



Gender based analysis of occupational stress among academic managers at higher educational level

Shazia Zamir¹, Sara Iqbal² and Azhar Mahmood Chaudhary²

¹Department of Education, National university of Modern Languages, Islamabad.

²Faculty of Social Sciences, Department of Education, International Islamic University, Islamabad, Pakistan.

ARTICLE INFO

Article history:

Received: 31 March 2011;

Received in revised form:

17 May 2011;

Accepted: 25 May 2011;

Keywords

Occupational stress,
Role Stress,
Personal Strain,
Academic Managers,
Gender differences.

ABSTRACT

This present study was mainly focused upon gender based analysis of occupational stress among academic managers at higher educational level. The major objective of this study was to compare the level of occupational stress among academic managers at higher educational level. The researcher used Occupational Stress Inventory–revised (OSI-R) to measure stress in academic managers. It comprised 140 items which was used for collection of data from the principals of government degree colleges in the province of Punjab, Pakistan. In order to select representative sample from the population, simple random sampling technique was used. Data were collected through registered mail and personal visits to the offices of principals. Total sample size was 120 for data analysis; both descriptive and inferential statistics were used. Data analysis revealed that significant difference was found in responses of male and female academic managers regarding to occupational stress, role stress and personal strain. Whereas no significant difference was found in responses of male and female academic managers regarding personal resources stress.

© 2011 Elixir All rights reserved.

Introduction

An educational institution is like a mini society with numerous and varied opportunities provided to its members for acquisition of real life experiences. The paramount aim of education thus is to ensure formation of healthy social and formal relationship among and between students, teachers and other concerned. In the realms of economic and social development of a country today higher education is recognized as a capital investment and is of supreme importance. Institutions of higher education have the main responsibility for equipping individual with advanced knowledge and skills mandatory for positions of senior concern in government, business and other professions. Hence its importance must be recognized by decision makers who can take best decision if they are psychologically healthy and strong. In accordance with the above cited the role of an academic manager (head of the institute) is very important with all the areas of responsibility apropos of the educational system.

Academic manager has to deal with number of areas at the same time, so patience, vision, crisis management ability and accomplished of task are almost unavoidable traits. Academic manager has to interact with variety of employers, learners and objectives. Academic managers have to Use organizational skills that facilitate performance of duties ,effectively communicate orally and in writing; manage financial resources effectively in order to best utilize resources and running budgets and expenditures; use personal computers utilizing typical office software appliances including the Internet; work efficiently and effectively with other managers, faculty and staff in a participatory governance environment to achieve the goals and objectives of the college and the allocated divisions or areas; converse effectively and constructively with persons of diverse cultures, language groups, and abilities; exercise good judgment

and compassion to work with the diverse academic, socioeconomic, cultural and ethnic backgrounds of college students, faculty, and staff, including those with disabilities; establish and maintain effective working relationships with those who made contact with in the course of work.

In such a complex scenario, management may seriously be affected by the occupational stress. Enduring stress that is narrated with the place of work is called occupational stress. The concept of occupational stress is an innermost aspect of modern-day theories of stress. The topic of occupational stress has become trendier, while it dwells in academics' and practitioners' attention now for more than half a century. Occupational stress has become an increasingly common facet of modern life. This is the type of stress resulting from one's occupation and may be either physical or psychological in nature and sometimes both. Cyclical stress is one kind of occupational stress. This is a physical condition created through the reiteration of certain movements or as a result of the body being used in a certain way. Apprehension nuisance are often an indication of some physical types of occupational stress. Chaos sound, intense temperature, meager air quality, and other physical factors can supply occupational stress.

Occupational stress may lead towards physical and psychological problems. Academic managers (principals) can perform their duty very well, if they are psychologically vigorous and sturdy .The study is mainly aimed at these crucial issues of gender based differences of occupational stress among academic managers. This present study was mainly focused upon gender based analysis of occupational stress among academic managers at higher educational level. In developing countries, however, the entrance of women into managerial or senior managerial places has been slower; women of developing country only now beginning to engage in responsibilities to

these positions in noteworthy numbers. gender based analysis of occupational stress explains the relationship between men and women in connection with their roles as men and women in academic as well as developing nations.

Literature review

The definitions of stress are several and wide-ranging, ranging from simple one word statement such as tension or pressure to medical explanations for the physiological response of the human body to certain stimuli. Ofoegbu and Nwadiani (2006) perceive it as a process in which environmental events or forces threaten the well being of the individuals in the society. Stress, in general, can be defined as the reaction of individuals to demands (stressors) imposed upon them (Erkutlu & Chafra, 2006). It submits to situations where the well-being of individuals is detrimentally affected by their failure to cope with the demands of their environment (Erkutlu & Chafra, 2006.). Occupational Stress is an extremely difficult construct to define. Obviously, it is stress on the job, but stress on the job occurs in a person. Several sources of occupational stress exist. Some of these stressors are intrinsic to the job. Some are related to the employee's role within the organization, some to career development, some to relationships at work, and some to structure and climate of the organization. Occupational stress, particularly, is the inability to cope with the pressures in a job (Rees, 1997). It is a mental and physical condition which has an effect on an individual's productivity, effectiveness, personal health and quality of work (Comish & Swindle, 1994)

When left unchecked, occupational stress can lead to emotional and physical disorders that began to impact personal as well as professional lives. The individual may develop a level of tension that interferes with sleep, making relaxing outside the workplace impossible. Over time, the stress can trigger emotional disorders such as anxiety, depression and in some cases various phobias that further inhibit the ability to enjoy any aspect of living. Occupational stress occurs when there is a discrepancy between the demands of the environment/workplace and an individual's ability to carry out and complete these demands. Physical or psychological disorder associated with an occupational environment and manifested in symptoms such as extreme anxiety, or tension, or cramps, headaches, or digestion problems. The concept of occupational stress has become central aspect of contemporary theories of stress. One reason why occupational stress receives so much attention is that businesses are genuinely beginning to care about employee welfare. Henry identified three clusters of roles the manager fulfilled, namely: interpersonal, informational, and decisional (Mintzberg 1975).

A general tendency exists in the literature according to which females experience higher levels of occupational stress regarding gender-specific stressors and have different ways of interpreting and dealing with problems related to their work environment (Antoniou et al., 2006). For example, (Sharpley et al. 1996) found that males have statistically significant lower job stress scores, and Antoniou et al (2006) found that female teachers experienced significantly higher levels of occupational stress compared to their male counterparts. Ganster and Schaubroeck (1991) pointed that women experience the greater level of stress as they are more vulnerable to the demands of work to the extent that they often have more non-work demands than men. Gregory (1990) reported that, for the female professional, gender stereotyping in the workplace adds to the role conflict stress experiences, while Comish and Swindle (1994) enlighten that role demands such as that of being wife,

mother and professional provoke role conflict. Fotinatos & Cooper (2005) found that female managers are under much more pressure than their male counterparts, Finally, the results of the bivariate analysis conducted by Fotinatos and Cooper (2005) revealed significant differences in terms of physical and psychological wellbeing amongst the male and female sample. Evidence from a growing body of research suggests that certain individuals, in a variety of occupations, are increasingly exposed to unacceptable levels of job-related stress.

Traditionally, the occupation of academics has not been considered stressful (French, et al. 1982). Academic freedom and tenure provided work conditions which were free from the time constraints and organizational pressures which are usually associated with occupational stress (Kahn, et al. 1964). The occupational stressors can be categorized into four major groups. Firstly, the working conditions, including shift and week-end work, inadequate remuneration, hours of work, discrimination and safety at the work environment. Secondly, relationships at work including quality of relationships with peers, subordinates and supervisors. Thirdly, role conflict and ambiguity including ill-defined role, functions, expectations, and duties. Fourthly, organization structure and climate which includes communication policy and practice, major changes in the workplace, culture of the organization, and lack of participation in decision-making. Another cause is career development including under utilization of skills or failing to reach full potential. Another contributing factor is the nature of the job which might amount to an immense amount of physical and emotional exhaustion (Parikh & Taukari, 2004)

One study of Gender differences in occupational stress explains no significant gender difference was found for stress originating from "home-work interface". Female reported significantly higher scores on sources of stress originating from "factors intrinsic to the job", "managerial role", "career and achievement", "organizational structure and climate", and "relationships with others". (Vivien , Thompson , 1996). One study of managers found that females tended to experience stressors emotionally. Their stress was due to pressure to meet expectation to be responsible for people both inside and outside the home (Yoshi, Kelly, Janice 2004). Female workers take on more the household work, and the accompanying stress, then do male workers (Davidson & Fielden.1999). The role of gender has been indicated by various studies investigating perceived stress. Women experience more work-related stress than men and are more often employed in jobs that have lower status, have lower pay, require a lower level of qualification, and have limited opportunities for career development (Alexanderson & Jostling, 2001; Lundberg & Gonads, 1998; Nelson & Burke, 2002). It is also evident that women show more ill-health than men (Alexanderson & Jostling, 2001).

The entry of women into managerial and professional organizational roles over the last three to four decades has been accompanied by a substantial amount of research which has examined the impact of this change on the organization, the woman and her family (Barling, Sorensen 1997). In count, women are also confronted with additional stressors such as work-family conflict (Burke & Greenglass, 1999) that result in a heavier total workload for women (Lundberg, Mardberg, & Frankenhaeuser, 1994). The occupational stress that male workers experience has been found to be related to their concerns about the power structure within the organization that employs them. Female workers, in contrast, experience

occupational stress when there is a conflict between job requirements and family responsibilities (Peter, charges, Spielberger and Carol, 2002). Study on Occupational stress and gender: a cross-cultural study explains that there were differences in the consequences of work stress for male and female managers. (Karen, Mike, Luo, Kate and, Paul, 1999). Jick and Mitz (1985), reviewed the empirical evidence for sex differences in work stress from 19 studies and found that women tend to report higher rates of psychological distress than men. Further, a study conducted by (Nelson and Quick, 1985) pointed that employed women experience greater stress than both non-employed women and men because of several unique stressors faced by employed women. (Baruch, Biener and Barnett, 1987) on the other hand, found that non-employed women experience greater stress than employed women, while (Martocchio and Leary, 1989) who undertook a meta-analysis of 15 studies that examined sex differences in occupational stress, found no differences in experienced and perceived work stress. Throughout the world, higher education has undergone a more profound re-orientation than any other system in industrial societies. Since the 1980s, many systems of higher education have expanded while resource levels have not kept pace. Due to major change initiatives, excessive work hours, heavy workloads, poor management, diminishing resources, unfavorable student: staff ratios, pressure to attract external funds, job insecurity, lack of recognition and reward, and role ambiguity, have frequently been reported by academic staff in the UK and overseas universities (Tytherleigh et al, 2005).

Female IT personnel reported significantly higher scores on sources of stress originating from "factors intrinsic to the job", "managerial role", "career and achievement", "organizational structure and climate", and "relationships with others". Contrary to initial prediction, no significant gender difference was found for stress originating from "home-work interface". With respect to coping strategies, female IT personnel tend to seek social support and talk to others when they experience stress, while men tend to suppress their emotions and deal with problems in a logical and unemotional manner (Vivien & Thompson, 1996). Workloads, working conditions and relationship at work were the main concern of the managers that lead to stress at the work place. (Amat, et.al, 2003)

In an increasingly competitive and fast changing business world, efficient managers should feel compelled to address the issue of work-related stress through counting the costs and taking appropriate action so as to minimize its effects (McHugh, 1993). Managers should expand their efforts in reducing the significant sources of stress (Blake et al., 1996), as this leads to a higher employee satisfaction, increases the productivity of the workforce and reduces negative consequences of stress, which at the end results in higher profits. In view of drought of persuasive studies about whether the same this is true that there is gender based difference of occupational stress of academic managers, the present study was conducted. In Pakistan, considerable and extensive research work is available pertaining to the topic of occupational stress. Gender based comparison of occupational stress, particularly with reference to academic managers, however, is still on need of comprehensive research. This study aims to present a comparative analysis of gender based occupational stress experienced by academic managers.

Methodology

Random sampling technique was used to get sample from the population of all government degree colleges of province

Punjab, Pakistan. The sample size was 120 (50% male academic managers and 50% female academic managers). In order to select representative sample from the population, simple random sampling technique was used. The data was collected through registered mail and personal visits to the offices of principals. In order to measure the occupational stress level of academic managers, the occupational stress inventory (OSI-R) with 140 items was used. The questionnaire covers three subscales of occupational role stress, personal strain and personal resources stress. The items were measured in a 5 point Likert - like scale ranging from "never true" to "most of the time true". The researcher made some changes in item number 24, 33 of section 2 and item number 13 of section 3, according to the need of environment. Then the reliability of scale is 0.91. The three dimensions of occupational stress assessed by this tool.

Analysis

SPSS version 16 was used to analyze the data. Mean and t-test was employed on the scores taken from occupational stress. Data gathered with regard to pre-determined questions was analyzed by calculating the Mean score, Standard deviation and t-value of each of the variables to compare the gender based differences of occupational stress among academic managers at higher educational level.

Table 1 shows mean scores, standard deviation mean difference and t-value of male and female academic managers. The calculated t value 4.956 is significant at 0.05 level of significance this shows that there is a significant difference in responses between male and female academic managers regarding occupational role stress which indicates that the female managers were more effected by occupational role stress.

Table 2 shows mean scores, standard deviation, mean difference and t-value of male and female academic managers. The calculated t value 3.305 is significant at 0.05 level of significance this shows that there is a significant difference in responses between male and female academic managers regarding personal strain. It indicates that the female managers were more affected by personal.

Table 3 shows mean scores, standard deviation, mean difference and t-value of male and female academic managers. the calculated t value .974 is not significant at 0.05 level of significance this shows that there is no significant difference in responses between male and female academic managers regarding personal resources. Therefore the formulated null hypothesis that there is no difference between gender regarding personal resources is rejected.

Table 4 shows mean scores, standard deviation, mean difference and t-value of male and female academic managers. The calculated t value 4.109 is significant at 0.05 level of significance, this shows that there is a significant difference in responses between male and female academic managers regarding occupational stress. It indicates that the female academic managers are more affected by occupational stress.

Discussion and recommendations

This research study is mainly captivated to dissect the occupational role stress of male and female academic managers that leave a new dimension to the whole education system. There are diverse researches on occupational stress in the field of education but no explicit work is found to investigate the gender based level of occupational stress among academic managers at higher educational level. The proclamations of this research are peerless that impart rectified acumen of the concept. On the basis of the statistical findings presented in the former

section, a high level of occupational stress is patent in female academic managers. Out of the results in Table 1 shows that there is significant difference in the level of occupational role stress of male and female academic managers at higher educational level. Females have higher occupational stress than male. This interpretation albeit the comparatively higher mean score of female academic managers in Table 1 (174.60 < 194.75) could be interpreted as an indication that female academic managers seem to be highly affected by occupational role stress than their male counterparts. The finding of Table 2 shows that there is a significant difference in the level of personal strain of male and female academic managers at higher educational level. This elucidation notwithstanding the comparatively higher mean score of female academic managers in Table 2 (86.53 < 95.53) could be interpreted as an indication that female academic managers seem to be highly affected by personal strain than their male counterpart

The results in table 3 revealed that male and female academic managers experienced same level of stress in the areas of personal resources stress. Table 4 shows there is a significant gender difference in the level of occupational stress of academic managers at higher educational level. This elucidation notwithstanding the comparatively higher mean score of female academic managers in Table 4 (393.37 < 426.47) could be interpreted as an indication that female academic managers seem to be highly affected by personal strain than their male counterpart. Men experience slightly higher levels of stress than women (Martin and Tom 2004) On gender, level of stress was found not to be different among male and female academic staff by Abouserie (1996) and Ofoegbu and Nwadiani (2006) and Narayanan, Menon, Spector (1999). There was no significant difference in stress perceived by men and women, (Kirkcaldy & Furnham, 1999). But this study is indicating higher stress in female academic manager. This study showed occupational stress is comparatively more in female as compare to male; this position stands true because of women are more prone to domestic stress than their male counterparts due to value orientation, social pressure, family responsibilities and home work interface. Detailed analysis of the relevant factors has revealed the fact that female academic managers experience comparatively higher level of occupational stress when it comes to occupational role and personal strain with reference to personal resources, however, male and female academic managers undergo the almost the same level of occupational stress.

Bibliography

1. Abouserie, R. (1996). Stress, coping strategies and job satisfaction in university academic staff. *Educational psychology*, 16 (1), 49-56
2. Alexandersson, K., & Jostlin, P. (2001). Work and ill-health among women and men in Sweden. In S. Marklund (Ed.), *Worklife and health in Sweden 2000* (pp. 119-134). Stockholm: National Institute for Working Life.
3. Amat T. M, Rodrigue, Fontaine, Chong Siong Choy, (2003) "Occupational stress among managers: a Malaysian survey", *Journal of Managerial Psychology*, Vol. 18 Iss: 6, pp.622 – 628
4. Antoniou, A.-S., Polychroni, F., Vlachakis, A.-N. (2006), Gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece, *Journal of Managerial Psychology*, 21(7): 682-690
5. Barling J, Sorensen D. Work and family: in search of a relevant research agenda. In *Creating Tomorrow's*

Organizations. A Handbook for Future Research in Organizational Behaviour, Cooper CL, Jackson SE (eds). John Wiley and Sons: Chichester, 1997; 157±170.

6. Baruch, G.K, Biener L, Barnett, R.C. Women and gender in research on work and family stress. *Am. Psychol.* 1987; 42: 130±136.
7. Blake, C. G., Saleh, S. D., Whorms, H. H. (1996), Stress and satisfaction as a function of technology and supervision type, *International Journal of Operations & Production Management*, 16(5): 64-73
8. Burke, R. J., & Greenglass, E. R. (1999). Work-family conflict, spouse support, and nursing staff well-being during organizational restructuring. *Journal of Occupational and Organizational Psychology*, 4(4), 327–336.
9. Comish, R., Swindle, B. (1994), Managing stress in the workplace, *National Public Accountant*, 39(9): 24-28
10. Erkutlu, H. V., Chafra, J. (2006), Relationship between leadership power base and job stress of subordinates: example from boutique hotels, *Management Research News*, 29(5): 285-297
11. Fotinatos-Ventouratos, R., Cooper, C. (2005), The role of gender and social class in work stress, *Journal of Managerial Psychology*, 20(1): 14-23
12. French, J., Caplan, R., & Harrison, R.V. (1982). The mechanisms of job stress and strain. New York: John Wiley & Sons Ltd.
13. Ganster, D. C., Schaubroeck, J. (1991), Work Stress and Employee Health, *Journal of Management*, 17(2): 235-271
14. Gregory, A. (1990), Are Women Different and Why are Women Thought to Be Different? Theoretical and Methodological Perspectives, *Journal of Business Ethics*, 9(4/5): 257-266
15. Guppy A, Rick J. The influence of gender and grade on perceived work stress and job satisfaction in white-collar employees. *Work and Stress* 1996; 10(2): 154-164.
16. Mintzberg, The Manager's Job: Folklore and Fact', *Harvard Business Review* 53(1975):49-61
17. Jick T.D, Mitz L.F. Sex differences in work stress. *Acad. Management Rev.* 1985; 10(3): 408-420.
18. Kahn, R.L., Wolfe, D., Quinn, R., Snoek, J., & Rosenthal, R. (1964). *Organizational stress: Studies in role conflict and ambiguity*. New York: John Wiley & Sons Ltd
19. Karen Miller, Mike Greyling, Cary Cooper, Luo Lu, Kate Sparks and, Paul E.Spector.(1999). Study on Occupational stress and gender: a cross-cultural study.(271-278). South Africa. Department of Psychology, University of the Witwatersrand
20. Kirkcaldy, B., Furnham, A. (1999), Stress coping styles among German managers, *Journal of Workplace Learning*, 11(1): 22-26
21. Lundberg, O., & Gonas, L. (1998). Trends in women's psychosocial work environment and health, and structural changes on the labor market. In K. Ort-Gomér, M. Chesney & N.K. Wenger (Eds.), *Women, stress, and heart disease* (pp. 57–72). New York: Lawrence Erlbaum
22. Lundberg, U., Mårdberg, B., & Frankenhaeuser, M. (1994). The total workload of male and female white collar workers as related to age, occupational level, and number of children. *Scandinavian Journal of Psychology*, 35, 315–327.
23. Davidson, M.J & Fielden, S. (1999) "Stress and the working women" in ed. handbook of gender and work, G.N. Powell(thousand oaks, CA:Sage),413-426.

24. Martin Loosemore¹ and Tom Waters² (July 2004) "Gender Differences in Occupational Stress Among Professionals in the Construction Industry" J. Mgmt. in Engrg. Volume 20, Issue 3, pp. 126-132
25. Martocchio, J.J, Leary A.M. Sex differences in occupational stress: a meta-analytic review. J. Appl. Psychol.1989; 74(3): 495-501.
26. McHugh, M. (1993), Stress at work: Do managers really count the costs?, Employee Relations, 15(1): 18-32
27. Narayanan L, Menon S, Spector PE. Stress in the workplace: a comparison of gender and occupations. J. Organizational Behavior. 1999; (20), 63-73.
28. Nelson D.L, Quick J.C. Professional women: are distress and disease inevitable? Acad. Management Rev. 1985; 10(2): 206-218.
29. Nelson, D., & Burke, R. J. (2002). A framework for examining gender, work stress, and health. In D. L. Nelson & R. J. Burke (Eds.), Gender work stress and health (pp. 3–14). Washington, D.C. : American Psychological association.
30. Ofoegbu, F. & Nwandiani, M. (2006). Level of perceived stress among lecturers in Nigerian Universities. Journal of instructional psychology, 33 (1), 66-74
31. Parikh P, Taukari A, Bhattacharya T (2004), "Occupational Stress and Coping among Nurses. J Health Management, 6: 115-27.
32. Peter R.V. Charles D.Spiel, B. & Carol F. (2009). Effects of organizational level and gender on stress in the work place: International journal of Stress Management: 243-261.
33. Rees, W. D. (1997), Managerial stress – dealing with the causes, not the symptoms, Industrial and Commercial Training, 29(2): 35-40
34. Sharpley, C. F., Reynolds, R., Acosta, A., Dua, J. K. (1996), The presence, nature and effects of job stress on physical and psychological health at a large Australian university, Journal of Educational Administration, 34(4): 73-86
35. Tytherleigh, M. Y., Webb, C., Cooper, C. L., & Ricketts, C. (2005). Occupational stress in UK higher education institutions: a comparative study of all staff categories. Higher Education Research and Development, 24(1): 41-61.
36. Vivien K.G. , Thompson S.H. (1996) "Gender differences in occupational stress and coping strategies among IT personnel" Journal: Women in Management Review, MCB UP Ltd:20-28
37. Yoshi Iwasakii, Kelly J.Mackay and Janice Restock(2004), "Gender based analysis of stress among professional managers: an exploratory study, "international journal of stress.

Table 1: Gender based Comparison of occupational role stress of academic managers.

Gender	N	Mean	SD	Mean Difference	t-value	df	Sig (2tailed)
Male	60	174.60	22.606	20.150	4.956	118	.000
Female	60	194.75	21.927				

Significant at $\alpha = .05$ level

Table 2: Gender based Comparison of personal strain of academic managers.

Gender	N	Mean	SD	Mean Difference	t-value	df	Sig (2tailed)
Male	60	86.53	15.554	9	3.305	118	.00
Female	60	95.53	14.251				

Significant at $\alpha = .05$ level

Table 3: Gender based Comparison of personal resources stress of academic managers.

Gender	N	Mean	SD	Mean Difference	t-value	df	Sig
Male	60	132.23	23.670	3.95	.974	118	.33
Female	60	136.18	20.656				

Not significant at $\alpha = .05$ level

Table 4: Gender based comparison of occupational stress of academic managers

Gender	N	Mean	SD	Mean Difference	t-value	Df	Sig (2tailed)
Male	60	393.37	40.852	33.100	4.109	118	.00
Female	60	426.47	47.172				

Significant at $\alpha = .05$ level