



# A Study to Assess the Stress Related Adaptation to the Online Learning Process among Teachers at Selected High Schools in Belagavi, Karnataka

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## ABSTRACT:

The study explores the success of e-learning systems in universities, focusing on factors such as personal, social, cultural, technological, organizational, and environmental aspects. It highlights the importance of understanding these factors to improve students' learning experience and performance.

**OBJECTIVES:** To assess the stress, To find out the association between level of stress with selected demographic variables

**METHODS:** A descriptive study was conducted on teachers in selected high schools in Belagavi during COVID-19 using e-learning techniques. The study assessed stress and coping strategies during nursing education phases using questionnaires. Data was analyzed using inferential statistics.

**RESULTS:** The study found that the majority of teachers (95%) are between 30-45 years old, 72% female, and 28% male. They belong to Hindu, Muslim, or Christian religions. The majority use mobile media, with 47% using Google Meet, 18% using Zoom, and 17% using Goo Meeting. The majority of teachers (55%) are from urban areas, while 38% are from rural areas.

**Final findings of the stress level:** Stress score of the teachers who were using e-learning technique was 22- median, 22.41- mean, mode- 20 and 6.7- standard deviation. Conclusion: The study found no statistically significant association between stress scores and demographic variables like gender, religion, education, family type, place of residence, and marital status, with age being the only significant factor at 0.05 level.

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## Introduction

The transition to online learning has reshaped the educational landscape, especially due to the impact of the COVID-19 pandemic. Teachers, particularly in high schools, have had to adapt quickly to new technologies, platforms, and pedagogical strategies. While this shift has opened up new opportunities for education, it has also introduced significant stressors for teachers. These stressors often include managing new technology, maintaining student engagement in virtual environments, and dealing with increased workload and isolation (1, 2).

The concept of stress adaptation refers to how individuals manage and cope with stressors in their environment. Teachers, being at the forefront of this educational transformation, are significantly impacted by these stressors, which can influence their psychological and physical well-being (3). The stress experienced by teachers can be categorized into work-related stress and technology-related stress, both of which affect their ability to teach effectively (4, 5).

In the context of Belagavi, a city in Karnataka, India, the online learning process has gained prominence, yet little is known about how teachers in this region are adapting to the stressors associated with this new learning modality. Understanding these stress responses is critical for designing interventions that can alleviate teacher stress and improve the quality of online education (6, 7).

This study aims to assess how high school teachers in Belagavi adapt to the stressors associated with online teaching. It will explore the factors contributing to stress, the coping strategies employed by teachers, and the support systems that may mitigate stress (8, 9). Such insights are crucial for promoting teacher well-being and improving online teaching practices in this region (10).

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## Research Methodology

- **Research approach:** Survey research approach was found to be suitable for the present study.

- **Research design:** A non-experimental descriptive design to be used to assess the level of the stress.
- **Variables**
- The variables for the present study are.
- **Independent variables:**
- Level of stress
- **Dependent variable:**
- Patient who are using e-learning.
- **Research setting:** selected High schools of, Belagavi.
- **Population:** The population of this study was teachers of selected high schools of, BELAGAVI.
- **Sample:** Sample of this study was teachers who are undergoing stress due to e-learning.
- **Sampling technique:** Non random sampling procedure of convenient sampling technique was used to select the sample of teachers.
- **Sample size:** The sample size for the present study consists of 60 teachers who are using e-learning and has fulfilled sampling criteria
- **DEVELOPMENTAL OF TOOL**
- After an extensive literature review the tool was prepared. The investigators standardized five-point stress inventory consists of 10 items. the interview method was used to collect the data from sample. The following steps carried out in preparation of tool. The tool has two sections namely section A section B and section
- **SECTION A:** Demographical data.
- **SECTION B:** Standardized stress scale.

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## RESULTS

### ORGANIZATION OF THE FINDINGS:

The analysis of the data is organized and presented under the following headings:

#### Section – I Demographic variables of the high school teachers.

#### Section – II Stress scores of Respondents on e-learning

#### Section 1: Findings related to the socio-demographic variables

Table 1 : frequency and percentage distribution of responds according to the demographic variable

DEMOGRAPHIC CHARACTERISTICS	NO OF RESPONDENTS	% OF RESPONDENTS
<b>AGE (IN YEAR)</b>		
30-45	57	95%
46-60	03	5%
Above 60	00	0%
<b>GENDER</b>		
Male	17	28%
Female	43	72%
<b>RELIGION</b>		
Hindu	45	75%
Muslim	13	22%

Christian	02	3%
<b>SOURCE OF MEDIA</b>		
Mobile	53	89%
Laptop	06	10%
Tab	01	1%
<b>TYPE OF APP USED</b>		
Google meet	28	47%
Goto meeting	10	17%
Zoom	11	18%
Teach mint	11	18%
<b>INCOME (per month)</b>		
Less than 15000	33	55%
15001-30000	26	44%
Above 30000	01	1%
<b>PLACE OF RESIDENCE</b>		
Rural	23	38%
Urban	37	62%

The data presented in the table one reveals the majority of teachers 57(95%) were 30-45 age and 3(5%) are the age group of 46-60 and minority of the teachers 0(0%) are the age group of >60. Majority of the teachers 43(72%) were female and minority of teachers 17(28%) were male. Majority of the teachers 45(75%) belongs to Hindu religion, 13(22%) belongs to Muslim and minority of the teachers 2(3%) belongs to Christian. Majority of the teachers 53(89%) use mobile as a source of media, 6(10%) use laptop and minority of teachers 1(1%) use tab as a source of media. Majority of teachers 28(47%) use goggle meet app, 11(18%) use zoom and teach mint app and minority of teachers 10(17%) use goto meeting app. Majority of the teachers 33(55%) belongs to <15,000/-, 26(44%) belongs to 15,001-30,000, and minority of the teachers 1(1%) are belongs to >30,000/- . Majority of the teachers 37(62%) belongs to Urban area and 23(38%) belongs to Rural area.

## SECTION II: ANALYSIS AND INTERPRETATION OF THE LEVEL PERCEIVED STRESS SCORE OF THE TEACHERS

**Table 2: Mean, Median, Mode, Standard Deviation and range of perceived stress score of the teachers n=60**

Table 2 reveals that the mean of perceived stress score of the teachers who are adapting e-learning was mean: 22.416, median: 22 and mode: 20. Standard deviation was 6.775 and range of the perceived stress was.

**Table 3: frequency and percentage distribution of the perceived stress scale of the teachers n=60**

Perceived stress score	Frequency (f)	Percentage (%)
No stress	00	00
Mild stress	10	15%
Moderate stress	42	72%
Severe stress	08	13%

Table 3 represent that majority 43(72%) of the teachers having moderate stress while, 09(15%) had mild stress and minority of teachers 08(13%) had severe stress.

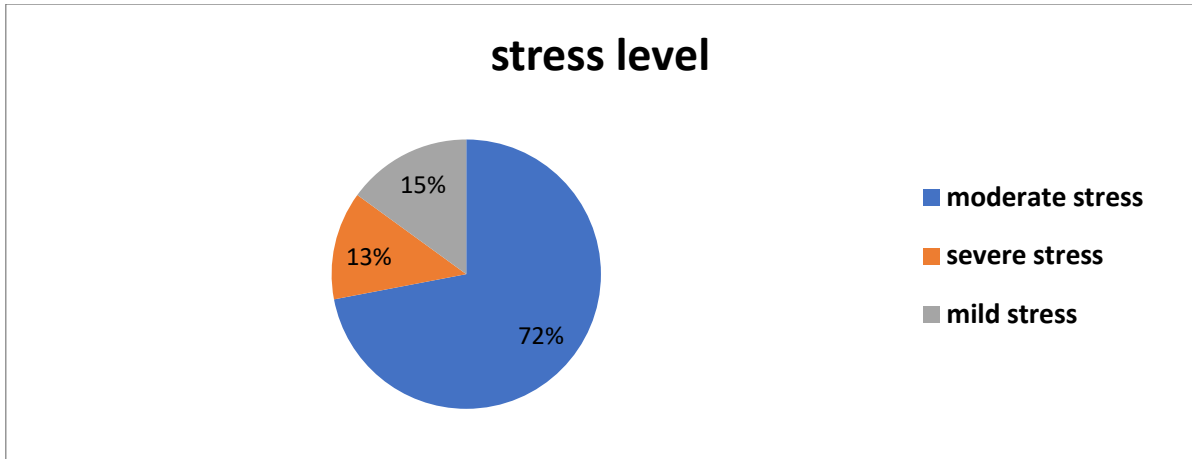


Figure 1: Pai Diagram shows that frequency and percentage distribution of the perceived stress scale of the teachers

Section IV: Association between level of stress and selected demographic variables

Table: association between stress score and the selected socio-demographic variable n=60

Socio-demographical variables	Perceived stress scale			Chi-square	Table Value	Df	LEVEL OF SIGNIFICANCE
	Mild stress	Moderate stress	Severe stress				
<b>Age groups</b>							
30-45 years	10	41	06	7.873	3.841	01	NS
46-60years	00	01	02				
Above 60	00	00	00				
<b>Gender</b>							
Male	01	13	03	2.126	5.991	02	NS
Female	09	29	05				
<b>Religion</b>							
Hindu	06	33	06	3.07	9.48	04	NS
Christian	00	02	00				
Muslim	04	07	02				
<b>Source of media</b>							
Mobile	08	37	08	1.480	9.48	04	NS
Laptop	02	04	00				
Tab	00	01	00				
<b>Type of app used</b>							
Google meet	04	22	02	7.724	12.592	06	NS
Goto meeting	00	10	00				
Zoom	04	07	00				
Teach mint	03	07	01				
<b>Income</b>							

Less than 15000	06	23	04	<b>6.05</b>	<b>9.48</b>	<b>04</b>	<b>NS</b>
15001-30000	05	17	04				
Above 30	00	01	00				
<b>Place of residence</b>							
Rural	04	14	05	<b>3.319</b>	<b>3.841</b>	<b>01</b>	<b>NS</b>
Urban	06	28	03				

The above table depicts the results of association between level of stress scores and selected demographic variables. The calculated value of demographic variables like gender, religion, source of media, type of app used, income and place of residence are less than table value at 0.05 level of significance, hence stating that there is no statistical significance with above demographic variable.

### Discussion:

The study found that the majority of teachers (95%) are between 30-45 years old, 72% female, and 28% male. They belong to Hindu, Muslim, or Christian religions. The majority use mobile media, with 47% using Google Meet, 18% using Zoom, and 17% using Goo Meeting. The majority of teachers (55%) are from urban areas, while 38% are from rural areas.

### Final findings of the stress level:

Stress score of the teachers who were using e-learning technique was 22- median, 22.41- mean, mode- 20 and 6.7- standard deviation.

### Conclusion:

The study found no statistically significant association between stress scores and demographic variables like gender, religion, education, family type, place of residence, and marital status, with age being the only significant factor at 0.05 level.

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