



# **Teacher Educators' Mental Stress towards Online Teaching in West Bengal, India**

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## **Authors' contributions**

*This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.*

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## **ABSTRACT**

The study aimed to find out the mental stress of teacher educators towards online teaching in respect to their gender and type of institutions. Descriptive survey method was employed for the study. 200 teacher educators were selected as sample by random sampling from 29 different universities and colleges of West Bengal, including government and private institutions. Among the selected samples, 120 were male and 80 were female, while 103 teacher educators were from government institutions and 97 from self-financed institutions. Data were collected using "ICT Scale on Mental Stress". Data were analyzed by percentage analysis and independent samples t-test. Results revealed that 40% teacher educators faced high mental stress towards using ICT in online teaching. Further the results revealed that female teacher educators faced more mental stress than

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their male counterparts. Teacher educators of private colleges showed more mental stress than the teacher educators of government institutions. Therefore, rigorous training on online teaching can be recommended for teacher educators.

*Keywords: Teacher educator; mental stress; online teaching.*

## 1. INTRODUCTION

After COVID-19 pandemic, online teaching has become a most trending teaching-learning system based upon information and communication technologies to make learning more flexible, efficient and accessible by reaching out education at any time and any location to a more extensive network of students. Before COVID-19 pandemic, online teaching was rarely used, but since the pandemic it is being widely used worldwide. Due to the pandemic there was a sudden shift to remote learning and teaching and teachers were at the front of that shift. Teachers were expected to continue students' academic development and wellbeing, while also dealing with adversity and stress in their own lives [1]. This sudden shift to remote teaching and learning during covid-19 pandemic has forced education system to get out from confined four walls to a virtual set-up which is known as online classroom teaching or online teaching. However, there is a common understanding that the success of any form of online education largely depends upon the attitude of teachers towards online teaching and learning [2]. But still the online teaching system is not welcomed well heartedly in India even after Covid-19 pandemic due to inadequate knowledge of ICT among teachers.

National Policy on Information and Communication Technology (ICT) in School Education (2012), emphasized the role of teachers in introducing ICT in their teaching by equipping appropriate ICTs in classrooms. National Education Policy (NEP-2020) also emphasized the bi-directional role of technology in the transformation and improvement of educational process and outcomes. Owing to knowledge explosion and tremendously fast changing ICT, teachers sometimes find it difficult to cope with the new technologies. Therefore, updating the knowledge of ICT among teachers is the need of the hour and the onus primarily goes to teacher education programmes, as producing effective teachers largely depends on teacher education programmes. The main objective of teacher education is to develop the teaching proficiency and competency including

the digital competency that would empower the prospective teachers to meet the requirements of profession in the present time. The quality of teachers depends on the expertise and performance of the teacher educators as they provide training and guidance to the prospective teachers. Therefore, it is very much essential that in the post Covid era, teacher educators must have the ICT competencies to deal with online teaching efficiently, so that they can produce effective teachers even while teaching in online mode, if required.

## 2. REVIEW OF LITERATURE

The COVID-19 outbreak encouraged teachers to change their educational practices quickly and urgently in order to guarantee learning continuity for students from distance. During this period, the pandemic showed that many teachers were virtually replicating face-to-face lessons, without utilizing the vast possibilities offered by technology for carrying out virtual activities and working with different types of resources [3-5]. Trust and Whalen [6] revealed that teachers felt overwhelmed and unprepared towards online teaching and they found it challenging to adapt. Teachers present high level of stress and anxiety when they are exposed to the use of technology [7]. In a study conducted by Ngo [8] it was found that 43.9% teachers faced stress due to lack of ICT competency, feeling of anxiety, and having insufficient professional knowledge to keep abreast with technological developments. Aida et al. [9] in their study tried to measure the level of techno-stress among academic and non-academic staff and found moderate level of stress among the respondents. No significant difference of stress was found in terms of gender and occupation. Jena & Mahanti [10] showed that techno stress had significant effect on age, gender and technological awareness. Males experienced more techno stress than females as men were more inclined towards the use of ICT. Aruna and Raju [11] revealed that gender and type of school management had no influence on the technophobia of teachers towards the use of ICT in secondary schools. Ahmad et al. [12] reported about the negative attitude towards the technology among academic staff and revealed

that resistance towards technology was due to ICT anxiety, ICT efficacy, attitude and acceptance towards the use of ICT. All these factors created technophobia among the academic staff which hindered the use of ICT effectively in teaching-learning process.

Lack of training and work overload increased the burden and stress among university faculty during online teaching [13-15]. In a recent study, the authors found that most of the university teachers who were taking online classes were not happy with the online teaching model which affected their mental health [16]. Other studies also revealed that the disruption to education during the COVID-19 pandemic imposed huge demands and mental stress on academic staff due to the short notice for online course preparation [17,15].

Factors like limited IT resources, non-availability of internet access in some areas and lack of training in the online teaching have added to the psychological stress on the teachers and therefore, the teachers' mental health is being affected [18]. Some of the studies showed that the university teachers are working under stress and pressure when they are supposed to work online in a different way [19]. A study by experts has highlighted that technology affects the cognitions of university teachers as the online tasks demand greater and higher intellectual workloads, leading to mental fatigue [20] and notable reduction in performance [21]. Hatlevik and Hatlevik [22] showed that online teaching is more complex and complicated in comparison to conventional form of teaching. The use of technology brings more stress to the university teachers as their workload increase, and the work pattern changes as the knowledge and the required skills need to be upgraded to cover the increasing demands for performance and productivity [23].

The teachers play a key role in the process of integrating technologies and in the adoption and implementation of ICT in the classroom. The teachers must have effective digital competencies and ICT knowledge that allow them to integrate and use technologies in a pedagogical way [24].

Therefore, this issue deserves attention. Hence, the present study has the prime objective of assessing the level of mental stress of the teacher educators who are engaged in online teaching. This article has novelty since the

mental stress of the teacher educators regarding the use of ICT towards online teaching has not been investigated before, as most of the research have been conducted either on school teachers or university teachers.

## 2.1 Statement of the Problem

The problem under this study stated as "Teacher Educators' Mental Stress towards Online Teaching in West Bengal".

## 2.2 Objectives

1. To study the mental stress faced by teacher educators towards online teaching.
2. To find out the difference in mental stress of male and female teacher educators towards online teaching.
3. To find out the difference in mental stress of teacher educators of Govt. and Self-financed teacher education institutions towards online teaching.

## 2.3 Hypotheses

**H<sub>01</sub>:** There is no significant difference in mental stress of male and female teacher educators towards online teaching.

**H<sub>02</sub>:** There is no significant difference in mental stress of teacher educators of Govt. and Self-financed institutions towards online teaching.

## 3. METHODOLOGY

### 3.1 Research Design

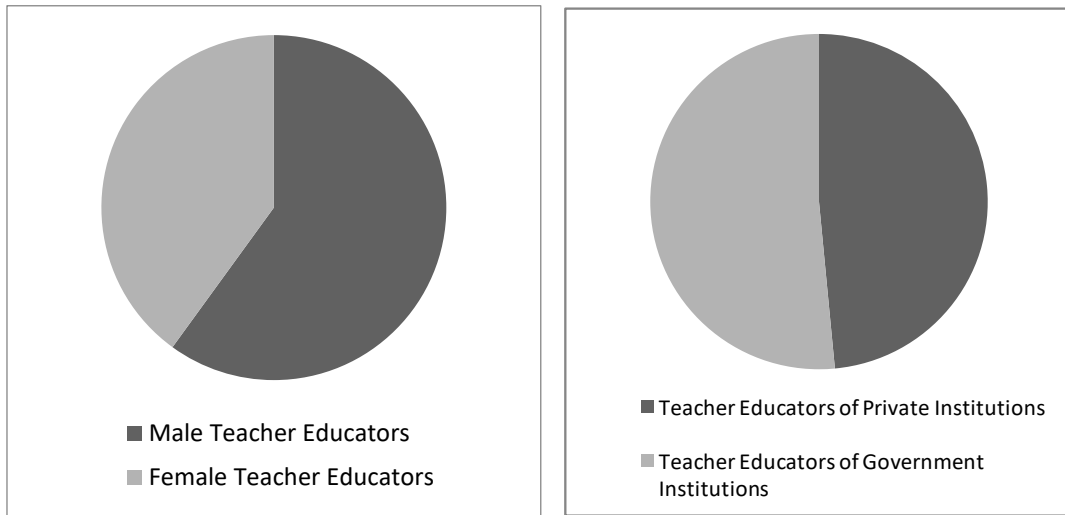
Descriptive survey method was adopted for the present study. Mental stress towards online teaching was taken as dependent variable whereas gender and type of institutions were taken as independent variables.

### 3.2 Population

The population of the present study consisted of teacher educators teaching in teacher education institutions of West Bengal.

### 3.3 Sample and Sampling Technique

Researcher randomly selected 103 teacher educators from 16 government teacher education institutions and 97 teacher educators from 13 self-financed teacher education institutions from



**Fig. 1. Distribution of sample on the basis of gender and type of institutions**

all over West Bengal. Thus a total of 200 teacher educators were selected as sample for the present study. Among the selected samples, 120 were male and 80 were female teacher educators. Description of sample is shown graphically in Fig. 1.

### 3.4 Tool Used for Data Collection

For collecting data, researchers administered 'ICT Scale on Mental Stress' developed by Saxena and Hans. The Scale consisted of total 32 items, having five dimensions: (1) Work-load (2) Personal (3) Invasion of privacy (4) Role ambiguity and (5) Complexity. The items were designed in a five-point Likert scale from (1) Not stressful (2) Slightly stressful (3) Moderately stressful to (4) Very stressful and (5) Extremely Stressful. A respondent can score minimum of 32 and maximum of 160. The higher score on the

scale indicates higher stress towards the use of ICT in online teaching.

### 3.5 Statistical Techniques used for Data Analysis

Mean, percentage analysis, and independent samples t-test were used for data analysis by using SPSS and interpretation was done accordingly.

## 4. RESULTS

Table 1 reveals that 40% teacher educators experienced high mental stress for using ICT towards online teaching. Whereas 40% teacher educators had low mental stress and only 20% of them face moderate mental stress towards using ICT for online teaching.

**Table 1. Frequency distribution of teacher educators on ICT mental stress scale**

ICT Stress	Frequency	Percentage
Low	80	40%
Moderate	40	20%
High	80	40%
Total	200	100%

**Table 2. Mean score and SD of male and female teacher educators' mental stress towards online teaching**

Gender	N	Mean	SD	't' value (df-200)
Male	120	75.08	20.21	3.28*
Female	80	85.37	23.85	

\*Significant at 0.01 level of significance

**Table 3. Mean score and SD of government and self-financed institutions’ teacher educators’ mental stress towards online teaching**

Type of College	N	Mean	SD	‘t’ value (df-200)
Government	103	73.61	13.01	3.70*
Self-financed	97	85.13	27.90	

\*Significant at 0.01 level of significance

Table 2 shows that the t-value is 3.28, which is significant at 0.01 level. Hence, the framed null hypothesis, “there is no significant difference in mental stress of male and female teacher educators towards online teaching” is not accepted. It means that there is significant difference in mental stress between male and female teacher educators towards online teaching. Female teacher educators showed higher mean value of 85.37 than male teacher educators’ mean score of 75.08. Hence, we can say that female teacher educators faced more mental stress than male teacher educators towards online teaching.

Table 3 reported that the t-value is 3.70, which is significant at 0.01 level. Hence, the framed null hypothesis, “there is no significant difference in mental stress of teacher educators of govt. and self-financed institutions towards online teaching” is not accepted. It means that there is significant difference in the mental stress between teacher educators of govt. and self-financed institutions. The mean value scored by government institution’s teacher educators was 73.61 and self-financed institution’s teacher educators was 85.13. Hence, we can say that teacher educators belonging to self-financed institutions faced more mental stress than teacher educators of government institutions towards online teaching. Thus, it is evident that type of institutions had an influence on mental stress towards online teaching.

## 5. DISCUSSION

This study investigated about the mental stress of teacher educators towards online teaching with reference to gender and types of institutions. Online teaching requires knowledge of ICT and different online teaching platforms. While dealing with ICT and different online teaching platforms, many people faced different kind of stress towards using those things. In this study, it was found that 40% teacher educators faced high level of mental stress towards online teaching. This finding is in agreement with previous studies [7-9,13-15,17] where it is found that most of the teachers faced high techno stress and mental

stress due to lack of ICT knowledge and skills related to technology. Rapid technological development and their inability to keep themselves abreast with it, is another reason of stress among teachers. Technological development imposes additional challenge to the teachers to deal those students who are techno-savvy and updated [25].

It is also found in the present study that female teacher educators faced more mental stress than male teacher educators towards online teaching. This finding is similar with previous studies [26-29] whereas opposite result is found in some other studies [30,10,31]. But the finding of this present study is not consistent with the findings of some other researches [9,11,32] where no significant difference was found in the mental stress of teachers in relation to gender.

Further, it was revealed that “type of institutions” had an influence on mental stress of teacher educators towards online teaching which is not in agreement with the finding of the study conducted by Aruna and Raju [11,33].

## 6. CONCLUSION

This study aimed to find out the mental stress faced by teacher educators towards online teaching, as the task of online teaching requires a lot of ICT knowledge and technological competencies. Findings of this study revealed that 40% of the teacher educators faced higher mental stress towards online teaching as they are lacking in ICT knowledge and technological competencies. Hence, proper training may be given to them regarding online teaching platforms and tools, and to develop ICT competencies. The findings of this research may be helpful for those apex bodies who deal with teacher education and also for the administrators, curriculum developers and policy making bodies for taking into consideration different training or courses to implement for enhancing ICT competency and skill not only among the teacher educators but also among the teachers of all levels to deal effectively with online teaching platforms.

## 7. LIMITATIONS OF THE STUDY

The authors acknowledge that the present study has several limitations. Sample from all the districts of West Bengal has not been collected. Though there are various approaches and uses of ICT in teaching, the present study is confined to ICT based online teaching only. Other variables like age, qualifications of teacher educators etc. would have been studied.

## 8. EDUCATIONAL IMPLICATION

Findings of the present study may be implemented to make the teachers realize the importance of using ICT towards online teaching and to make them self-confident towards online teaching. Teacher education institutions may arrange training courses and workshops on online teaching strategies and tools, and to develop ICT competencies among the teacher educators to enable them to conduct online teaching more effectively. NCERT, SCERT and DIET can incorporate the required soft skills and online teaching platforms in their curriculum for effective online teaching. In this way teacher educators and teachers will be able to fully utilize the online learning and teaching tools without being over stressed.

## DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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