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DEMOGRAPHIC DIFFERENCES AND OCCUPATIONAL STRESS OF SECONDARY SCHOOL TEACHERS

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Abstract

The present study examined the relationships of a set of independent variables (gender, qualification, teaching experience, salary, subjects taught and marital status) with occupational stress among secondary school teachers. The population in this study consists of 608 teachers from 42 schools of Uttar Pradesh (India). The Teachers Occupational Stress Scale was used for data collection, while t-test and F-test are used for statistical analysis. According to the results of the analysis, 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. Findings also reveal no significant differences between monthly salary, subjects taught, marital status and occupational stress of secondary school teachers.

Keywords: Gender, qualification, marital status, occupational stress, secondary school teachers

Introduction

Occupational stress is known as stress at work. It occurs when there is a discrepancy between the demands of the workplace and that of individual's (Tsutsumi et al., 2009). Job stress, also known as occupational stress, has been defined as the experience of negative emotional states such as frustration, worry, anxiety and depression attributed to work related factors (Kyriacou, 2001). Occupational stress in the human service professions, particularly in teachers, has been a focus of study in the last decades. Most surprisingly, school teachers

have been considered to be under stress (Beer & Beer, 1992; Boyle et al., 1995; Hammen & De Mayo, 1982; Kinnunen, 1988; Kinnunen & Salo, 1994; Kyriacou, 1987; Malik, Mueller, & Meinke, 1991; Smith & Bourke, 1992; Pithers, 1995), undergoing the process of burnout (Beer & Beer, 1992; Burke & Greenglass, 1995; Kyriacou, 1987) or suffering from depressive symptoms (Beer & Beer, 1992; Hammen & De Mayo, 1982; Schonfeld, 1990; Schonfeld, 1992). There exists a substantial body of literature describing teaching as stressful occupation and suggesting that teacher stress appears to be an increasing problem (Antoniou et al., 2006; Chaplain, 1995; Guthrie, 2006; Kyriacou, 2001; Laughlin, 1984; Manthei & Gilmore, 1996; Munt, 2004; Punch & Tuetteman, 1996). In recent time, several studies have examined occupational stress in the teaching profession. Studies have suggested that teachers experience disproportionately high level of stress (Adeyemo & Ogunyemi, 2005; Borg, 1990).

A number of factors have been shown to influence teachers' decisions about staying on or leaving the profession, including job stress, job satisfaction, resilience, and self-efficacy (e.g., Chan, et al., 2008; Day, et al., 2009). Typically, they include stressors in the areas of work role (e.g., workload); administration; class size; role ambiguity and conflict, (e.g., the sometimes conflicting demands of school management); the pressures of the teachers' roles (e.g., counsellor, facilitator); poor working conditions; little recognition and low remuneration; lack of involvement in decision-making; student recalcitrance; lack of effective communication, as well as the many emotional demands of teaching (e.g., Blix, et al., 1994; Brown & Ralph, 1992; Cooper & Kelly, 1993; Punch & Tuetteman, 1990). In addition, a study in Bahrain by Al-Khalefa (1999) observed work conditions, salaries, bonuses and allowances, status of physical education, supervision, school facilities, workload and career development to be the major causes of stress for physical education teachers. Teachers who become burned out may be less sympathetic toward students, may have a lower tolerance for frustration in the classroom, may plan for their classes less often or less carefully, may fantasize or actually plan on leaving the profession, may feel frequent emotional or physical exhaustion, may feel anxious, irritable, depressed, and in general, may feel less committed and dedicated to their work (Farber & Miller, 1981).

Furthermore, Farber (1984) assessed the sources of stress of suburban teachers in the United States and found that excessive paperwork, unsuccessful administrative meetings, and the lack of advancement opportunities in teaching were related to stress. Workload, lack of resources, poor professional relationships with colleagues, inadequate salary, pupil

misbehaviour, difficult interactions with parents and expectations of other staff have been identified as sources of stress in many studies (Borg, Riding & Falzon, 1991; Boyle, et al., 1995; Pierce & Molloy, 1990; Pithers & Soden, 1998; Travers & Cooper, 1993). Smilansky (1984) examined teachers' work satisfaction and reports of job-related stress in some English elementary schools, and he found that teachers' general satisfaction and stress at work were related mostly to their reported feelings about what had happened within class (such as relations with pupils, the process of teaching, and pupil behavior in school) rather than to administrative or policy questions (such as degree of work autonomy, relations with principals). Negative self-perception, negative life experiences, low morale, and a struggle to maintain personal values and standards in the classroom all take their toll (Goodman, 1980; Schnacke, 1982; Schwanke, 1981). Stressed teachers had more illness, medicine intake, anxiety, depression, and sexual passivity. More psychological and psychosomatic symptoms were reported by teachers experiencing high burnout (Bauer et al., 2006).

Background Studies

Research suggests that gender may be an important demographic characteristic to be considered in the experience of stress (Jick & Mitz, 1985). Mondal et al. (2011) found a significant difference between male and female teachers, with male teachers having more psychological stress and physical stress than the female teachers. Also, male teachers were reported to be more insecure and emphasized financial concerns, while females expressed concerns about intrinsic facets of their jobs (Rosenblatt et al., 1999). Moreover, males were observed to have higher stress and anxiety than the females (Cheng, K.-L., Kelly, 1993; Brember et al., 2002, Gursel et al., 2002, Chaplain, 1995). Quite contrary to this, female teachers tended to complain more of burnout than male teachers (Chan & Hui, 1995; Ravichandran & Rajendran, 2007; Bhadoria & Singh, 2010). Some researchers also fail to advocate any significant result to support a gender difference in their studies regarding level of stress and gender (Siong & Yet, 2003; Fontana & Abouserie, 1993).

Studies on the relationship between teachers occupational stress and their qualification have shown that postgraduate teachers have significantly less job satisfaction on job role item than the undergraduate and graduate teachers (Mondal et al., 2011). Hong Kong teachers without finishing professional training and of junior rank reported themselves to be more burned out in a study by Lau et al. (2005). Quite opposite to this, teachers qualification was not correlated to their stress level (Lam Yee Mei, 2006). Other data support no

significant difference between stress and academic qualifications of the teachers (Cheng, K.-L., Kelly, 1993; Mokdad, 2005). The early years of a teacher's career have been recognized as being stressful. Contradict to this, the year of experience on the school teachers did not show any significant effect on job satisfaction and job stress (Mondal et al., 2011; Johannsen, 2011; Jepson & Forrest, 2006; Chona C. Roxas, 2009). Younger and less experienced teachers were observed to be more burned out than older or more experienced teachers (Abdul Majid, 1998; Lau et al., 2005; Bhadoria & Singh; 2010). Also, low wages and limited opportunities for promotion, teachers' goals (occupational and financial) have been identified as a source of stress for Greek primary and secondary teachers (Koustelios and Kousteliou, 1997; Papastylianou, 1997). Inadequate salary and low status were found to be important in predicting job stress among high school teachers (Litt & Turk, 1985). Khurshid et al. (2011) showed that the teachers with low income experience more occupational role stress than teachers with higher income level.

On the same note, Social Science teachers exhibited better job satisfaction than Language, Mathematics and Science teachers (Mehra & Kaur, 2011); while Shukla (2008) revealed no significant difference in the relationship between perceived burnout and teaching effectiveness as perceived by teachers on the basis of subjects taught (Language, Social Science, Science). In addition to this, marital status was related to the reporting of stress with those who were widowed/divorced/separated generally having a higher proportion in the high reported stress category (Smith et al., 2000). Quite opposite to this, researchers (Yahaya et al., 2006; Cheng, K.-L., Kelly, 1993; Chona C.Roxas, 2009) indicated no significant differences between the marriage status groups in stress levels.

Purpose of the Study

The purpose of this study was to examine the relationship of occupational stress (dependent variable) with gender, qualification, teaching experience, salary, subjects taught and marital status (independent variables) among secondary school teachers.

Research questions

The research questions for this study include the following:

- What is the level of occupational stress in secondary school teachers?
- Do the demographic factors (gender, qualification, teaching experience, salary, subjects taught and marital status) explain the differences in occupational stress of secondary school teachers?

Method

The present work is a descriptive study investigating whether the occupational stress faced by the school teachers differed significantly to their level of occupational stress and demographic factors. The sample consisted of 608 secondary school teachers, selected from 42 schools of eastern, central and western U.P., of India, in which 281(46.22%) were male and 327 (53.78%) were female teachers.

Tools Used

To obtain the data Teachers Occupational Stress Scale (TOSS) was developed along with a general proforma by the investigators. The TOSS is a 20-item instrument, containing all negatively worded statements. The instrument uses a five point Likert scale ranging from 5 (strongly agree) to 1 (strongly disagree). Teachers occupational stress score is calculated by adding the individual scores of all the items together whose possible range can be between 20-100. High score on the TOSS indicate a high level of stress among the teachers towards the occupation. Teachers stress levels are categorized into less, moderate and more level of stress in accordance with average stress scores obtained. According to the investigators, this scale has split-half reliability of 0.79. The inner consistency coefficient determined by the alpha correlation, which is a generalized form of 20 formulas of Kudar Richardson, is 0.88. Another consistency test of the scale is performed by item total correlations technique. Item total score correlations are between the range of 0.35 – 0.69 of all items with total test.

Results and Analysis

The secondary school teachers are divided into three groups (Table 1), that is less, moderate and more stressed groups, on the basis of their Occupational Stress Scores. The occupational stress levels of secondary school teachers are between the following range: Less level of Occupational Stress (i.e. 20-50 scores), Moderate level (i.e. 51-70 scores), and More level of Occupational Stress (71-100 scores). An examination of Table 1 shows that the percentages of More, Moderate and Less Stressed groups of teachers are 11.35%, 40.95% and 47.70% respectively. In male sub-group, this translates into 14.59%, 45.91% and 39.50%, while in female sub group it is 8.56%, 36.70% and 54.74% respectively. Thus, it is evident from the analysis that nearly half of the teachers are in less stressed group and generally male teachers experience more stressful situations about their occupation than their counterparts.

Table 1: Percentage of Teachers Experiencing Less, Moderate and More Stress towards Job

Group	N	Occupational Stress Groups	Number of Teachers in each Group	Percentage of Teachers in each Group
Total	608	Less Stress	290	47.70
		Moderate Stress	249	40.95
		More Stress	69	11.35
Male	281	Less Stress	111	39.50
		Moderate Stress	129	45.91
		More Stress	41	14.59
Female	327	Less Stress	179	54.74
		Moderate Stress	120	36.70
		More Stress	28	8.56

It is evident from the result shown in Table 2 that the mean occupational stress scores of male and female teachers are found 53.40 and 49.60 with SDs of 15.44 and 14.81 respectively. When the means of two groups compared, the difference between comparison groups is found statistically significant ($t=3.09$, $P<0.01$). The trend of result showed that male teachers are significantly more stressed with their job than female teachers.

Table 2: Comparison of Mean Occupational Stress Scores of Male and Female Teachers

Gender	N	Mean Occupational Stress Score	SD	t	df	P<
Male	281	53.40	15.44	3.09	606	<0.01
Female	327	49.60	14.81			

As shown in Table 3, t-test is performed to ascertain whether there is any difference in occupational stress of teachers according to their qualification. Results show that trained graduate teachers have significantly higher occupational stress ($M=57.22$, $SD=15.39$) than

those of other two groups. Furthermore, post-graduate teachers (M=49.50, SD=14.55) experience significantly less occupational stress than both the two groups of teachers.

Table 3: t-values obtained from comparison of Mean Occupational Stress Score of three groups of Teachers formed on the basis of Qualification

Qualification	N	Mean Occupational Stress Score	SD	t-value		
				U	T	P
Untrained (U)	206	51.96	15.61			
TGT (T)	80	57.22	15.39	2.57*		
PGT (P)	322	49.50	14.55	1.84	4.20**	

*P<0.05, **P<0.01

Mean scores of the teachers stress based on their teaching experience presented in Table 4, show teachers with an experience of 6-10 years have significant highest mean occupational stress scores (M=55.11, SD=16.53) than the other three teaching experience groups. Similarly, those teachers with 11-15 years of teaching experience have significantly higher occupational stress scores (M=51.37, SD=14.28) than those with 0-5 and 16 onwards groups; and teachers in the 16 onwards group have significantly higher occupational stress scores (M=49.81, SD=12.90) than those with 0-5 years of experience group. Further, teachers with 0-5 years of experience have significantly lowest occupational stress scores than those other three groups (M=48.66, SD=15.30).

Table 4: t-values obtained from comparison of Mean Occupational Stress Score of four groups of Teachers formed on the basis of Experience in Teaching

Years of Experience	N	Mean Occupational Stress Score	SD	t-value			
				(I)	(II)	(III)	(IV)
0-5 (I)	181	48.66	15.30				
6-10 (II)	183	55.11	16.53	3.86**			
11-15 (III)	113	51.37	14.28	1.52	1.99*		
16 onwards (IV)	131	49.81	12.90	0.70	3.06**	0.90	

*P<0.05, **P<0.01

Table 5 shows there is no significant difference between monthly salary and occupational stress among secondary school teachers. Teachers with higher monthly income are not necessarily having higher stress levels than their colleagues with lower monthly income, vice versa.

Table 5: Comparison of Mean Occupational Stress Scores of two groups of Salary of Teachers

Salary	N	Mean Occupational Stress Score	SD	t	df	P<
Upto15,000	386	50.73	15.93	1.34	606	Not Sig.
15,000 onwards	222	52.44	13.85			

One-way ANOVA was used to compare the four subject groups taught by the teachers: languages, arts, social sciences and sciences. As shown in Table 6, occupational stress is not found among the teachers teaching languages, arts, social sciences and sciences.

Table 6: Summary of analysis of variance in respect to Occupational stress and Subjects taught by Teachers

Source of Variance	df	Sum of Squares	Mean Square	F	P<
Between Groups	3	535.63	178.54	0.77	Not Sig.
Within Groups	604	139973.04	231.74		
Total	607	140508.67			

A t-test is used to compare married and unmarried teachers on total scores on the Teachers Occupational Stress Scale. The results in Table 7 reveal no significant difference in the marital status and occupational stress of secondary school teachers.

Table 7: Comparison of Mean Occupational Stress Scores of Married and Unmarried Teachers

Marital Status	N	Mean Occupational Stress Score	SD	t	df	P<
Married	436	51.68	15.32	0.86	606	Not Sig.
Unmarried	172	50.51	14.95			

Discussion

The present study suggests that nearly one-half of the population of secondary school teachers (47.70%) face less stress towards their occupation, while among the remaining teachers a large chunk of population falls into moderate stress group (40.95%); in contrast, a minor group consisting of 11.35% of the total population has more stress towards teaching profession. This is in partial accordance with Durani's observation (2009) who reported that among 150 women working as teachers in schools, 39% were having low stress, 20% were having high stress, 15% were having very average stress, 13% were having very high stress, 8% of the respondents no stress, and 5% very low stress and 0% i.e. negligible were abnormal. This result is discordant with that of Nayak et al. (2009), who found the higher percentage of teachers (70.5%) to be in the low stress category, followed by very low stress category (23.5%) and lesser percent in moderate stress category (6.0%).

Gender-wise analysis shows that male teachers are more stressed than female teachers. The lesser degree of job satisfaction among male teachers can be attributed to the perceptions of female teachers to shoulder the responsibilities same as males in this competitive world, along with their aspiration level, social acceptability, challenges, job responsibilities and career development. Moreover, it is a widely accepted fact that secondary schools are heading towards the work environments that are non-masculinized. The finding is supported by Byrne (1998) and Bhagawan (1997) who emphasized that the causes leading to burnout/stress affect male teachers more than the female teachers who have higher motivation. Whatever the underlying explanation, the results reported here contradict those of other studies that reported higher stress in female primary and secondary staff (Antoniou et al., 2006; Laughlin, 1984; McCormick & Solman, 1992b; Timms et al. , 2006; Abdul Majid, 1998), and no difference between the gender in the three burnout syndrome (Zhao & Bi, 2003; Dali, 2004; Coulter & Abney, 2009).

This study shows a significant difference between occupational stress among school teachers and their qualification. The mean occupational stress scores of teachers ranges from more (Trained Graduate Teachers, 57.22) to less (Post Graduate Teachers, 49.50) with Untrained teachers in between (51.96). This disparity can be accounted to those teachers who attained a lower level of qualification or were not trained enough would be more susceptible to malicious demands from others on the understanding that they are not confident enough to stand on their stance and belief, which further escalates their perception on their stressors. However, with regard to their trained or higher degree holder counterparts, most of them were already a bachelor's degree holder once they entered the profession and possess a deep knowledge of their subject. In this connection, less stress was experienced by them with respect to this aspect. Study by Kyriacou and Sutcliffe (1978) has proved that teachers with higher academic qualification, such as bachelor or higher were less stressed than their colleagues with lower academic qualification, such as diploma.

This study also reveals a significant corresponding relationship among the four sub-groups of teachers experience and occupational stress. This means, the stress in teachers should increase with an increase in the years of their teaching experience. But the teachers with an experience of >16 years are not found to support this notion. The reason might be related to their professional role as a teacher that at older age, the role burden usually gets diluted because of their potentiality, increased capacity to analyze their role due to the job clarity; thus, they could perform their roles better. Moreover, the older teachers might be more experienced and adaptable to the environment and more ready to cope with stress (Huberman, 1993). Also, this study finds that those with an average range of experience, that is, 6-10 and 11-15 years appear to have most stress. This can be explained, as the experience in Indian teachers increases, they become more saturated or exhausted and tired and worn out. This may make them feel less competent, less successful and incompetent to cope with the challenging demands of their jobs. Also, they might not be confident enough in teaching/dealing with disruptive pupils as they probably are inexperienced in their profession comparison to their senior colleagues. Researches have also indicated that teachers length of teaching has significant effects on their personal teaching efficacy, depersonalization and reduced personal accomplishment (Li et al., 2007). In this study, teachers having 0-5 years of teaching experience are seen to be less stressed of all, may be because they are in the initial years of their career making and enjoy their job to the fullest.

The present study advocates no significant difference in occupational stress and salary. This result can be viewed as occurrence of better promotion prospects probably, job security or better pays of teachers as their qualifications are concerned. Robbins et al. (1994) indicated that the more important factors conducive to job satisfaction include mentally challenging work, equitable rewards, supportive working conditions and supportive colleagues. Quite opposite to this, poor salary was found to be the main cause of job dissatisfaction (Ofili et al., 2009; Anitha, 2007). Furthermore, another variable which is not found to be an influencing factor for occupational stress among teachers, is the subjects taught by the teachers. This indicates that the languages, arts, social sciences and sciences teachers do not differ on the level of stress experienced by them. This may be because every subject has its own value for the teacher and their prime concern is to make the students understand their subject and teach well so as to clear their concepts, irrespective of the subject taught by them. Also, no significant associations between the occupational stress of teachers and marital status are presented in this study, and this finding is in accord with results of Al-Qaryoti & Al-Khateeb (2006) who reported that being married or not does not effect on the level of burnout among Arab teachers. This result is not consistent with the findings of Gold and Roth (1993), who stated that unmarried teachers had a higher stress level than married teachers.

Conclusion and Recommendations

The study concludes that nearly half of the teachers are in less stressed group and male teachers face more occupational stress than their counterparts. Further, it is revealed from the result that trained graduate teachers have significantly higher occupational stress than post-graduate and untrained teachers. The study also finds that occupational stress is most prevalent among teachers with an experience of 6-10 years and least among 0-5 years of experience in teaching. Further, a no significant difference is seen between the monthly salary and occupational stress of secondary school teachers. Also, no significant difference is found among the teachers teaching languages, arts, social sciences and sciences. In addition to this, the study also supports no significant difference in the marital status and occupational stress of secondary school teachers.

Stress affects the efficiency of the individual. So, there is a need to provide proper conducive environment and support to teachers to maintain individual stress at their workplace. Teachers should be positive in facing their challenges, which will help them in

improving their functional skills and reduce stress, so that their profession is not affected. It is recommended that regular assessment of stress level should be conducted for preventive measures. Direct physiological measures of stress like diagnostic tests and consultation should be conducted by the Guidance Center and Medical Clinic. Besides that, the institution or management should check that, supervision, support and relationship with the teachers is properly taken care of and enhanced most strongly. Most importantly, it is recommended that principals and supervisors should investigate the causes for stress and evaluate the organizational climate of the school. They should also suggest ways, like workshops and seminars to alleviate and cope with stress.

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