

Teachers' Job Stress Scale (Tjss): Construction And Validation

Dr. S. Balamurugan^{1*}

^{1*}Assistant Professor, Department of Educational Psychology Tamil Nadu Teachers Education University Chennai – 600 097, Tamil Nadu, India, balamurugan@tnteu.ac.in

Citation: Dr. S. Balamurugan et .al (2023), Teachers' Job Stress Scale (Tjss): Construction And Validation, *Educational Administration : Theory and Practice*, 29(1), 403-407
Doi: 10.53555/kuey.v29i1.7189

ARTICLE INFO	ABSTRACT
	<p>The purpose of this study was to assess the influence of job stress of secondary school teachers' absenteeism in Chennai and Kanchipuram Districts. The sample was 100 teachers from 20 secondary schools. The simple random sampling technique was used that is, where the respondents who were randomly taken teachers who were working in the secondary school level. The data was collected by distributing questionnaires using a 5-point Likert scale to measure 37 statements. Consequently, the responses were subjected to critical ratio analysis of 't' test and the final form of the job stress scale was consisted of 35 statements. Therefore, the investigators believed that the 35 statements in the scale were meaningful and reflect the job stress of the secondary school teachers and it would be helpful to measure the level of their job stress level.</p> <p>Key Words: Absenteeism, Job Stress, and School Teachers</p>

Introduction

The destiny of the nation is being shaped in the classroom is not rhetoric. It focuses on the essential role; the teaching community is expected to play in making education qualitative. Education is a bed-rock to any nation's development either socially, economically or politically. In the educational system, teachers occupy a very important position among the human resources required for functioning of education system. Teachers help in nurturing students, enhancing the values, skills, knowledge and other attributes needed for worthy living in the society into them. The attainment of quality education system largely depends on teachers who implement education programmes. Therefore, teachers being regularly present in school and classroom, their active participation in educational activities, their commitment and dedication to school goals would enhance the quality of education that students receive. Teachers' regular attendance at school and active participation in academic activities could help to strengthen the academic bond between students and teachers.

Teachers are a priority population as they are role models for students and influential members of the society, capable of influencing the overall development of the students. Kyriacore and Sutcliffe (1978) defined teachers stress as "an uncomfortable feeling, negative emotions such as anger, anxiety, pressure and disappointment sourced from their work aspects as a teacher". As like other professions teachers have been leaving their profession at the start of the 21st Century, as the most cause problems with rising stress.

Most alarming is that 30% of all beginner teachers are leaving their profession and annual teacher turnover is higher when compared with turnover of all other occupation (Russell, 2000). A report in June 2002 issue of the National Associations of Secondary School Principals of the USA showed that annual turnover of profession other than teaching averaged 11% while annual turnover for the teaching profession was 15.7% (Ingersoll, 2002). Further, Johnson et al. (2005) concluded that out of 26 professions, teaching represents the second most stressful profession after ambulance car drivers. Teachers' occupational stress means their stress source which changes stress intensity related to the teaching or teaching context of the individual.

Concept of Job Stress

Hans Seyle coined the term 'stress'. The word stress has originated from the Latin word "stringere", which means to 'draw tight'. Hans Seyle (1936) defined stress as "a syndrome produced by diverse noxious agents".

He described stress as a no-specific response of the body to “noxious stimuli”. Stress is an unavoidable and unpleasant experience, which affects everybody in different ways and times. Seyle (1976) originally suggested that stress is simply the rate of wear and tear in the body.

The definitions of job stress or occupational stress refers to “a mental and physical condition which affects an individual’s productivity at the workplace, as well as his effectiveness, personal health and quality of work”.

The European Commission Directorate - General for Employment and Social Affairs (2000) define job stress refers to “the emotional, cognitive, behavioural, and psychological reaction to aversive and noxious aspects of work, work environment and work organization. It is a state characterized by high levels of arousal and distress and often by feelings of not coping”.

According to **Malta (2004)** job stress is “any discomfort which is felt and perceived at a personal level and triggered by instances, events or situations that are too intense and frequent in nature so as to exceed a person’s coping capabilities and resources to handle them adequately”.

Chen and **Silverthorne (2008)** labelled job stress “as a work-related psychological pressure and worker’s ability to respond and grip the specific situation at workplace skilfully”.

Yan and Xie (2016) defined job stress “as a series of physiological, psychological and behavioural responses due to the continuing effects of one or more stresses on individual in an organization”.

Beehr and Newman (1978) define job stress as “a condition arising from the interaction of people and their jobs and characterized by changes within people that force them to deviate from their normal functioning”.

Development of Teachers’ Job Stress Scale (TJSS)

As per the investigator’s knowledge and experience, there is no apt instrument for measuring the secondary school teachers’ job stress. Most of the available tools are generally measuring the job stress of other employee of organizations. Hence, the investigator had decided to develop a tool for measuring the school teachers’ job stress, especially the teachers working in the secondary school level.

Item Pooling

The investigator, at first made an in-depth study of review of available literature and available tools pertaining to ergonomics of school teachers. Diving deep in the review of related studies and the concepts in different books and journals on ergonomics have given a clear idea to the investigator about the various dimensions of ergonomics to be assessed among the secondary school teachers. Based on this, the investigator had collected and modified, rephrased, bifurcated and newly added items in the form of statements with objective of measuring the ergonomics of the secondary school teachers with 35 statements. The preliminary draft was given to 5 ergonomists, and 5 teachers for review, modification and suggestions. Based on the opinions of the experts’ 8 statements were deleted and some statements were re-worded to remove the ambiguity, and the draft tool with 27 items was ready for pilot study.

Pilot Study

In developing a new aircraft, the engineer draws heavily upon his knowledge and understandings of the science of aeronautics. However, after he/she has completed his plans for the new aircraft, he/she builds a small model and tests it extensively in a wind tunnel before constructing a full-scale prototype. The educational researcher proceeds similarly in that having completed a research plan; he/she often carries out a pilot study. A pilot study is a small scale mode of the research project usually involving only a few subjects, which is carried out in order to test and improve the plan before the researcher makes a major investment in time and effort required to carry out the planned research (Walter & Meredith, 1979)

In order to make perfection of the scale, a pilot study was conducted among 100 teachers with a simple random sample of 20 schools located in Chennai and Kanchipuram Districts of Tami Nadu. While administrating the scale, the teachers were instructed and motivated not leave any item with answering as far as possible. The purpose of the study was clearly explained and sufficient time was given to them and they were assured that their responses would be kept confidential and it will be used only for the research purpose.

Item Analysis

There are 37 statements in the pilot study. For the purpose of scoring, numerical values were assigned to each of the five categories of responses i.e. ‘5’ for Strongly Agree, ‘4’ for Agree and ‘3’ for Undecided, ‘2’ for Disagree and ‘1’ for Strongly Disagree. In this way, one can get a maximum score of 185 and minimum score of 37. Followed by scoring, the responses were subjected to critical ratio analysis of ‘t’.

Table: 1 Teachers' Job Stress Scale (TJSS) - Pilot Study

Sl. No.	Items	't' Value	Remarks
1.	Inability to do the desired work.	3.06	Selected
2.	Students' carelessness in studies.	3.76	Selected
3.	Not getting good books from the library.	3.51	Selected
4.	Strict control by Head of the Institution.	3.04	Selected
5.	Not doing one's work honestly.	2.97	Selected
6.	Not knowing new methods of teaching.	3.57	Selected
7.	Neglected by family members.	3.81	Selected
8.	Not earning adequate money to meet needs.	3.69	Selected
9.	Indiscipline during student admission.	3.86	Selected
10.	Pressure to evaluate more answer books in less time.	3.59	Selected
11.	Friction with colleagues.	3.17	Selected
12.	Non-availability of good books in library.	1.81	Not Selected
13.	Encouragement by others to perform inappropriate work.	3.67	Selected
14.	Unable to use new methods of teaching.	3.47	Selected
15.	Negative attitude of family members towards teaching profession.	3.42	Selected
16.	Pressure to tell important questions from examination point of view.	3.19	Selected
17.	To pay less attention to teaching due to administrative responsibilities.	3.43	Selected
18.	Colleagues' effort to humiliate me.	3.12	Selected
19.	Afraid of teaching in front of students.	1.73	Not Selected
20.	Compulsion to do slightly unjust acts for additional income.	3.47	Selected
21.	Not getting training for effective teaching.	2.73	Selected
22.	Family members favour tuition for earning more money.	2.70	Selected
23.	Lack of opportunities in the school to earn additional money.	3.88	Selected
24.	Pressure to ignore students who use unfair means in examination halls.	3.04	Selected
25.	Students do not work as per instructions.	3.55	Selected
26.	Lack of encouragement to further studies.	2.91	Selected
27.	Less motivation to teach.	3.12	Selected
28.	Not getting support from administrative officials.	2.70	Selected
29.	Lack of opportunities to learn in workshops and seminars.	3.84	Selected
30.	Encouragement from family members to accept gifts from others in order to earn additional money.	3.76	Selected
31.	Lack of money to have good treatment when ill.	3.15	Selected
32.	Less honorariums for doing admission work.	3.49	Selected
33.	Inappropriate behaviour of the members of flying squad.	3.56	Selected
34.	Unable to get time for self-learning.	3.21	Selected
35.	Administrative officials create hindrance in my work.	3.30	Selected
36.	Unable to save more money for future.	3.59	Selected
37.	Disinterest towards teaching profession.	2.47	Selected

In the present study, only such of those items having satisfied the level of both 't' and 'r' value were selected. It may remember that the tool used in the pilot study has 37 statements in total. Out of those 37 statements, only 35 statements were selected and those statements are presented in Table 2. These 35 statements had taken for the final form of the Secondary School Teachers' Job Stress Scale.

Table: 2 Items Selected based on 't' Value of Teachers' Job Stress Scale (TJSS)

Item No.	't' Value	Remarks
1	3.06	Selected
2	3.76	Selected
3	3.51	Selected
4	3.04	Selected
5	2.97	Selected
6	3.57	Selected
7	3.81	Selected
8	3.69	Selected
9	3.86	Selected
10	3.59	Selected
11	3.17	Selected
12	3.67	Selected
13	3.47	Selected
14	3.42	Selected

15	3.19	Selected
16	3.43	Selected
17	3.12	Selected
18	3.47	Selected
19	2.73	Selected
20	2.70	Selected
21	3.88	Selected
22	3.04	Selected
23	3.55	Selected
24	2.91	Selected
25	3.12	Selected
26	2.70	Selected
27	3.84	Selected
28	3.76	Selected
29	3.15	Selected
30	3.49	Selected
31	3.56	Selected
32	3.21	Selected
33	3.30	Selected
34	3.59	Selected
35	2.47	Selected

Reliability

Reliability is the degree of consistency that the instrument or procedure demonstrates, whatever it is measuring, it does consistency (Best and Khan, 1992). The investigator applied the test-retest method to obtain the reliability of the tool by administering the tool to 100 secondary school teachers. After two weeks of time gap, the tool was re-administered to the same 100 secondary school teachers. Pearson's co-efficient correlation was calculated for the two sets of scores. The reliability value of the ergonomics scale was found to be 0.85 and it is significant at 0.01 level.

Validity

A test is highly valid only if it measures what is intended to measure. Validity means truthfulness (Ress and Stancy, 1969). There are various methods of estimating validity of a measuring instrument. For the present study, content validity method was applied. This form of validity is estimated by evaluating the relevance of the test items, individually and as a whole. Validity of content should not depend upon the subjective judgment of only one specialist. For establishing validity, the investigator distributed a set of objectives and the tool constructed to 15 experts including ergonomists, physiotherapists and teachers to check whether the statements given in the tool satisfy the objectives of the study. On the basis of their suggestions, minor corrections were made for clarity in the tool.

Table: 3 Norms for Teachers Job Stress Scale

Score Range	Interpretation
1 - 58	Low
59 - 117	Moderate
118 - 175	High

Conclusion

The final form of the job stress scale consists of 35 statements. The investigator believes that the 35 statements in the scale are meaningful and reflect the job stress of the secondary school teachers and it will be helpful to measure the level of their job stress.

References:

1. **Best, J.W. and Kahn, J.V. (2007).** Research in education (9th Ed.). New Delhi: Prentice - Hall of India Private Limited.
2. **Beehr, T.A., & Newman, J.R. (1978).** Job stress, employees' health and organizational effectiveness: A fact analysis model and literature reviews. *Personal Psychology*, 3(1), 665-669.
3. **Chen, J.C., & Silverthorne, C. (2008).** The impact of locus control on job stress, job performance in Taiwan. *Leadership & Organizational Development Journal*, 29(7), 572-582.
4. **Dang, H.H., & Rogers, F.H. (2007).** What does teacher want, and does it matter? Job Satisfaction and Employee Performance. Mimeo, Washington, D.C.
5. **Darmody, M., & Smyth, E. (2016).** Primary School Principals' Job Satisfaction and Occupational Stress. *International Journal of Educational Management*, 30 (1), 115-128.
6. **Dogan, P. K., Akyel, Y., & Dogan, I. (2018).** Examination of the Relationship between Job Satisfaction and Job Stress of Physical Education Teachers. *Acta Didactica Napocensia*, 11(1), 1-12.
7. **Emily, J.K., John, M.M., & Corolyne, K.C. (2018).** The impact of occupational stress on job satisfaction among Kenyan primary school teachers. *International Journal of Scientific Research and Management*, 6(1), 2321-3418. <http://www.ijssrm.in> DOI: 10.18535/ijssrm/rbil.elof
8. **Hang, X., Liu, Q., and Zhang, M. (2021).** Dual stressors and female pre-school teachers job satisfaction during the COVID19: The mediation of work-family conflict. *Frontiers in psychology*. [Hppt://www.doi.org.10.3389/fpsyg.2021.691498](http://www.doi.org.10.3389/fpsyg.2021.691498)
9. **Horta, H., Jung, J., Zhang, L. and Postiglione, G. A. (2019).** Academics' Job-Related Stress and Institutional Commitment in Hong Kong Universities. *Tertiary Education and Management*, 25(4), 327-348.
10. **Hu, B. Y., Li, Y., Wang, C., Reynolds, B. L., & Wang, S. (2019).** The relation between school climate and preschool teacher stress: The mediating role of teachers' self-efficacy. *Journal of Educational Administration*, 57 (6), 748-767.
11. **Iyore, C. (2018).** Stresses, effects and coping strategies among teachers in secondary schools in Edo State. Nigeria, *International Journal of Research*, 6, 137-147.
12. **Ivatts, A. (2010).** Literature review of teacher absenteeism. Budapest: Roma Education Fund. <http://www.romadecade>
13. **Ismail, S. N., Abdullah, A., Abdullah, A. G. (2019).** The Effect of School Leaders' Authentic Leadership on Teachers' Job Stress in the Eastern Part of Peninsular Malaysia. *International Journal of Instruction*, 12(2), 67-80.
14. **Johnson, S., Cooper, C., Cartwright, S., Donald Taylor, P., & Millet, C. (2005).** The experience of work-related stress across occupations. *Journal of Managerial Psychology*, (20), 178-187.
15. **Kyriacou, C. & Sutcliffe, J. (2006).** Teacher Stress and Satisfaction. *Educational Research*, 21(2), 89-96. <https://doi.org/10.1080/0013188790210202>
16. **Li Zhouxing., & Li Jian-Bin. (2019).** The association between job stress and emotional problems in mainland Chinese kindergarten teachers: The mediation of self-control and the moderation of perceived social support. Retrieved from <https://doi.org/10.1080/10409289.2019.1669127>
17. **Li, Z., & Li, Jian-Bin (2020).** Association between job stress and emotional problems in mainland Chinese kindergarten teachers: The mediation of self-control and the moderation of perceived social support. *Early Education and Development*, 31 (4), 491-506. https://eric.ed.gov/?q=JOB+STRESS&ff1=dtYSince_2020&id=EJ1251374.
18. **Liu, T., & Hu, B. (2010).** Modelling and simulation of teachers occupational stress diffusion in China. Proceedings of the 2010 Winter Simulation Conference.