A Comparative Study to Assess the Level of Satisfaction Regarding Traditional Versus Online Learning Among Students of Selected Colleges of Adesh University Bathinda, Punjab

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ABSTRACT

Background: In online learning, learners get the opportunity to access learning materials published by educators and researchers in every corner of the world as long as they have the required equipment and a working internet connection. Offline learning refers to traditional education that allows students to have face-to-face interactions with teachers and peer groups. Although online teaching and learning are considered to be the future of education, they cannot replace offline education in every aspect. This study is to investigate the level of satisfaction among students in online and offline learning.

Objectives: to assess the level of satisfaction of students in online learning**,** to assess the level of satisfaction of students in traditional learning, to compare the level of satisfaction of students in traditional versus online learning**,** to assess the effectiveness of traditional versus online mode of learning and to find association between level of satisfaction among students with their selected social demographic variables.

Materials and Methodology: A quantitative research approach and non-experimental research design was used for the study. Sample size was 180 (90 online and 90 offline) students and sampling technique used was non-probability purposive. A self-structured rating scale was used, to assess level of satisfaction among students. Descriptive and inferential statistics were used to analyse the data. Different diagrams were used to depict the findings and to interpret the data.

Results: The major findings of the present study were 50 (55.55%) students have moderate level of satisfaction followed by 10 (11.11%) students have low level of satisfaction in online learning. Majority 70 (77.77%) students have high level of satisfaction followed by 15 (16.67%) students have moderate level of satisfaction in offline learning. Mean and standard deviation of online learning was 54.8±1.227 and mean and standard deviation of offline learning was 62.42±1.278. Mean score difference was 7.62. Therefore, It shows that traditional learning was effective. t-value was 32.88 with df 178 with p-value 0.0001 at p< 0.05 Hence, shows that traditional learning was effective than online learning. Among all socio-demographic variables Gender, students previous year percentage and Family income were found significant (at p<0.05) association between level of satisfaction among students for online learning. Among all socio-demographic variables only students previous year

percentage were found significant (at p<0.05) association between level of satisfaction among physiotherapy students.

Conclusion: The study concluded that the students prefer offline learning since they can focus, activate and enjoy throughout the session by understanding the content better and do communication easily.

Keywords: Level of satisfaction, learning, college students.

INTRODUCTION

Learning is a process of achieving knowledge, skill and performance. Thus, learning is ultimately considered one of the fundamental pillars of society.[1]

Nowadays, technology has obviously made our lives easier. That means internet technology has been considered as an important medium for many aspects in our lives including academic learning. E-learning or online learning has received much attention in the recent years globally; with an estimated 5-7 million students now are enrolling in at least one online course each year.[2]

To study the impact of E-learning on academic performance, it will be better to be presented with a brief discussion of E-learning concept. Different terminologies had been used to define E-learning. For instance, it has been defined by Jama *et* al as a type or system of learning which is utilizing electronic technologies to access educational curriculum outside traditional classrooms. Sangra, Vlachopoulos and Cabrera defined E-learning as " A method of teaching and learning that fully or partially signifies the educational model used, based on the use of electronic media and devices as tools for enhancing availability of training, communication and interaction that helps in accepting novel ways of comprehending and establishing learning".[3]

Online learning is a form of learning where students and instructors do not meet face to face for teaching and learning to take place compared to traditional learning where there is physical interaction between the instructor and the learners for teaching activities. During covid-19 pandemic, all schools were closed and students at all levels could not attend face to face teaching as all activities were shut down. To this effect, online teaching was introduced which was so instrumental for the successful implementation of course program to prevent break in academic calendar because of shutdown policy, a measure taken to combat the spreading of the disease across board, which prevent the traditional means of teaching to take place.[4]

NEED FOR THE STUDY:

The introduction of multimedia technologies and the internet in learning in many universities has been observed as means of improving accessibility and quality of delivery and learning among the students and teachers. Zameni and Kardan believe that with the widespread use of the internet, knowledge has become more effectively reachable by the mass students, educators and researchers.[5]

Based on the data collected regarding the impact of e-learning on academic achievement, there were conflicting findings in the literature which range from positive, negative or even no significance difference in students' performance between online and live classes respectively. Many researchers believe that technology is a tool that used to remove geographical barriers and to facilitate learning anytime and anywhere without presence of lectures which may fosters deeper learning. They argue that e-learning has many advantages that include flexibility of access from different locations, ease of access to other materials from other sources that including non-educational ones.[6]

Numerous studies authors think that in order to take a real course or a real exam, you

need to be physically present on a certain place like a classroom and have a teacher or trainer to guide you at all times. They reported some disadvantages regarding E-learning such lack of interpersonal skill development, lack of memory and learning development and lack of student motivation. They believe that face-to-face learning provides live interaction with the instructor, beside that face-to-face learning helps students to get organized with their studies.[7]

STATEMENT OF THE PROBLEM
"A comparative study to assess the level of satisfaction regarding traditional versus online learning among students of selected colleges of Adesh University Bathinda, Punjab".

OBJECTIVES
1. To assess the level of satisfaction of students in online learning
2. To assess the level of satisfaction of students in traditional learning
3. To compare the level of satisfaction of students in traditional versus online learning
4. To assess the effectiveness of traditional versus online mode of learning
5. To find association between level of satisfaction among students with their selected social demographic variables

MATERIALS AND METHODS
A quantitative research approach with comparative non-experimental research design was used to assess the level of satisfaction regarding traditional versus online learning among the students of selected colleges of Adesh University, Bathinda. The setting was chosen on the basis of feasibility in terms of availability of samples and cooperation extended by authorities. The population of present study comprises 180 students (60) each from College of Physiotherapy, College of Dental Sciences & Research and College of Pharmacy, Adesh University, Bathinda.

CRITERIA FOR SELECTION OF THE SAMPLE
- Students of College of Physiotherapy, College of Dental Sciences & Research and College of Pharmacy
- Who are present on the day of data collection?
- Who are willing to participate in the study?
- During online those belong to batch 2020-21.

Exclusion Criteria: It includes:
- Who are not willing to participate or busy in their work?
- Who are absent on the day of study?
- For offline any student from all batches.

DATA COLLECTION
The questionnaire was formulated after discussion with the experts in related to the field and on the basis of review of literature. The self- structured rating scale and socio-demographic variables were designed for the samples.

Methods of data collection
Part-A: Includes socio-demographic data such as age, gender, area of residence, source of online class previous year percentage, source of internet at home, method of teaching, family income and type of family.
Part-B: Self structured rating scale was used to assess the level of satisfaction of traditional versus online learning among the selected colleges of Adesh university Bathinda students.

Scoring and interpretation

Level of satisfaction	Score	%
Low	18-42	20-46
Moderate	43-66	47-73
High	67-90	74-100

Data collection procedure: The main study was conducted after receiving the written permission from Principal, College of Physiotherapy, College of Dental Sciences

& Research and College of Pharmacy, Adesh University, Bathinda. It was assured that anonymity of each individual has maintained and written consent was obtained. After that researcher went to the classroom and explained the purpose of study and tool. The tool was made on google forms. The students who met the exclusive and inclusive criteria were selected for the study. Students were selected as a sample by using non-probability purposive sampling technique from each college. The researcher sent the socio-demographic data and rating scale to the students on mobile phones and asked the students to fill the tool by google forms. Time taken by each student to fill the tool was 15-20 minutes. The data was compiled through Microsoft excel.

RESULTS
The data was presented under the following section: -

Section 1: Frequency and percentage distribution of socio-demographic variables

Section 2: Frequency and percentage distribution of students according to their level of satisfaction in online learning.

Section 3: Frequency and percentage distribution of students according to their level of satisfaction in traditional learning.

Section 4: Comparison the level of satisfaction in traditional versus online learning.

Section 5: Effectiveness of traditional versus online mode of learning.

Section 6: Association between level of satisfaction among students with their selected socio - demographic variables.

Table-1 Frequency and percentage distribution of socio-demographic variables of College of Dental Sciences & Research students N-60

S.NO.	DEMODRAPHIC VARIABLES	n	%
1.	**Age (in years)** 18-21 22-24 25-27	49 10 1	81.66 16.67 1.67
2.	**Gender** Male Female	19 41	31.67 68.33
3.	**Area of residence** Urban Rural	43 17	71.67 28.33
4.	**Source for online classes** Zoom Phone/Mobile Chrome/Google/internet/laptop Offline	9 25 11 15	15 41.67 18.33 25
5.	**Student's previous year percentage** 55-75% 76-95% Supple	29 31 0	48.33 51.67 0
6.	**Source of internet at home** Wi-Fi Mobile internet Any other	16 44 0	26.67 73.33 0
7.	**Method of teaching** Online Offline	30 30	50 50
8.	**Family income** Greater than 5 lakhs Less than 5 lakhs	40 20	66.67 33.33
9.	**Type of family** Nuclear Joint	37 23	61.67 38.33

Table-2 Frequency and percentage distribution of socio-demographic variables of Physiotherapy students N-60

S.NO.	DEMODRAPHIC VARIABLES	n	%
1.	**Age (in years)** 18-21 22-24 25-27	19 36 5	31.7 60 8.33
2.	**Gender** Male Female	31 29	51.67 48.33
3.	**Area of residence** Urban Rural	38 22	63.33 36.67
4.	**Source for online classes** Zoom Phone/Mobile Chrome/Google/internet/laptop Offline	30 19 9 2	50 31.67 15 3.33
5.	**Student's previous year percentage** 55-75% 76-95% Supple	51 7 2	85 11.67 3.33
6.	**Source of internet at home** Wi-Fi Mobile internet Any other	16 42 2	26.67 70 3.33
7.	**Method of teaching** Online Offline	30 30	50 50
8.	**Family income** Greater than 5 lakhs Less than 5 lakhs	32 28	55.33 46.67
9.	**Type of family** Nuclear Joint	40 20	66.67 33.33

Table-3 Frequency and percentage distribution of socio-demographic variables of College of B-Pharmacy students N-60

S.NO.	DEMODRAPHIC VARIABLES	n	%
1.	**Age (in years)** 18-21 22-24 25-27	21 34 5	35 56.67 8.33
2.	**Gender** Male Female	34 26	56.67 43.33
3.	**Area of residence** Urban Rural	36 24	60 40
4.	**Source for online classes** Zoom Phone/Mobile Chrome/Google/internet/laptop Offline	32 20 6 2	53.33 33.33 10 3.33
5.	**Student's previous year percentage** 55-75% 76-95% Supple	53 5 2	88.33 8.33 3.33

6.	**Source of internet at home** Wi-Fi Mobile internet Any other	16 43 2	26.67 71.66 1.67
7.	**Method of teaching** Online Offline	30 30	50 50
8.	**Family income** Greater than 5 lakhs Less than 5 lakhs	28 32	53.33 46.67
9.	**Type of family** Nuclear Joint	43 17	71.66 28.33

Analysis:

TABLE-5 Frequency and percentage distribution of students according to level of satisfaction in online learning N-90

S.NO	Level of satisfaction	Score	n	%
1.	High	67-90	30	33.33
2.	Moderate	43-66	50	55.55
3.	Low	18-42	10	11.11

Maximum score = 90
Minimum score = 18

Table 5: depicts that 50 (55.33%) students have moderate level of satisfaction followed by 30 (33.33%) students have high level of satisfaction and 10 (11.11%) students have low level of satisfaction in online learning.

TABLE-6 Frequency and percentage distribution of students according to level of satisfaction in offline learning. N-90

S. No.	Level of satisfaction	Score	n	%
1.	High	67-90	70	77.77
2.	Moderate	43-66	15	16.67
3.	Low	18-42	5	5.55

Maximum score = 90
Minimum score = 18

Table 6: depicts that 70 (77.77%) students have high level of satisfaction followed by 15 (16.67%) students have moderate level of satisfaction and only 5 (5.55%) student have low level of satisfaction in offline learning.

TABLE-7 Compare the level of satisfaction of students in traditional versus online learning.

Mode of teaching	N	Mean		SD	Minimum	Maximum
		Statistic	Std. Error			
Online	90	54.8	1.227	1.344	35	90
Offline	90	62.42	1.278	1.400	18	90

Maximum score = 90
Minimum score = 18

Table 7: depicts that mean and standard deviation of online learning was 54.8±1.227 and mean and standard deviation of offline learning was 62.42±1.278. Mean score difference was 7.62. It was inferred from the above table that traditional learning was effective.

TABLE-8 Effectiveness of traditional versus online Learning N=180

S. No	Mode of Teaching	N	T	df	p-value
1.	Online	90	32.88	178	0.0001
2.	Offline	90			

Maximum score = 90   *Significant (p<0.05)
Minimum score = 18

Table 8: The above table shows the effectiveness of traditional learning than online learning.

To find association between level of satisfaction among students with their socio-demographic variables: Among all socio-demographic variables Gender, students previous year percentage and Family income were found significant (at p<0.05) association between level of satisfaction among students for online learning.

Association between level of satisfaction with their selected demographic variables in offline learning: Among all socio-demographic variables only students previous year percentage were found significant (at p<0.05) association between level of satisfaction among physiotherapy students.

DISCUSSION
The similar study was conducted by **Shachar and Neumann (2010)[8]** The findings of their study indicated that significant difference in the final grades students enrolled in distance learning and face to face learning. The ratio of positive effect sizes across time improved steadily from 63% up to 84%.

The similar study was conducted by **Padmalini Singh et al (2021)[9]** conducted a study among 100 respondents regarding comparative study on effectiveness of online and offline learning in higher education in India, Indonesia and Malaysia. The results of the study revealed that offline learning is effective than online learning.

CONCLUSION
The face to face learning method has been shifted by the online learning process due to the COVID-19 pandemic in every country around the world. Many students and teachers are forced to use online learning tools to teach their students. Hence, many teachers and students have changed their ways in the learning methods and they also suggested that online learning have changed their ways in the learning. The pandemic COVID-19 situations online learning is enormously beneficial in these times of lock down and limitations. The teaching learning activities are done satisfactorily. However, the network problems become the main problem in online learning methods. In addition, based on the results found that many students would like to prefer offline learning. The students prefer offline learning since they can focus, activate and enjoy throughout the session by understanding the content better and do communication easily.

The major findings of the study were as follows:

90 students participated in the online learning,
- 50 (55.55%)) Majority of students have moderate level of satisfaction
- 30 (33.33%) students have high level of satisfaction
- and 10 (11.11%) students have low level of satisfaction in online learning.

90 students participated in the offline learning,
- 70(77.77%) Majority of students have high level of satisfaction
- 15 (16.67%) students have moderate level of satisfaction
- and only 5 (5.55%) student have low level of satisfaction in offline learning.
- Mean and standard deviation of online learning was 54.8±1.227 and mean and standard deviation of offline learning was 62.42±1.278.

Nursing Implications
Nursing Education:
Findings of the study have some implications for nursing education. Finding of the study can help in preparation of lesson plan about the level of satisfaction in learning. The nurse educator plays a vital role in organizing health education campaign regarding satisfaction of learning in schools, colleges and community areas.

Nursing Practice:
Nurses are playing major role in the health promotion and maintenance of health. The nurses need to have knowledge regarding level of satisfaction. Nurses should plan strategies based on principles of how students learn, enable learning. E-learning programs with proper strategies needs to enhance the students' clinical skills.

Nursing administration:
The nurse administrator should formulate policies, protocols, guidelines and system of care in collaboration with the multi-disciplinary team. Nurse administrator ensures professional practice with evidence-based research which is clinically effective.

Nursing research:
Research has the character of depending. This study references to the scholars, especially the beginners. Detailed studies can be taken up in same area and skill can be tested further. It also helps in motivating the research modification of the teaching programme especially learning through online and offline methods are only possible through the research.

Recommendations:
- ❖ Study can be conducted on large sample to validate and to make generalization of the findings.
- ❖ Impact of online classes on the satisfaction and performance of student's.
- ❖ The efficacy and acceptance of online vs offline learning in medical student's education.
- ❖ Student's perception and preference for online vs offline education.

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