

A NON-EXPERIMENTAL STUDY TO ASSESS THE LEVEL OF PERCEPTION, PERFORMANCE AND SATISFACTION TOWARDS ONLINE LEARNING DURING COVID-19 PANDEMIC AMONG UNDERGRADUATE PHYSIOTHERAPY STUDENTS IN EMAAR GREENS, JAIPUR

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ABSTRACT

E-learning plays a vital role in this current scenario among students across the globe. The aim of this study was to evaluate the level of perception, performance and satisfaction regarding online learning during Covid-19 pandemic among undergraduate physiotherapy students. A quantitative approach with a non-experimental descriptive research design with 60 undergraduate physiotherapy students were recruited as study participants using a non-probability sampling technique for this study.

According to the research study conducted by Abbasi Maria S. in 2020 stated that E-learning satisfaction levels were better among developed countries (7.34) compared to developing countries (5.82). The majority of participants agreed that E-learning was satisfactory in acquiring knowledge, however not effective in acquiring clinical and technical skills. As the COVID-19 lockdown eases, there is a need for improvement in the methods employed in E-learning and more blended learning among healthcare students is recommended.

Data were collected using a self-structured questionnaire both for demographic information and to assess their level of perception, performance and satisfaction with online learning. The result of this study showed that the majority (50%) of the 30 physiotherapy students were between the ages of 19 and 20. By gender, 39 (65%) were women. In terms of religion, 38 (63.3%) were Hindu. 42 (60%) of them in the Bachelor of Physiotherapy program were in their junior year. Regarding prior information, 36 (60%) received updates via social media. It has also found that the current Level of Awareness, Performance and Satisfaction of Physiotherapy Students with Online Learning 7%) were found to have moderate awareness. Low awareness, 8 people (13.3%) had high awareness. Current online learning outcomes were 44 (73.3%) fair, 13 (21.7%) good and 3 (5%) bad. Current satisfaction results showed that 44 people (73.3%) were moderately satisfied with online learning, 12 people (20%) were very satisfied, and 4 people (6.7%) were not satisfied.

For this study, the mean score and standard deviation of current level of perception, performance and satisfaction with online learning among undergraduate physiotherapy students were 31.28 ± 6.27 , 33.20 ± 5.54 , 33.35 ± 6.29 with a minimum score of 14.0, 15.0 and 10.0, maximum score 43.0, 50.0 and 50.0.

Furthermore, it has also showed that the association between current level of perception, performance, and satisfaction with online learning among undergraduate physiotherapy students with their selected demographic variables None of the demographic variables showed a statistically significant relationship with current level of perception, performance, and satisfaction with online learning among undergraduate physiotherapy students. The aim of this study was to evaluate the level of perception, performance, and satisfaction regarding online learning among undergraduate physiotherapy students during covid-19 pandemic in Emaar Greens, Jaipur. Therefore, it was concluded that the current level of perception and satisfaction was average with fair performance towards online learning among undergraduate physiotherapy students.

KEYWORDS: *Online learning, perception, performance, satisfaction, undergraduate physiotherapy students and COVID-19 pandemic*

INTRODUCTION

Online learning is often used in student training – not as a stand-alone technique, but in combination with a traditional learning guide approach. E-learning, which includes online education and training, has been known for decades. Many research papers, theories, presentations, quality criteria and evaluations focus on standard e-learning, online teaching and online course design. The eLearning administrative structure will be used to facilitate face-to-face training at multiple institutions. There are many factors that shape and determine a student's perception of an online learning management system. Online education is a constantly evolving way of learning. Online students learned among mail, television, and telegraph in the first half of the 20th century, and learning occurred among new technologies such as tape, the Internet, e-learning, and videoconferencing in the second half of the century. Distance learning is also known as e-learning, online learning, computer-based learning, Internet learning, guided learning, online electronic learning, or Internet learning. The use of online education is not new in some parts of the world. The rapid growth of computer and World Wide Web technologies has completely expanded teaching and learning methods. Distance education allows teachers and students to change the nature of education and the details of transportation in different areas. E-learning formats vary across the web. For example, including satellites, technology includes the laptops and phones you use. E-learning takes the form of routes and elements and small learning articles. Online learning is gaining wide acceptance and is primarily seen as a leading approach that can overcome the limitations of on-campus learning in higher education technology. This is generally based on technology-related beliefs and perceived usability. E-learning systems use interactive (offline) value and (online) learning decay to significantly increase learning progress and duration. In the educational kingdom of the modern world, e-learning is becoming the norm. Massive open online courses are open online learning environments in which students and teachers contribute beyond the scope of regular online courses. Students identified the biggest barriers to online learning as lack of community, technical issues, and difficulty understanding the purpose of the lesson. People will be happy to watch modern changes instead of educational activities. students and teachers see e-learning technology as a positive part of their education system. The development and modification of traditional educational courses to provide e-learning presents many opportunities for educational institutions and potential students. Online learning also becomes a way for students to learn other classroom activities. Therefore, its objective was to assess the relationship between undergraduate physiotherapy students' current level of student perception, performance, and satisfaction with online learning and undergraduate physiotherapy students' level of perception, performance, and satisfaction with online learning. was to make demographic variables

LITERATURE REVIEW

S. Bali1 and M C Liu (2019), Students' perceptions toward online learning and face-to-face learning courses. The research paper examined the implications of online learning versus face-to-face learning have been discussed for several years in higher education. This study examined the issues of student perception toward online learning and face-to-face learning in the context of social presence, social interaction, and satisfaction in Indonesia Open University, Taiwan branch (n=107). The comparison of the online group and the face-to-face group conducted to explore student-learning perceptions regardless of the course delivery method and the online environment. The result of this study indicate that face to-face learning perception was higher than online learning in term of social presence, social interaction, and satisfaction. However, there is no statistically significant difference in learning preference found among level of student. Meanwhile, some students were very comfortable in online learning since it led them to the chance to being innovative by using computer technology.

T. Muthuprasad·S. Aishwarya·K.S. Aditya·Girish K. Jha (2021), Educational institutes across the world have closed due to the COVID-19 pandemic jeopardizing the academic calendars. His research article indicates that most educational institutes have shifted to online learning platforms to keep the academic activities going. However, the questions about the preparedness, designing and effectiveness of e-learning is still not clearly understood, particularly for a developing country like India, where the technical constraints like suitability of devices and bandwidth availability poses a serious challenge. In this study, we focus on understanding Agricultural Student's perception and preference towards the online learning through an online survey of 307 students. We also explored the student's preferences for various attributes of online classes, which will be helpful to design effective online learning environment. The results indicated that majority of the respondents (70%) are ready to opt for online classes to manage the curriculum during this pandemic. Majority of the students preferred to use smart phone for online learning. Using content analysis, we found that students prefer recorded classes with quiz at the end of each class to improve the effectiveness of learning. The students opined that flexibility and convenience of online classes makes it attractive option, whereas broadband connectivity issues in rural areas makes it a challenge for students to make use of online learning initiatives. However, in agricultural education system where many courses are practical oriented, shifting completely to online mode may not be possible and need to device a hybrid mode, the insights from this article can be helpful in designing the curriculum for the new normal.

Abbasi Maria S (2020), E-Learning perception and satisfaction among health sciences students amid the COVID-19 pandemic. In his article, E-learning is increasingly used during the COVID-19 pandemic, however the impact of this

change on students is not known. This study aimed to evaluate perception and satisfaction of health sciences students towards E-learning during the COVID-19 lockdown. A structured questionnaire was distributed to 2000 health care students either through email or social media platforms. The questionnaire was divided into two sections: the first section addressed demographic information such as age, education level, course of study, number of lectures attended and country. The second section gathered information on perception and satisfaction of students using 13 close-ended questions. Frequencies and percentages were assessed for demographic data, perception and satisfaction level of students. The paired sample *t*-test, independent *t* test and Spearman correlation were applied to evaluate statistical significance between different variables of the study. A *p*-value of <0.05 was considered significant.

Data from 1255 participants were included at a response rate of 66.4%. More than one third (37%) of the students took 25 or more online E-learning sessions and 47% preferred Zoom as an online platform. Participants belonged to 11 countries from developed and developing nations. 41% reported interference of E-learning due to network problems. 60% considered that clinical and practical skills are best learned in clinics and laboratories. More than one third of the students preferred classroom teaching and 34% of the students did not feel confident enough to take exit exams after E-learning sessions.

E-learning satisfaction levels were better among developed countries (7.34) compared to developing countries (5.82). The majority of participants agreed that E-learning was satisfactory in acquiring knowledge, however not effective in acquiring clinical and technical skills. As the COVID-19 lockdown eases, there is a need for improvement in the methods employed in E-learning and more blended learning among healthcare students is recommended.

Research Methodology

1. Research Approach: Quantitative approach
2. Research Design: Non-experimental descriptive study design was chosen for this study
3. Setting of the Study: The study was conducted at Emaar Greens, Jaipur
4. Population: The target population selected for this study comprised of undergraduate physiotherapy students living in Jaipur greens, Jaipur
5. Sample Size: The aggregate of 60 physiotherapy students was selected for this study
6. Sampling Technique: Convenience sampling is used in the study
7. Criteria for sample selection
 - Inclusion criteria:
 - College students aged 17 to 21 years who live in Emaar greens, Jaipur who use smartphones with adequate internet connectivity and regularly attend online sessions
 - It consists of both sexes and well verse and well-read students
 - Those are willing to participate in online sessions
 - They are fluent in Hindi and English
 - Exclusion Criteria:
 - The students living in poorly connected areas
 - They are not available for the duration of the study
8. Description of the study tool:
 - Part-1- Demographic variables such as age, religion, educational status, occupation, place of work, years of experience
 - Part-2 - Semi structured questionnaire was used to assess the perception, performance and satisfaction towards online learning
9. Validity: The constructed tool along with blueprint and objectives of the study were given to five experts for content validity. After establishment the validity of the tool was translated into Hindi and again translated into English to validate the language
10. Pilot Study: The pilot study was conducted at Emaar greens, Jaipur. The study was carried out on 60 students who fulfilled the inclusion criteria of the sample. It was carried in the similar way as the final study would be done
11. Data Analysis: The data were statistically analyzed by using descriptive (frequency, percentage, mean) and inferential statistics. Descriptive and inference statistics was used to find the level of perception, performance and satisfaction level among students

Results and Discussion

Part A: Demographics of the 60 study participants, the majority (50%) of the 30 physiotherapy students were between the ages of 19 and 20. By gender, 39 (65%) were women. In terms of religion, 38 (63.3%) were Hindu. 42 (60%) of them in the Bachelor of Physiotherapy program were in their junior year. Regarding prior information, 36 (60%) received updates via social media.

Part B: Current Level of Awareness, Performance and Satisfaction of Physiotherapy Students with Online Learning 7% were found to have moderate awareness. Low awareness, 8 people (13.3%) had high awareness (Table: 1 and Figure: 1)

Current online learning outcomes were 44 (73.3%) fair, 13 (21.7%) good and 3 (5%) bad (Table: 2). Current satisfaction results showed that 44 people (73.3%) were moderately satisfied with online learning, 12 people (20%) were very satisfied, and 4 people (6.7%) were not satisfied. (Table: 3).

Table 1: Frequency and percentage distribution of current level of perception of online learning among undergraduate physiotherapy students.

Current level of Perception	Frequency (No.)	Percentage (%)
Poor ($\leq 50\%$)	10	16.7
Moderate (51 – 75%)	42	70.0
Good ($< 75\%$)	8	13.3

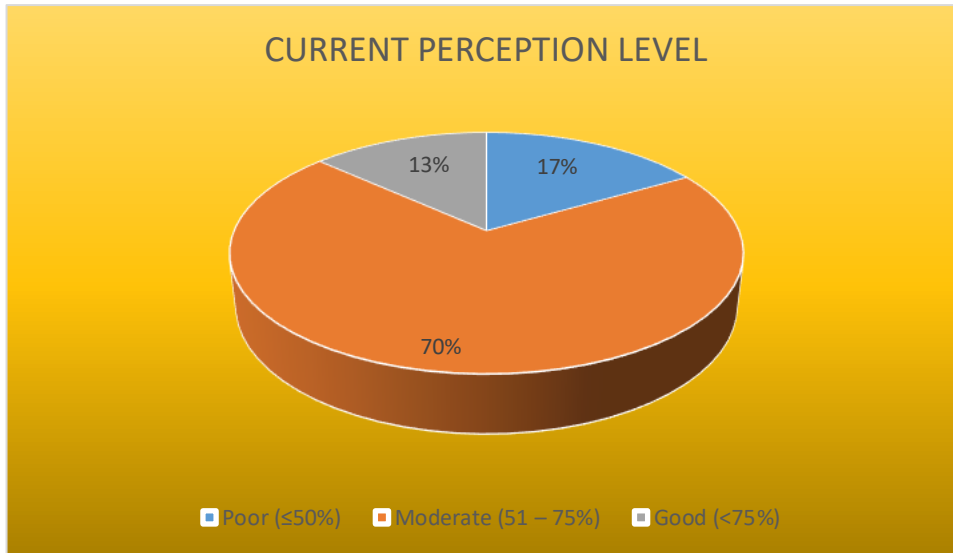


Figure-1

The results of this study are supported by a study by Michal Baczko (2021) which aims to evaluate the level of perception of online learning among students during this COVID 19 pandemic. The results of the study concluded that out of 804 samples, 451 (56%) were good, 337 (42%) medium, 16 (2%) poor. Thus, it is concluded that there is a need to implement different teaching methods in conducting online learning for students.

Table 2: Frequency and Percentage Distribution of Current Level of Satisfaction with Online Learning Among Undergraduate Physiotherapy Students

Current Level of Performance	Frequency (No.)	Percentage (%)
Poor ($\leq 50\%$)	3	5.0
Fair (51 – 75%)	44	73.3
Good ($> 75\%$)	13	21.7

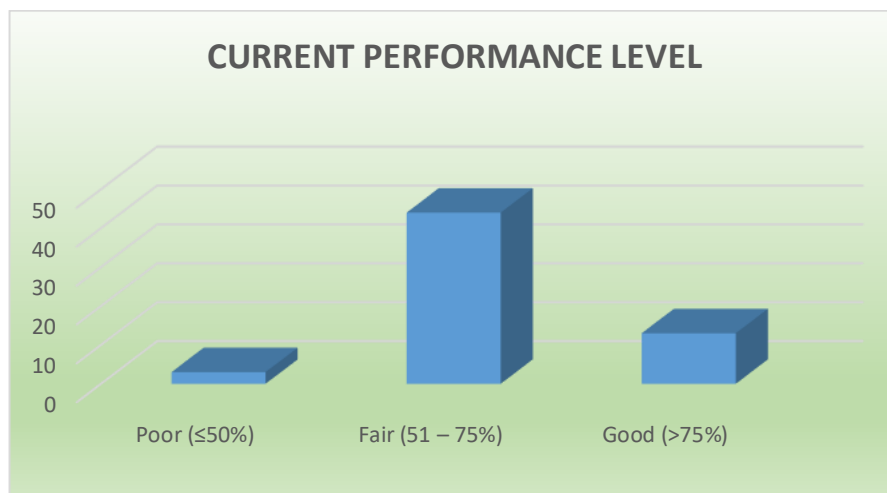


Figure-2

The present study findings is supported by a study conducted by Ryan micheal F Oducado, Homelo V. Estoque (2021) aiming in assessing the undergraduate physiotherapy students stress, satisfaction and academic performance towards online learning. The study results concluded that, out of 108 study participants 40 (37%) were poorly performed, 54(50%) were performed fairly and 10(9.3%) were good performance. Hence, it was concluded that, the students' performance was fair during online learning.

Table 3: Frequency and percentage distribution on current level of satisfaction towards online learning among undergraduate physiotherapy students

Current level of Satisfaction	Frequency (No.)	Percentage (%)
Low	4	6.7
Moderate	44	73.3
High	12	20.0

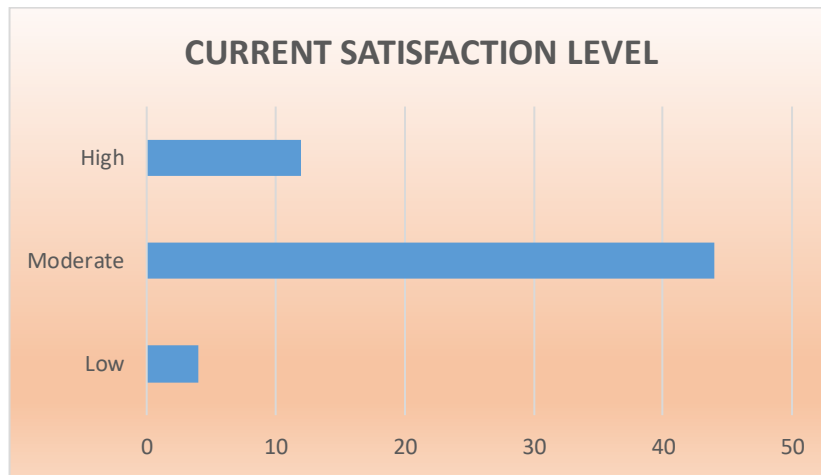


Figure-3

This study finding is supported by a study conducted by Enco Surahman (2020) to assess the level of student satisfaction with the quality of online education during the COVID 19 pandemic. The results of the study concluded that out of a sample of 224, 19% were very satisfied, 41% were satisfied, 30 % were dissatisfied and 10% were very dissatisfied with online learning. Thus, it was concluded that the level of satisfaction of students with online learning was satisfied.

Table 4: Evaluation of Perception, Performance, and Satisfaction Scores Towards Online Learning Among Undergraduate Physiotherapy Students

Variables	Current Level of		
	Perception	Performance	Satisfaction
Minimum score	14.0	15.	10.0
Maximum score	43.0	50.	50.0
Mean	31.28	33.20	33.35
S.D	6.27	5.54	6.29

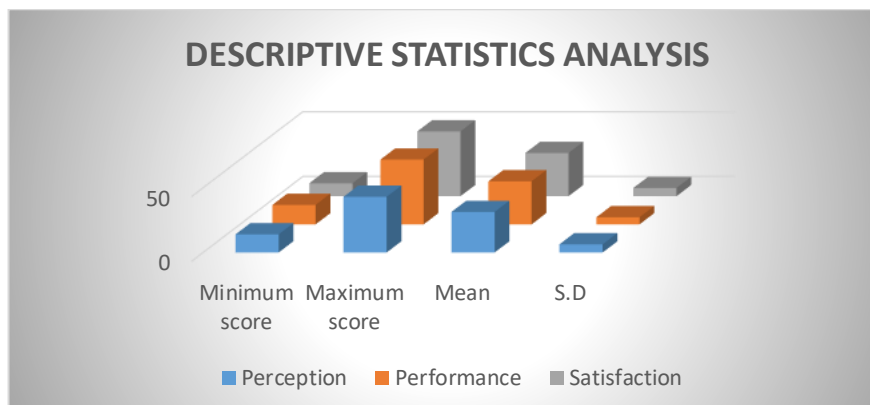


Figure-4

For this study, the mean score and standard deviation of current level of perception, performance, and satisfaction with online learning among undergraduate physiotherapy students were 31.28 ± 6.27 , 33.20 ± 5.54 , 33.35 ± 6.29 with a minimum score of 14.0, 15.0 and 10.0, maximum score 43.0, 50.0 and 50.0.

Part C: Association between current level of perception, performance, and satisfaction with online learning among undergraduate physiotherapy students with their selected demographic variables None of the demographic variables showed a statistically significant relationship with current level of perception, performance, and satisfaction with online learning among undergraduate physiotherapy students.

CONCLUSION

The aim of this study was to evaluate the level of perception, performance, and satisfaction regarding online learning among undergraduate physiotherapy students during covid-19 pandemic in Emaar Greens, Jaipur. Therefore, it was concluded that the current level of perception and satisfaction was average with fair performance towards online learning among undergraduate physiotherapy students.

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