Determinants of Stress among Primary School Teachers of Government Sector

Sadaf Waqar*, Dr. Umm E Rubab Kazmi**

Abstract

This research aims to develop an indigenous scale of stress for Government primary school teachers. The research was conducted in three phases. In first phase, stressors of teachers were explored through semi structured interviews with equal number of both genders (N=10). Afterwards, over-lapping stressors were eliminated. In phase II, content validity of stressors list was established through ratings of 10 experts (Clinical Psychologists and Senior Educationists). In phase III, main study was done. Permission was taken prior to data collection. Demographic form along with indigenously developed stress scale for primary school teachers (SSPST) was administered on sample (N=306) of Government primary school teachers (men, n = 150 and women, n = 150). Results show Mean of the SSPST (M=106.30, *SD*=38.0) with Cronbach alpha of .95. Total 5 factors of SSPST emerged which were : Lack of Resources, Workload, Physical and Psychological effects, Job Stress, Insulting Attitude of Colleagues. SSPST will be a reliable and valid tool for assessing stress among Government primary school teachers.

Key words: stressors, indigenous, valid, reliable

This Article can be cited as:
Waqar S., Kazmi R., (2019). Determinants of Stress among Primary School Teachers of Government Sector Journal of Arts and Social Sciences, VI (2), 70--87.

* Sadaf Waqar Department of Applied Psychology, Lahore College for Women University (LCWU) Jail Road
** Correspondence concerning this article should be addressed to Dr. Umm E Rubab Kazmi Assistant Professor Department of Applied Psychology, Lahore College for Women University (LCWU) Jail Road kazmi_rubab@yahoo.com

Introduction

Presently, stress is the most universal problem in this demanding and intricate life (Eriksen, 2000).

Stress is an exceedingly common aspect of daily life and it is a mental and bodily situation when

the source to deal with is inadequate (Michie, 2002). Furthermore, stress may also lead to augmented exhaustion (Spikard, Gabbe, & Christensen, 2002). Sligman (2000) described stress as emotional reaction associated with expected biochemical, bodily, mental and behavior transformations that are either; changing the tense state or obliging its result. Situations that activate stress are described as stressors which enfold broad part of circumstances (Balse, 1996). In return to tension, the brain stimulates plenty of secreting systems which free numerous dangerous hormones (Kloet, Joels, & Holsboer, 2005).

Numerous issues add stress in life like passing away of other half, companion or relative, suffering terrible physical condition and workplace stress etc. Workplace tension is one more major base of various problems in person's life (Majeed, Rehman, & Rashid, 2011). Farber (2000) describes workplace stress as a state of intellective and bodily uphill struggle in response to the challenging situations of the workplace. Dictatorial chief, deadlines, pressure and demands of the firm cause peak stress in working persons (Sheikh & Bhushan, 2002).

Teachers are the building blocks of any nation and primary education is the most pertinent (Bertoch, 2002). According to Borg and Riding (2003), it is clear that apart from colossal level stressors there are many minute issues which cause tension and almost 60 % government primary and secondary school teachers reported increase in stress from past 7 years

because of tough working schedule. According to Kyriacou (2002) long working hours is another cause of stress. It is identified that job demands are getting modified day by day. Naidoo and Patel (2009) described that there are plenty of tasks which primary school teachers have to do e.g., keep the kids fresh, tell them the motives of the class, talk with parents and most of all, managing the

behavior problems of students. Common results of stress are headache, sleeplessness, disorientation, neck ache, dizziness etc (Olaitan, Oyerinde, Obiyemi, & Kayode, 2009).

Falzon (2002) demonstrated that 80% school teachers suffer stress because of lack of social support. Hanif (2004) demonstrated that government school teachers experience high level of stress than private school teachers. Family system, monthly income, class strength, age and work practice contribute significantly in stress. The vital purpose about coping with the stress is to balance between work, job and relations (Younghusband et al., 2003). Psychological facilitation, balanced line up, appropriate diet and communication skills are supportive in coping with stress (Chona & Roxas, 2009; Pribylova, Smetanova, Machek, Koznarova, & Knaute, 2015).

For this purpose, an indigenous tool of stress for Government primary school teacher was developed to measure the level of stress and cultural uniqueness. As primary school teachers experience higher levels of stress because in private schools, environmental conditions and opportunities (attractive incentives, teaching equipments) are better than Government sector (Bamji, 2005).

Objectives of the study

The objectives of the research were

- To develop an indigenous scale of stress
- To establish its reliability and validity

Method

Phase I (Identification of Stressors)

This part included identification of stressors of Government primary school teachers by a semi-structured interview.

Participants

10 primary school teachers having equal number of men (*n*=5) and women (*n*=5) from four (4) different schools.

Sampling distribution of Govt primary school teachers (n=10)

School Name	Men	Women	Total
Govt Junior Model Middle School, Samanabad, Lahore.	---	2	2
Maqbool-e-Aam School, GOR I, Lahore.	1	---	1
Govt Dar-un-Niswan School, Lahore.	---	3	3
Govt Primary School Services Hospital, Lahore.	4	---	4

Total	5	5	10

Inclusion criteria

- Government Primary school teachers with minimum two years experience
- Age 24-55 years

Exclusion criteria

Teachers with experience fewer than two years

Materials

Materials included written consent form, demographic sheet and semi-structured interview.

Procedure

Five (5) men and Five (5) women Government primary school teachers from four (4) different schools were selected. Written consent was taken from the willing participants. Teachers having experience fewer than 2 years were excluded. Age range was 24-55. A Semi-structured interview was done to draw out stressors. Later on, list of stressors (65) was prepared.

Phase II (Establishing content validity)

In phase II, list of stressors was sent to experts for content validity. These were 5 experienced Government primary school teachers and 5 clinical psychologists (Men=5 and Women=5) having minimum 10 years of experience, instructed to rate each item on a 3 point scale (clarity of concept, relevance and representing the frequency/occurrence of that phenomenon). Items with

more than 50% frequency were retained in the list. Total 54 items were retained and 5 items were excluded due to dubious meaning.

Phase III (Establishing Reliability and construct validity through factor analysis)

Participants

300 Government primary school teachers with equal number of men and women (*n*=154, *n*=152).

Inclusion criteria

- Govt. Primary school teachers with minimum two years experience
- Age range 24-55 years

Exclusion criteria

Teachers with experience fewer than two years

Materials

Indigenously developed stress scale for primary school teachers (SSPST). A list of stressors (54 items) was compiled in form of 5 point rating scale ranging from completely disagree to completely agree. SSPST was administered along with demographic sheet on a sample of 306 teachers.

Procedure

After the agreement from school authorities, consent was taken from the sample. Lahore is alienated in nine (9) towns by the union council. Among nine (9) towns, two (2) towns were chosen

for data collection. A sample of 300 men and women Government primary school teachers was chosen from fourteen schools that come under above mentioned two (2) towns. Demographic sheet along with SSPST was administered on sample. Afterwards, researcher thanked the participants. 17% of the sample (N=50) was again approached for finding the test retest reliability of SSPST with two weeks interval. The mean age of the sample was 44.18 (*SD*= 9.24). Test retest reliability was found to be significant (r=.89**, p<.01).

Results

This study has explored the stressors of Government primary school teachers. Descriptive statistics along with factor analysis, correlation and t-test were used. Demographic characteristics of the sample revealed that the sample age mean was (*M*= 40.60, *SD*=8.22). Education was categorized into four categories which were matriculation, intermediate, graduation and masters. 4% of sample was matric, 28% was intermediate, 36% was graduate and 32% of the sample was masters. Marital status of the respondents indicates that married respondents were 67%, 27% were single, 3% were divorced and 3% were widow/widowed. Family system showed that 55% members had combined family and 45% had nuclear family system. 48.5 % of the sample was having certificate in Primary Teaching (PTC) and 46.3% was SST.

Table 1. *Means and Standard Deviation of SSPST*

Scale	*M*	*SD*
SSPST	106.3	38.0

Note. SSPST= Stress Scale for Primary School Teachers

Table 1 indicate that the mean of the SSPST is 106.3 and (*SD*= 38.0).

Table 2. *Cronbach's Alpha Score Showing Reliability SSPST*

Measures	Number of items	Cronbach's alpha
SSPST	53	.95

Table 2 indicates cronbach alpha of SSPST (α=0.95) which indicates significantly high reliability of the scale.

Table 3. *Item Total Correlations of SSPST*

Item #	R	Item #	R
1	.63**	20	.62**
2	.59**	21	.67**
3	.63**	22	.69**
4	.59**	23	.68**
5	.41**	24	.57**
6	.58**	25	.64**
7	.65**	26	.60**
8	.60**	27	.62**
9	.58**	28	.62**
10	.60**	29	.60**
11	.64**	30	.60**
12	.60**	31	.59**
13	.63**	32	.57**
14	.56**	33	.59**
15	.50**	34	.59**
16	.58**	35	.60**

17	.58**	36	.54**
18	.68**	37	.52**
19	.64**	38	.55**

Item #	R	Item #	R
39	.56**	47	.54**
40	.56**	48	.49**
41	.48**	49	.46**
42	.56**	50	.46**
43	.60**	51	.46**
44	.52**	52	.44**
45	.57**	53	.38**
46	.51**	54	.32**

Note. **p<0.01, *p<0.05

In table 3, item total correlation shows that item #1, 3, 7, 8, 10, 11, 12, 13, 18, 19, 20, 21, 22, 23, 25, 25, 26, 27, 28, 29, 30, 35, 43 are having correlation of .60 or above. These items show significant positive correlation. Whereas item # 2, 4, 6, 9, 14, 15, 16, 17, 24, 31, 32, 33, 34, 36, 37, 38, 39, 40, 42, 44, 45, 46, 47 having correlation of .50, these items indicate average correlation while items 5, 41, 48, 49, 50, 51, 52, 53, 54 show weak correlation.

Table 4. *Factor Loading of SSPST by Using Factor Analysis with Varimax Rotation*

		Factors				
Sr.#	items	F1 (LOR)	F2 (WL)	F3 (JI)	F4 (LOS)	F5 (EPPH)
1	1	**.78**	.12	.25	.14	.26
2	2	**.81**	.07	.24	.13	.30
3	3	**.77**	.09	.24	.19	.20

4	4	**.77**	.08	.21	.12	.20
5	5	**.52**	.23	.24	.18	.20
6	6	**.76**	.14	.10	.03	.01
7	7	**.79**	.17	.04	.17	.05
8	8	**.74**	.19	.00	.19	.09
9	9	**.75**	.12	.08	.22	.08
10	10	**.70**	.28	-07	.17	.00
11	11	**.77**	.22	-.04	.19	.05
12	12	**.67**	.29	.01	.03	.09
13	13	**.70**	.35	.00	.02	.08
14	14	**.73**	.15	.07	.13	.10
15	15	**.66**	.11	.14	.17	.19
16	22	**.46**	.40	.19	.27	.11
17	23	**.37**	.31	.17	.52	.11
18	21	.30	**.50**	.26	.27	.03
19	24	.06	**.53**	.20	.34	.12

		Factors				
Sr.#	items	F1 (LOR)	F2 (WL)	F3 (JI)	F4 (LOS)	F5 (EPPH)
20	25	.24	**.55**	.26	.21	.05
21	26	.32	**.60**	.06	.12	.04
22	27	.30	**.44**	.11	.42	.00
23	28	.20	**.32**	.18	.61	.07
24	29	.13	**.63**	.16	.28	.04
25	30	.28	**.45**	.07	.40	.02
26	31	.13	**.59**	.18	.27	.05
27	32	.06	**.56**	.24	.21	.18
28	33	.16	**.68**	.15	.09	.09

29	34	.22	**.64**	.08	.15	.10
30	35	.21	**.63**	.09	.19	.09
31	36	.04	**.55**	.15	.35	.09
32	37	.07	**.59**	.14	.22	.05
33	38	.20	**.65**	.20	.05	.09
34	39	.13	**.67**	.17	.04	.14
35	40	.10	**.65**	.18	.07	.14
36	41	.09	**.61**	.21	.08	.13
37	42	.04	.24	**.61**	.34	.16
38	43	.13	.26	**.74**	.23	.02
39	44	.05	.24	**.70**	.22	.00
40	45	.07	.31	**.72**	.14	.06

		Factors				
Sr.#	items	F1 (LOR)	F2 (WL)	F3 (JI)	F4 (LOS)	F5 (EPPH)
41	46	.08	.24	**.69**	.00	.24
42	47	.02	.25	**.70**	.12	.26
43	48	.01	.26	**.57**	.08	.37
44	49	.03	.18	**.57**	.04	.43
45	50	.00	.17	**.53**	.17	.44
46	16	.23	.20	.18	**.59**	.14
47	17	.37	.06	.18	**.69**	.03
48	18	.44	.27	.15	**.56**	.01
49	19	.30	.27	.23	**.56**	.03
50	20	.23	.31	.13	**.56**	.23
51	51	.04	.18	.45	.08	**.57**
52	52	.00	.20	.35	.06	**.71**
53	53	.04	.18	.19	.12	**.80**

54	54	.10	.21	.13	.09	**.77**

Factors	I	II	III	IV	V
Eigen values	18.08	6.75	2.70	1.96	1.72
% of variance	33.48	12.50	5.00	3.64	3.18
Cumulative %	33.48	45.99	51.00	54.64	57.83

Note. LOR= lack of resources, WL= workload, PPE=physical and psychological effects, JS= job stress, IAC= Insulting attitude of colleagues

Table 4 presents factor loadings and eigen values of the items of SSPT. Those items were retained which were having minimum .30 loading on a particular factor (Khan, 2004).

Table 5. *Alpha Coefficient of Subscales of SSPST*

Scales	No of items	Cronbach's score
LOR	I7	.94
WL	19	.93
PPE	9	.90
JS	5	.83
IAC	4	.85

Table 5 represents alpha coefficient of subscales of SSPT. The alpha co efficient of all subscales is highly significant i.e., Lack of teaching resources 0.93, Work Load 0.92, Lack of Support/cohesiveness among colleagues 0.92 and Job Insecurity 0.86. These findings show the high reliability and internal consistency of SSPST.

Table 6. *Correlation among SSPST and its factors*

	Scales	1	2	3	4	5	6
1.	SSPST	_	.79**	.85**	.69**	.51**	.85**
2.	LOR	_	_	.46**	.27**	.09	.65**

3.	WL	_	_	_	.60**	.45**	.71**
4.	PPE	_	_	_	_	.62**	.50**
5.	JS	_	_	_	_	_	.34**
6.	IAC	_	_	_	_	_	_

** p< 0.01

Table 6 shows correlation of subscales with total score of SSPST, which also depicts that the subscales of SSPST have significant correlation among each other and with total score of SSPST.

Table 7. *Independent Sample t-test for the Comparison of Gender Difference on Stress*

Stress	Males (n=154)		Females (n=152)				95% CI		Cohen`s d
	M	*SD*	*M*	*SD*	t(304)	p	LL	UL	
	96.81	34.83	116.0	38.92	-4.55	.000	-27.52	-10.51	0.5

Table 7 depicts that there is significant mean difference between the scores of men (*M* = 96.8, *SD* = 34.8) and women (*M* = 116.0, *SD* = 38.9) on SSPST with *t* (304) = 9.5, *p* = .00, 95% CI [-27.5, -10.9], *d* = 0.5. Results indicate that female primary school teacher experience more stress as compared to male primary school teacher.

Discussion

The research was conducted to explore the nature of stressors among primary school teachers of Government sector by developing an indigenous tool for calculating the stress level. Total items of SSPST after expert rating were 55. Factor analysis with varimax rotation was applied. Total 54 items emerged on 5 factors These five actors were named as lack of teaching resources (LoR), workload (WL), physical and psychological effects (PPE), job stress (JS) and insulting attitude of

colleagues (IAC). Items with minimum .30 factor loading were retained.17 items appeared on factor 1(LoR) which are related to broken blackboards, unavailability of chalks, broken benches and chairs. Factor 2 shows workload (WL) comprising of 19 items. This indicates extreme organizational work burden. Majority of teachers complained that they were have to bear the load by the management for extracurricular activities and also many pointless responsibilities. Pribylova et al. (2015) revealed the same findings that primary school teachers are over burdened by organizational work.

Factor 3 is related to physical and psychological effects (PPE) which includes 9 items. It includes items that are related to the physical and psychological side effects e.g., headache, bodily aches and pains and tension and frustration. These findings are consistent with previous literature (Majeed et al., 2011). Factor 4 is job stress (JS) which includes 5 items and these are related to the strictness from the side of management and lack of appreciation etc. 4 items came on factor 5 which is related to the insulting and ridiculing attitude of senior colleagues in terms of age, experience and qualification.

Table # 5 shows significant reliability and internal consistency of the subscales of SSPT. Factor 1 has alpha level.94 with 17 items. Second factor workload having alpha coefficient .93 with 19 items, third factor having alpha level .90 with 9 items, fourth factor having alpha level .83 with 5 items and last factor contains alpha coefficient .85 with 4 items. Table 6 showed correlation among SSPST and its subscale. All subscales along with SSPST total significantly correlate among one another. Table 6 indicates women primary school teachers face more stress than men primary school teachers. This finding go with the study by Fujino (2001) that women school teachers suffer elevated stress than men school teachers.

This research will be beneficial for the early screening of stress among primary school teacher so that they may be benefitted with proper stress management programs.

Limitations and Recommendations

- Data was gathered from only two towns of Lahore
- In future, private schools can be incorporated
- Intervention study may be designed in future for the management of stress.

References

Balse, J. (1996). A Qualitative Analysis of Sources of Teacher Stress. *Consequence for American Educational Research Journal, 23,* 13-40.

Bamji, M. S. (2005) INSA examines Indian women's access to and retention in science. *Current Science 88, 9,* 1361 – 1363.

Bertoch, M. (2002).Reducing Teacher Stress. *Journal of Experimental Education, 57,* 117-128.

Borg, M., & Riding, R. J. (2003).Occupational Stress and Satisfaction in Teaching. *British Educational Research Journal, 117,* 263-281.

Chona, C., &Roxas,C. (2009). Stress Among Public Elementary School Teachers. *University of the Cordilleras, 1*(4), 86-108.

Eriksen, C.W. (2000). Cognitive Responses to Internally Cued Anxiety.*Anxiety and Behavior,* 327–360. New York: Academic Press.

Falzon, J. (2002). A Structural Model of Dimensions of Teacher Stress. *British Journal of Education Psychology, 8,* 90-100.

Farber, B.A. (2000) Treatment Strategies for Different Types of Teacher Burnout. *Journal of Clinical Psychology/In Session: Psychotherapy in Practice, 56,* 675-689.

Fujino, Y. (2001). Job Stress and Mental Health among Permanent Night Workers. *Journal of Occupational Health*, *43*, 301-306.

Hanif, R. (2004*). Teacher Stress, Job performance and Self Efficacy of Women School Teachers.*Retrieved from *http://eprints.hec.gov.pk/2582/1/2352.html.*

Kloet, E., Joels, M., Holsboer, F. (2005). Stress and Brain: From Adaptation to Disease. *Nature Reviews Neuroscience. 6,* 463-475.

Kyriacou, C. (2002). Teacher Stress: Prevalence, Sources and Symptoms. *British Journal of Educational Psychology, 48,* 159-167.

Majeed, S. S., Rehman, M., Rashid, M. (2011).Leading Stress Factors among School Teachers.*World Review of Business Research. 1*, 179-191.

Michie S. (2002). Causes and management of stress at work. *Occupational Environmental Medicine*, *59,* 67–72.

Naidoo, K. & Patel, F. (2009).Working Women. Stories of Strife, Struggle and Survival. Sage Publications: New Delhi.

Olaitan, L. O., Oyerinde, O. O., Obiyemi,O., & Kayode,O. O. (2009). Prevalence of

Job Stress Among Primary School Teachers in South-west, *Nigeria. African Journal of Microbiology Research, 4*(5), 1-9.

Pribylova, J., Smetanova, V., Machek, J., Koznarova, M., &Knaute, L. (2015).Psychological needs, level of frustration and anxiety of teachers at primary school. *Social and Behavioral Sciences, 171,* 1114-1117.

Spickard, A., Gabbe, S., & Christensen, J. (2002). Mid-career Burnout in Generalist and Specialist Physicians. *JAMA, 288,* 1447–1450.

Younghusband, L., Garlie, N., & Church, E. (2003). High School Teacher Stress in Newfoundland, Canada: A Work in Progress. *Hawaii International Conference on Education*, 2-28.