



# IS TECHNOSTRESS BECOME AN ENDURING DESPONDENCY TO THE TEACHERS?

SHAFEEK P\* & Dr. HASSANKOYA M.P, \*\*

\*Senior Research Fellow, Farook Training College

\*\*Associate Professor, Farook Training College

Calicut, Kerala, India, 670632

**Abstract:** This study has been undertaken to investigate the level of technostress of government secondary school teachers in Kerala. Now days teachers are aware of the techno paradigm shift and they take initiative to implement new teaching techniques in their instructional activities into a great extent. As a result of techno pedagogical approach teachers suffers lot of new issues. Techno stress is one of the major issues among them. It is related with circumstances where individuals feel inability to cope with technology in a healthy manner. The investigator used the survey method for this study. Technostress scale prepared by Shafeek P & Koya H M P, used for the data collection. The sample of the study includes 124 government secondary school teachers in Kerala.

**Index Terms - Technostress, Techno invasion**

## I. INTRODUCTION

The use of information technology enhances the effectiveness of the learning and develops the motivation for learning, which makes the learning process more successful. Information technology not only opens up opportunities for the variability of educational activities, their personalization and diversity, but also allows for a new way of organizing the communication of all subjects of learning and building an educational system. The all education system, it pedagogy, content, transaction and method of teaching transformed into technology based one. In this postmodern world man start to realize the negative side of modern revolution in all areas of development. Like almost all other things under the sky information technological revolution too has its own positive and negative impact. As a result of this revolution now teachers began to feel technostress. It may be due to the complexity and uncertainty of technology or the invasion of technology or the lack of technological facility.

Technostress (Technology and Stress) was originated from the title of a book written by Crigs Brod. It is defined as a modern disease of adaptation caused by an inability to cope with the new computer technologies in a healthy manner (Brod, 1982). Technostress is the negative psychological link between people and the introduction of new technologies. Where ergonomics is the study of how humans react to and physically fit with machines in their environment. Technostress is a process that includes the presence of “technology environmental conditions”; which are appraised as demands or “techno-stressors” that are taxing on the individual and require a change; which set into motion “coping responses”; that lead to psychological, physical, and behavioural “outcomes” for the individual’ (Tarafdar, Cary, et.al 2017). According to Çoklar and Akçay, (2016) there are five chief causes indicating technostress suffered by teachers such as individual problems, technical problems, education-oriented problems, health problems, Time problem. Nina Davis-Millis and (2006) tried to define technostress more comprehensively. Varanasi, et.al (2021) conducted an investigation on technostress among teachers in low-income Indian schools.

**Objectives of the study**

The objectives of the present study are as follows: -

1. To find out the extent of technostress of government secondary school teachers in Kerala
2. To find out whether there exist any significant differences in the level of technostress among government secondary school teachers in Kerala based on relevant subsample gender.

**Methodology in brief**

The present study is designed as a survey which comes under the preview of description research.

**Sample used for the study**

The population of the study includes all government secondary school teachers in Kerala state.

The sample of the study was consisting of 124 government secondary school teachers taken from various schools in Kerala.

**Tools Used for the study**

Technostress Scale (Shafeek P & Koya H M P, 2019) was used for the data collection . There are 41 items in the tool with a maximum score of 205 and minimum score of 41. items are distributed on the components Techno Insecurity, Techno Complexity, Techno Invasion, Techno Awareness and Techno Facility

**Statistical techniques used for the study**

To analyse the obtained data, descriptive statistics and t test were used. The tool was administrated to the government secondary school teachers and the responses were scored carefully and subjected to statistical analysis. The difference in the mean scores of Technostress for total and the relevant sub sample was calculated using ‘t test.’

**Results and discussion**

To find the extent of technostress among government secondary school teachers the obtained data were analysed using suitable statistical techniques. The analysis of data and discussion of results are presented under relevant heading.

To find the nature of distribution of the variable of the descriptive statistics like mean, median, mode, skweness and kurtosis of technostress and its components were found. Obtained results of Technostress and its components for government secondary teachers are presented in table 1

Table 1

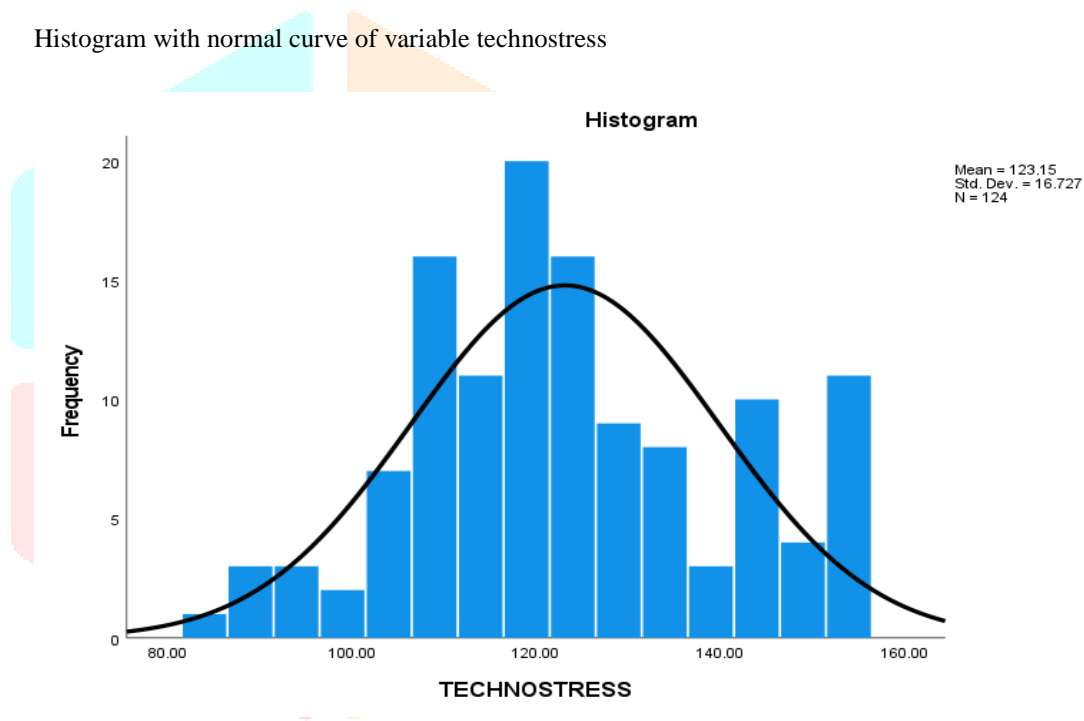
Statistical constants for the distribution of scores of Technostress and its components for government teachers

Statistical Constants	Techno Insecurity	Techno Complexity	Techno Invasion	Techno Awareness	Techno Facility	Techno stress
N	124	124	124	124	124	124
Mean	20.62	22.03	32.12	24.790	23.58	123.15
Median	21.00	22.00	32.00	25.50	24.00	121.00
Mode	23.00	20.00	39.00	24.00	25.00	119.00
Std. Deviation	3.46	3.18	5.48	4.35	3.56	16.72
Skewness	0.069	-0.040	-0.349	-0.070	-0.026	.107
Kurtosis	0.256	-.0326	-0.589	-0.410	0.398	.499

Mean (123.15) and median (121.00) of Technostress for government secondary school teachers are approximately equal. Mode (119) of Technostress for government secondary school teachers is slightly deviated from mean and median. The indices of skewness (.107) and kurtosis (0.499) indicate positively skewed, leptokurtic distribution of Technostress. Mean (20.62), median (21), and mode (23) of techno insecurity for total sample are approximately equal. The indices of skewness (.069) and kurtosis (.256) indicate positively skewed, leptokurtic distribution of techno insecurity. Mean (22.03), median (22), and mode (20) of techno complexity for total sample are approximately equal. The indices of skewness (.271) and kurtosis (.078) indicate positively skewed, leptokurtic distribution of techno complexity. Mean (34.87), median (35), and mode (39) of techno invasion for total sample are approximately equal. The indices of skewness (-.266) and kurtosis (.213) indicate negatively skewed, leptokurtic distribution of techno invasion. Mean (25.25), median (25.50), and mode (28) of techno awareness for total sample are approximately equal. The indices of skewness (-.040) and kurtosis (.066) indicate negatively skewed, leptokurtic distribution of techno awareness. Mean (24.92), median (25), and mode (27) of techno facility for total sample are approximately equal. The indices of skewness (-.372) and kurtosis (.011) indicate negatively skewed, leptokurtic distribution of techno facility. Obtained values of mean, median, mode, skewness and kurtosis for Technostress and its components indicate that the distribution is approximately normal. Histogram with normal curve of technostress is presented in figure 1.

Figure 1

Histogram with normal curve of variable technostress



**Effect of gender on technostress among secondary school teachers**

To find whether there exists any significant difference in technostress and its component of government secondary school male and female teachers, independent sample t test was conducted. The data and results of the mean comparison is presented in table 2.

Table 2

Data and results of comparison of mean scores of technostress and its component for relevant subsample based on Gender

Variable	Gender	N	Mean	Std. Deviation	t test
Technostress	Male	44	126.54	14.27	1.68
	Female	80	121.28	17.94	
Techno insecurity	Male	44	20.79	3.24	0.41
	Female	80	20.52	3.60	
Techno complexity	Male	44	22.45	3.04	1.097
	Female	80	21.8	3.24	
Techno invasion	Male	44	32.43	5.07	0.466
	Female	80	31.95	5.65	
Techno awareness	Male	44	26.28	3.87	2.798**
	Female	80	24.00	4.62	
Techno facility	Male	44	24.64	3.15	2.478*
	Female	80	23.01	3.76	

\* Significant at 0.05 level \*\* Significant at 0.01 level

Obtained t value showed that there is no significant difference in technostress ( $t=1.68$ ), techno insecurity( $t=0.41$ ) techno complexity ( $t=1.097$ ) and techno invasion ( $t=.466$ ) of male and female of government secondary school teachers at 0.05 level. The obtained t value for techno awareness( $t=2.798$ ) showed that there exists a significant difference in techno awareness of male and female of secondary school teachers at 0.01 level of significance. Mean score showed that male teachers have more techno awareness than female teachers. The obtained t value for techno facility( $t=2.478$ ) showed that there exists a significant difference in techno facility of male and female of secondary school teachers at 0.05 level of significance. Mean score showed that male teachers have more techno facility than female teachers.

### MAJOR FINDINGS AND CONCLUSION

Major finding of the study is, there is no significant difference in technostress ( $t=1.68$ ), techno insecurity( $t=0.41$ ) techno complexity ( $t=1.097$ ) and techno invasion ( $t=.466$ ) of male and female of government secondary school teachers at 0.05 level. There exists a significant difference in techno awareness and techno facility of male and female of government secondary school teachers at 0.05 level of significance. Government secondary school teachers have above average level of technostress. Technostress is an offshoot of technological development and now it is evident different types of drawbacks of it. To overcome such issues identification of the extent of the problem in detail is essential. In the process of techno pedagogical education techno awareness has a great role. So, it should be improved irrespective of male and female.

**REFERENCES**

Varanasi, R. A., Vashistha, A., Kizilcec, R. F., & Dell, N. (2021). Investigating technostress among teachers in low-income Indian schools. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW2), 1-29.

Tarafdar, M., Cooper, C. L., & Stich, J. F. (2017). The technostress trifecta-techno eustress, techno distress and design: Theoretical directions and an agenda for research. *Information Systems Journal*, 29(1), 6-42.

Çoklar, A., Efilti, E., Şahin, Y., & Akçay, A. (2016). Determining the reasons of technostress experienced by teachers: a qualitative study. *Turkish online journal of qualitative inquiry*, 7(2), 71-96.

Brod, C. (1982). Managing technostress: optimizing the use of computer technology. *Personnel Journal*, 61(10), 753-57.

Mahapatra, M., & Pati, S. P. (2018, June). Technostress creators and burnout: A job demands-resources perspective. In *Proceedings of the 2018 ACM SIGMIS conference on computers and people research* (pp. 70-77).

Nina Davis-Millis, "Technostress and the Organization. A Manager's Guide to Survival in the Information Age" (presented at the 67th Annual Meeting of the Music Library Association, Boston, Massachusetts, February 14, 1998), [web.mit.edu/ninadm/www/mla.htm](http://web.mit.edu/ninadm/www/mla.htm) (accessed September 4, 2006).

