Being Stressed: Investigation of University Teachers' Gender Differences in Occupational Stress

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Abstract

This study encapsulates the phenomenon of stress among the teachers of public and private sector universities of Peshawar. The sample of the study included 163 teachers from both public and private sector universities. This study utilized Fimian (1984) and Gmelch (1984) inventories, designed specifically for measuring teachers stress. The findings of the research based on the Mean scores of the responses identified no significant difference among the stress levels of public and private sector universities' teachers. Professional and work related stress remained equally key contributors for public and private sector universities teachers. The study also identified the levels of teachers' stress considering their gender differences. Application of t test on the study data, found that females took comparatively more stress than males. Work related stress, professional stress, self efficacy and collegial support stood the leading contributors making significant differences between the stress intake of female and male faculty members.

Key words: occupational stress, stress moderator, teachers' gender and workplace stress.

1. Introduction:

Teaching stands one of the most significant professions amongst the number of other professions. The importance of this profession lies in the fact that all other professions in society have their basis in the profession of teaching. Teachers are the pillars of education system and the one on whose quality the entire learning process depends. Hence the importance of this profession cannot be denied and overlooked (Aluede, 2009). Looking at the other side of the picture, several studies report that teaching is one of the most stressful occupations (Hammann, 1990; Easthope&Easthope 2000; Zingle& Anderson, 1990; Troman, 2000). In the light of literature reporting teaching as the stressful occupation, it is realized to probe the intensity of this problem among the teachers of Pakistan as well, where teachers have been pursuing their profession under several economic, social as well as political pressures. Although there are few studies conducted in Pakistan, pertaining to teachers job satisfaction, peer support, locus of control and well being (Naheed et al. 2000, Imam, 1990) but none of them related specifically with measuring teachers stress. It was hence realized that

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teachers stress phenomenon within the tertiary sector must be studied for not only knowing the gravity of the problem but also provoking interest of the universities' administration for taking corrective actions. Keeping in view the limited work within the domain of determinants of stress based on gender differences, present research attempts to investigate levels of teachers stress employed in public and private sector universities of Peshawar.

2. Literature Review

Several attempts have been made to reach a consensus about the definition of stress. One common problem confronting researchers remain in the fact about the perceptions of individuals experiencing stress, since people respond and behave differently while encountering various stressors (Hanif, 2004). According to Pithers and Fogarty (1995), stress is an interaction of person with his work environment. Kyriacou and Sutcliffe (1978) define stress as a negative response accompanied by physiological changes and mediated by individual's perceptions about coping with the stressors. Within the context of occupational stress, for the education policy makers and educationists, throughout the world, teachers' stress has become the prime area of concern. Although teaching as a profession is marked by various extrinsic as well as intrinsic rewards, even then this profession has certain inherent problems amongst which stress is the major issue reported by literature (Hamman, 1990). McLaughlin (1994) highlights the underlined meaning in this definition that stress is an outcome of factors associated with work (aspects associated with work) and is further intensified through the elements belonging to teachers (i.e. teachers' subjective perceptions of work experience). Similarly Boyle et al. (1995) consider teachers stress as a negative response that is a consequence of teachers' job and is mediated by the perceptions of teachers regarding the demands built upon the teachers. Given the precise look at literature it is inferred that stress is a negative response made by the teachers provided the stress sources. These sources may be provoked by job or by the individual perceptions.

Eskridge and Coker (1985) states that throughout the professional life of teachers, stress use to be a routine experience that result in mental and physical disorders. While discussing stress sources Gupta (1981) stated four organization based stressors including role ambiguity (when individual is unclear about the role to be performed), role overload (when individual is dominated by time demands), Role insufficiency (when individual provided by deficient or inadequate resources) and Responsibility for others (when individual having broad responsibilities for students' growth and development). While discussing teaching rewards for reducing teachers' stress it is reported that along with performance based compensation (Lavy,2007),

and effective relations with fellow colleagues who can share mutually workplace issues (Younghusband et al. 2003) students' behavior and class room environment is a major stress leading factor. Gupta (1981) states that isolation from colleagues or peers results in poor teacher morale which further results in stress and this stress or tension can even be felt in certain case by the students as well, making eventually the entire situation even more stressful for the teachers. Winefield and Jarret (2001) found that fund cuttings to universities is a leading stress source, along with teachers' work load, poor relationships with students and colleagues and difficulties associated with obtaining research funds. Several other researchers support the conflict among colleagues and poor student parent relationships as prime stress sources (Griffith et al. 1999; Kyriacou, 2001). Consistently reported stressors in literature include time management, management styles and inadequate resources and research. (Thorsen, 1996; Easthope&Easthope). According to Rutter et al (2002) securing financial support for academic research, slow career progress, manuscript preparation and conflicting job demands are some of the leading stress sources for teachers. According to Kyriacou (2001), some pertinent teachers' stressors include class room discipline, time demands, students with poor motivation, poor collegial relations, performance evaluation, poor working conditions and overall institution's management and administration. According to Easthope&Easthope (2000), the leading stressors amongst the teachers of Tasmania and Australia included work over load, long working hours and administrative duties. It was found that teachers were left with little time for student's counseling because of their administrative responsibilities. Teachers tend to refuse to administrative responsibilities due to time limitations and this in turn leads them towards feelings of guilt and resentment towards administration.

Within the tertiary sector, some researchers argue that prime stress inducing factors are structural rather than interpersonal (Manthei and Solman, 1988; Kinman, 2001). While reporting the stress inducing factors among universities faculty members. Ahmandy et al (2007) specified incompatible demands raised by organization, inadequate resources for better performance, workload and inadequate decision making power. Abouserier (1996), however, introduced conducting research as another stressor from amongst universities academic staff. According to consistent findings of longitudinal studies among Australian universities' faculty members, some pertinent stressors included time pressures, workload, inadequate resources and educational change (Winefield and Jarrett, 2001; Dua, 1994). Similar findings were obtained with no major differences when applied among U.S teachers sample (Hogan et al 2002). Kinman (2001) in the nine longitudinal studies from 1990 to 1998 in tertiary sector at England, reported time demands or workload, work life imbalance management styles and administrative work as the pertinent stressors. Goodall& Brown (1980) found low salary, teaching to large classes and little or no promotional opportunities

as stress inducing variables.

One of the prime areas of concern within the domain of stress literature remains the association of stress with physical health. There are various studies that explored the association of stress with the physical and mental health of the individuals (Blix et al 1994). While relating this with the mental and physical health of teachers, there are many evidences that teachers during their course of career take much stress that effects negatively their mental as well as physical health (Guglielmi&Tatrow, 1998). According to Jenkins and Calhoun (1991), stress amongst teachers also leads to teachers dissatisfaction, de- motivation and intentions to quit teaching profession. While relating teachers stress with their physical health, Chiu and Lam (2006) found that among the secondary school teachers, upper limb and neck pain were the results of the workload, low collegial support and anxiety.

However, Guglielmi and Tatrow (1998), in response to the empirical support for the hypothesis that poor job stress and poor health of teachers are related, draws attention to the serious methodological flaws associated with these studies, in terms of their validity and reliance on self report procedures, along with another limitation that majorities of studies are conducted in developed countries and less is known about the teachers experiences regarding stress in the developing countries.

According to Tennant (2007) it is though accepted that number of variables may be accounted for moderating workplace stress e.g. individual perceptions and emotionality etc, yet there is no general consensus about the issue. Since some researchers take moderators as stressors and others as stress moderators. Lack of consensus indicates considerable inconsistencies within the domain of this area.

Gillespie et al(2001) spot out the deficiency of investigation within the context of tertiary sector's teachers stress moderators by reporting some of the stress moderators including coping style, social support etc. Barling and Sorensen (1997) states that over the last three to four decades entrance of women in various professions have dragged researchers to examine the impact produced by this change on the organizations, as well as the women and their families.

According to Bell and Barry (2007), one of the primary themes in social science over the last couple of decades remains the presence of diversity across the organizations. Associated with diversity are various organizational outcomes (Wise and Tschirhart, 2000), yet it involves several challenges including the criterion for success that vary across different diversity groups (Anderson, 1997). Focusing on specific dimensions of diversity, one of the concerns of this paper is to identify that whether male and female teachers experience stress differently. This study thus intends to find

out the levels of teachers' stress based on their gender differences. Working generally brings positive outcomes for both males as well as females (Baruch et al 1987; Malley and Stewart, 1988; Repetti et al 1989), however considering the significance of occupational stress as a major work related problem, gender differences while experiencing stress may not be overlooked for effective management of stress (Jick and Mitz, 1985). There exist contradictory findings regarding gender and its association with stress. For example there exist studies reporting no evidence of difference among genders on basis of stress (Martocchio and O'Leary, 1989; Fontana and Abouserie, 1993; Aminabhavi and Triveni, 2000; Pradhan and Khattri, 2001). On the other end of continuum, however exists studies suggesting that though male and females are exposed to same stressors but their response to similar stressors is unique (McDonald and Korabik, 1991; Nelson et al 1990). While studying the relationship of stress with demographic variables, Beena and Podual (1992) amongst the sample of 40 male and 40 females executives found that with the increase in age stress level increased due to the increased responsibilities. Similarly female executives were more prone to stress than their male counterparts. The study revealed that females were more prone to stress due to the reason that females experienced greater amount of work change than male counterparts. Similar evidence is reported by Osmany and Khan (2003) that females take more stress than males due to their dual (i.e. professional as well as domestic) responsibilities. However contradictory findings were stated by Bhagawan (1997) revealing that comparatively males teachers experience more stress than females, as evident from Barkat and Praveen (1999) that female teachers show low degree of role stress than male teachers.

One of the serious limitations of stress literature so far remained the lack of researches segregating male and female occupational stressors, majorities of studies are male dominating (Decker and Borgen, 1993; Hofboll et al 2003). As a result drawing conclusions about the role of gender in intensifying or reducing stress remains unanswered due to the scarcity of data (Burke, 2003). Further there are evidences that researchers treat women as a homogeneous group and rarely incorporate differences of perception. According to (Baruch et al 1987) for obtaining a clear picture about stressors it is important to disintegrate the population of females.

However considering the review of current literature indicating inclination of researches in finding out teachers' stress levels as well as their stressors pertinent to their genders (e.g. Lath, 2012; Antoniou et al 2013; Sliskovic and Sersic, 2011), if there are differences among groups of teachers' stressors and levels of stress based on their gender then it will likely to be useful to identify those differences for further devising sound stress coping strategies which so far do not take in to account heterogeneous population of teachers. Research suggests that for reduction of workplace

stress workplace support is the key player (Hofboll et al. 2003).

3. Purpose of study:

According to the literature reviewed it is evident that teachers experience stress almost throughout their career, resulting in severe detrimental consequences in form of mental, physical as well as behavioral disorders. (Eskridge and Coker, 1985; Blix et al, 1994; Borg & Ridding, 1991). Current research encapsulates the major workplace stressors of faculty employed in public and private sector universities of Peshawar. Further it will examine the levels of teachers' stress considering their gender differences.

As there are limited studies within the domain of occupational stress among universities faculty especially stressors based on gender differences, probing the stressors of universities faculty could yield beneficial data for the policy makers in formulating effective stress management programs. As Fimian (1980) indicates teachers, administrators and counselors must learn to identify the problems of stress, in order to face the issue, and to learn stress reduction techniques.

4. Objectives of the research:

Objectives of the current research are as under;

- To determine the level of stress among faculty members of public and private sector universities.
- To identify the difference between stress levels of faculty members of public and private sector universities.
- To investigate if there is difference between male and female teachers' levels of stress employed in public and private sector universities.

5. Methods:

The study adopted a survey research design for the purpose of data collection from the respondents of the study.

5.1 Sample:

The population of this study included teachers from all the public and private sector universities of Peshawar. Sample was drawn from the faculty members of universities of Peshawar only because being the capital city, it represents maximum universities belonging to the entire province. A simple random sample of 163 teachers was drawn by the application of the Yamane (1967) formula for calculating sample size

with 95% confidence level i.e. $n = N/1 + N(e)^2$. Moreover by application of Kaiser-Meyer-Olkin (KMO) test with the value .652 on data collected examined the adequacy of the sample size as well (Naidoo, 2011). The criteria for the teachers taken as a sample were minimum one year teaching experience. Data regarding the rest of the details of demographic profile of teachers included in this study is presented in Table-1.

Table 1: Frequency Distribution of Respondents & their Demographic Characteristics

Personal Profile of Respondents	Frequency	Percentage
Sector		
Public	82	50.3
Private	81	49.7
Total	163	100.0
Group 1 (20-30)	95	58.3
Group 2 (31-40)	59	36.2
Group 3 (41-50)	4	2.5
Group 4 (51-60)	2	1.2
Total	163	100.0
Highest Degree Earned by Respondents		
Masters	71	43.6
M. Phil	70	42.9
PhD	17	10.4
Post Doc	5	3.1
Total	163	100.0
Nature of Job of Respondents		
Permanent	66	40.5
Contract	97	59.5
Total	163	100.0
Gender		
Male	109	66.9
Female	54	33.1
Total	163	100.0
Marital Status		
Single	70	42.9
Married	93	57.1
Total	163	100.0
Rank / Designation		
Lecturer	130	79.8
Assistant professor	19	11.7

5.2 Instrument:

Survey instrument was adopted from The faculty stress index by Gmelch (1984) and Teachers stress inventory (Fimian, 1984), that was modified according to the research objectives.

Validity and reliability of Fimian (1984) as well as Gmelch inventories has already been proven by several researches (Putter, 2003; Hanif, 2004; Riaz and Ramazan, 2013; Vaezi and Fallah, 201; Allison, 2004). Moreover, for ensuring further the relevance of the scales to the education sector in Pakistan, the final questionnaire of the study was shown to many experts in the field of human resource management. The questionnaire was considered by them as the valid measure of intended concept. According to Sekran (1999) Reliability of instrument determines the extent to which the measure is biased free. Also it verifies the consistency of measurement across time and across various items. Thus reliability is associated with uniformity of responses or data by repeated applications. For the section 2 of the research questionnaire, Cronbach Alpha for overall scale shows consistent measure, with the Cronbach Alpha coefficient of 0.93.

Questionnaires were personally administered at their respective workplace. Teachers were requested to complete questionnaire in one sitting. Anonymity of responses was provided with assurance that the information will be utilized only for the research purpose. Two hundred questionnaires were distributed out of which 172 questionnaires were returned. Nine out of them were discarded due to incomplete data.

6. Results and discussions:

The study was carried out in public and private sector universities. Results for the overall stress levels of both public and private sector universities are presented in Table 2.

Table 2: Overall stress levels of public and private sector universities' teachers

Factors	N	Minimum	Maximum	Mean	Std. Deviation
Time management	163	1.50	4.75	2.7830	.79384
Work related stress	163	1.17	4.67	2.7219	.78699
Professional stress	163	1.00	5.00	2.9669	1.08372
Discipline	163	1.17	4.17	2.3661	.71623
Efficacy	163	1.00	4.80	2.4859	.84327
Collegial support	163	1.00	5.00	2.3644	.89909
Valid N (list wise)	163				

Source: survey data, 2012

According to the results the overall stress level of the faculty members employed in both public and private sector universities, Mean values ranges between 2.96 to 2.36, suggesting that the Professional stress with mean value 2.96, stands to be the highest stressor for the teachers, as it shows inclination towards the level (considerably stressful). Time management stands to be another highest stressor for the teachers (Kyriacou, 2001; Easthope&Easthope, 2000); however the least stressful factors remain to be collegial support and Discipline, with mean values 2.364 and 2.366 respectively.

In order to test the first hypothesis that occupational stress of faculty members of public and private sector universities members of Peshawar is different independent sample T test computed the results given in Table 3. Similar test was applied while finding the relationship between teachers' demographics and their levels of stress among Community College Business faculty members in Texas (Allison, 2004).

Table 3: Group statistics and independent sample t test for stress levels of public private sector universities, teachers

					t-Test for Equality of Means	
Factor	Sector	N	Mean	Standard Deviation	F	Sig. (2- tailed)
Time management	Public	82	2.8034	.83588	.668	.743
	Private	81	2.7623	.75353		
Work related stress	Public	82	2.8354	.73912	1.525	.064
	Private	81	2.6070	.82129		
Professional stress	Public	82	2.8415	1.03315	3.054	.138
	Private	81	3.0938	1.12476		
Discipline	Public	82	2.4004	.70655	.122	.539
	Private	81	2.3313	.72863		
Efficacy	Public	82	2.5415	.85461	.515	.399
	Private	81	2.4296	.83313		
Collegial support	Public	82	2.2512	1.03414	11.394	.105
	Private	81	2.4790	.72642		

Source: survey data, 2012

It is evident from the Table 3 that for Time management there is exist no statistically significant difference between the stress of the public and private sector faculty members ($p = .415$, $t = .743$). Looking at the group Mean statistics values 2.80, for public and 2.76 for private sector, makes it obvious that for time management both faculties (public and private) considerably stressful. Work related stress is also not significantly different in public and private sector university members ($p = .219$, $t =$

.064). Group Mean statistics (2.8 and 2.6) also reveals that both faculties (public and private) are considerably stressful for work related stress. For the stressor professional stress ($p = .082$, $t = .138$), shows a statistically in significant relationship between the stress taken by public and private sector universities faculty members. Group statistics Mean 2.84 (public) and 3.09 (private) also depict that in public and private sector teachers are considerably stressful. In case of discipline there is no statistically significant difference between the stress taken by public and private sector faculty members ($p = .727$, $t = .539$) also the group Mean statistics for public and private sectors (2.4 and 2.3) confirms that teachers are somewhat stressful for the stressor. For self efficacy teachers from public and private sector with ($p = .474$, $t = .399$), are statistically in significantly related in terms of their stress. Group Mean also makes it evident that public as well as private sector faculty members are somewhat stressful. In case of collegial support, with ($p = .001$, $t = .105$) a statistically in significant difference is indicated in both groups (public as well as private) with Group Means 2.2 (public) and 2.4 (private) indicating that faculty members are somewhat stressful. Overall in public as well as private sector teachers take almost equal levels of stress for the stressors. Professional stress is the only stressor which exists in greater intensity in both sectors. Contrary to the findings of same kind of study performed among the public and private sector universities of Islamabad and Rawalpindi Pakistan, according to which stress in public sector universities was dominating than private sector (Khurshid et al.2011), current study found no significant difference among the stress levels of faculty members of public and private sector universities of Peshawar.

Results for the relationship between faculty stress based on their gender differences have been presented in Table 4.

According to the results there is no statistically significant difference between the male and female faculty members with respect to the stressor, time management, with ($p = .03$, $t = .164$). Group statistics Mean also makes it evident that both male as well as female faculty is considerably stressful (Male= 2.8 and female= 2.6). For work related stress there exist a statistically significant difference between the stress of male and female faculty members ($p = .294$, $t = .001$) with Mean values (Male= 2.8 and female= 2.4), indicating that male faculty is more inclined towards considerable level of stressful. With respect to professional stress male and female faculty is showing a statistically significant difference ($p = .769$, $t = .001$) with group mean (Male= 2.7 and female= 3.3), that shows that females take comparatively more professional stress than their male counterparts. From the findings it may be inferred that although workplace seems apparently gender neutral yet there exists gender biases. Supporting the findings of this study (Nelson and Quick, 1990; Nelson and Quick, 1985) also reported that lack of career progression found to be a potential stress source contributing for poor

Table 4: Gender wise Group statistics and independent sample t test for stress levels of public private sector universities, teachers

					t-Test for Equality of Means	
Factor	Sector	N	Mean	Standard Deviation	F	Sig. (2- tailed)
Time management	Male	109	2.8440	.75541	4.600	.184
	Female	54	2.6597	.86036		
Work related stress	Male	109	2.8685	.70495	1.108	.001
	Female	54	2.4259	.86431		
Professional stress	Male	109	2.7688	1.08974	.086	.001
	Female	54	3.3667	.96250		
Discipline	Male	109	2.3242	.69494	.631	.290
	Female	54	2.4506	.75696		
Efficacy	Male	109	2.3523	.77932	2.980	.004
	Female	54	2.7556	.90838		
Collegial support	Male	109	2.1578	.84987	.798	.000
	Female	54	2.7815	.85673		

Source: survey data, 2012

health and low job satisfaction. Hofboll et al. (2003) found that females still face glass ceiling, a potential barrier that limits career progression of females towards top management positions (Burke, 2003; Morrison, 1990). Similarly while conducting a comparative study among male and female managers, Cox and Harquail (1991) found that there was a significant difference between male and female managers with respect to their salaries and promotions in comparison to their age, experience and performance.

In case of discipline there is statistically insignificant difference between the stress of male and female faculty members indicated from the ($p = .428$, $t = .290$) and Group mean values (Male= 2.3 and female= 2.4), depicting both male and female faculty members are somewhat stressful. In case of Efficacy male and female faculty is statistically insignificantly related ($p = .086$, $t = .004$). Looking at the group statistic mean it is confirmed that male as well as female are somewhat stressful. However a major significant difference between the stress of male and female faculty is found with respect to collegial support ($p = .373$, $t = .000$). Group statistic mean (Male= 2.1 and female= 2.7), makes it evident that males are somewhat stressful whereas females are considerably stressful for the stressor.

The analysis of the results reveals that comparatively from the male counterparts, females are more prone to stress. Similar findings were supported by the studies (e.g. Nelson and Quick, 1990; Bogg and Cooper, 1994; Jenkins and Palmer, 2004; Davidson and Cooper, 1984). According to Nelson and Quick (1990) women along with sharing some common stressors with males also take more stress due to certain other stressors particularly encountered by women like gender discrimination, stereotyping and social isolation. Similarly Davidson et al. (1995) also reported significantly high stress among 126 females included in their sample than 220 Males. Additionally females were more prone to physical and mental ill health and job dissatisfaction. Jick and Mitz (1985) reported that males and females are exposed to unique stressors and gender moderates relationship between stress appraisal, stressors and coping mechanism.

Keeping in view the findings of current research as well as the reported researches, gender stands to be a potential determinant of stress and implications for its eradication. According to Hanif (2004) the problems of female teachers in Pakistan are far more than their male counterparts in terms of social (e.g. cultural traditions, social conservatism) and related to work environment (e.g. location, transportation, security for single females etc). All these issues may be related to female teachers' stress. Concerning their stress in take (e.g. although few contradictory evidences have also been found in literature, emphasizing that there is no significant difference between males and females (NIOSH, 2003), but lot more studies rigorously reported that females take more stress (Bogg and Cooper, 1994). According to Wrigh (2002) high stress of women may be associated with imbalance between the demands of their work and home. According to Hanif (2004) that there is a common belief in Pakistan that teaching use to be the most smooth and relaxed occupation or females, but practically it seems that women teachers face more crisis and job related stress than male teachers. This is no doubt an alarming signal for those in administrative capacity and policy makers, that they must take serious notice of the prevailing inequities and stressors paralyzing the beliefs and working capacities of women across universities of public as well as private sector of Pakistan. As indicated by literature if stress remained unchecked and prolonged it may bring several detrimental consequences for the health as well as the performance of the workers (Guglielmi&Tatrow, 1998; Kausar et al. 2006).

7. Conclusion and future research implications:

The present research although provides some valuable findings regarding teachers stress but still it may be considered as the pioneering research. The research provides a glimpse of the stress situation prevailing in public and private sector universities' faculty that it is wrapping within its sphere both sectors' teachers. Although it is not

commented here that this situation has been prevailing from how many years yet it is a serious concern for the policy makers to address the issue through proper stress interventions before its further escalation. The research came up with a preliminary contributions, however much can be explored further like the consequences of stress for both groups (male and female) for their health and performance. Another avenue opened for upcoming researchers might be to identify the coping styles of male and female teachers along with their standard coping strategies. This research as mentioned earlier utilized a limited sample (belonging to universities of Peshawar only), in future a national sample can be taken to confidently generalize the findings of research. The findings of this research provides a major contribution towards teachers training and wellness programs, that according to this study must consider gender specific contents while training teachers on their stress management programs. Another contribution of this research is within the area of women education, as females are becoming a vital contributor in education, their workplace problems, in which occupational stress in particular, that proves to be a major instigator, must be alleviated for the satisfactory performance of female teachers.

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