Research Article

SOCIAL SUPPORT AND COPING STRATEGIES AS PREDICTORS OF OCCUPATIONAL STRESS AND PERFORMANCE AMONG CBSE AFFLIATED SCHOOL TEACHERS IN HYDERABAD: A MULTINOMIAL LOGISTIC REGRESSION APPROACH

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ABSTRACT

To explore the association between social support and coping strategies on occupational stress and performance among CBSE affiliated school teachers in Hyderabad, a cross sectional survey of 300 teachers consisting of 200 women and 100 men from CBSE affiliated in around Hyderabad is carried out. A self-administered questionnaire with socio-demographic, occupational stress, social support and coping factors was used. The occupational stress was measured based on Occupational Stress Index, the social support from the perceived support from co-workers, instrument and emotional support received and factors related to approach and avoidance coping strategies. The five in dependent stress causing factors Workload, Role Overload, Role Ambiguity, Students Behaviour, School Environment, the three social support factors Instrument support, Emotional support and Co-workers, two coping strategies Approach and Avoidance coping strategies on employees were measured. To measure the reliability of the scales used in this study, and internal consistencies of the survey questionnaire, the reliability statistics Cronbach's alpha (C-Alpha) was measured. The overall C-Alpha value is 0.82 whereas and the C-Alpha values ranged from 0.70 to 0.82, for all the 10independent factors and one dependent factor Performance. The bivariate logistic analysis was carried out on dichotomous variables to measure the association of demographic variables with occupational stress, social support and coping. The multinomial logistic regression analysis was performed to estimate the likelyhood odds ratios (ORs) to explain the factors associated with occupational stress, and its association with social support and coping strategies and their relationship with the occupational stress. Health-wise, some teachers developed chronic leg pains due to mild varicose vein disorders may be because of long standing teachings and there is no statistically significant differences with relation to gender on occupational stress and effect on performance. The smoking has significant influence on hypertension in particular in male teachers.

INTRODUCTION

The occupational stress or job stress is inevitable and almost of all the working men and women has to fight with this silent killer. In Hyderabad Metro and surroundings around 200 of CBSE affiliated schools function at primary, secondary and high school and the strength of the teachers vary from 15-40, totaling around 5000 teachers of which about 70% are women teachers. The present survey undertaken in the CBSE affiliated private schools in and around Hyderabad. The schools need to generate the revenue for salaries and operational costs. The competition in Hyderabad schools is intense, and the school management needs to provide best and quality education, security of child and with state of the art infrastructure to attract the parents to withstand the competition.

Hans Seyle an Austrian born Endocrinologist first introduced the concept of stress in to the life sciences in 1936. Stress is man's adaptive reaction to an outward situation which would lead to physical, psychological and behavioral changes. An individual can experience stress from the four basic sources, the environment, social stressors, physiological and thoughts (Matthews 2001). The occupational stress effects the health and well-being of the employees directly acting on the body causing physiological damage and mind causing psychological damage. The studies also reported the behavioural change due

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to occupational stress across the globe. However, reasonable amount of stress can actually trigger one's passion for work, taps the latent abilities and even ignite inspirations. Occupational stress is a dynamic condition at work place where an individual is confronted with an opportunity, demand, or resource related to what the individual desired and for which the outcome is perceived to be both uncertain and important (Schuler 1980). The General Adaptation Syndrome has been widely held has a comprehensive model to explain the stress phenomenon (Hans Selye, 1956).

Stress in School Teachers

In the recent past, the stress experienced by teachers has become an interesting aspect in India. The school environment, several activities within the school, lack of professionalism, work load, lack of benefits, income level time pressures are some of the important factors (Mearns & Chin, 2003). Teachers also facing the problem of occupational stress and according to Kristensen (2005) up to 40% of the teachers are suffering from under extreme stress or burnout, in European countries. In India, 42% of teachers showed high to very high level of stress among the female teachers. The time invested on students, colleagues, school politics and management create emotional, psychological and occupational difficulties in the school teaches (Van Hron, Schaufeli, & Taris, 2001). The burnout is another common syndrome effects the teachers on their performance and generate lot of occupational stress because of emotional exhaustion, depersonalization and lack of personal accomplishment (Montgomery & Rupp 2005). Burnout is one of the major reasons that teachers turnout in teaching profession that results in added costs in training and hiring in the field of education

Ravichandran and Rajendran (2007) reported higher level of stress among female teachers on perceived personal stress in Chennai Metro. The Teacher Stress inventory toll which measures eight different factors namely Personal stress, Teaching assignments, Personal expectation, Teaching evaluation, Lack of support from parents and others, Facilities available at school, Organizational Policy and Parental expectations was used in this study. No genders differences were found on any other factor except Teaching Assignment and Teachers' qualification was also found to be significantly associated with the stress. Age differences were found on factors Personal Stress, Teaching Evaluation, Facilities available at school and Organizational Policy Experience only. Differences based upon type of school were found on Facilities Available at School, Facilities Available at School, Organizational Policy Experience and Parental Expectations (Ravichandran and Rajendran 2007). Chen (2008) reported the association of occupational stress and social support with health related behaviours among the Chine Offshore oil workers. Chen concluded the health outcomes of social support in handling the occupational stress.

REVIEW OF LITERATURE

Occupational Stress in Teachers

Nomita Punia and Shanti Balda (2016) in their reported that majority of the teachers working in Central Board of School Education (CBSE) experience moderate level of stress due to

role overload, role ambiguity, role conflict, lack of control, poor peer relations, and strenuous working conditions. A study among working professions concluded that teachers and nurses experience more stress due to work overload heavy demands for other assignments (Chan *et al.* 1998). Bakhshi *et al* found that 40% of university teachers had a high occupational stress. In the study, occupational Stress Inventory was used to measure stress. Occupational stress was found to affect household activities. Ghodsy Ahghar (2008) studied the influence of organizational climate in occupational stress among secondary school teachers in Tehran and reported that among the teachers working in the disengaged and closed climate, the rate of occupational stress significantly higher than the teachers working in the open climate.

Mariya Aftab and Tahira Khatoon (2012) reported the demographic differences and occupational stress of secondary school teachers in a population of 608 teachers from 42 schools of Uttar Pradesh (India). The results of this study reveal, nearly half of the secondary school teachers experience less stress towards their job and males display more occupational stress towards job than the females. Moreover, the trained graduate teachers are found to have higher occupational stress than post-graduate and untrained teachers. Teachers with an experience of 6-10 years face occupational stress the most, and 0-5 years the least; while those falling in the remaining two groups slide in between these two. Further, there no significant differences between monthly salaries, subjects taught, marital status and occupational stress of secondary school teachers.

Ansarun Hasan (2014) using a study of occupational stress of primary school teachers observed that the primary school teachers have found to be highly stressed. Moreover, the private primary school teachers have also found to be highly stressed in comparison to their government primary school teacher counterparts. A study reported that teachers exhibit moderate degree of occupational stress. Stress is present among teachers at all levels of experience, though differences exist in stress levels based on length of service or based on gender. Differences in stress levels were identified based on grade level taught, with elementary school teachers exhibiting higher levels of stress than did middle school or high school teachers (Sue Ellen Johannsen 2011). Smith, Kasee L (2012) concluded that specific demographic characteristics showed preferences for utilizing specific coping mechanisms. Significant relationships existed between specific coping mechanisms and age, length of teaching career, and type of certification, and hours spent on teaching and teaching-related tasks.

Mark and Smith (2011) demonstrated the importance of coping favors in work-stress research in accordance with the multi-factorial premise of transactional stress models and suggesting multi-factor research to help and develop effective organizational interventions. Sader Myra *et. al*. (2015) in their IT services survey, reported the role of social support on occupational stress using a network approach reporting more social support and less occupational stress. Madeline Weiss (1983) observed that the level of social support among Information Systems Managers is lower than the level of social support among other managers in his studyEffects of Work Stress and Social Support on Information Systems Managers in

United States. Rakesh (2012) observed a positive and significant correlation between organizational role stress and social support. Saharay E. Cosio and Lynn Olson and Joseph P. Francis (2011) in their study on social support and occupational stress among University employees observed a significant inverse relationship was found between work-related social support and occupational stress. The perceived supervisor support had a greater impact on improved levels of job satisfaction, as compared to support received from work colleagues (Paula Brough & Judi Pea, 2004)

Stress in General

The psychological stressors influence the health through emotional, cognitive, behavioural and psychological factors (Levi, 1998). The role ambiguity, role overload, role conflict, lack of resources and strenuous working conditions have positive relations and are the common causes of the stress (Chand & Sethi, 1997). The type of work assigned to an employee is also one of the stress factor and those engaged in work related to them able to cope the stress better than those who are assigned unrelated work (Tread Gold, 1999). Cooper and Marshall (1976) are of the view that by occupational stress is meant environmental factors or stressors such as work overload, role conflict, role ambiguity, and poor working conditions associated with a particular job.

Several theories were proposed to stress and its effects. Osipow and Spokane (1987) described six work roles that they felt were stressful regardless of an individual's actual vocational choice. Role Overload (RO) —measures the extent to which job demands exceed resources (personal and workplace) and the extent to which the individual is able to accomplish workloads (Osipow, 1998). Role overload can result in an employee experiencing anger and frustration toward persons believed responsible for the overload in work (Marini, Todd & Slate, 1995). Cercarelli and Ryan (1996) indicated that, fatigue involves a diminished capacity for work and possibly decrements in attention, perceptions, decision making, and skill performance, perhaps must simply put, fatigue may refer to feeling tired, sleepy, or exhausted (NASA, 1996).

Role ambiguity is the degree to which clear information is lacking, the expectation associated with a role and method for fulfilling known role expectations; finally) the consequences of role performance (Graen, 1976; Kahn *et al.*, 1964). The occupational stress can be caused by role ambiguity appear to cause lower productivity, tension, dissatisfaction, and psychological withdrawal from the work group (Van Sell *et al.*, 1981)

A study on causes of stress among the employees and its effect on the employees' performance at the workplace in an international agricultural research institute at Hyderabad Metro reported moderate impact on employees performance of the institute (Prasad *et al.* 2015). A comparative study on the cause of stress among the employees in IT sector with reference to International Agricultural Research Institute, Hyderabad reported that the job related stress in general and the stress factor job security in particular effects the employee performance in IT sector (Prasad *et al.* 2016).

Logistic Regression

The natural logarithm logit of an odds ratio is the main mathematical concept that underlies logistic regression. The logistic regression used for testing hypothesis about a relationship between categorical outcome variable and one more categorical or continuous predictor variables (Peng *et al.* 2002) in our study. We carried out logistic regression analysis as linear and multiple regression models sometimes, the ordinary scatterplots are curved at the end with S-Shape and is difficult to interpret because the extremes do not follow the linear trend and errors are neither normally distributed nor constant across entire range of data (Peng, Manz, & Keck, 2001). To overcome this problem from logistic regression applying logit transformation to the dependent variable. In the essence logistic model predicts the logit, the natural algorithm of response variable (dependent) over continuous variable (independent). The simple form of logistic regression adopted from (Peng *et al.* 2002) is:

$$\text{Logit}(Y) = natural\log(\text{odds}) = \ln\left(\frac{\pi}{1-\pi}\right) = \alpha + \text{ß}X$$

Where ß is the regression coefficient; π = Probability(Y=outcome of interest|X=x and α is the Y intercept and this can be extended to the multiple predictors the equation is:

$$\text{Logit}(Y) = natural\log(\text{odds}) = \ln\left(\frac{\pi}{1-\pi}\right) = \alpha + \text{ß}_1X_1 + \text{ß}_2X_{2+} + \text{ß}_3X_{3+} + \ldots.$$

Where ßs are regression coefficients, Xs are set of predictors. The αs and ßs are typically estimated by the Maximum Likelyhood (ML) method which is preferred over the weighed least squares method (Haberman, 1978 Schlesselman, 1982)

Multinomial Logistic Regression: The multinomial logistic regression is an extension of simple logistic regression that generalized to multi class problems such as with more than two possible discrete outcomes. Using this model web predicted the probabilities of the different possible outcomes of a categorically distributed dependent variable or response variable and a set of independent variables which arecontinuous, binary or categorical. Using multinomial regression the dependent variable in question is a nominal where more there are more than two categories (Suryanwanshi *et al.* 2015). The nominal outcome variables using multinomial logistic regression are modelled in which the log odds of the outcomes are modelled as linear combination of the predictor variables (Suryanwanshi *et al.* 2015). Sudhir Chandra Das (2016) in his study reported the results on predictors of work-family conflict and employee engagement among employees in Indian Insurance Companies applying multinomial logistic regression analysis. Several researchers (Suryavanshi *et al.* 2015; Sateeshkumar and Madhu, 2012; Stephen, 2014; Masoud Lotfizadeh 2014) reported their results on occupation stress and associated factors using multinomial logistic regression. However the authors observed very limited research using logistic and multinomial regression measuring occupational stress, coping with relation to performance in particular working teachers. Therefore the authors attempted to use multinomial logistic regression method for evaluating the factors of occupational stress, coping with relation to performance of CBSE affiliated teachers.

Objectives and Hypotheses

Background and cause for the study: A wide range of studies on occupational stress and its related effects were carried out in Information Technology, Banking and Industrial sectors. As stress is common for all the employees irrespective of the area work, the authors pursued this study surveying the teachers working in CBSE affiliated private schools in and around Hyderabad Metro, considering social support and coping strategies and their association with occupational stress and performance.

Is social support and coping strategies are the predictors of occupational stress?

To study the relationship of social support and coping strategies with occupational stress and coping in CBSE affiliated school teachers

Based on the identified problem, research question and the objectives the following hypotheses were formed:

H_{01}: There is no association between Social support and occupational stress and performance in CBSE affiliated schoolteachers

H_{11}: There is an association between Social support and occupational stress and performance in CBSE affiliated schoolteachers

H_{02}: There is no association between Coping strategies and Occupational stress and performance in CBSE affiliated school teachers

H_{12}: There is an association between Coping strategies and Occupational stress and performance in CBSE affiliated school teachers

RESEARCH METHODOLOGY

Conceptual Framework: The proposed framework was adopted based on the past research by Beehr (1998) and Prasad *et al.* (2015& 2016) with minor modifications in accordance with our study. The following frame work is formulated on the objectives to be achieved shows the linkages of the factors in this study (Figure 1). The factors of work place stressors, social support, coping strategies and performance are indicated in the respective boxes of figure 1.
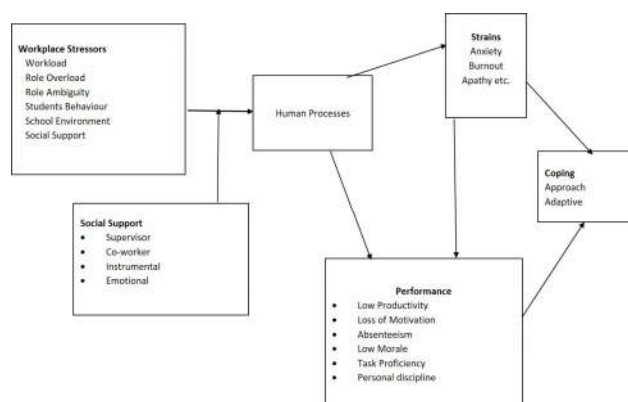
Sample Size: A sample size of 300 was selected using simple random sample sampling where each member of the subset has

an equal probability of being chosen and data from 300 respondents was used for the analysis. The demography of sample presented in Tables 1 &2.

Table 1 Demography of Sample

Gender	Frequency	Percent
Women	200	66.67
Men	100	33.33
Total	300	100
Source: Primary data		

Table 2 Sample Description

Age Group	No of respondents
20-29	77
30-34	83
35-39	72
>40	68
Source: Primary data	

Research Instrument for data gathering: The research instrument used for the survey is a self-administered structured undisguised questionnaire using three scales – a) Occupational stress scale based on occupational stress index (OSI) developed by Srivastava AK and Singh AP (1984) which has 39 statements including 12 reversed keyed statements covering 5 factors with five point Likert scale ranging from Strongly agree (5) to Strongly disagree (1); Performance scale based on Higher-Order performance Dimensions model proposed by Campbell (1990) which has 20 statements covering 7 factors using a 9 point Likert scale with values ranging from +4 to -4. This was converted to a 5 point scale for ease in calculation; +4 and +3 becoming 5, +2 and +1 becoming 4, 0 becomes 3; -1 and -2 becomes 2; -3 and -4 becomes 1. The scores range from 5 (strongly agree to 1(strongly disagree). The statements consists of 15 true keyed and 5 reverse keyed.

Table 3 Stress causing factors and performance factors used in the study

Factor	Factor	Items
1 Stressors	Work overload	7: Number of hours, class size, result percent, enrollment, post school assignments, number of meetings, lesson planning
2	Role Overload	8: Too many expectations, role conflict with dual roles, conflict at home and work, etc.
3	Role Ambiguity	8: Unclear explanation of role, confusion, too many untrained assignments, etc.
4	Students Behaviour	6 Student knowledge, conflicts, classroom behavior, questions, understanding
5	School Environment	10: Lighting, Ventilation, teaching aids, library, clean toilets, communication, library, computer, transport, security
6 Social Support	Co-workers	5: Receive help from co-workers, friends, subordinates
7	Instrumental support	5: Support from supervisor, colleague, families, friend, etc.
8	Emotional support	5: Supervisors, subordinate, colleague, family, relatives
9	Approaching coping	10: Confront, Plan, Impulsive decision, alternative solutions, console, scheduling action plan, etc.
10	Avoidance Coping	10: Leave, Off to sleep, smoking, alcohol, excessive eating, escaping, withdrawal, resignation, etc.
11	Performance	7: Low productivity, loss of motivation, absenteeism, relationship with co-workers, task proficiency, personal discipline.

The coping strategies scale constructed and standardized by AK Srivastava (2001) has 20 statements describing the factors

Approach and Avoidance copings using a Liker scale with 5 (Almost Always) and 0(Never) are main source for the primary data collection. The support scale has 20 items with 5 reversed key items, a modified version of based on the multidimensional scale of perceived social support (Zimet, 1988) based on five point Likert scale from a rating scale of 1(never) to 5 (almost always). Secondary data was collected from various published books, websites and records pertaining to the topic. The questionnaire was divided into 2 sections – in the Section I, Demographic variables like age, sex, number of years of experience, highest qualifications and other background information/personal details of the respondent were collected. The Section II of questionnaire was used to find out the stress levels of the employees, coping strategies and impact of the stress on performance as described above. To measure each factor, a range of 5 to 10 questions were given but all these questions were mixed systematically and the factors and their items listed in Table 3.

Data Analysis: We have applied statistical techniques to analyze the data for drawing inductive inferences from our research data. To ensure the data integrity the authors have carried out necessary and appropriate analysis using relevant methods on our findings. The descriptive statistics are used to summarise the data and to investigate the survey questionnaire, formulating the hypotheses the inferential statistics were employed. To measure the central tendency such as means, variance and standard deviation we used the dispersion methods.

Reliability methods: To measure the internal consistency, reliability of our research instrument, the survey questionnaire, and to maintain similar and consistent results for different items with the same research instrument, we used the reliability methods Cronbach's alpha. The Cronbach alpha is an index of reliability that may be thought of as the mean of all possible split-half co-efficient corrected by Spearman-Brown formula (Cronbach, 1951) and subsequently elaborated by others (Novic & Lews, 1967; Kaiser & Michael, 1975). The estimated values of the Cronbach's alpha are indicated in Table-4. The Statistical Package for Social Sciences (SPSS ver. 24) was used to measure the central tendency, measures of variability, reliability statistics, and to predict the dependent factor PAS based on independent factors the multinomial logistic regression analysis carried out (IBM SPSS Statistics, 2016).

Formula for Cronbach's Alpha (C-alpha can vary between 0.00 and 1.00) $r_\alpha \left(\frac{N}{N-1} \right) \left(1 \quad \frac{\Sigma \sigma_j^2}{\sigma^2} \right)$

Where r_α is coefficient alpha; N is the no of items; σ^2 variance of items

$\Sigma \sigma_j^2$ is sum of variances of all items and σ_j^2 is the variance of the total test scores

Reliability test of the Questionnaire: The outcome of the survey was measured using a Likert-type scale with items 1-5 for all the questionnaires. In case of performance a 9 point Likert type scale was used (+4 to -4) was converted to a 5 point scale for ease of calculation and analysis. The reliability statistic Cronbach's alpha coefficient value (C-alpha) was calculated to test the internal consistency of the instrument, by determining how all items in the instrument related to the total instrument (Gay, Mills, & Airasian, 2006). This instrument was

tested with the data of 50 employees and using SPSS the Cronbach alpha static was measured at 0.78, suggesting a strong internal consistency. Three months later, keying data for all the 300 teachers the overall C-alpha measured at 0.82 and it ranged from .0.80 to 0.88 for the all independent and 1 dependent factors (Table 4).

A second reliability measure called Spearman Brown Split-Half Reliability Coefficient and Spearman Brown Prophecy were computed to assure the overall reliability of the scale items. The obtained overall Spearman Brown Split-Hall Reliability was 0.86 and Spearman-Brown Prophecy was 0.90 suggesting strong reliability of the instrument. In the Table 4 we presented the computed C-Alpha Static, for factors in the study (William Trochim, 2006).

The Statistical Package for Social Sciences Version 24 was used to measure the central tendency, measures of variability, reliability statistics, correlations, parametric tests and to predict the dependent factor training program effectiveness based on independent factors multiple regression analysis carried out (IBM SPSS Statistics, 2016).

Table 4 Cronbach's alpha values for factors used in this study

Sl. No	Factor	Cronbach's alpha
	Overall Independent Stress Factors (1-10)	0.82
1	Work overload	0.80
2	Role Overload	0.71
3	Role Ambiguity	0.72
4	Students Behaviour	0.82
5	School Environment	0.70
6	Co-workers	0.78
7	Instrumental support	0.73
8	Emotional support	0.72
9	Approaching coping	0.72
10	Avoidance Coping	0.78
11	Performance	0.76

Overall: Split-Half (odd-even) Correlation: 0.86 Spearman Brown Prophecy: 0.90
Source: Primary Data

RESULTS

Factors associated with stress

The bivariate analysis was performed to identify the factors responsible for occupational stress among teachers. Later, most significant predictors of occupational stress were identified used multinomial logistic regression. In bivariate analysis the stress was categorized into two modes (stress/no stress). Similarly other demographic variables recoded for carrying the analysis. Like was based on the coping strategies and social support received also indicted in the Table 5. The association of socio demographic factors with occupational stress were presented in Table 5.

The association of socio demographic factors with occupation stress results were presented in Table 5. The results indicate that 46% of Men and 54% of women teachers experienced stress, 62% less than in the age group of <34 years of experience stress where as 38% in the age group of > 34 years. It was observed there were no statistically significant differences observed on occupational stress with relation to age, gender, and non-teaching activities. However, those teachers who received social support and followed coping strategies experienced less stress than others. The results are

statistically significant (coping strategies p = 0.021) and (received social support, p < 0.014)

Table 5 Association of socio demographic factors with occupational stress, social support and coping strategies

		No Stress (N=170)	Stress (N=130)	UnadjustedOR	P Value
Gender	Women (200)	130(76.47)	70(53.84)	1.097	0.278
	Men# (100)	40(23.53)	60(46.16)		
Age	Up to 34 years (186)	106(62.35)	80(61.54)	0.986	0.264
	>34 years (114)#	64(37.65)	50(38.46)		
Coping Strategies	Yes(210)	140(82.35)	80(61.54)	0.878	0.022*
	No(90)#	30(17.65)	50(38.46)		
Receive Social Support	Yes(190)	130(76.5)	70 (53.85)	0.762	0.014*
	No(110)#	40(23.50)	60(46.15)		

OR: Odds Ratio, * P value<0.05, # - Reference category

Multivariate analysis

The Table 6described the findings of multinomial logistic regression carried out to predict the independent factors associated with occupational stress in CBSE affiliated school teachers. The multinomial logistic regression analysis measures the effect of change in variation of one of the independent variable on the variation of the dependent variable – performance and explain the variation. The effect of different independent variables was explained in the relative log odd ratios (OR or Exp(ß)). The results portray that except independent variable co-worker all the variables are significantly associated with the occupational stress and effect the performance factors task proficiency, and low morale. The relative log odds ratios has significant negative influence of independent variables Workload (OR 0.4169, 95% CI 0.165-0.987), Role overload (OR 0.1769, 95% CI 0.05-0.2370),

Role Ambiguity (OR 0.1092, 95% CI 0.037-0.218) Students Behaviour (OR 0.3325, 95% CI 0.124-0.689), School environment (OR 0.5032, 95% CI 0.212-1.22), Co-workers (OR 0.3657, 95% CI 0.118-0.547), Instrumental support (OR 1.3840, 95% CI 0.213-0.787), Emotional Support (OR 0.3628, 95% CI 0.136-0.512) Approach coping (OR 0.3329, 95% CI, 0.114-0.234) Avoidance coping (OR 0.3671, 95% CI 0.171-0.441) for Stress causing factors, social support and coping strategies vs performance with overall performance as reference variable. Adaptation of the Approach and Avoidance coping strategies able to reduce the occupational stress, and in case of social support, the co-workers and emotional social support have positive impact on performance with reducing the stress. The relative log odds indicate that task proficiency, loss of motivation and low morale are the factors effected by occupational stress. Increase in social support will decrease the stress and improves the performance (Table 6).

The ß is the regression coefficient and e=2.71828 (the base of the natural logarithm) and the results are expressed in natural logarithm of an odds ratio. This indicates for each unit increase in the independent variable Role overload the odds of being decrease in Performance from 1 to 0.177 (=e^{-1.732} = 2.71828^{-1.732}) verses Overall Performance as reference category and so on. Similarly for each unit increase in Approach coping strategies the likely odds of being decrease occupational stress from 1 to 0.333(=e^{-1.1}) verses overall performance is reference variable with other factors kept constant. One unit increase social support from co-workers decrease the occupational stress from 1 to 0.356 and so on. In the same way one unit increase in task proficiency the likely odds of being increase in performance from 1 to 6.44 units (=e^{1.86}) and so on. The results indicate the gender has insignificant influence on occupational stress and performance of the teachers.

A Wald test calculates a Z statistics, which is the ratio of the coefficient ß to its standard error and the resultant Z is squared to yield Walt Statistic.

Table 6 Predicted probabilities from Multinomial Logistic Regression of the influence of stress causing independent factors and coping strategies on dependent factor Performance (Odds Ratios and 95% CI for Exp(ß))

	Variable	ß	Std. Error	Wald Statistic	df	Sig.	Exp(ß)	95% Confidence Interval for Exp(ß)	
								Lower Bound	Upper Bound
	Intercept	42.719	5.818	53.917	1	0			
Stress Related Factors and	Workload	-0.875	0.448	3.8147	1	0.043	0.4169	0.165	0.987
	Role Overload	-1.732	0.436	15.7806	1	0	0.1769	0.05	0.237
	Role Ambiguity	-2.215	0.501	19.5466	1	0	0.1092	0.037	0.218
	Students Behaviour	-1.101	0.423	6.7748	1	0.005	0.3325	0.124	0.689
	School environment	-0.513	0.434	1.3972	1	0.187	0.5032	0.212	1.22
Social support	Co-Workers	-1.006	0.402	6.2624	1	0.002	0.3657	0.118	0.547
	Instrumental	0.325	0.132	6.0620	1	0.04	1.3840	0.213	0.787
Coping Strategies	Emotional	-1.014	0.406	6.2377	1	0.001	0.3628	0.136	0.512
	Approach Coping	-1.1	0.387	8.0791	1	0.012	0.3329	0.114	0.234
	Avoidance coping	-1.002	0.406	6.0909	1	0.001	0.3671	0.171	0.441
	Task Proficiency	-1.862	0.437	18.1550	1	0.001	0.1554	0.119	0.535
	Loss of Motivation	-1.638	0.837	3.8298	1	0.001	0.1944	0.164	0.231
Performance (Teacher)	Low Morale	-1.082	0.437	6.1304	1	0.001	0.3389	0.371	1.001
	Absenteeism	-1.064	0.437	5.9282	1	0.287	0.3451	0.132	0.461
	Relationship with Co-workers	-1.032	0.437	5.5769	1	0.381	0.3563	0.111	0.506
	[Gender=F]	0.749	0.573	1.71	1	0.191	2.1149	0.688	6.499
	[Gender=M]	0^b	.	.	0	.	.	.	.

a. Reference category is Performance Overall b. This parameter is set to zero because it is redundant. Exp(ß): Odds Ratio, *P <0.05

Menard (1995) warns that for large coefficients, standard error is inflated, lowering the Wald statistic (chi-square) value. Agresti (1996) states that the likelihood-ratio test is more reliable for small sample sizes than the Wald test.

Therefore we reject the null hypotheses H_{01}**:** There is no association between Social support and occupational stress and performance in CBSE affiliated schoolteachers and H_{02}:There is no association between Coping strategies and Occupational stress and performance in CBSE affiliated school teachers and accept the alternate hypotheses H_{11}: There is an association between Social support and occupational stress and performance in CBSE affiliated schoolteachers; H_{12}:There is an association between Coping strategies and Occupational stress and performance inCBSE affiliated school teachers.

DISCUSSION

The primary data gathered to structured undisguised questionnaire with 81statements which were sub-divided into 11 factors based on their characteristic grouped as stress causing factors, social support, coping factors and performance factors. These findings include the two extremes of the Likert scale given in the analysis i.e. strongly disagree and strongly agree. The results when compared with gender indicated that there were statistically significant differences among the women and men. The results are in line with the Chen *et al.* (2008) and Hazily Izwar Ibrahim (2014) who the relationship between job stress, co-worker support on organization based self-esteem. Our results also to the similar to a study carried out Moeller, Christin (2009), on Stressors, Strains and Social Support: Occupational Experiences of University Professors. The researchers'reduction of faculty stress by informing procedures geared toward the reduction of strain as a result of occupational demands and following social support strategies.

The research did find significant differences between the teachers those who received social support and who followed the coping strategies who experienced less occupational stress compared to those teacher who do not have required social support and coping. The medium level stress exists at workplace and is manageable with job design changes, adjusting school environment which improve performance.
Survey research will have some problems associated with its use as these are self-administered instruments may not be complete and reliable. It is very difficult to follow a single social support questionnaire as the human beings behave differently across the world. We have surveyed the literature, and reviewed several research articles and developed the questionnaire, which we believe perfectly fits in our study. To address and confirm the issues related to the internal consistency of the research instrument we measured by both Cronbach's alpha and Spearman-Brown split-half reliable static at overall and at independent level using ordinal data.

A major limitation to the interpretation of the results is with the instrument i.e. survey questionnaire. The questionnaire was distributed circulating hard copies to the teachers of the CBSE affiliated schools, and we expect some biasedness because of the school environment and ethics. The researcher have no idea whether who has filled the form for same cases. The author can be only make guess based on their age. The authors observed the similar answers from the hard copies received from the pilot study and final survey with insignificant differences.

CONCLUSION

The literatures suggests that recent changes in the values and practices of education and its curricula are contributing considerably to the stress levels among school teachers. Increasing financial restraints, to engage best available teachers and to accomplish more with less also causing stress on the school management. The present results indicate that increased occupational demands not only have considerable consequences for health and well-being of the school teachers but may also affect their students and sometimes school as a whole. The present study also provides empirical evidence that the role of social support and coping strategies applied to counter stress in the schools may depend on the type of stressor encountered, the social support source, as well as the outcome. The results from this study also suggest that workplace social support is neither a uni-dimensional nor a consistent. In fact, perceived social support may exacerbate the adverse effects of certain work-related stressors. These results warns against a sole focus and reliance on co-worker social support as a means to reduce occupational stress. The schools administrators would be well advised to also address the root of teacher stress by reviewing the requirements and responsibilities they bestow upon their teaching staff.

Recommendations: Stress issue has become contemporary, being an occupational hazard and needs to be addressed without delay. There is no "one size fits all" solution to managing stress, because it is the individual who has the still have control over lifestyle, thoughts, emotions, and the way one deal with the problems.

Some of the unhealthy methods and which reduce stress temporarily are: smoking, drinking, using pills for relax, drinking too much, sleeping too much and out bursts. Accept constructive criticism which will be helpful to improve your performance. Spend time with those who talk about ideas Find out the happiest and most intelligent people at your workplace and try meeting them on a regular basis. Give up the distractions: Learn to conserve your emotional energy. Walking, will increase the heart rate and relive you from the stress. Activities that are continuous and rhythmic—and require moving both your arms and your legs—are especially effective at relieving stress (Walking, running, swimming, and aerobic classes are good choices. One should try to make a conscious effort to focus on body and the physical (and sometimes emotional) sensations experienced while moving. In addition to regular exercise, there are other healthy lifestyle choices that can increase your resistance to stress. Having a healthy diet, reducing caffeine and sugar, avoid alcohol, cigarettes and drugs may relieve the stress.

Organizational level: The management of the organization should also take the responsibility of employees' stress conducting stress management and coping programs for the teachers. The organization should start employee motivation programmes, yoga and meditation. If employees are given control the job they perform, there will be job satisfaction and high quality of work, as the employee himself takes the decisions and organizes his work at optimal level. Flexible working hours, work redesign, appropriate training on the new technologies, decentralized decision making, regular health checkups will definitely help to overcome the problem of the

stress. The job related issues – job insecurity need to be addressed amicably. The commonsense remedies like more sleep and eating better, find more suitable job are some suggestions. As the stress is individual oriented one himself/herself should develop the coping strategies adjust his/her life-style and food habits.

Acknowledgments

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