

# Online Examination During Covid- 19 Pandemic-Phyiotherapy Student's Perspective

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**Abstract:** In today's world Teaching has been continuously evolving to accommodate the new ways of using the Internet and technology, whereas the exam format is generally conducted in the same, paper-and-pen way. Online examination has become important these days due to the Covid -19 pandemic. This study was undertaken to explore the advantages and disadvantages of online exam taken during Covid -19 pandemic. Physiotherapy student's perception of online exams was studied, with the help of a self-created questionnaire. Reliability was checked using Cronbach's alpha method. Purposive sampling was used to ensure maximum participation. 295 physiotherapy students responded for the study. All students showed enthusiasm for the future use of online exam format. Online examinations are more economical and environmental friendly, it needs due consideration in education sector for future permanent implementation

**Keywords:** Online testing, Exam, Environment, education, survey, internet, technology.

## Introduction:

In this Globalized World where learning is a mouse-click away, Covid -19 a global pandemic has prompted teachers to adapt and find new methods of online assessment, since traditional assessment methods are not feasible in the current scenario.

This research paper being a part of a bigger project is designed to study the use of technology on the education field during Covid -19 pandemic.<sup>4, 7, 8</sup>

As per the literature review conducting online exam is more economically and environmentally beneficial as we do not need to print and store papers. <sup>1, 2, 4, 7</sup>. The most promising observations of the online exam system were, immediate feedback, randomization of questions, and immediate scores after the exam.<sup>1, 2, 4, 7</sup>.

This study was designed to study the perception of Physiotherapy students towards online examination introduced during Covid- 19 pandemic. "Online exams" is referred to an exam that is device based and requires internet connection by the student to answer the questions, the exam can be attempted anywhere as long as there is availability of internet connection and device setup. The paper exam is the traditional paper and pen exam that requires students to write their answers. <sup>2, 4</sup>. Studies done in this format would give valuable input about future reforms for the online exam.

**Aim:** To study the perception of Physiotherapy students towards online examination introduced during Covid- 19 pandemic

## Objective:

To study the concerns, technical problems and suggestions for improvement regarding online exams observed by the participating Physiotherapy students.

## Methodology

A Descriptive study was undertaken to gather student's perspective about the online exam format. Google Forms were used to collect the primary data. The convenient sampling method had been used .Google Form links were circulated among the physiotherapy student population who had just completed online examination during Covid -19 pandemic, at Tilak Maharashtra Vidyapeeth.<sup>4</sup> Participating students filled the forms anonymously. Responses were collected and analyzed with comparison of mean and percentage value.

**Reliability**

Reliability refers to the consistency of responses over time. In order to assess the reliability of this questionnaire, a pilot study was undertaken with five students randomly chosen from the population. Cronbach’s alpha coefficient was calculated for questions with Likert scale in a survey/questionnaire, from this pilot study. Next, Cronbach’s alpha coefficients were also assessed for the actual study responses.

**Reliability statistics:**

**Table: 1**

<b>Cronbach’s Alpha</b>	<b>Physiotherapy 0.85</b>
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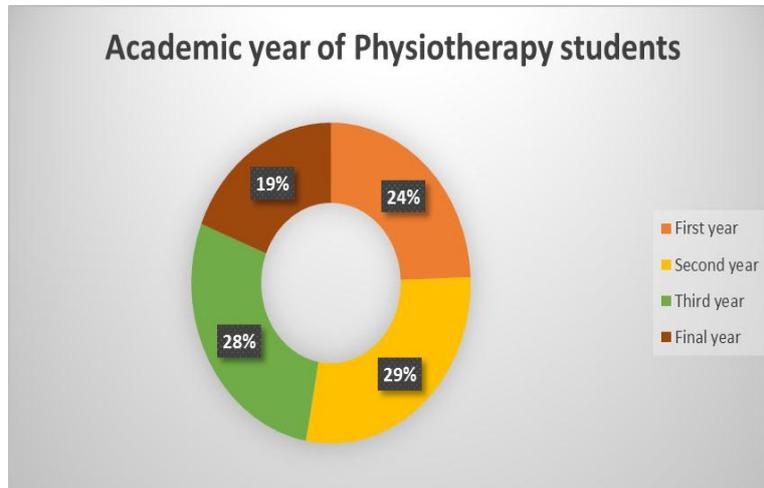
All items are responded to on a Likert scale of 1-5, where 5 = Strongly agree and 1 = Strongly disagree. For the efforts, Likert scale of 1-5 was used, where 5= Very High and 1 = Very Low.

We can infer from the resulting scores as seen in table no. 1, questionnaire was reliable and dependable on response gathered for analysis. Thus the reliability level of this research was consistently high. Data from the open-ended responses were used for qualitative analysis.

**Data analysis –**

Total of 295 responses were collected from the Physiotherapy students who had experienced traditional paper& pen method in past as well as online assessment during Covid-19 pandemic.

**Chart 1:**



Maximum respondents were from third year and final year, hence they have better familiarity of the Traditional exam system.

**Table 2: Effort required by the students, Pre & Post exam.**

	Effort required by student - pre - exam	Effort required by student- during exam
Mean	3.63	4.06
SD	0.75	0.76

Physiotherapy students perceived more exertion in online exam format. This indicates more training and adequate preparation time is required for the Physiotherapy students to adopt technology for online exams.

Chart 2: Effort required by the students, Pre & Post exam

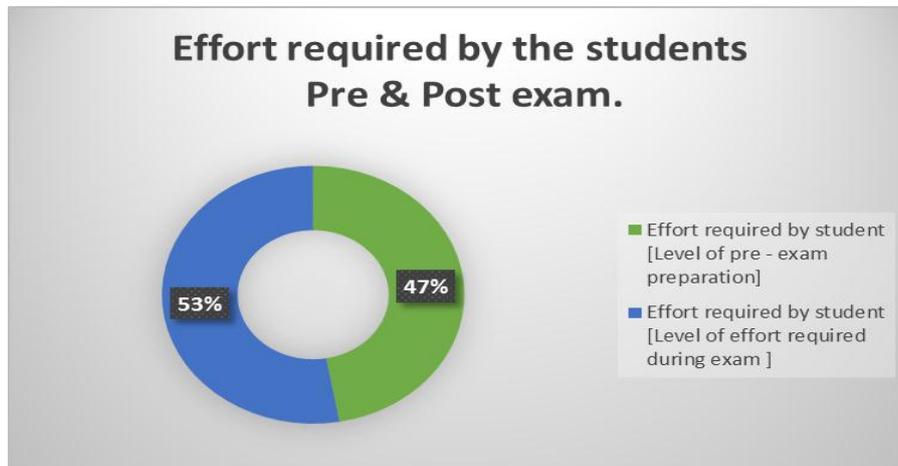


Table 3: Students Feedback on Online Exam

	Scheme of examination was clear and organized	Instructions were clear and easy to follow	Examiner was available and helpful	Grading was prompt and had useful feedback given after exam	Exam objectives were clear	Exam workload was appropriate	Exam organization allowed all students to participate effectively
Mean	3.79	3.90	3.83	3.50	3.76	3.33	3.85
S D	0.93	0.92	0.95	0.98	0.86	0.93	0.94

Likert scale of 1-5, where 5 = Strongly agree and 1 = Strongly disagree.

Physiotherapy students gave high score on good planning and execution of online the exam .Exam workload, grading and feedback was appropriate as per the Physiotherapy students.

Chart 3: Students Feedback on Online Exam.

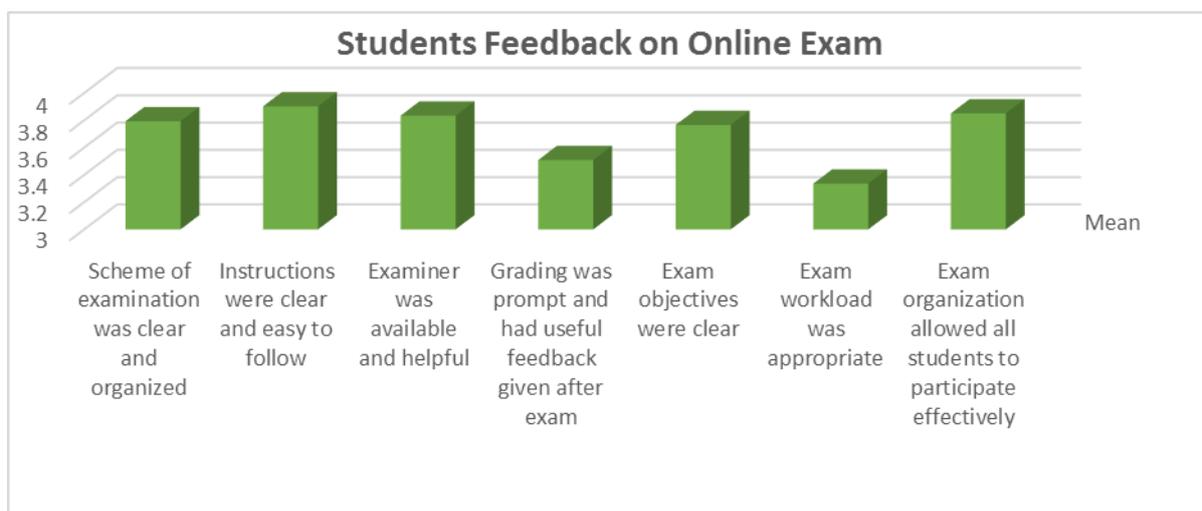
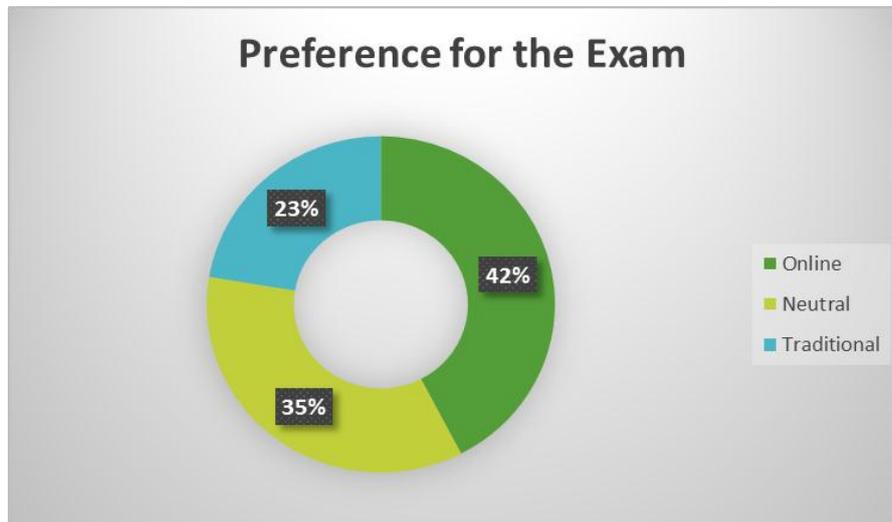


Chart 4: Preference for the Exam.



Majority of students preferred online exam format in the future.

### 3. Discussion

This research study is a part of a project which aims to study the effect Covid-19 pandemic on different stake holders of education sector <sup>4, 8</sup>. This study is done to analyze the perception of Physiotherapy students about online exam. Clinical education forms the core component of the teaching and training of physiotherapy students <sup>9</sup>. Physiotherapy education normally have a curriculum consisting mainly of theory (usually taking place in the college campus) and practical's (usually taking place in the clinics) <sup>10</sup>.

Results discussed here are only for online exam adopted during Covid- 19 pandemic situation. <sup>4, 8</sup>. Analyzing students view as well as giving suggestion to help future reforms in educational field was the basis of this study<sup>4, 10</sup>.

Statistical analyses of reliability as seen in the Table 1 above, infers that questionnaire had meticulous design with high reliability.

Chart 1, illustrates Academic year of students, maximum students were from the third year and final year, which infers that the respondents had good experience of traditional exam pattern in their respective field.

From Chart 2 and Table 2 it was seen that the effort required by Physiotherapy students during online exam was more, it can be concluded that the time given for preparation should be increased with training given to the students, about internet applications (apps) and being more technology friendly. More assignments can be given for online completion for better exposure of technology to the students in future <sup>4, 8, 9, 10</sup>.

Interactive platforms like video conferencing; Google classroom, Microsoft Team etc. can be inculcated in the near future so as to prepare the students and education field stakeholders for the future and pandemic situations. Table 3 and Chart 3, compliments the teachers for the planning and execution of online exam at a short notice and which was well received by the students. Studies done in this regard previously reported the effectiveness of the online assessment system <sup>1, 2, 4, 8, 10</sup>.

Chart 4 shows, when asked about the future preference of online exam, maximum number of students were ready to adopt online exam format. Surveys done in the past suggests that the student's prefer certain aspects of online exams such as immediate results and feedback <sup>2, 4</sup>. Thus online exams offer an interesting and effective method for enhancing objectivity <sup>1</sup>.

### Conclusion

Physiotherapy Student's perception towards online examination introduced during Covid- 19 pandemic, showed positive attitude towards technology. Results analysis shows evidence and need towards introduction and training of the Physiotherapy Student's in the field of information and technology. Exploring and adopting new platforms and formats which will help in conducting exam for large population of students is the need of the hour.

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## References

- 1) Gabriele Frankl, gabriele.frankl@aau.at, Sofie Bitter, sofie.bitter@aau.at, Alpen-Adria-Universität Klagenfurt, Austria. Online Exams: Practical Implications and Future Directions <https://www.researchgate.net/publication/234153336>
- 2) M. Yasar Özden, Ismail Ertürk, and Refik Sanli, Students' Perceptions of Online Assessment: A Case Study, JOURNAL OF DISTANCE EDUCATION REVUE DE L'ÉDUCATION À DISTANCE SPRING/PRINTEMPS 2004, VOL. 19, No 2, 77-92.
- 3) Majdi Al-Qdah and Islam Ababneh, Comparing Online and Paper Exams: Performances and Perceptions of Saudi Students, International Journal of Information and Education Technology, Vol. 7, No. 2, February 2017.
- 4) Dr. Shweta S. Devare Phadke, Dr. Sabina S. Kazi Hakim, Dr. Meera Deshmukh, Dr. Pranati Tilak, Comparison of Physiotherapy and Management Students' Perception Towards Online Examination Introduced During Covid- 19 Pandemic, International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056, Volume: 07 Issue: 07 | July 2020 www.irjet.net p-ISSN: 2395-0072.
- 5) Mohsen Tavakol, Reg Dennick, Making sense of Cronbach's alpha; International Journal of Medical Education, 2011; 2:53-55
- 6) Kore Tejaswini et al. Survey on Online Examination system, Research J. Science and Tech. 7(2): April-June, 2015; Page 118-120, DOI: 10.5958/2349-2988.2015.00015.7
- 7) Tavakol M, Mohagheghi MA, Dennick R. Assessing the skills of surgical residents using simulation. J Surg Educ. 2008; 65(2):77-83.
- 8) Dr. Pranati Tilak, Tilak Maharashtra Vidyapeeth, Pune, Dr. Meera Deshmukh, Tilak Maharashtra Vidyapeeth, Pune, Dr. Shweta Phadke, TMV's Lokmanya Medical College of Physiotherapy, Navi Mumbai, Dr. Sabina Salim Kazi Hakim, TMV's Lokmanya Medical College of Physiotherapy, Navi Mumbai., A survey on online examination during COVID 19 pandemic: Perception of Management Students. Mukta Shabd Journal, ISSN NO : 2347-3150, Volume IX, Issue VIII, AUGUST/2020
- 9) D.V. Ernstzen, E. Bitzer & K. Grimmer-Somers, Physiotherapy students' and clinical teachers' perceptions of clinical learning opportunities: A case study, Journal: Medical Teacher, Volume 31, 2009 - Issue 3, Pages e102-e115 | Published online: 03 Jul.
- 10) Røe, Y., Rowe, M., Ødegaard, N.B. *et al.* Learning with technology in physiotherapy education: design, implementation and evaluation of a flipped classroom teaching approach. *BMC Med Educ* **19**, 291 (2019). <https://doi.org/10.1186/s12909-019-1728-2>