Development And Validation Of Teachers' Occupational Stress Questionnaire (Tosq) For School Teachers

GHULAM SARWAR¹, Dr. NAVEED SULTANA²

¹Ph.D. Scholar AIOU, Islamabad Email: <u>sarwar369@gmail.com</u>
²Chairperson, STED, AIOU, Islamabad Email: <u>naveed.sultana@aiou.edu.pk</u>

Abstract

The modern world is full of difficulties. Teaching is a mentally and physically demanding profession. Occasionally teaching becomes stressful for the teachers. Workplace stress has become more prevalent in the teaching profession, owing to rising occupational demands and economic difficulties on an individual. Keeping in view the importance, a scale is developed to measure the teachers' occupational stress, to create a better working environment for teachers of schools. Firstly,47 items were generated from literature review on physical stress, social stress, emotional stress, and cognitive stress. Psychologists and academics were approached for their professional judgement on the validity of the items. During validation process two items were excluded. Remaining items were 45. The questionnaire was distributed to 1046 teachers to rate themselves on a five-point Likert's Scale. Data obtained was fed into Software Package for Social Scientist (SPSS) for reliability statistics. In reliability statistics one item was deleted, so remaining were 44. These 44 items have α value of .93. The scale has good reliability value. The reliability value of the sub-scales is also good. The scale can be easily used to measure the occupational stress in teachers.

Keywords: Teachers' Occupational stress, Physical stress, social stress, Emotional stress, and Cognitive stress. Professional stress.

Introduction

A teacher today deals with a variety of scenarios. The monotonous, daily grind of labor strains the mind. Only because the man wants to gain social recognition does he react negatively to his work or responsibilities, as Freud (1962) once suggested. Teaching is internationally recognized to provide best levels of job satisfaction and at the same time it also presents remarkable challenges. Teacher experienced stress, is an intricate relationship between various factors in the surrounding, encompassing teacher and his immediate environment. (Beck & Garguilo, 1983; Mearns & Cain, 2003; Billingsley, 2004; Näring, Briët & Brouwers, 2006; Chaplain, 2008; Skinner & Beers, 2016).

The urge placed on from society are complex, and this leads to tension that is no longer focused. Sometimes a body's response changes depending on the demand. In such circumstances, it is important to remember that different circumstances might be associated with different stress responses, and vice versa.

Given how difficult and intricate teaching is, occupational stress among teachers is a growing problem. The economic strain on teachers has increased as a result of this issue. Failure to meet social and educational demands is a regular source of stress for teachers.

Job stress is defined as "the detrimental social, emotional, and physiological reactions that is created in and individual when the call of the duty does not coincide the expectation of the workers' skills, resources, or abilities." A person may get physically ill, hurt, cognitively retarded, or socially harassed and mentally tortured as a result of job stress.

Literature Review

Stress is a psychological phrase that describes an imbalance in the steadiness state. Stress results from an organism's inability to react effectively to social and emotional demands, whether they are actual or fictitious. Stress is inevitable in a demanding classroom and workload. Various circumstances, such as packed classes, standing periods, for extended and numerous communications (Borg, 1991). Endocrinologist (Hans Selye, 1930) coined the term "stress" to describe the circumstances in which organisms respond to and adapt to their immediate environment (Viner, 1999). Hitherto, Cannon (1920) had referred to the happening of animals reacting to threats and dangers with an overall evoking of the sympathetic nervous system as the acute stress reaction, which later became the first of the three steps of General Adaptation Syndrome (Selye, 1976). Selye (1976) elucidated that if an organism is exposed to a variety of stimuli over an extended period, it may create reactions that are widespread rather than only distinct to the change in the environment or stimulus at hand. According to Selve (1976), stress is an illness that comprises all of the bodily variations that aren't particularly induced (Krohne, 2001). Payne claimed that a high level of motivation leads to psychological well-being. Every living thing is constantly under stress but only becomes aware of it when it can no longer take it. Therefore, when people report feeling anxious, they are actually under more stress than they can bear (Payne & Donaghy, 2010).

Stress doesn't just result from traumatic events or serious occurrences such as accidents or death, but it can also be brought on by issues that arise frequently yet last for a long time. Concerns about job and work, such as disproportionate demands at work, employment uncertainty, conflicts at work, a lack of control, and insufficient resources training, time-consuming and ineffective meetings, seminars, and travel itineraries that are too busy (Agarwal, 2015; Ahmad & Ashraf, 2016). Mental stressors can also lead to stress in the whole body or psyche. of the stressed-out individual (Agarwal, 2015; Chandani, Mehta, Mall & Khokhar, 2016).

Different factors contribute to teachers' stress. These not only include overscheduling, slipping fast deadlines but high expectations from leadership. (Miller, Smith & Rothstein, 1994). Even with these factors, most people chose to disregard them or keep going with their current behavior. seeking any type of therapy, medicine, or treatment until it becomes severe and begins exhibiting discernible effects.

Stress has an impact on the mind, body, behavior, and day-to-day operations. relationships (Lupien, McEwen, Gunnar & Heim, 2009). tension resulting from work-related behavior relationships are harmed by the workplace or the work environment, socializing, eating, and sleeping habits outside with coworkers. in the office (Jackson & Maslach, 1982). The outcome of workplace stress on Employee output are persistent across all professions (Murray-Gibbons & Gibbons, 2007); hence, occupational stress can also harm output. also, of instructors in the classroom. Teachers may experience stress due to their job or personal characteristics like procrastination, obsession with perfection, or being disorganized. causes include conflicts at work, workload, crowded classrooms, a lack of privacy, or longer school days. It might have an impact on their creativity, problem-solving abilities, teaching style, or general classroom management (Montgomery & Rupp, 2005), which would ultimately have an impact on their student's academic success. Stress cannot be ignored because it impacts not only our lives but

GHULAM SARWAR 1756

also the lives of those close to us, thus it needs to be dealt with.

Professional stress is one of the most common phenomena in contemporary society and the workplace, since stress is produced by all facets of human activity (Aremu and Adenegan, 2013; Ismail., Abdullah., Khon., & Hoe, 2014). Actually, the term "stress" is rarely understood precisely, and scientists disagree on what exactly constitutes "professional stress." This is because it might imply various things to various people (Stranke, 2005). Many academics believe that workplace stress has a significant effect on individual life and effect to both mental and physical health (Hopkins, 2014). However, psychologists refer to stress as the body's reaction to a change that warrant for emotional and physical adjustment (Bauer & Erdogan, 2009).

Most people are unaware of the level of stress that teachers must manage daily. "Wow, my kids can be holy terrors. I'm glad I can drop them off at school so I can take a break. (Kaur, 2011). As per Kyriacou (2001), teacher occupational stress is felt by teachers as negative emotions that result from some aspects of their work as educators. These emotions include anger, anxiety, frustration, depression, and nervousness (p 94). According to Chan, Chen, and Chomg (2010), occupational stress is a negative emotion that worsens as a result of people overworking themselves and worrying that they won't be able to handle too much stress.

They frequently have big courses with full enrollment and have numerous student difficulties. The youngsters' behavior at home and at school will likely differ. Because of this, teachers frequently deal with administrative issues, student issues, and burnout. Occupational stress can result in several adverse effects, (Schwab, 1983). It can cause burnout, which would necessitate additional education-related training. (Niles & Anderson,1993 & Mo, 1991). In conclusion, various scholars have diverse definitions of professional stress. They do;

however, all concur that it is a common occurrence in the workplace. Therefore. management has to be aware of the causes and feasible solutions. With this in mind, we define professional stress as stressful variables that an individual experiences at work and that result in psychological illnesses such as anxiety, rage, imbalance, tension, frustration, and despair. Numerous researches have shown that the primary sources of occupational stress faced by teachers in schools are as follows (see, for example, Travers & Cooper, 1996; Benmansour, 1998; Pithers & Soden, 1998). Occupational stress can be caused by many factors. As indicated by Kyriacou (2001, p. 31) as follows:

- I. Educating under-motivated students.
- II. Upholding discipline.
- III. Living with change.
- IV. Time constraints and workload
- V. Receiving criticism from others
- VI. Interactions with coworkers.
- VII. Ineffective organizational and managerial practices.
- VIII. Self-esteem and status update.
- IX. Individual disagreement and uncertainty.
- X. Unhealthy working and physical circumstances.
- XI. Ignoring how people fit within organizations.

Operational definition

Occupational Stress

Occupational stress is tension in the workplace. Stress is described in terms of how it affects a person physically and physiologically. Stress is a condition or factor that can lead to mental, bodily, or emotional pressure or tension, (Anjum & Swathi, 2017).

Methodology

For this scale development, the procedure given by Devellis (2017) was adopted. These include defining the construct, developing item pools, deciding the format, consulting experts, taking into account the inclusion of verified things, and administering the items according to a development scale. Assess each item, and Aim for the ideal scale length. For this purpose, There was creation an item development model with indicators for each of the four sub-constructs. to measure the stress level of teachers', a scale of different types of stress was devised. The scale was developed keeping in view the research of Anjum & Swathi, (2017). These types are i. Physical stress, ii. Social stress, iii. Emotional stress and iv. Cognitive stress.

After operationally defining the construct, an item development methodology was developed for each of the four sub-constructs. A total of 47 items were developed for all four sub-constructs on aligned, partially aligned, and not aligned. After their responses two items were deleted so, the remaining items were 45. The content validity index calculated as per the universal agreement method is .95 which is excellent (Rodrigues, Adachi, Beattie & McDermid, 2017). These 45 items were processed for 1046 teachers with 500 male and 546 female. After coding their rating, data was entered into SPSS for reliability and

factor analysis. Factor analysis was executed to show the latent variables in the scale. Based on the results of the exploratory factor analysis of the TOSO, four factors were identified related to work stress for teachers. This is in line with other researches that identify teachers' stress as multidimensional. Only those items in the scale were retained that attain a Eugene value of 1. The Kaiser-Meyer-Olkin measure used as sample frequency test- the was .926. This value is .70, demonstrating significant items for every subscale. (Leech, Barrett & Morgan, 2015). The alpha value of Bartlett's Test of sphericity was significant (.0001) (<.05) showing that there was a connection among items (Leech, Barrett & Morgan, 2015). All values of communalities were greater than .30.

Result

To demonstrate The scale's psychometric properties, including internal consistency and item-to-item association, were assessed. The coherence of every item with the other items on the scale is demonstrated by inter-item correlation. A complete reliability study was done using the column reliability and 44 items were left.

The reliability of the measure is given in table 1.

GHULAM SARWAR 1758

Table 1
Reliability of TOSQ

No. of items	Cronbach Alpha
44	.93

Table 1 indicates that the measure had 44 items with Cronbach Alpha .93. As per to Nunnaly (1978), Hulinn, Cudek & Netemeyer (2001), and Rothbard & Edward (2003) reliabilities values

from .60 to .70 are taken as acceptable, greater than .80 are good and greater than .95 are not very ideal because that presumably show redundancies.

The reliability of four sub-scales is given in table 2.

Table 2
Reliability of Sub-constructs of TOSQ

No	Construct	Number of items	Cronbach Alpha
1	Physical stress	10	.94
2	Social stress	10	.95
3	Emotional stress	14	.95
4	Cognitive stress	10	.93

Table 2 shows that the reliability statistics of all four sub-scales are in acceptable range. The table indicate that teachers' occupational stress questionnaire (TOSQ) has four sub-scales with physical stress having 10 items, social stress also has10 items, emotional stress having 14 items, and cognitive stress has10 items.

Discussion

The purpose of the study was to measure the stress level of our teachers. The sample contained 1046 teachers of Secondary Schools for boys and girls. Additionally, it has a number of benefits that make it appropriate for usage in a variety of research settings. TOSQ is suitable for use in all of these contexts because it was tested on a sizable sample of participants who came from both rural and urban locations and who taught both from primary to secondary school students. Additionally, our instrument is concise enough to be employed when there is a shortage of time or when the load on the respondent is increased. Additionally, the TOSQ items are quite similar to those in international studies (such as Shirom, Oliver, Stein., 2009., Kourmousi, Darviri, Varvogli, Alexopoulos., (2015). making our instrument suitable for cross-cultural study.

The scale has 44 items with a reliability of .93 which was ranging from .95 to .96. The average score of the teachers on the scale is good but comparatively below average on the sub-scale social stress and emotional stress and this area need improvement. For this purpose, the inservice teachers' training should include components to help teachers overcome such kind of stress. The research was delimited to Federal Government Schools working under the umbrella of the Federal Directorate of Education in Islamabad Capital Territory. The researcher suggests a larger sample to check the result further.

References

 Agarwal, R. N. (2015). Stress, job satisfaction and job commitment 's relation with attrition with special reference to Indian IT sector. Management and Innovation for Competitive Advantage.

- Anjum, A., & Swathi, P. (2017). A study on the impact of emotional intelligence on quality of life among secondary school teachers. International Journal of Psychology and Counseling, 7(1), 1-13.
- 3. Aremu, A. O., & Adenegan, T. S. Stress Management in Nigeria Teaching-Learning Environment Using the Application of Information Communication Technology (ICT).
- 4. Bauer, TalyA., & Erdogan, Berrin, (2009). An Introduction to Organizational Behavior. http://creativecommons.org/licenses/by-nc-sa/3.0.
- 5. Beck, C.L., & Garguilo. (1983). Burnout in teachers of retarded and nonretarded children. The Journal of Educational Research, 76(3):169–173. https://doi.org/10.1080/00220671.1983.1 0885444
- Benmansour, N. (1998). Job Satisfaction, Stress, and Coping Strategies among MoroccanHigh School Teachers. Mediterranean Journal of Educational Studies, 3(1), 13-33.
- 7. Billingsley, B.S., (2004). Special education teacher retention and attrition: A critical analysis on the research literature. The Journal of Special Education,38(1):39–55. https://doi.org/10.1177%2F0022466904 0380010401
- 8. Borg, M. G., & Riding, R. J. (1991). Towards a model for the determinants of occupational stress among

- schoolteachers. European Journal of Psychology of Education, 6(4), 355-373.
- 9. Chandani, A., Mehta, M., Mall, A., & Khokhar, V. (2016). Employee engagement: A review paper on factors affecting employee engagement. Indian Journal of Science and Technology, 9(15), 1-7.
- Chan, A. H., Chen, K., & Chong, E. Y. (2010). Work stress of teachers from primary and secondary schools in Hong Kong
- Chaplain,R.P., (2008). Stress and psychological distress among trainee secondary teachers in England. Educational Psychology, 28(2):195–209. https://doi.org/10.1080/0144341070149 1858
- 12. DeVellis, R.F. (2017). Scale Development: Theory and Application. Sage Publication.
- 13. Dewe, P. J., & Cooper, C. L. (2017). Work Stress and Coping: Forces of Change and Challenges. SAGE.
- Fraenkel, J. K., & Wallen, N.E. (2003).
 How to design and evaluate research in education. The McGraw-Hill Company, Inc. New York.
- 15. Freud, S. (1962). On the grounds for detaching a particular syndrome from neurasthenia under the description 'anxiety neurosis'. In The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume III (1893-1899): Early Psycho-Analytic Publications (pp. 85-115).

GHULAM SARWAR 1760

- 16. Hopkins, M. L. (2014). The sources of work stress and coping resources for high school Teachers in the Gauteng Province within different career stages (Doctoral dissertation).
- 17. Hultin C., Netemeyer R., Cudeck R. (2001). Can a reliability coefficient be too high? Journal Consumer Psychol. 10,55-58.
- 18. Jackson, S. E., & Maslach, C. (1982). After-effects of job-related stress: Families as victims. Journal of Organizational Behavior, 3(1), 63-77.
- 19. Kaur, S. (2011). Comparative study of occupational stress among teachers of private and govt. schools in relation to their age, gender, and teaching experience. International Journal of Educational Planning & Administration, 1(2), 151-160.
- 20. Kourmousi N, Darviri C, Varvogli L, Alexopoulos E. (2015). Teacher Stress Inventory: validation of the Greek version and perceived stress levels among 3,447 educators. Psychol Res Behav Manag. https://doi.org/10.2147/PRBM.S74752.
- 21. Krohne, H. W. (2001). Stress and coping theories. The international encyclopedia of the social and behavioral sciences, 22, 15163-15170.
- 22. Kyriacou, C. (2001). Teacher stress: Directions for future research. Educational review,53(1), 27-35.

- 23. Kyriacou, C. (2001). Teacher stress: Directions for future research. Educational review,53(1), 27-35.
- 24. Leech, N.L., Barrett, K.C., & Morgan, G.A. (2005). IBM SPSS for Intermediate Statistics: Use and Interpretation. Routledge. New York.
- 25. Lupien, S. J., McEwen, B. S., Gunnar, M. R., & Heim, C. (2009). Effects of stress throughout the lifespan on the brain, behavior and cognition. Nature Reviews Neuroscience, 10(6), 434-445.
- 26. Mearns,J., & Cain, J.E., (2003). Relationship between teachers' occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. Anxiety, Stress, & Coping, 16(1):71–82. https://doi.org/10.1080/1061580021000 057040
- 27. Merriam, S. B. (1998). Qualitative Research and Case Study Applications in Education. Revised and Expanded from" Case Study Research in Education.". Jossey-Bass Publishers, 350 Sansome St, San Francisco, CA 94104.
- 28. Miller, L. H., Smith, A. D., & Rothstein, L. (1994). The stress solution: An action plan to manage the stress in your life. Pocket. In Kerr, C. B. (1997). Stress and burnout in independent piano teachers in Oklahoma (Doctoral dissertation).
- 29. Murray-Gibbons, R., & Gibbons, C. (2007). Occupational stress in the chef profession. International Journal of Contemporary Hospitality Management, 19(1), 32-42.

- 30. Näring. G., Briët. M., & Brouwers. A. (2006). Beyond demand–control: Emotional labour and symptoms of burnout in teachers. Work & Stress, 20(4):303–315. https://doi.org/10.1080/0267837060106 5182
- 31. Niles, S. G., & Anderson Jr, W. P. (1993). Career development and adjustment: The relation between concerns and stress. Journal of Employment Counseling, 30(2), 79-87.
- 32. Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill.
- 33. Payne, R., & Donaghy, M. (2010).
 Payne's handbook of relaxation techniques. London: Churchill Livingstone.
- 34. Pithers, R. T., & Fogarty, G. J. (1995). Symposium on teacher stress. British Journal of Educational Psychology, 65(1), 3-14.
- 35. Robbins, S. P., & Judge, T. (2012). Essentials of organizational behavior.
- 36. Rodrigues, I. S., Adachi, J. D., Beattie, K. A., & Macdermide, J. C. (2017). Development and Validation of a New Tool to Measure the Facilitators, Barriers, and Preferences to Exercise in People with Osteoporosis. BioMed Central
- 37. Rothbard, N. P., & Edwards, J. R. (2003). Investment in work and family roles: A test of identity and utilitarian motives. Personnel Psychology, 56(3), 699-729.

- 38. Schwab, J. J. (1983). The practical 4: Something for curriculum professors to do. Curriculum inquiry, 13(3), 239-265.
- 39. Selye, H. (1936). A syndrome produced by diverse nocuous agents. Nature, 138(3479), 32. Shirom, A., Oliver, A., & Stein E., (2009). Teachers' Stressors and Strains: A Longitudinal Study of Their Relationships, International Journal of Stress Management.of Their Relationships, International Journal of Stress Management
- 40. Skinner. E., & Beers. J., (2016). Mindfulness and teachers' coping in the classroom: A developmental model of teacher stress, coping, and everyday resilience. In KA Schonert-Reichl & RW Roeser (eds). Handbook of mindfulness in education: Integrating theory and research into practice. New York, NY: Springer. https://doi.org/10.1007/978-1-4939-35062
- 41. Stranks, J. W. (2005). Stress at work: Management and prevention. Elsevier.
- 42. Travers, C. J., & Cooper, C. L. (1996). Teachers under pressure: Stress in the teaching profession. Psychology Press.
- 43. Viner, R. (1999). Putting stress in life Hans Selye and the making of stress theory. Social Studies of Science, 29(3), 391-410.