

OCCUPATIONAL STRESS AMONG TEACHERS WORKING IN THE SCHOOLS OF WESTERN INDIA

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Abstract

Introduction: Teacher stress is defined as experiences in teachers of unpleasant, negative emotions, such as anger, frustration, anxiety, depression and nervousness, resulting from some aspect of their work as teachers. Objective was to assess the level of occupational stress and its associated factors among teachers of two private schools from the metropolitan city of Maharashtra.

Method: A cross sectional study was conducted on 96 school teachers of two Private schools of Metropolitan city. Two scales namely Multidimensional Scale of Perceived Social Support (MSPSS) and General Health Questionnaire-12 items (GHQ-12) to measure social support and occupational stress respectively. Both these scales have been used as stress measurement tools.

Results: Around half of teachers were in the age group of 31 to 45 years (50.08%) and mean age was 38.5 (SD \pm 9.25). Around 12.5% of the teachers had inadequate social support and about 54.17% teachers had stress. Bivariate analysis showed accomplishment pressure and lack of social support to teachers adds to their stress levels ($p < 0.05$). Similar finding were seen by multivariate analysis i.e. higher expectation of performance (OR: 2.59) and lack of social support (OR: 2.87) had higher odds of having stress.

Conclusion: Competent work accomplishments and adequate social support to school teachers were considered as protective factor against occupation stress.

Keywords: Occupational stress, school, teachers.

Introduction

Stress is a multidimensional and multi-level phenomenon which is influenced by personal, situational or structural factors. Stress is recognized as an occupational disease resulting in significant human illness, both physical and psychological.¹ The World Health Organization (WHO) Global Burden of Disease Survey estimates that by the year 2020, stress-related mental health conditions will be the second most prevalent after ischemic heart diseases.² Occupational stress is defined by National Institute for Occupational Safety and Health (NIOSH, USA) as, “the harmful physical and emotional responses that occur when the requirements of the job do not match

the capabilities, resources, or needs of the worker".³ WHO reported that nearly 75 percent of the world's labor force works in developing countries but many developing countries are not in position to provide even the basic facilities to workers leaving them to work in hazardous environment. Nearly 20 to 50 percent of workers in developed countries are subjected to hazardous exposures at work and the figure is expected to be higher in the developing countries.⁴

Teacher stress is defined as experiences in teachers of unpleasant, negative emotions, such as anger, frustration, anxiety, depression and nervousness, resulting from some aspect of their work as teachers.⁵ In many countries teaching is often considered as one of the most stressful profession.⁶ According to Schamer and Jackson (1996) school teachers are more likely to be affected by stress and burnout than any other public service professional.⁷

Stress levels in school teachers don't get much notice with limited literature availability due to false consideration about their stress related to working pattern of schools. Hence, current study was planned to assess the level of occupational stress and its associated factors among teachers of two private schools from the metropolitan city of Maharashtra.

Methodology

Descriptive cross sectional study was planned where total of 105 teachers working in two Private schools of Mumbai were included irrespective of age, sex, experience, type of work or subject of teaching. Prior to data collection, permission was obtained from the relevant school authorities. Purpose of the study was explained to teachers along with the structure and instructions for the questionnaire filling. Consent was taken from all the participating teachers and declaration on the anonymity and confidentiality of the respondent was made. The data was collected by using a structured self-administered questionnaire which included the sociodemographic data and working information of teachers. Also data regarding working hours, lecture preparation, teaching and non-teaching duties, and involvement in outside school activities like campaigns, surveys, census, etc. was collected. Total teachers in two schools were 105, out of which only 96 gave consent to participate in this study. The questionnaire also included two scales namely Multidimensional Scale of Perceived Social Support (MSPSS) and General Health Questionnaire-12 items (GHQ-12) to measure social support and occupational stress respectively. Both these scales has been used as stress measurement tools. The collected data was entered and analysed using SPSS version 21. Descriptive statistics were obtained for different parameters. The associations between dependent and independent variables were assessed using a bivariate and multivariate analysis based on the odds ratio (OR) with significance at $P < 0.05$.

Multidimensional Scale of Perceived Social Support (MSPSS): Prepared by Zimet *et al* ,⁸ is a 12 item instrument which measures support from three factors namely family, friends and significant others. MSPSS was scored as 1 'very strongly disagree' to 7 'very strongly agree' from left to right on Likert scale (Range 0-84). Score above 60 was considered as adequate social support. Scale includes questions related to support from family and friends in hard times.

General Health Questionnaire-12 items (GHQ-12): Scale developed by Goldberg D⁹ is a well-known instrument for measuring minor psychological distress which is brief, simple and easy to complete. This scale contains 12 questions which are scored as zero, one, two, and three from left to right on Likert Scale (range 0-36). Score of less than 15 indicates no stress while score in excess of 20 is indicative of severe distress (out of maximum possible score of 36). Scale included were concentration, decision making capability, self-doubt, depression.

Results

Total of 96 teachers participated in the study. Majority of the teachers were females (83.33%). Around half of teachers were in the age group of 31 to 45 years (50.08%) and mean age was 38.5 (SD \pm 9.25). Education level of around two third of the participants was graduate and above.

Table 1: Sociodemographic data and Workplace related data:

VARIABLES	FREQUENCY (N=96)	PERCENTAGE (%)
Gender		
Female	80	83.33
Male	16	16.67
Age		
<30 years	20	20.83
31-45 years	50	50.08
>46 years	26	27.08
Education		
Diploma in Education	29	30.21
Graduate	42	43.75
Post Graduate	23	23.96
PHD	2	2.08
Income		
<25000	57	59.38
>25000	39	40.62
Teaching Experience		
Up to 10 years	46	47.92
More than 10 years	50	52.08
Nature of employment		
Permanent	62	64.58
Temporary	34	35.42

Sections		
Pre-primary	14	14.58
Primary	30	31.25
Secondary	50	52.08
Others (Yoga)	2	2.08

More than 54% of the teachers were working for more than six hours per day at school. About 87.5% of the teachers were required to achieve more than 80 percent of result. About 91% of the teachers performed satisfactory and above satisfactory levels last year while 9% could not satisfy expectations of their performance. According to 83.33 % teacher, students are cooperative in the class settings. Also 83.33 % teachers feel that sometimes students don't behave according to their expectations. This might be a reason for the additional stress among teachers. Approximately 66% participants have reported of feeling stressed at current employment.

Mean of Social Support score was 72.44 (SD \pm 18.23) and about 12.5% of the teachers had inadequate social support. Mean of GHQ-12 scale score was 8.63 (SD \pm 6.6) and about 54.17% teachers had stress.

Table 2: Bivariate analysis and Multivariate Regression Analysis of Variables with Stress:

Variables	Categories	Total	Stress Present	Bivariate Analysis		Multivariate Analysis	
				OR	P value	OR	P value
Income	<25,000	57	31	1.022	0.958	0.883	0.820
	>25,000	39	21			1	
Experience	<10 years	50	28	1.165	0.707	0.337	0.133
	>10 years	46	24			1	
Employment	Temporary	34	18	0.9272	0.858	1	0.192
	Permanent	62	34			2.942	
Performance	Not Satisfactory	8	6	2.713	0.047*	2.59	0.013*
	Satisfactory	88	46			1	
Students Behaviour	Non-cooperative	14	6	0.5903	0.179	2.701	0.218
	Cooperative	82	46			1	
Student Number	<100	40	18	0.5294	0.128	1	0.924
	>100	56	34			0.953	
Expected Result	< 80 %	20	12	1.346	0.556	1	0.662
	> 80 %	76	40			1.3	
Social Support	< 60	12	12	12.1	0.001*	2.87	0.001*
	> 60	84	40			1	

Bivariate analysis was done using Chi-square or Fischer exact test and multivariate analysis using multiple logistic regression (Table 2). Bivariate analysis showed accomplishment pressure adds to the stress levels of teachers and was statistically significant ($p < 0.05$). Also lack of social support to teachers was found to be associated with increased level of stress ($p < 0.05$). Multivariate analysis showed that higher expectation of performance (OR: 2.59) and lack of social support (OR: 2.87) had higher odds of having stress.

Discussion

Around half of teachers were in the age group of 31 to 45 years with mean age as 38.5 years ($SD \pm 9.25$). Majority was female teachers and more than half were graduates. Around 12.5% of the teachers had inadequate social support and more than half of teachers had stress (54.17%). Statistical association was seen between stress levels in school teachers with their expected performance by the school management. Measure of teachers having stress being in this profession was seen more when high performance was expected. While competent work accomplishments and adequate social support were found to be a protective factor against occupation stress among teachers.

Higher level of stress compared to current study were reported in majority of studies.^{10,11,12} Reasons for high levels could be unfriendly working environment, workload, relation with colleagues, activities other than teaching, etc. The lower levels of stress in current study could be due to use of different stress scales, geographical distribution of rural and urban areas. High performance in job was considered as a predisposing factor of stress in teachers. This finding was in accordance with other studies.^{11, 13, 14} Possible explanation for this could be the high workload related to teaching and non-teaching activities. Also higher number of students in the class can lead to additional stress amongst teachers.

Social support was found to have significant association with stress level. This finding was in line with other studies.^{15,16} Adequate social support from family members, friends and colleagues generally considered to help on balancing the work place stress.

Current study couldn't find any association of stress level with monthly income, experience, employment status being permanent or temporary, number and behaviour students. Reasons might include differences in terms of urban area, different working patterns in government and private schools and accomplishable high efficiency demands by school management. Also, burden of un-cooperative students and difficulty to meet the needs of students definitely adjunct to the stress level of teachers.

Conclusion: In the current study, regression model showed that non satisfactory performance and lack of social support act as the main factors for occupational stress. Therefore competent work accomplishments and establishing good relationships at professional and personal fronts were considered as protective factor against stress.

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