, Hill, Koh, Jones, and Barbour (2016)** who studied " Online learning: Perceptions of useful and challenging characteristics " and found that students seemed to prefer to attend class rather than take the course online because they are more familiar with the traditional teaching and learning environment.

Also, **Ali, (2017)** found in his study about " Factors Affecting Nursing Student's Satisfaction with E-Learning Experience " that more than half of students were unsatisfied with their experience with an online learning experience.

The findings of the current study showed that less than half of the academic nursing students have a moderate perception level toward online learning. This could be due to the ease with which online learning can be obtained, as well as the constant availability of distant learning resources and media. This finding could be explained by the students' concern of being contacted by each other during the pandemic, as well as their previous positive experiences with online learning from previous studies.

These findings could be linked to the accessibility of online learning. Total benefits and cooperation were high in online learning, which may be due to students' desire to be more involved in the learning process, which gave them more opportunities to gain a higher level of usefulness from the studied courses; and many students were unable to attend lectures due to illness, COVID-19, or fear of infection.

The result is in the same line with a study was conducted by **(Betihavas et al., 2016)** who assessed the evidence for 'flipping out in nursing education at the classroom. In addition to a meta-analysis by **(Hew and Lo, 2018)** evaluated the effect of the Flipped classroom on students' learning; and reported that online learning causes neutral or positive academic outcomes among undergraduate nurses students.

Another study in Egypt on 450 undergraduate students by **(Kaoud et al., 2021)**, explores the attitudes and challenges faced by students in online learning throughout the COVID-19 pandemic; and found that more than three-fifths of the undergraduate students from the schools of business in three different universities in Egypt believed that learning in class was not the same as learning at home on the internet and they cannot complete an online course without difficulties.

The current study discovered a positive statistically significant correlation was detected between total perception score and total obstacle score among studied academic nursing students for online learning. From the researchers' point of

view, it indicates that the presence of many obstacles leads to low perception.

Results of the current study highlighted that a positive and significant correlation was observed between the total perception of the studied academic nursing students regarding online learning and demographic characteristics concerning the students' sex and residence. From the researchers' point of view, this result reflects males have had the freedom to use mobile and the internet. Regarding residence, it can be explained by that urban residence has a lot of accessibility and availability of internet services than rural areas. This result agreed with a study performed by **(Diab and Elgahsh, 2020)** who found the same result.

Limitation of the study:

The researchers can interviewed with the academic nursing students face to face through pandemic period and used the online Google form spreadsheet to create the study research.

Conclusion:

In light of the study findings, it was concluded that the most used platform among academic nursing students was the Microsoft platform for online learning. The most obstacles faced by the students during online learning concern the Learners' characteristics dimension, as well as less than two-thirds of the studied academic nursing students, face a high level of obstacles. Also, about two-thirds of students were unsatisfied with their online learning experience. There is a positive statistically significant correlation between total perception and obstacles for online learning. Moreover, there is a positive and significant correlation was found between total perception regarding online learning and the academic nursing students' sex and residence.

Recommendations:

The following recommendations are offered based on the findings of the current study:

- Educating the younger generation of academic nursing students about how to use online learning platforms to transform them into the future through various media and faculties to help academic them become more knowledgeable and skilled

- A combination of online and traditional learning should be merged by providing students and teachers with specialized training on how to use online learning and gain confidence in their use.
- Medical educational institutions should implement online learning in a systematic strategy.
- Additional studies should be conducted to investigate faculty members' attitudes and perceptions of online learning as well as implementation difficulties.
- Future study on the effect of online learning on the academic achievement of nursing students is important.

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