



# Occupational Stress Amongst Faculty Members : A Review of Literature

<sup>1</sup>Vibhuti Gupta, <sup>2</sup>Ekta Rao, <sup>3</sup>Ranjit Mukherjee

<sup>1,2,3</sup>IIMS Unison University, Dehradun

**Abstract :** The literature available on stress amongst faculty members highlights the fact that with emergence of business dynamics, academics no longer remains a profession which is stress free. Increased globalization and competition has made the role of faculty members more challenging. Their role is not restricted to only teaching rather they also have to contribute towards other institution building activities.

The paper identifies various common stressors amongst faculty members; after an extensive global literature review. It also focuses on individual as well as organisational interventions adopted by faculty members to cope with occupational stress.

**Key words:** Occupational stress, stressors, faculty members, organisational intervention, individual intervention.

## I. INTRODUCTION

Stress is a natural phenomenon in competitive environments, a physiological response to any change, which can be either good or bad. Good stress, also called "eustress," gives us energy and motivates us to strive while bad stress is called "distress" and has harmful effects. Some amount of eustress, according to researches, is essential for performance. Two Harvard researchers, Robert M. Yerkes and John D. Dodson, first identified the relationship between stress and performance in 1908 and is called the Yerkes-Dodson law. According to it, the efficiency increases when stress increases but only up to a point; after that, performance falls off dramatically. According to Paine, "high levels of stress are an integral and largely unavoidable component of work", however, the problem arises when that stress becomes excessive and produces negative effects (Endres and Wearden, 1996).

So what is stress ? The concept of stress was first introduced in the life sciences by Hans Selye in the year 1936. It was derived from the Latin word 'stringere'; it meant the experience of physical hardship, starvation, torture and pain (Nayak, 2008). Selye, 1936 defined stress as "the non-specific response of the body to any demand placed upon it". When a person feels insufficient in dealing with demands and challenges faced in life, s/he experiences stress. (Eres et al 2011) Being harmed by this situation or taking advantage of it

mainly depends on the person because stress may either be a factor threatening the organism physically or psychologically or a power which gives energy in dealing with life (Baltaş, 2002). Some experts argue that those who work in a moderate level of stress work with a higher performance (Steers, 1981). Besides, a moderate level of stress may have a motivating effect if the individual's comprehension of roles is positive (Little, Simmons and Nelson, 2007).

Stress as we all know, has become an important feature of our day to day lives. For the last few decades, research around stress has produced a large number of conferences, books, and articles, however despite the popularity of "stress" as a research topic, experts still do not agree on a common definition of this simple and at the same time controversial concept (Rees and Redfern, 2000). Stress is now usually defined as a feeling of physical or emotional tension and a feeling of being unable to cope with anxiety and discomfort, particularly in response to change (Vijayashree and Mund, 2011). It can be due to personal professional (occupational) reasons. It has been found that it is not only a problem for developed information societies but also for developing countries and is omnipresent in all professions. Each profession causes a specific level of stress. Researches suggest that with rapid advancements and changes today, there is hardly any occupation left, the members of which do not suffer from occupational stress and burnout.

Occupational stress can be described as the adverse reaction people have due to excessive pressure or other types of demand on them (Health and Safety Executive, 2005) Occupational stress and its effect have been amongst the most popular topics in research literature. This is because many researchers believe that stress is becoming a major contributor to absenteeism, low employee morale, high accident and turnover rates. The cost of these stress consequences has become huge burden on many organizations (Jefri and Al-shammri, 1995, Iqbal and Kokash, 2011). The effects of occupational stress are devastating to both employees and employers (McDonald and Korabik, 1991). High levels of chronic stress can result in job dissatisfaction and aggression, as well as lead to the thickening and hardening of the heart muscles, resulting in

cardiovascular disease (Rozanski, Blumenthal and Kaplan, 1999). This occupational stress, thus, leads to burnout.

Pareek points out that the phenomenon of burnout is a harmful effect of stress resulting in loss of effectiveness. Pareek further points out, burnout can be defined as the end result of stress experienced but not properly coped with, resulting in the symptoms of exhaustion, irritation, ineffectiveness, inaction, discounting of the self and others and health problems (hypertension, ulcers and heart ailments). Thus, burnout has been defined as a state of mental, physical and emotional exhaustion, usually resulting from chronic and persistent stress (Sharma, 2007). It is generally considered as a syndrome consisting of three dimensions (Maslach and Jackson, 1986) including emotional exhaustion, depersonalization and lack of personal accomplishment. Hence, stress of any kind in general and occupational stress in particular, it can be seen is considered detrimental for health of an individual.

However, the fact remains that even though it is a well known fact that stress or occupational stress is not good for health, this is an accepted fact, through researches, that people do take stress. There is hardly any profession which is free of stress; be it the corporate sector or as simple a field as academics.

Concentrating now on academics only, it has been found through various researches that the responsibilities of academicians have increased manifold, and now faculty members are supposed to play many other roles besides their traditional roles of teaching and research (Abbas et al, 2012).

Traditionally university teaching has been perceived as a stress-free profession, particularly by those who are not related to this profession (Fischer, 1994). However, some recent studies suggest that university faculty is among the most stressed occupational group (Iqbal and Kokash, 2011). Since the last two decades with the inflow of many private sector universities, higher education institutions are commonly labeled as stressful environments (Barkhuizen and Rothmann, 2008). Teaching profession was once viewed as a 'low stress occupation' and they have been envied for tenure, light workloads, flexibility and other perks such as foreign trips for study and conference. But, now research on stress among academic and general staff of universities from across the globe indicates that the phenomenon of occupational stress in universities is alarmingly widespread and increasing (Winefield, 2000, Gillespie et al, 2001).

During the last decade, a fast growth has been observed in higher education institutions, particularly in developing countries, leading to higher competition and deteriorated organizational climate in most of the public and private sector universities (Rajarajeswari, 2010). Teacher stress is recognized as serious by virtually everyone who has studied the problem (Phillips and Matthew, 1980).

The paper thus focuses on the stress caused to faculty members of universities, with special reference to India. The paper would be a review of literature on the said topic.

## II. RESEARCH METHODOLOGY

The research papers were searched through EBSCO host, google scholar and google. The criterion of search was stress amongst faculty members. The result generated several outcomes, including stress amongst teachers of primary level and senior secondary level. This was eliminated from the study. The search was more focused on stress amongst university level faculty members. It generated results in which reference of stress could be found for countries like United States of America, United Kingdom, Australia, Saudi Arabia, Macedonia, Turkey, Asian countries like Pakistan, Malaysia etc and few studies for India. It also included studies focusing on stress specifically.

Though there are innumerable studies conducted on stress globally, but, comparatively, the literature is not so rich in researches specifically to stress faced by faculty members at university level. However, through the available literature, it has been found that the stress amongst university faculty members is a highly researched topic, globally.

Plan of the paper would be to first focus, globally as well as with special reference to India, on the occupational stress experienced by the faculty members at university level, various contributory factors leading to stress amongst faculty members at the university level, coping strategies recommended by various studies and conclusion.

### **Occupational Stress amongst University Faculty Members**

Traditionally, universities have been collegial communities that have enjoyed professional autonomy. Their members having the freedom to set their own priorities and goals according to criteria set by their disciplines, rather than by the institutional needs of their employing organizations (Harley et al 2004). Since long, academics have been highly respected in most countries because they represent a "key profession" (Locke and Teichler, 2007). The scholarly ideal expressed a thirst for knowledge and love of learning uncontaminated by material considerations (Harley et al 2004). Seldin (1987) stated that the academic environment of the 1980s had imposed surprisingly high levels of job stress on academics, and that the level of stress would continue to increase in future decades. In recent years, a number of substantial changes in the higher education sector (Teichler, 2007) have significantly transformed the conditions under which the university teachers perform their jobs. According to Altbach: (cited in Winefield et al, 2002)

For a number of years, the professoriate has been undergoing change and has been under strain almost everywhere..... In most of the nations, the somewhat

unprecedented phenomenon of increasing enrolments has been allowed to supersede allocated resources. At the same time, professors in a number of countries are being asked to be more entrepreneurial – for example, in bringing research grants and contracts to their institutions.

We are also seeing, it is argued, the “McDonaldization” of its dissemination (Parker and Jary, 1995; Ritzer, 1998, 2000), where delivery is increasingly judged in terms of efficiency, value for money, and ability to attract large numbers of fee-paying students, who are being duly re-constituted as customers (Harley et al 2004).

According to Willmott (1995), we are witnessing the commodification of academic knowledge production which is increasingly judged in terms of its exchange value, represented in research funding and position in university league tables, rather than in terms of its intrinsic value as an original contribution to knowledge. It is argued that this results into the potential de-professionalisation of academic work and the proletarianisation of the academic worker (Dearlove, 1997; Halsey, 1992). These changes are well-advanced and documented in the case of Britain, Australia, Canada, and the United States (Miller, 1995; Smyth, 1995; Harley et al 2004). However, such kind of studies, with reference to university faculty members, has not been conducted very extensively in India, though much of research has been done.

Many researchers conducted their researches and presented a fair amount of comparison between stressful nature of teaching profession and other occupations (Iqbal and Kokash, 2011). Comparative studies of 26 occupations conducted by Johnson et al. (2005) conclude that teaching is one of the most stressful occupations (Abbas et al, 2012).

In Australian universities, a national survey on occupational stress revealed that “academic staff were generally worse off than general staff, and staff in newer universities were worse off than those in older universities” (Winefield et al, 2003). Recent studies have demonstrated that university professors experience levels of stress that are unparalleled in any other employed group of individuals (Iqbal and Kokash, 2011). Research shows that teachers’ stress becomes problematic and potentially harmful when the challenges teachers face outpace their perceived ability to cope, or when they perceive that their important needs are not being met (Kahn et al, 1964). The overall stress level of professors is now second only to the recently unemployed when compared to other professions (Korotkov et al, 2008).

In a study on stress in seven New Zealand universities, Boyd, and Wylie (1994) reported that half of the academics in their sample of academics ‘often or almost always’ found their work to be stressful, and 80% believed that their workload had increased and become more stressful in recent years. In addition, 46% expected

further increases in workload in the future (Gillespie et al, 2001). Blix et al. (1994) in their research on “occupational stress among university teachers” found out that two third of the university faculty reported that they perceived job stress at least half of the scheduled time. Faculty also expressed burnout, health problems caused by job stress, decreased work output, low capacity to manage the work stress and basis of job change. According to Blix et al. (1994), over workload is one of the most frequently quoted reasons for considering job change.

The United Kingdom Association of University Teachers study (AUT, 1990) found that 49% of university employees reported that their jobs were stressful and 77% reported an increase in occupational stress over recent years. Shirley Fisher (1994), author of *Stress in Academic Life*, stated in relation to British universities: ‘The demands on academics have risen rapidly over the last ten years ... there has been a steady erosion of job control. All the signs are that this will continue’ (Fisher, 1994).

Ahsan et al (2009) conducted a study in Malaysia and found that the number of universities in Malaysia has increased tremendously in the past few years due to which the university academic staffs face more problems in their job. Almost all the universities are now setting new goals to compete with other universities as well as the academic staff are involving with the ultimate goal. This may cause the university academic staff to face plenty of stress and therefore affect their satisfaction and even their physical or mental health (Ahsan et al, 2009).

In India, the situation is not very different from those mentioned above. It has been found that in India as well, the academics are suffering from stress due to most of the factors mentioned in researches in some other countries. Because of the entry of private institutions and foreign universities especially at higher education level, the faculty members are expected to play many roles other than as teachers. This makes the faculty members to do more clerical work apart from teaching. It affects their performance and also leads to a stressful life (Kavitha, 2012).

### III. FACTORS CAUSING OCCUPATIONAL STRESS TO FACULTY MEMBERS

Faculty draw upon physical, emotional and intellectual resources in order to be effective in the classroom. Like all other professionals, faculty are also overwhelmed by multiple and complex challenges. They lag behind their counterparts in relations to the opportunities for self development and professional enhancement. In many parts of the world, faculty is rarely provided with the resources they need to meet the high demands and expectations placed on them (Bakshi and Kochchar, 2012). The academic exposure towards new challenges has increased level of stress on faculty, which ultimately encourages the researchers of education management to study the relationship of work stress with different

variables regarding university faculty members. Its significance lies in the fact that occupational stress closely linked with job satisfaction, employee commitment, employee turnover, organizational performance and productivity. (Chaudhry, 2013)

A survey of recent studies of teacher stress shows that many identified stressors appear consistently and may be subsumed under the general domains of environmental and personality based stressors (Bertoch et al). Environmental stressors include student discipline and attitude problems, teacher competence, and teacher-administrator relations. Additional stressors include accountability laws, large classes, low salaries, intense pupil dependence, and declining community support. Sources of personality-induced stressors relate to one's self-perception. 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; Bertoch et al).

Research conducted in the UK, USA, New Zealand, and Australia has identified several key factors commonly associated with stress among academic and general staff (Gillespie et al, 2001). These include, work overload, time constraint, lack of promotion opportunities, inadequate recognition, inadequate salary, changing job role, inadequate management or participation in management, inadequate resources and funding and student interaction (Gillespie et al, 2001, Armour et al., 1987; Blix, et al, 1994; Boyd, and Wylie, 1994; Gmelch et al, 1986; Hind, and Doyle, 1996; Melendez, and de Guzman, 1983; 1996; Seldin, 1987). Antoniou and Vlachakis, (2006) brought forward the sources of stress which are being faced by university teachers such as students' interaction issues, low level of interest and problematic attitude of graduates. Other sources of stress, such as work-related technology (Totten and Schuldt, 2009), family life and work balance (Korotkov et al, 2008), years of experience (Totten and Schuldt, 2008), job-type category (Dua, 1994), control over the work environment (Golnaz, 1997) and person-environment fit (Korotkov et al, 2008), have been highlighted in few studies. The most stressful aspects of the job perceived by teachers include workload, time pressures and no guidance pertaining to various teacher roles (Hui & Chan, 1996).

Quoting about academic careers in UK, Harley et al 2004 pointed out that universities are engaging in human resource strategies designed to enhance institutional rankings rather than provide the opportunities that all academics need to increase the knowledge and skills, and hence reputation, upon which their careers are based.

In a study of New Zealand universities, Boyd, and Wylie (1994) reported that increasing workloads and work-related stress resulted in less academic time spent on research, publishing and professional development, decreasing teaching and research standards, and

increasing interpersonal conduct in academic staff relationships (Gillespie et al, 2001).

Abbas et al (2012) in their study in Pakistan found that role ambiguity (when roles are not clearly defined or have been changed with time (Srivastava 2007) has a significant impact on both dimensions of stress and on one dimension of burnout i.e. lack of personal accomplishment.

The study on Organisational Role Stress in India by Kavitha (2012) reveal that the faculties in the colleges are doing more on multiple roles apart from teaching work at the colleges that leads to higher job stress. Hence, there is a higher sole-role distance among the faculties. It also affects the quality of education (Kavitha, 2012). According to her, the significantly influencing organizational role stresses on the overall job stress among the faculties are self role distance, role conflict, role overload, and lack of group cohesiveness and supervisors support.

Dua reported six groupings of stressors produced by factor analysis: job significance, workload, work politics, interpersonal dealings at work, work conditions, and university reorganization. He also found that younger staffers reported more stress than older faculty, and that there was some indication that staff employed at higher job levels had less stress than those employed at lower job levels.

In the first phase of their longitudinal investigation of occupational stress, conducted in 15 Australian universities, (Gillespie et al, 2001) identified the following sources of stress:

**Lack of funding resources and support services** i.e. lack of research funding and merit-based distribution of funds to attend conferences and travel for research purposes results in academics feeling demoralized and disillusioned about conducting research. Another potential source of stress identified under this head was decline in staff numbers, due to which there was no longer adequate staff to perform the work required.

**Work overload** leading to working a high number of unpaid overtime hours. The increase in student numbers has resulted in a dramatic increase in the student-staff ratio, hence in the workload of faculty. With regard to teaching, the increasing number of courses that the faculty is expected to design and teach, coupled with the introduction of new teaching modalities (e.g. web-based), rapid continuous advances in research knowledge, and in some universities the introduction of year round teaching, had substantially increased this workload. Academics also experience an increase in the administrative component of their role, leading to stress.

**Poor management practice**, meaning thereby, lack of opportunity to contribute to important decisions that would impact upon the faculty members, make them feel powerless and helpless.

**Insufficient recognition and reward**, i.e. limited opportunities for promotion and high level of competition within their workplace, leads to stress

**Job insecurity**, i.e. staff redundancy, contractual status of few which means no certainty if the contract would be renewed, a cut throat 'look after number one' competitive environment amongst colleagues, due to job insecurity, further contributed to academic stress.

A comparative study conducted between Turkey and Macedonia by Eres, and Atanasoska (2011) found that the factors may be monotony, change of technology, excessive work load, job security, ergonomics, management problems (Cooper and Davidson, 1987; Sutherland and Cooper, 1990, Chaudhry, 2013), and individual characteristics (Quick and Quick, 1984), the feeling of insufficiency (Ivancevich et al 1990, Chaudhry, 2013).

However, a study in Pakistan by Usman et al (2011) concluded that following are the stressors amongst academics:

**Role Conflict** i.e. contradictory demands within a single or between multiple roles refer to as role conflict (Gupta & Jenkins, 1985). This has been confirmed by several studies that role conflict leads to job stress (Fisher & Gittleston, 1983; Johnston et al., 1990a; Netemeyer et al., 1990).

**Role Ambiguity** i.e., when role expectations are not clearly understood and the employee is not sure what he or she is to do" (Robbins et al., 2009). This role ambiguity becomes an important source of stress.

The study by Usman et al (2011) found that both role conflict and role ambiguity are positively related to work stress experienced by teachers, work stress is negatively associated with both job satisfaction and organizational commitment of teachers.

It is evident from these studies that due to emerging business dynamics, competition amongst the universities is increasing. It will be rather apt to say what Darwin said in 1869, the survival of the fittest (a term coined by Herbert Spencer).

There are therefore, various strategies suggested by the above mentioned and few other studies to overcome the stress and lead a peaceful life.

#### IV. STRATEGIES TO COPE FROM OCCUPATIONAL STRESS

Iqbal and Kokash (2011) conducted a study on faculty in a private university in Saudi Arabia and found out the strategies used by faculty in coping with stress. Their findings revealed that faculty resorted to exercises such as indoor games, gym and aerobics, yoga spirituality, time management and spending time with family to cope up with stress.

Gillespie et al, 2001 in their study found that support from co-workers and management, recognition and

achievement, high morale, and flexible working conditions like being able to work from home one day a week, not having to 'clock in and out', working part-time, and taking study leave helped them to cope with work-related stress. They also highlighted the value of drawing on support in the workplace as a way of dealing with stress. This included talking to co-workers about work and 'having a whinge' and a laugh together, sharing one's workload with co-workers, being able to ask for help, being able to rely on support staff and support services. Attending conferences was also mentioned as a stress moderator and morale builder.

Gillespie et al, 2001 also mentioned about the personal strategies adopted by faculty for coping with work-related stress. This included practicing stress management techniques such as learning to recognize and understand stress, managing expectations, planning and prioritizing, taking regular breaks from the work station, regularly exercising, and seeking alternative therapies for stress relief (e.g. yoga, massage). Another personal stress coping strategy was maintaining a balance between work and non-work included making a clear distinction between work and personal life (e.g. leaving work on time, not taking work home), switching off from work, and focusing on non-work-related interests (e.g. gardening and sport).

Winefield et al 2002, in a study in Australian universities mentioned that the workplace interventions like reviewing the fairness of procedures and processes related to promotion, redundancy, adequacy of current pay, reward and recognition systems, performance appraisal, balance workloads more effectively and avoid periods of intense work pressure, processes and programs to reduce job insecurity, may be adopted.

Usman et al (2011) in their study in Pakistan suggest participation in sports activities, tours, meditation, yoga, positive thinking, and many other relaxation techniques can be helpful in reducing the negative effects of stress, depersonalization and emotional exhaustion. Such activities could be developed on the campus. The top management of universities can encourage such activities at organizational level if faculty members do not take such initiatives by themselves. If necessary, interventions such as psychotherapy could be suggested at the individual level (Abbas et al, 2012).

Kavitha (2012) suggests that the management should engage academic counselors who would help the teachers to identify the causes of their problems and solve them. Management should enhance job performance by providing job security, adequate pay, participation in decision-making, and a good organizational climate. At the institution level, a periodic stress audit should be conducted by the management. By that they can identify the dominant work stressors in the institution and its departments.

Nayak, 2008 suggests keeping ready well ahead, taking rest, avoiding strenuous posture, taking balanced diet, walking, using sleeping pills, hot water therapy were

practiced by majority of the teachers when they were physically stressed. Further, offering prayer, positive thinking, working in-group, avoiding painful reminders, delegating the tasks and listening songs were practiced by maximum per cent of the teachers when they were mentally stressed.

## V. DISCUSSION AND CONCLUSION

The literature available on stress amongst faculty members highlights the fact that with emergence of business dynamics, academics no longer remains a profession which is stress free. Increased globalization and competition has made the role of faculty members more challenging. Their role is not restricted to only teaching rather they also have to contribute towards other institution building activities. Common stressors identified from studies, globally, ofcourse including India are:

- ⊙ Work Overload
- ⊙ Time Constraint,
- ⊙ Lack of Promotion Opportunities,
- ⊙ Inadequate Recognition,
- ⊙ Inadequate Salary,
- ⊙ Changing Job Role,
- ⊙ Inadequate Participation in Management,
- ⊙ Inadequate Resources and Funding
- ⊙ Student Interaction
- ⊙ Publish or Perish
- ⊙ Professional Development
- ⊙ Poor Standard of Students
- ⊙ Job Insecurity
- ⊙ Intense Competition
- ⊙ Adaptation to New Technology
- ⊙ Role ambiguity etc

Usman et al (2011) suggest that if institutes of higher learning i.e. universities want to satisfy their most important assets, the teachers, they need to facilitate them in terms of reducing and coping with their work stress experienced largely by the conflicting demands placed on teachers and ambiguity in assuming their roles.

Common strategies identified by various studies, globally, including India are both workplace as well as individual interventions. Among workplace interventions, these include :

- ⊙ Reviewing the fairness of procedures and processes related to promotion,
- ⊙ Adequacy of current pay,
- ⊙ Reward and recognition systems,

- ⊙ Performance appraisal,
- ⊙ Balance workloads more effectively and avoid periods of intense work pressure,
- ⊙ Processes and programs to reduce job insecurity etc.

Personal Interventions suggested in various studies are :

- ⊙ Learning to recognize and understand stress,
- ⊙ Managing expectations,
- ⊙ Planning and prioritizing,
- ⊙ Taking regular breaks from the work station,
- ⊙ Regularly exercising, and seeking alternative therapies for stress relief
- ⊙ Balance between work and non-work
- ⊙ Switching off from work, and focusing on non-work-related interests
- ⊙ Support from co-workers and management,
- ⊙ Recognition and achievement,
- ⊙ High morale,
- ⊙ Flexible working conditions
- ⊙ Study leave
- ⊙ Value of drawing on support in the workplace
- ⊙ Talking to co-workers about work and 'having a whinge'
- ⊙ A laugh together,
- ⊙ Sharing one's workload with co-workers,
- ⊙ Being able to ask for help,
- ⊙ Being able to rely on support staff and support services.
- ⊙ Attending conferences etc

We have seen various stressors and coping strategies through various studies. However, the fact of the matter remains, stress cannot be eliminated from the organizations completely. It can only be reduced with the help of workplace as well as personal interventions to optimum level, without compromising with the efficiency of the individual and his contribution to the organization.

## REFERENCES:

- [1] Abbas, Syed Gohar, Roger, Alain, Asadullah, Muhammad Ali (2012). Impact of Organizational Role Stressors on Faculty Stress & Burnout (An exploratory analysis of a public sector university of Pakistan), 4ème colloque international (ISEOR – AOM)
- [2] Ahsan, Nilufar, Abdullah, Zaini, Gun Fie, David Yong, Alam, Syed Shah (2009). A Study of Job Stress on Job Satisfaction among University Staff

- in Malaysia: Empirical Study, *European Journal of Social Sciences*, 8 (1).
- [3] Alexandros-Stamatios G. A., Matilyn J.D., & Cary L.C. (2003). Occupational Stress, Job satisfaction, and health state in male and female junior hospital doctors in Greece, *Journal of Managerial Psychology*, 18(6), 592-621.
- [4] Altbach, P.G. (Ed.). (1996). *The International Academic Profession*. Princeton, N.J.: Carnegie Foundation for the Advancement of Teaching.
- [5] Antoniou, F.A.S., & Vlachakis, P.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).
- [6] Association of University Teachers {AUT}(1990). *Goodwill under Stress: Morale in UK Universities*. London: AUT.
- [7] Bakshi, Poonam and Kochhar, Veeran (2012). A Study and Evaluation of Stress Role on Faculty: An Analysis of Professional Institutions in Haryana. *International Journal of Research in IT & Management*, 2 (6), 71-79.
- [8] Baltaş, Z. (2002). *Verimli iş hayatının sırrı*. İstanbul: Remzi Kitapevi.
- [9] Barkhuizen, N. & Rothmann, S. (2008). Occupational stress of academic staff in South African higher education institutions, *SA Journal of Psychology*, 28: 321-336
- [10] Beehr, T. (1987). The themes of social-psychological stress in work organizations: From roles to goals. In: A. Riley & S. Zaccaro (Eds), *Occupational Stress and Organizational Effectiveness* (pp. 71-102). New York: Praeger.
- [11] Ben-Bakr, K, Jefri, OA, & Al-Shammari, IS. (1995). Occupational Stress in Different Organizations: A Saudi Arabian Survey, *Journal of Managerial Psychology*, 10(5): 24-28.
- [12] Bertoch, R., Nielsen, Elwin C., Curley, Jeffrey R., Borg, Walter, R. (1988). Reducing Teacher Stress, *The Journal of Experimental Education* 57(1), 117-128.
- [13] Blix, A.G., Cruse, R.J., Mitchell, B.M.M.B., & Blix, G.G. (1994). Occupational stress among university teachers. *Educational Research*, 36, 157-170.
- [14] Boyd, S., & Wylie, C. (1994). *Workload and Stress in New Zealand Universities*. Wellington: New Zealand Council for Educational Research and the Association of University StaV of New Zealand.
- [15] Cahn, K.B., Lai, G., Ko, Y.C., & Boey, K.W. (2000). Work stress among six professional groups: the Singapore experience, *Social Science Medicine*, 50(10), 1415-1432.
- [16] Chaudhry, A.Q. (2013): Analysis of Occupational Stress of University Faculty to Improve the Quality of their Work. *Journal of Quality and Technology Management IX (I)*, 12-29.
- [17] Cooper, C. & Davidson, M. (1987). Sources of stress at work and their relations to stressors in non-working environments. In Kalimo, R., El-Batawi, M. and Cooper, C. (Eds.). *Psychosocial factors at their relations to health* (pp. 99-111). Geneva: World Health Organization,
- [18] Dearlove, J. (1997). The academic labour process: From collegiality and professionalism to managerialism and proletarianisation? *Higher Education Review*, 30, 56-75.
- [19] Dua, J K. (1994). Job stressors and their effects on physical health, emotional health, and job satisfaction in a university, *Journal of Educational Administration*, 32(1): 59-79.
- [20] Endres, Fred F. and Wearden, Stanley T. (1996). Job-Related Stress among Mass Communication Faculty, *Journalism & Mass Communication Education*, Autumn '96, 32-44.
- [21] Eres, Figen, Atanasoska, Tatjana (2011). Occupational Stress of Teachers: A Comparative Study Between Turkey and Macedonia, *International Journal of Humanities and Social Science*, 1(7), 59-65.
- [22] Faculty responsibility and institutional climate. In P. Seldin (Ed.), *Coping with Faculty Stress*..
- [23] Fischer, S. (1994). *Stress in academic life: The mental assembly line*, Buckingham, UK: Open University Press
- [24] Fisher, C.D., & Gittleson, R. (1983), a meta-analysis of correlates of role conflict and ambiguity, *Journal of Applied Psychology*, 68, 320-33.
- [25] Gillespie, N. A., Walsh, M., Winefields, A. H., Dua, J. and Stough C. (2001)., Occupational stress in universities: staff perceptions of the causes, consequences and moderators of stress, *Work & stress*, 15 (1), 53-72.
- [26] Gmelch, W. H., Wilke, P. K., & Lovrich, N. P. (1986). Dimensions of stress among university faculty: Factor-analytic results from a national study. *Research-in-Higher-Education*, 24, 266-286. Harrison, D. (1997). First-degree concern. *People Management*, 3 (25), 36-39.
- [27] Golnaz, S. (1997). An examination of academic and occupational stress in the USA, *International Journal of Educational Management*, 11(1), 32-43.

- [28] Goodman, V. B. (1980). Urban teacher stress: A critical literature review. ERIC Document Reproduction Service No. ED 221 611.
- [29] Gupta, N. & Jenkins, G.D. (1985). Dual-career Couples: Stress, Stressors, Strains and Strategies, in T.A.
- [30] Halsey, A. (1992). The decline of Donnish dominion. Oxford: Clarendon Press. Armour, R. A., Caffarella, R. S., Fuhrmann, B. S., & Wergin, J. F. (1987). Academic burnout:
- [31] Harley, Sandra, Muller-Camen, Michael and Collin, Audrey (2004). From academic communities to managed organisations: the implications for academic careers in UK and German universities, *Journal of Vocational Behavior*, 64, 329–345, [www.elsevier.com/locate/jvb](http://www.elsevier.com/locate/jvb)
- [32] Health & Safety Executive. (2005). Tackling work-related Stress: The Management Standards Approach, Sudbury: HSE.
- [33] Hind, P., & Doyle, C. (1996). A cross-cultural comparison of perceived occupational stress in academics in higher education. Paper presented at the XXVI International Congress of Psychology, Montreal, Canada.
- [34] Hui, E. K. & Chan, D.W. (1996). Teacher stress and guidance work in Hong Kong secondary school teachers, *British Journal of Guidance & Counseling*, 24: 199-211
- [35] Iqbal, Adnan, Kokash, Husam (2011). Faculty Perception of Stress and Coping Strategies in a Saudi Private University: An Exploratory Study *International Education Studies Canadian Center of Science and Education* 4(3), 137-149.
- [36] Ivancevich, J., Matteson, M., Freedman, S. & Phillips, J. (1990), *Workside stress management interventions*. *American Psychologist*, 45, 252-261.
- [37] Wilder, Jack F. and Plutchik, Robert (1992). Preparing the Professional: Building Prevention Into Training, in Whiton Stewart Paine, *Job Stress and Burnout* (Beverly Hills, CA: Sage, 1982), 113-129; and, Fred F. Endres, "Stress in Professional Classes: Causes, Manifestations, Coping," *Journalism Educator* 47 (Spring 1992):20-22, 2. Paine, 17-18, 21
- [38] Dua, Jagdish K. (1994). "Job stressors and the effects on physical health, emotional health, and job satisfaction in a university," *Journal of Educational Administration*, 32 (1), 59-78.
- [39] Johnson, S., Cooper, C., Cartwright, S., Donald, I., Taylor, P. & Millet, C. (2005), *The Experience of Work-Related Stress across Occupations*, *Journal of Managerial Psychology*. 20 (1/2), 178-187.
- [40] Johnston, M.W., Parasuraman, A., & Futrell, C.M. (1990a). Extending a model of salesperson role perceptions and work-related attitudes: impact of job tenure, *Journal of Business Research*, 18, 269-90.
- [41] Jordan, P. J., Ashkanasy, N. M., & H'artel, C. E. J. (2002). Emotional intelligence as a moderator of emotional and behavioral reactions to job insecurity. *Academy of Management Review*, 27, 361–372.
- [42] Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, J. D., & Rosenthal, R. A. (1964). *Organizational stress: Studies in role conflict and ambiguity*, New York: John Wiley.
- [43] Kavitha, P. (2012). Organisational role stress among college faculties: An empirical study, *Sona Global Management Review*, 6(4), 36-50.
- [44] Khoury. G., & Analoui. F. (2010). How Palestinian managers cope with stress, *Journal of Management Development*, 29(3), 282-291.
- [45] Korotkov, D, Fraser, I, Houlihan, M, Fenwick, K, McDonald, K., & Fish, T (2008) *The Balancing Act: The impact of University Professors' Juggling Research, Teaching and Service*, Conference paper, [Online] Available: [http://w3.stu.ca/stu/sites/lttd/resources/Job%20Sat isfactionAABSS.pdf](http://w3.stu.ca/stu/sites/lttd/resources/Job%20Sat%20isfactionAABSS.pdf) (February 27, 2011)
- [46] Landeweerd, J.A., & Boumans, N.P.G. (1994). The effect of work dimensions and need for autonomy on nurses' work satisfaction and health, *Journal of Occupational and Organizational Psychology*, 67, 207-217.
- [47] Little, L.M., Simmons, B.L. & Nelson, D.L. (2007). Health among leaders: Positive and negative affect, engagement and burnout, forgiveness and revenge. *Journal of Management Studies*, 44(2), 241-260.
- [48] Locke, W. & Teichler, U. (2007). Introduction, *The Changing Conditions for Academic Work and Career in Select Countries*, *Werkstattberichte*, 66: 7-14
- [49] Maslach, C. & Jackson, S. E. (1986). *MBI: Maslach Burnout Inventory; Manual Research Edition*. Palo Alto: Consulting Psychologists Press
- [50] McDonald, L. M., & Korabik, K. (1991). Sources of stress and ways of coping among male and female managers, *Journal of Social Behavior & Personality*, 6(7): 185-198
- [51] Melendez, W. A., & de Guzman, R. M. (1983). *Burnout: The New Academic Disease*. ASHE-ERIC Higher Education Research Reports, no. 9. Washington, DC: Association for the Study of Higher Education.



- [52] Miller, H. (1995). *The management of change in universities*. Buckingham: Open University Press
- [53] Narayanan, L., Menon, S., & Spector, P. E. (1999). Stress in the workplace: A comparison of gender and occupations. *Journal of Organizational Behavior*, 20, 63–73.
- [54] Nayak, Jayashree (2008). *Factors Influencing Stress and Coping Strategies among the Degree College Teachers of Dharwad City, Karnataka*, Thesis submitted to the University of Agricultural Sciences, Dharwad July, 2008.
- [55] Netemeyer, R.G., Johnston, M.W., & Burton, S. (1990). Analysis of role conflict and ambiguity in structured equations framework, *Journal of Applied Psychology*, 75, 148-57.
- [56] Pareek, Udai. *Understanding Organisational Behaviour*, Oxford University Press, New Delhi, 2006., pp 252.
- [57] Parker, M., & Jary, D. (1995). *The McUniversity: Organisations, management and academic subjectivity*. *Organization*, 2, 319–338.
- [58] Phillips, B. N., & Matthew, L. (1980). The changing role of the American teacher: Current and future sources of stress. In C. L. Cooper & J. Marshal (Eds.), *White collar and professional stress*, 93-111. New York: Wiley.
- [59] Quick, J. C. & Quick, J. D. (1984). *Organizational stress and preventive management*. New York: McGraw-Hill Publishing.
- [60] Rajarajeswari, S. (2010). Role stress among the aided and self financing college teachers: A discriminant analysis, *Global Management Review*, 2010, 4 (4): 73-86
- [61] Rees, C. J. & Redfern, D. (2000). Recognizing the Perceived Causes of Stress . A Training and Development Perspective, *Journal of Industrial and Commercial Training*, 32(4): 120-127
- [62] Ritzer, G. (1998). *The McDonaldization thesis*. London: Sage.
- [63] Ritzer, G. (2000). *The McDonaldization of society*. Thousand Oaks, CA: Pine Forge Press.
- [64] Robbins, S.P., Judge, T.A., & Sanghi, S. (2009). *Organizational Behavior*, Mumbai, IN: Dorling Kindersley.
- [65] Robinson, S.E., Roth, S.L., & Brown, L.L. (1993). Morale and job satisfaction among nurses: what can hospitals do? *Journal of Applied Social Psychology*, 23(3), 244-251.
- [66] Rozanski, A., Blumenthal, J. A., & Kaplan, J. (1999). Impact of Psychological Factors on the pathogenesis of Cardiovascular Disease and Implication for Therapy, *Circulation*, 99(16): 2192-2217
- [67] Salas, E., & Klein, G. (2001). *Linking expertise and naturalistic decision making*. Manwah, NJ: Lawrence Erlbaum.
- [68] Schnacke, S. B. (1982). *Burnout: Coping with predictable professional life crises*. Paper presented at the annual meeting of the American Association of Colleges for Teacher Education, Houston, TX. (ERIC Document Reproduction Service No. ED 257 836)
- [69] Schwanke, D. C. (1981). *Teacher stress: Selected ERIC resources*. Washington, DC: ERIC Clearinghouse on Teacher Education. (ERIC Document Reproduction Service No. ED 204–258)
- [70] Seldin, P. (1987). Research Findings on causes of academic stress. In P. Seldin (Ed.), *Coping with Faculty Stress* (pp. 13-24). San Francisco, CA: Jossey-Bass.
- [71] Sharma, R. R. (2007). Indian Model of Executive Burnout, *Vikalpa (Journal of Indian Institute of Management, Ahmedabad)* 32(2), April-June: 23-38.
- [72] Smyth, J. (Ed.). (1995). *Academic work: The changing labour process in higher education*. Buckingham: SRHE/Open University Press.
- [73] Srivastav, A. K. (2007). Stress in organizational roles - individual and organizational implications, *Icfaian Journal of Management Research*, 6(12): 64-74
- [74] Steers, R. M. (1981). *Introduction to organizational behavior*. Glenview: Scott-Foresman Publishing.
- [75] Sullivan.S.E., & Bhagat. R.S. (1992). Organizational Stress, Job Satisfaction and Job performance: Where do we go from here? *Journal of Management*, 18(2), 353-374
- [76] Sutherland, V. & Cooper, C.L. (1990). *Understanding stress a psychological perspective for health professionals*. London: Chapman and Hall Publishing.
- [77] Teichler, U. (2007). Germany and Beyond. New Dynamics for the Academic Profession, In *The Changing Conditions for Academic Work and Career in Select Countries*, *Werkstattberichte*, 66: 15-38
- [78] Totten, W. J., & Schuldt, B. A. (2008). Technological Factors and Business Faculty Stress, *Proceedings of the Academy of Information and Management Sciences*, 12(1), 13-19

- [79] Totten, W. J., & Schuldt, B. A. (2009). Stress on Marketing Faculty, *Proceedings of the Academy of Marketing Studies*, 14(1), 55-59
- [80] Tumulty, G., Jernigan, I.E., & Kohut, G.F. (1994). The impact of perceived work environment on job satisfaction of hospital staff nurses, *Applied Nursing Research*, 7(2), 84-90
- [81] Usman, Ahmad, Ahmed, Zulfiqar, Ahmed, Ishfaq, Akbar, Zeeshan (2011). Work Stress Experienced by the Teaching Staff of University of the Punjab, Pakistan: Antecedents and Consequences *International Journal of Business and Social Science*, 2(8), 202-210.
- [82] Vijayashree, L. & Mund, P. (2011). Role stress and coping: A case in ITES company, *Mustang Journal of Business & Ethics*: 107-119
- [83] Wilkes, L., Beale, B., Hall, E., Rees, E., Watts, B., & Denne, C. (1998). Community nurses' descriptions of stress when caring in the home, *International Journal of Palliative Nursing*, 4 (1).
- [84] Willmott, H. (1995). Managing the academics: Commodification and control in the development of university education in the UK. *Human Relations*, 48, 993-1025.
- [85] Winefield, A. H. (2000). Stress in academe. Some recent research findings. In D. T. Kenny, J. G. Carlson, F. J. McGuigan, & J. L. Sheppard (Eds.), *Stress and Health: Research and Clinical Applications* ( pp. 437-446). Sydney: Harwood.
- [86] Winefield, A. H. (2003). Stress in University Academics. In Dollard, Winefield and Winefield (Eds) *Occupational Stress in Service Professionals* (237-260). New York: Taylor & Francis
- [87] Winefield, A. H., Gillespie, N., Stough, C., Dua, J., Hapuarachchi, J. Boyd, C. (2003). Occupational stress in Australian university staff: Results from a national survey. *International Journal of Stress Management*, 10: 51-63
- [88] Winefield, Anthony H., Gillespie, Nicole, Stough, Con, Dua, Jagdish, Hapuarachchi, John (2002). *Occupational Stress in Australian Universities: A National Survey 2002*, National Tertiary Education Union.
- [89] Yousef, D. A. (2002). Job satisfaction as a mediator of the relationship between role stressors and organizational commitment: A study from an Arabic cultural perspective. *Journal of Managerial Psychology*, 17, 250-266.

