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## [ORIGINAL ARTICLE]

# Perception of Physiotherapy Students on Virtual Classes.

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## **ABSTRACT:**

**Background-** Due to the COVID-19 pandemic Indian governments had issued stay-at-home directives, and as a result, colleges and universities have been shut down across the world. The major response to the pandemic has been to try to move both teaching-learning and assessment lectures online. So, studying the student's perception of virtual classes is a must to consider the views. This study is important because of the physiotherapy profession's practical and skill-based practice, it is vital that we not lose focus on the non-technical skills that are required for effective clinical practice.

**Methodology** - This is an observational study with a study duration was of 1 year. All physiotherapy students from DVVPF'S college of physiotherapy were recruited by purposive sampling method by using a google form.

**Result-** Data has been summarized by using the descriptive analysis method. Our data showed that 108 undergraduate physiotherapy students answered the questionnaire. They shared their experiences about online classes as compared to offline classes, they shared firstly about communication skills. In online classes students experienced that it does provide a platform to improve communication skills most of the time, & sometimes challenges due to the online environment during an emergency may delay the adoption of technology-enabled education, some students have technophobia because of that they cannot communicate on online classes or they faced difficulties.

**Conclusion-** Our study revealed that on basis of the experiences of physiotherapy students' actual classes are much more efficient and productive as compared to virtual classes.

**Keywords-** Perception, Virtual classes, Physiotherapy students, Actual classes.

### Introduction

The coronavirus illness 2019 (COVID-19) widespread has affected all viewpoints of our lives, counting instruction and the economy, as we know it. Indian governments had issued stay-at-home mandates, and as a result, colleges and colleges have been closed down over the world. Subsequently, online classes have ended up a key component within the coherence of instruction [1]. Colleges have moreover attempted to move clinical learning and instructing communication abilities online utilizing standardized patients and facilitators [2]. The consequent execution of social removing (i.e., expanding the physical space between individuals) amid the COVID-19 widespread has constrained

colleges and colleges to purge their classrooms and keep the understudies absent from the teach <sup>[7]</sup>. Thus, there has been a common move from conventional face-to-face instruction to online educating. Most educate have switched to separate learning within the easiest and most helpful ways conceivable, counting conferencing stages, email, and phone <sup>[1]</sup>.

A virtual classroom is an online system that allows students and teachers to connect and cooperate while they are in a different place from their teacher or other students in their class <sup>[5]</sup>. A learning environment that takes place over the Internet is known as online learning. It gives a path for humanity's evolution during times of physical isolation caused by pandemics. Online learning is

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advantageous since it is readily available and allows for flexible scheduling <sup>[4]</sup>. Learners in this system use the Internet to communicate electronically with their teachers and fellow students using email, WhatsApp, videoconferencing, instant messaging, and other methods <sup>[4]</sup>. To limit travel and illness exposure, all lectures and interviews this year are likely to be conducted by ZOOM, Skype, Google Meet, or another online platform rather than in person<sup>[3]</sup>.

Time management, usage of digital tools, students' assessment, communication, and the loss of inperson connection have all been noted as challenges to online education in health science students [9,11]. Furthermore, online education may not be equal in terms of access or instructional quality [10]. Some pupils lack access to laptop computers or highspeed internet at home. Furthermore, for reasons such as technophobia [12], elderly internet users gain the least from online education. Many instructors themselves are technophobic, i.e., they are frightened or not confident enough about working with computer hardware and software in their classrooms [13]. Challenges to the online environment during an emergency may impede the uptake of technology-enabled education [14].

It is critical that we do not lose sight of the non-technical abilities that are essential for good clinical practise in the physiotherapy profession's practical and skill-based practise. Reflection and other general abilities are widely documented in the development of practise knowledge in health professionals <sup>[6]</sup>. Academic and community teaching faculty's practises have been harmed, limiting their ability to enrol students in clinical healthcare education. Clinical healthcare education can be

effective in facilitating learning environments that encourage the development of clinical skills such as collaboration, reflection, and knowledge sharing.

## Methodology

This was an observational study of 6 months. All physiotherapy students from DVVPF'S college of physiotherapy were recruited using the purposive sampling method by using a google form. While inclusion criteria were all undergraduate physiotherapy students who are attended online classes and who are willing to participate in the study.

#### **Procedure**

Institutional ethical committee approval was obtained before the commencement of the study. the subjects were selected according to the inclusion criteria of the study. The entire study was conducted using "Google Form" to obtain responses from physiotherapy students.

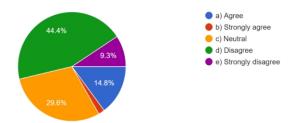
# Self-Structured Questionnaire for Physiotherapy Student's Perception on Virtual Classes:

- It consists of 9 closed-ended questions, which include participant's demographic data and their experiences about virtual classes during lockdown due to the COVID-19 pandemic.
- The final survey link was distributed among the students in the form of "Google Form" via a media platform using WhatsApp.
- Sampling method: Purposive sampling technique
- Content of the survey questionnaire:
- This questionnaire is easy to administer and requires 5 minutes for completion.

#### **Result:**

1. Rate your opinion of the statement "virtual classes facilitate the learning progress in the same manner when compared to face to face classes"

108 responses

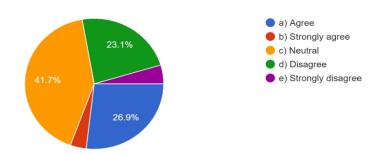


**Table no. 1:** shows 44.4% of students disagree and only 1.2% strongly disagree. It is concluded that of majority of students disagree that mainly in physiotherapy virtual classes cannot facilitate the learning process in the same manner when compared to face-to-face classes.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	16	2	32	48	10
Percentage %	14.8	1.2	29.6	44.4	9.3

2. Based on your experience, do virtual classes play significant role in enhancing communication skills?

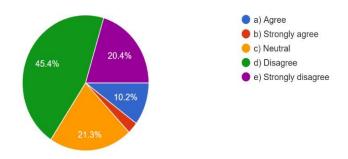
108 responses



**Table no. 2** shows (41.5%) 45 students out of 108 gives neutral response to this question. It is concluded that based on student's experience it does gives you a platform to improve communication skill most of the time

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	29	4	45	25	5
Percentage %	26.9	3.7	41.7	23.1	4.6

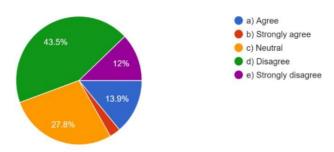
3. Do you prefer using virtual class in your learning rather than face to face classroom sitting?  $_{108\, responses}$ 



**Table no.3** shows 45.5% of students disagree and only 2.8% of students strongly agree. It is concluded that the majority of physiotherapy students do not prefer virtual classes in their learning.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	11	3	23	49	22
Percentage %	10.2	2.8	21.3	45.4	20.4

4. Do you think in online lectures knowledge convenable as like actual classes? 108 responses

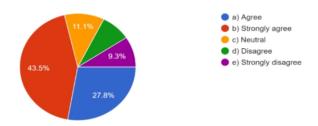


**Table no.4 s**hows 43.5% of students disagree and 2.8% of students strongly agree. It is concluded that the majority of students do not think that online lectures are knowledge conveyable as like actual classes.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	15	3	30	47	13
Percentage %	13.9	2.8	27.8	43.5	12

5. Do you think that practical sessions are informative in actual classes as compare to online classes?

108 responses

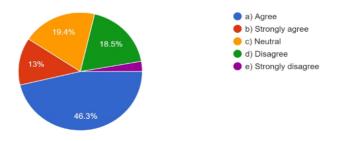


**Table no.5** shows 43.5% of students strongly agree and 8.3% of students disagree. It is concluded that the majority of students think that as compare to online classes, practical sessions are more informative in actual classes.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	30	47	12	9	10
Percentage %	27.8	43.5	11.1	8.3	9.3

6. Do you feel any difficulties while asking questions during online classes rather than actual classes?

108 responses

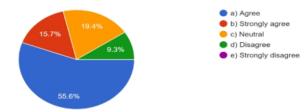


**Table no.6** shows 46.3% of students agree and 2.8% of students strongly disagree. It is concluded that the majority of students feel difficulties while asking questions during online classes rather than actual classes.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	50	14	21	20	3
Percentage %	46.3	13	19.4	18.5	2.8

7. Do you feel any difficulties to understand any concept in online teaching compare to actual teaching?

108 responses

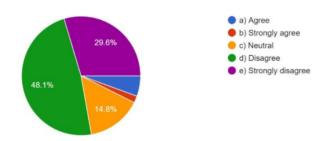


**Table no.7** shows 55.6% of students agree and 9.3% disagree. It concluded that most of the students feel difficulties to understanding any concept in online teaching compare to actual teaching.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	60	17	21	10	0
Percentage %	55.6	15.7	19.4	9.3	0

8. Do you find online study is better than offline?

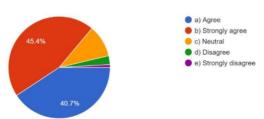
108 responses



**Table no.8** shows 48.1% of students disagree and 1.9% of students strongly agree. It concluded that the majority of physiotherapy students think that offline study is better than online study.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	6	2	16	52	32
Percentage %	5.6	1.9	14.8	48.1	29.6

9. Do you get any technical errors during online lectures? 108 responses



**Table no.9** shows 45.4% of students strongly agree and 0.9% of students strongly disagree. It concludes that the majority of students get technical errors or technical problems during online lectures.

	Agree	Strongly agree	Neutral	Disagree	Strongly disagree
No. of students	44	49	11	3	1
Percentage %	40.7	45.4	10.2	3	0.9

#### Discussion:

We are currently in the midst of a historic academic crisis. COVID-19 has shattered our society's foundations. Universities and colleges all throughout the world have shuttered, and online education has become the norm. The most significant response to the pandemic has been to transfer both teaching-learning and assessment lectures online. [1] To consider the viewpoints, it is necessary to investigate the students' perceptions of virtual classes. There have been concerns raised around the world about the utility and format of preclinical content taught in junior medical programmes, particularly lectures. However, there is growing evidence that blended approaches to education meet learners' expectations for connectivity, flexibility, and interactivity, and have the potential to combine the best of both online and face-to-face teaching.

This study provides data on an initial attempt to integrate online modules in a traditional class, moving toward the model of blended or online instruction.

Students shared their experiences of common problems associated with online classes as compared to offline or actual classes. These are based on (a) communication skills, (b) knowledge, (c) about practical sessions, (d) About difficulties faced by students while asking questions, (e) understanding, (f) technical errors or difficulties. Mohammad H. Rajab, Abdalla M. Gazal Et Al. also study on challenges to online medical education during the covid-19 Pandemic.

Our data showed that 108 undergraduate physiotherapy students answered the questionnaire. They shared their experiences about online classes as compared to offline classes, this they shared firstly about communication skills, in online classes based on students experiences it does provide a platform to improve communication skills most of the time but sometimes challenges to the online environment during an emergency may delay the

adoption of technology-enabled education, some students have technophobia because of that they cannot communicate on online classes or they faced difficulties during online classes.

Because the physiotherapy profession is built on practical and skill-based practise, it is critical that we do not lose focus on the non-technical abilities that are essential for effective clinical practise. [6] Academic and community teaching faculty's practises have been harmed, limiting their ability to enrol students in clinical healthcare education. Clinical healthcare education can be effective in facilitating learning environments that encourage the development of non-technical skills such as collaboration, reflection, and knowledge sharing. As a result, more than 70% of students respond in a feverish manner to actual sessions; based on our findings, actual classes are more knowledge-convenient than online ones.

The study showed that about 46.3% are agreed and 13% of undergraduate physiotherapy students are strongly agreed with they are faced more difficulties while asking questions in online classes but in actual classes, students are easily asked questions by their professors. In online classes students also faced some technical issues or problems, some students do not have access to laptops, or high-speed internet at home because of that they can't attend lectures most of the time. Also, older internet users benefit the least from online education for reasons such as technophobia. [12] Many teachers themselves are technophobic, i.e., they are worried or not confident enough about dealing with computer hardware and software in their classrooms and also teaching in online classes. [13]

Practical and clinical sessions are more difficult to take online because students face more difficulties in online practical sessions and it is very difficult to understand in online classes. Practical and clinical sessions are more based on the skills of the students that they performed on patients. According to our research, roughly 48 percent of undergraduate

physiotherapy students disagree and about 28 percent strongly disagree that online study is superior than offline study.

#### **Conclusion:**

Our study revealed that on basis of the experiences of physiotherapy students' physical classes are much more efficient and productive as compared to virtual classes.

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#### Conflict of interest - None

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