



---

## A STUDY OF CHALLENGES IN ONLINE PHYSICAL EDUCATION TEACHING LEARNING PROCESS DURING COVID 19

---

**Mr. Vicky Pujari<sup>1</sup> and Dr. Madhuri P. Sadgir<sup>2</sup>**

<sup>1</sup>Master Degree Research Scholar, Department of Physical Education, University of Mumbai.

<sup>2</sup>Assistant Professor, Department of Physical Education, University of Mumbai.

### ABSTRACT:

The noble covid19 has impacted badly on the economy, health, education, social gathering, and more on lives worldwide. There were multiple time complete and partial lockdowns, which evoked new challenges in the education system. The teaching mode was completely shifted from traditional mode to online mode. The biggest change which was never thought of was to conduct physical education and sports via virtual mode. Hence, the present study aims to understand the challenges that occurred while teaching physical education via virtual mode during covid 19. A standard questionnaire was developed for the purpose of the study. A total of 100 male and female teachers were selected as samples of the study from the school in the western zone in Mumbai. There were six study variables, namely 1. Quality and availability of internet, 2. Teacher competency in technology, 3. Space availability, 4. Resources availability 5. Health Issues, and 6. Student participation. The developed scale was valid and reliable with .54 and .93 (Cronbach alpha) respectively. To compare the mean of teachers' responses, the T-test was calculated. The study concluded that a weak internet, insufficient space for activity, lack of resources to conduct class, lack of student motivation, and socio-economic condition of teachers and students were major challenges that interrupted the effective online physical education teaching-learning process.



**KEY WORDS:** Covid19, Online mode, Physical Education, Challenges, Teachers and students.

### INTRODUCTION

COVID-19 affected people despite their background, class, community, gender, education, and nationality. The educational set was affected and transformed completely from offline to virtual mode. The closure of schools, universities, and other educational institutions has affected 990 million (UNESCO, 2020) students worldwide and over 320 million in India. India's situation was way more challenging to handle than countries worldwide because of the sheer number of populations. During the country-wide lockdown, the Indian government had to resort to online classes for education. Teachers in India have been using the chalk-talk method for a long time, but this situation has compelled them to shift to the online mode for education. Online teaching amidst this chaos; was no more an option but a necessity. As a result, there has been a boom in the e-learning sector. Apps and software like Zoom,

WebEx, Google meet, teams, YouTube, and What's up were becoming virtual classrooms for students, teachers, and parents. Along with this the need to have a smart device and reliable internet connection was a new urge of society. Many of the teachers were not even trained in teaching online. Beri says that the teachers [A1] lack in training and technical support in using ICT (Information and communication technologies) for teaching; in turn, there is an attached sense of anxiety to use ICT for teaching-learning purposes. Researcher says that teaching primary class students via virtual was a significant challenge as it generally involves hours of screen time, which hampers child development and does not allow for hands-on learning. Moreover, a low attention span adds to the problems. The lack of human touch, the absence of opportunities for collaborative learning, and most importantly the lack of support for hands-on learning for complex subjects like math and science are a big concern for achieving quality education. Nevertheless, the pandemic has given us a chance to make a difference. It serves as an opportunity to rethink the current situation and make emergency education planning inclusive. It would come with challenges, but this is long-awaited to bring about a drastic change in our education system. Therefore, it must be looked at as an opportunity to devise a new paradigm shift in the way we look at education. A more holistic plan must be developed that focuses on the entirety of the child's life (UNESCO, 2015). Therefore, an exciting thing that has come from the lockdown is that we can incorporate 'DE schooling society' in our education and encourage open-ended, exploratory, and liberal education (Illich, 1971).

The present study aims to explore the different dimensions of the challenges faced by the school teachers of physical education while conducting physical education classes via a virtual platform.

### OBJECTIVES OF THE STUDY

- To construct a scale for data collection.
- To compare means score of reaction towards online teaching of physical education of male and female teachers
- To compare means scores of reactions towards the quality of internet of male and female teachers
- To compare means scores of reactions towards teacher competency in the technology of male and female teachers
- To compare means scores of reactions towards resources availability of male and female teachers
- To compare means scores of reactions towards students participation of male and female teachers
- To compare means scores of reactions towards teachers' health issues of male and female teachers
- To compare means scores of reactions towards teaching methods of male and female teachers

### RESEARCH METHODOLOGY

#### Sample

It is a two-folded study, in the first phase of the study, a scale was developed and in the second phase, the survey was conducted. The physical education teachers working in the western Mumbai school were the population of the study. More than 5% of the population size was determined as a sample of the study, hence, 100 school teachers were randomly selected as respondents for this survey.

#### Procedure of the Study

There was a total of six variables were determined based on a literature review and pilot survey, namely, Quality and Availability of the Internet, Teacher Competency in Technology, Space Availability, Resources Availability, Health Issues, and Student participation. In the first part of the study, a five-point (Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree) rating scale was developed with standard research procedures. A total of 35 items were included in the scale related to the concerned variables. In the second phase, the scale was electronically made in the google form, due to the regulation of lockdown and social distancing. The google form link was forwarded to the subject via, email and what's up.

## Result

The content validity of the rating scale was .54 which is the accepted value to validate the rating scale. To establish the reliability of the scale, Cronbach's alpha was used. The computed Cronbach's Alpha value was .925, which is accepted to establish the reliability of the scale. Further, the collected data were analyzed by using a statistics T-test to compare the mean of male and female physical education teachers' perceptions towards the challenges occurring during covid 19.

**Table: 1.1**  
**The mean perception scores of Male and Female Teachers of Physical Education on online teaching**

Teachers	Numbers	Mean	Std. Deviation	t-value	df	Level of Significance
Male	88	141.8	21.04	1.598	105	Not Significant
Female	19	133.6	15.76			

Table 1.1 shows that the 't' value was 1.598 at a 0.05 level. This reflects that there is no significant difference in the mean score of reaction toward online teaching of Physical Education of male and female teachers. Hence, it may be said that Physical Education male and female teachers were found to have the same level of perception about the challenges to conduct online physical education classes.

**Table : 1.2**  
**The mean perception scores of Male and Female Teachers of Physical Education on Quality of Internet**

Teachers	Numbers	Mean	Std. Deviation	t-value	df	Level of Significance
Male	88	13.60	3.92	.381	105	Not Significant
Female	19	13.21	4.09			

Table 1.2 indicates the 't' value as .381 at a 0.05 level. It reflects that there is no significant difference in the mean score of reaction towards the quality of Internet of Physical Education of male and female teachers. It may be said that Physical Education male and female teachers were found to have the same level of perception about the quality of the internet to conduct online physical education classes.

**Table : 1.3**  
**The mean perception scores of Male and Female Teachers of Physical Education on competency in technology**

Teachers	Numbers	Mean	Std. Deviation	t-value	df	Level of Significance
Male	88	33.12	7.76	2.061	105	Significant
Female	19	28.95	9.16			

Table 1.3 revealed that the 't' value was 2.061 at a 0.05 level. It indicates that there is a significant difference in mean scores reaction towards the teachers competency in the technology of

Physical Education male and female teachers. Further, the mean score of reaction toward the teachers competency in the technology of Physical Education Female is 28.95 which is significantly lower than those of Male teachers whose mean score of reaction towards the teachers competency in the technology of Physical Education is 33.12. It may be said that Male Teachers were found to have significantly higher competency in technology as compared to females.

**Table : 1.4**  
**The mean perception scores of Male and Female Teachers of Physical Education on Resources availability**

Teachers	Numbers	Mean	Std. Deviation	t-value	df	Level of Significance
Male	88	8.01	1.72	.756	105	Not Significant
Female	19	7.69	1.67			

From the above table, the 't' value is found to be .756 at the 0.05 level. It reflects that there is no significant difference in the mean score of reaction towards the resources availability of Physical Education of male and female teachers. It may be said that Physical Education male and female teachers were found to have the same level of perception about the availability of resources to conduct online physical education classes.

**Table : 1.5**  
**The mean perception scores of Male and Female Teacher of Physical Education on health issues**

Teachers	Numbers	Mean	Std. Deviation	t-value	df	Level of Significance
Male	88	8.10	1.89	.312	105	Not Significant
Female	19	7.95	1.47			

From the above table, the 't' value is found to be .312 at 0.05 level. It reflects that there is no significant difference in the mean score of reaction towards the health issues of Physical Education of male and female teachers. It may be said that Physical Education male and female teachers were found to have the same level of perception about health issues due to online physical education classes.

**Table : 1.6**  
**The mean perception scores of Male and Female Teacher of Physical Education on Students Participation**

Teachers	Numbers	Mean	Std. Deviation	t-value	df	Level of Significance
Male	88	31.49	5.55	1.171	105	Not Significant
Female	19	29.84	5.61			

Table 1.6 indicates the 't' value as 1.171 at 0.05 level. It reflects that there is no significant difference in the mean score of reaction towards the students participation of Physical Education of

male and female teachers. It shows that Physical Education male and female teachers were found to have the same level of perception about students participation in online physical education classes.

**Table : 1.7**

**The mean perception scores of Male and Female Teacher of Physical Education  
on Teaching Method**

Teachers	Numbers	Mean	Std. Deviation	t-value	df	Level of Significance
Male	88	35.78	6.58	.753	105	Not Significant
Female	19	34.58	4.49			

Table 1.7 revealed the 't' value as .753 at a 0.05 level. It reflects that there is no significant difference in the mean score of reaction towards the teaching methodology of Physical Education of male and female teachers. It may be said that Physical Education male and female teachers were found to have the same level of perception about the application of teaching methodology in online physical education classes.

## DISCUSSION

The results obtained in seven different variables showed a high level of agreement among the male and female teachers about the challenges occurring during online classes via virtual mode.

1. The first variable was the Quality of Internet, under this variable the highest agreement was registered by the male and female physical education teachers about their experience that due to the weak internet availability they were not able to perform a live demonstration of sports skills, physical activity, and exercise, on a frequent basis. They also register their highest agreement on experiencing an interruption in audio quality, sharing teaching content, and difficulties to conduct and attaining multiple classes with an available data package. This indicates that a good internet facility is highly essential to conduct or attend online physical education classes.
2. The second variable was Teachers Competency in Technology, under this variable the highest agreement was registered by the male and female physical education teachers about their experty. The most used application was google form, PowerPoint Presentation, Google classroom, and MS word file. Most of the online classes were conducted on the google meet and zoom virtual platforms. The zoom platform is time-bounded (40 min) in case of non-subscription, which was the limitation to conduct online classes for more than 40 min, similarly, in the meet platform teachers experience lots of interruption from the students' end, particularly, unmute mic. The biggest limitation in non subscribe version is that the recording facility was unavailable for non- subscribers. Hence, male teachers were found more efficient in technology than females as per the calculated T- value.
3. The third variable was Space Availability, under this variable the highest agreement was registered by the male and female physical education teachers. Physical Education is based on physical movements; Hence a variety of physical activities are taught in the physical education class. But due to the space limitations, at teachers and students' homes, teachers were limited to demonstrating a variety of sports skills and physical exercises, as well as students, were also not in a position to imitate the same thoroughly. Due to limited features of the free version of the virtual platform, the class recording was also not possible for further reference.
4. The fourth variable was Resources Availability, under this variable the highest agreement was registered by the male and female physical education teachers. During the COVID-19 lockdown phase, the teaching mode was transformed from traditional to online. Due to the lack of access to the equipment, most of the classes were forced to conduct without equipment. Calisthenic exercises were highly used to conduct online physical education classes. Another limitation of an online class

was the availability of resources. Due to restricted access very limited resources were available to prepare e-content.

5. The fifth variable was Health issues, under this variable the highest agreement was registered by the male and female physical education teachers. The newly adopted teaching mode was more sedentary, Hence the majority of teachers showed their agreement with the weight gain issue. Due to long hours sitting for conducting online classes and preparing the teaching content, less physical activity leads to weight gain. The second health issue was dry eyes, blur vision, neck pain, backache, and sedentary posture. Moreover, edema, acidity, insomnia, etc were also experienced.
6. The sixth variable was students' response during online teaching, under this variable the highest agreement was registered by the male and female physical education teachers. The most commonly experienced issue was controlling class and student discipline. Secondly, the Lack of motivation to learn physical education through online mode was highly experienced. The physical appearance of the teacher and the sports field was the prime reason behind it. The third most important issue was insufficient space in student homes to perform physical activity, which further limited the students' ability to learn and practice effectively. Conducting an online physical education exam and its assessment was also very challenging for the teacher as well as students. Teachers also express their opinion that physical education teaching-learning is not effective through virtual mode.
7. The seventh variable was teaching method; under this variable, the highest agreement was registered by the male and female physical education teachers. Teachers found demonstration method, feedback method, explanation method, imitation method, and project method were very effective methods to be used during online classes.

## CONCLUSION

A study was conducted to identify the challenges occurring in online physical education classes during the COVID-19 phase. It can be concluded that weak internet availability, space availability, resources availability, students motivation, socio-economical conditions, and space availability were major challenges that interrupted the effective online physical education teaching-learning process.

## REFERENCE

- Adaval, S. B. (1952), An investigation into the qualities of teacher under training, Ph. D. Education (in Buch, M. B., A Survey of research in Education) Baroda Centre of Advanced Studies in Education
- Asha, R. (2002), A Comparative Study of Attitude of towards Teachers Teaching Profession. Journal of Educational Research and Extension. Vol. 30, no. 3, pp. 25-35
- Awasthi, V. (1989), Developing training strategies for science teaching by using concept attainment model. Fifth Survey of Educational Research, 3 (1086), 1236-1237.
- Inamullah, M.H., Ishtiaq, H. and Naseer, U.D.M. (2008), Teacher-students verbal interaction at the secondary level. Journal of College Teaching & Learning, 5 (9), 41-44.
- Passi, B.K. and Pal, R. (1982), Preparation of a multimedia instructional module for developing the skill of observing classroom behaviour through Flanders interaction analysis category system. Fifth Survey of Research in Education, New Delhi: National Council of Educational Research and Training.
- Singh, P. (1990), Effectiveness of different integration strategies for developing teaching skills among student-teacher: A Meso-teaching approach. Retrieved on 24 Nov, 2014 from
- Adaval, S. B. (1952), An investigation into the qualities of teacher under training, Ph. D. Education (in Buch, M. B., A Survey of research in Education) Baroda Centre of Advanced Studies in Education
- Donga. (1978), A study of the Adjustment of Trainees of Teacher Training Colleges in Gujrat. Doctoral Dissertation. Edu. Sau. University
- Kaneez, F & Syeda, H. (2011), Teaching Aptitude and Academic Achievement of B. Ed Trainee Teachers. Academic Journal, Golden Research Thoughts; Nov-2011, Vol-I Issue 5, p.1.



- Parveen, S. (2011), A Study of Teaching Aptitude in Relation of Effective and Ineffective Teachers towards professional Teaching and academic achievement of B. Ed. Pupil Teachers, Institute of Advanced Studies in Education, Jamia Millia Islamia, unpublished Ph. D. New Delhi.
- Sajan, K. S. (1999), A Study of Teaching Aptitude of Student Teachers. Unpublished doctoral dissertation, University of Calicut.
- Sharma, R. C. (1984), A study of teaching aptitude intellectual level and morality of prospective teachers, Ph. D. Education, forth survey Vol. II
- Tassew, Zeodic, M. (1992), A Study of Classroom Verbal Behaviours of Teacher Trainees in Ethiopia in Relation to their Intelligence, Self-concept and Attitude towards teaching, Ph. D, Education, Punjab University, Pp. 1494 fifth survey Vol. II.
- Veronica Gold (May 2000), "Values and Values Transmitters: A Study of Secondary Student Teachers Visa-Vis Teaching Values in Public Schools," Dissertation Abstracts International 60: 3969-3970-A.
- Sharnon Lee Husted (May 1999), "A Comparison of Secondary Professional Development School and Traditional Teacher Education Graduates: Analysis of Their Professional Concerns and Perceived 59: II 4107-A.
- Bryan Anthony McCullick (April 1999), "Practitioner's Perspectives Regarding Physical Education Teacher Preparation," 59: 10 3773-A.
- Thompson 1 and Linda Pearl (1988), "Student Teacher's Sense of Teaching Efficiency and Academic Learning time in Physical Education," 49:5
- Linda Edwards (1984), "A Cross-Sectional Comparison of Perceived Importance of Predetermined Characteristics of Successful Physical Educators,"
- M Raghu Ram Singh (1988), "Professional Teacher Attitudes of B.Ed. and M.Ed. Student Teachers and Its Correlated," Journal of Higher Education 7 :138-144
- Meera, S. (1988), A study of relationship between teacher behaviour and teaching aptitude of teacher trainees. M. Phil Edu. Avinash lingam Institute for Home Science and Higher Education fifth survey. Vol. II Pp. 1455
- Kahlon, S. P. & Saini, S. K (1989), Impact of Teacher Education On Teaching Aptitude.
- Patil & Deshmukh (1993), Relation Between Aptitude in Teaching and Teaching Efficiency of Pupil Teacher.
- Sajan, K. S. (2010), Student-Teachers and their Academic Achievements at Graduate Level. Journal of education and psychological research, volume 2, issue 4, pp: 95-98