Stress among Malaysian Academics:
A Conceptual Study

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Abstract

Academic stress had been prevalent in universities all around the world. This shows that the academic environment no longer provides the low-stress working environment that the academician once enjoyed. Rapid development, global competition, technology and changes in the nature of jobs today could make the job more demanding than ever, and workers are more prone to injuries and illnesses. Stressors such as work relationship, work-life balance, job overload, job control, job security, pay and benefits, resources and communication, as well as aspects of the job could also be the source of pressure in the workplace. As the effects of the stressors, individual and organizational commitment, as well as physical health and psychological well-being of the employees will suffer. This in turn will impede the productivity of the organization such as teaching, supervision, publication, training, student service, administrative duties, and social responsibility productivity. However, the study between stress and academic productivity is very limited. Proper interventions are required to minimize stress at the workplace.

Keywords: Stress, commitment, academicians, environment

Introduction

Malaysian public academics are also faced with increased stress due to the rapid development in the Malaysian tertiary education sector (Idris, 2009). Job stress affects job satisfaction of the public academician in a university in Klang Valley (Nilufar et al., 2009). Other occupations have also been reported to be suffering from stress within the Malaysian context, that is, among the multinational production operators (Zafir et al., 2008); managers (Manshor et al., 2003; Kumaresan et al., 2004); bank employees (Wai et al., 2006); sales person (Nasurdin et al., 2006); teachers (Haq et al., 2010); registered nurses (Kamal et al., 2008); navy personnel (Mohd Bokti & Abu Talib, 2009); laboratory technicians (Aziah et al, 2004; Aniza et al., 2010); education officials (Myrtle et al., 2010); dental healthcare workers (Rusli et al., 2006); shift workers (Nurfazila et al., 2008); petrochemical workers (Aziah et al., 2008); and automotive industrial assembly workers (Edimansyah, 2008).

Malaysian Research Universities (MRUs)

Currently, there are five research universities in Malaysia, namely: Universiti Kebangsaan Malaysia, Universiti Malaya, Universiti Sains Malaysia, Universiti Teknologi Malaysia, and Universiti Putra Malaysia. The history of its development can be traced back from its first inauguration in 2007 (Maah & Muhamad, 2009). The National Higher education transformation roadmap is embodied in the two strategic documents launched on August 27, 2007. The first is the The National Higher Education Strategic Plan whereby it involves the laying of the foundation beyond 2020. While, the second document is The National Higher Education Action Plan that will pave the way in triggering transformations for the year 2007-2010.

The goals of the Malaysian research universities (MRUs) are (1) to be a leader in innovation; (2) to set up and enhance centers of excellence in prioritized areas of the nations; (3) to produce world class research outputs; (4) to generate high impact research publications; (5) to attract graduate students of high standards; and (6) to provide a conducive environment for research (Ministry of Higher Education, 2004). The MRUs performance indicators are shown in Table 1.1 below. Despite the fact that the government spent about RM600 million to transform the four Malaysian universities into full-fledged research institutions, their world rankings are still far behind (Azizan, 2007). Furthermore, senior academic managers (SAMs) of one of the research universities reported that the demands from globalization of higher education have created global competition and the subsequent impact on the operations of senior managers within a research intensive university. According to Singh and Schapper (2009), the senior academic managers experienced pressures in their efforts to build the university's international reputation. The detail tensions faced by the SAMs are the gap between what is promised and what is actually received regarding the increased funding in research projects, bureaucracy, over-reliance on local funds only, no research governance structure, imbalance between research and teaching created by the pressures to produce quality research outcomes, and fulfilling the KPIs that could lead to unethical behaviors. More importantly, all of the above pressures could lead to job stress and impede their productivity as well as health and commitment, as their counterparts in US and Australian research universities and doctoral granting institutions experienced before (Gmelch & Miskin, 1993; 1995) as we moved to become a fully-developed nation by the year 2020.

Table 1.1: Performance Indicators for Malaysian Research Universities

Source Ministry of Higher Education (2004)

Indicator	Criteria	Research University
1. Quantity and quality of researchers	Critical mass	60 per cent of academic staff will be involved as Principal Investigator
	Percentage of academic staff with PhD or equivalent	60 per cent
	Research experience (3 cohorts)	With balanced distribution of staff with > 20 years experience, 10-20 years and < 10 years experience
	Number of recognitions/ awards/stewardship conferred by national and international learned and professional bodies	100
2. Quantity and quality of research	Publications	Two papers in national/ international refereed and cited journals per staff / year or cumulative impact factor for the institution of not less than 5,000
	Research grants for S&T academic staff a. Public b. Private (including contact research) c. International	At RM50,000/staff / year of which at least 20 per cent is from international sources and 20 per cent from private sector
3. Quantity of postgraduates	Ratio PhDs graduated to academic staff	1: 18 academic staff of which 60 per cent will be from S&T
	Ratio of postgraduates to academic staff (enrolment)	3 postgraduates: 1 staff
	Ratio of postgraduates (based on research and mixed method) to undergraduates	1 postgraduates: 4 undergraduates
	Percentage of international graduates	10 per cent
4. Quality of postgraduates	Percentage postgraduate intake	50 per cent of postgraduates with CGPA ≥ 3.0
	Percentage of postgraduate fellowships/ grants from prestigious bodies awarded to postgraduates via research	No less than 10 per cent

	mode	
5. Innovation	Number of patents attained/ number of products commercialized/ number of technology know-how licensing/ number of IPR/ copyrights (including original writings)	30/ year
6. Professional services/ gift	Income generated from training courses/ services/ consultancy/ postgraduate student fees/ endowment/ gift	Not less than RM20 million/ year
7. Networking and linkages	Inter-institution (national) participation	70 per cent
	Inter-institution (international) participation	30 per cent
8. Support facilities	Equipment fully operational and calibrated or physical facilities that meet safety and quality standards (accreditation to GLP/ ISO17025) or library facilities or service centres or recreational or access to high end research facilities	On site auditing 75 per cent compliance attained

Definitions and Theories of Stress

There are three types of the definitions of stress (Beehr & Franz, 1987).The first type is stimulus-based. In this point of view, stress is defined as the stimulus that came from the environment or situation that impinges on the person. Second type of the definition of stress is response-based. It is defines as the individual's physiological or psychological response to the environment or situation. However, the third stress definition is more generally accepted. It is interactional-based definition of stress, and often called the stressor-strain approach. It brings together the concepts put forward of the first two definitions. That is, it defines both the stimulus (source of stress or stressor) and the response (the outcome or the manifestation of stress or strain). Theories based on this definition are usually considered to be superior since they offer a more "complete" view of the dynamics of stress and can account for documented differential experiences with a single situation (Arnold, Cooper & Robertson, 1998).

The Beehr and Newman's Model (1978)

The general model work within the job stress, employee health and organization effectiveness domain. Overall, there are seven elements or facets exist in this model, namely: personal facet, environmental facet, process facet, human consequences facet, organizational consequences

facet, adaptive responses facet, and time facets (refer to Figure 1.1). The personal and environmental facets interact via the process facet to produce human and organizational consequences facets. Various agents undertake the task of adaptation to reduce the undesirable effects of stress or increase the beneficial effects of stress. The adaptive responses facet in turn affects the personal and environmental facets. The time facet runs through all of the other facets. For example, the elements of the environmental facet require time to exhibit their effects, etc.

The environmental facet contains the elements of the employee's work environment that are likely to be involved in job-related stress. Some of the elements are job demand, job security, and characteristics of the task, the role, and the organization. Meanwhile, the personal facet is the characteristics of the person that are likely to affect exposure and susceptibility to stress, experience of stress, and reaction to stress. Examples of the elements can be found in personal facet are age and education. The third element of the model is the process facet. The process facet represents the physical or physiological and psychological processes that may link personal and environmental facet together. Some of the ego needs found in the process facet are perceptions and evaluation of the situation. The human consequences facet consists of all the positive and negative aspects of physical and mental health that can be affected by job stress. An example in the human consequences facet is depression. The organizational consequences list all the key aspects of organizational effectiveness that may be affected positively or negatively by job stress. Job performance is one of the examples from the organizational consequences facet. Meanwhile, the adaptive responses facet represents various approaches to handling stress. This indicates that various agents can attempt to eradicate undesirable effects of stress in a manner that creates long-term health for the individual and the organization. And the final facet is the time facet whereby time is a factor in the stress process. Stress requires time to manifest in all of the facets discussed above. Therefore, one example of the time facet would be time as a variable in development of stress. Also, stress can have immediate, short-term, middle-term or long-term effects. All depends upon passage of time (e.g. the long term health effects of working in a bureaucratic organization). Causal relationships may come in either direction depending upon the time cycle is sampled. For example, Kahn, Wolfe, Quin, Snoek, and Rosenthal (1964) model indicates that stressful aspects of the environment may cause individual responses, but those responses also change the environment, either directly or through intervening variable. So, time is obviously important in the stress-health phenomena. It follows that any facet could serve as independent, dependent, intervening, or conditioning (moderator) variables – depending on which time period or segment of events is sampled and studied.
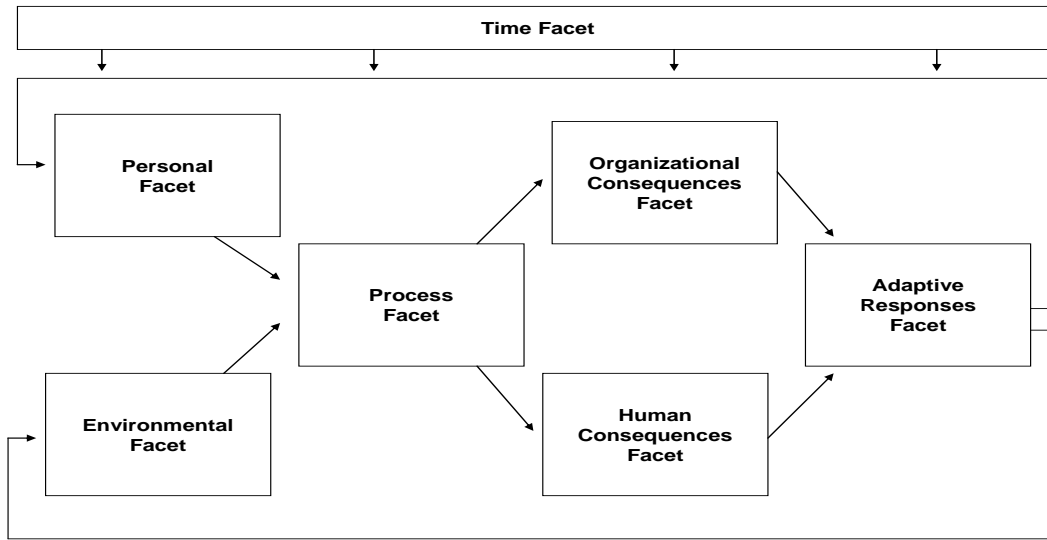
Figure 1.1: The Beehr and Newman's General Model of Stress

Source: Beehr & Newman (1978)

The Asset Model of Stress

The ASSET model is depicted in Figure 1.2. The ASSET model, which stands for An Organizational Stress Screening Tool (Cartwright & Cooper, 2002) is the latest stress model used and adapted to study stress in the workplace (Viljoen & Rothmann, 2009). The model is influenced by existing established models of stress (e.g. Cooper & Marshall, 1978).
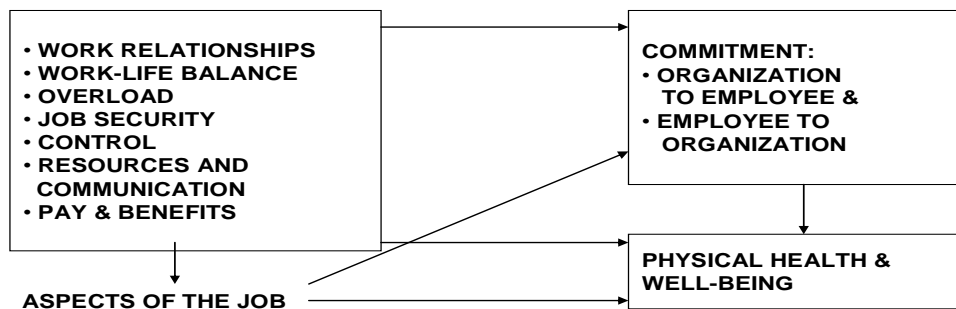

Figure 1.2: The ASSET Model of Stress

Source: Cartwright & Cooper (2002)

Work Environment as the Source of Job Stress

According to the Beehr and Newman's general theory of stress (1978), the environmental facet consist of employee's work environment that are likely to be involved in job stress. The work environment is by no means a place where individuals are likely to be inflicted by stress since they spent most of their lives at work.

Work-related stress is the adverse reactions people have to excessive pressures or other type of demands placed on them (Health & Safety Executive, 2006). The sources of stress or stressors are conditions that cause stress (Newstrom & Davis, 2002). According to the ASSET model of stress (Cartwright & Cooper, 2002), there are eight commonly found stressors in the workplace, namely: *Work Relationship, Work-Life Balance, Overload, Job Security, Control, Resources and Communication, Pay and Benefits, and Job Aspects.*

Work Relationship – Most jobs demands working with people. Thus, poor or unsupportive colleagues, clients, subordinates and bosses will be a potential source of stress (Cartwright & Cooper, 2002). Kahn et al., (1964) in his study of poor working relations found that mistrust of colleagues created role ambiguity that leads to psychological strain. Supportive managers and supportive colleagues are the two factors in the workplace that are most likely to help employees cope with stress (Industrial Society Survey, 2001). Manshor et al (2003) reported that relationship at work is a main source of stress among managers in all organizations. Confrontation with colleagues was also found to impact academic leaders' stress (Gmelch, 2006; Gmelch & Burns, 1994). Provost/supervisor-related stress such as, resolving differences with my superior is found to be the second most important factors of stress in US sample of deans (Gmelch et al., 1999). Conflict-mediating stress such as, complying with rules and regulations, obtaining program approval and support, and resolving differences with /among colleagues registered the highest stress in stress for academic departments chairs (Gmelch & Burns, 1994). According to Janus description, chairs are caught in the middle and stressed by their need to mediate the constraints of the institutions and faculty differences.

Work-Life-Balance – The demands of work have the potential to spillover and interfere with one's personal life (Cartwright & Cooper, 2002). This can put a strain on the outside relationship and increase stress level (Confederation of British Industry, 1998), health and safety (Health and Safety Executive, 2000). The primary cause of occupational stress is balancing the differing demands of work and home (Industrial Society Survey, 2001). Finding balance between professional and personal lives was found to be one the most important stressors in faculty deans (Gmelch et al, 1999; Gmelch & Burns, 1994). Academic administrators also identified "being part of a dual career couple" as one of the main source of stress in the Northern Arizona University Study (Northern Arizona University, 2005). Work imbalance was also one of the key stressors in head teachers' stress (Phillips et al., 2007).

Overload – Unmanageable workloads and time pressure can be a source of stress (Cartwright & Cooper, 2002). Trade Union Council's survey (2000), for example, identified high workloads as the main cause of stress for employees. In addition, the Industrial Society Survey (2001) cited

unrealistic deadlines/constant time pressures as the second most influential cause of stress. Furthermore, French and Caplan (1973) found that overload can produce symptoms of psychological stress. Chairs experienced most stress from their heavy workload, and time pressures (Gmelch & Burns, 1994). Attending too many meetings was ranked number 1 in the 10 most stressful individual stress variables in United States of America and Australian academic deans study (Gmelch et al., 1999; Gmelch, 2006). Meanwhile, Gmelch and Burns (1994) found out that task-based stress such as, heavy workloads, trying to keep current in their disciplines, and attending meetings were second highest categories of stress for academic chairs. Conflicting calls on their time was found affecting academic leaders' stress (Gmelch, 2006). Time pressures were also found to be the most important stresses in department chair stress (Gmelch & Burns, 1994). Work load was also found to be one of the key stressors to head teachers' stress (Phillips et al., 2007). Workload for research universities has been reported to be the highest among other types of universities in US. In addition, all universities have been reported to have an increase in their faculty workload from the year 1972 to 1998. Shuster and Finkelstein (2006) reported that mean hours worked per week in research universities in 1998 were 50.6 as compared to 43.7 in 1972. The proportion working more than 50 hours a week have doubled and the proportion working more than 55 hours a week has also increased from 13.1 to 25.6 %.

Job security – Fewer employees do not expect a life time employment today, but the fear of losing a job still remains a potential source of stress (Cartwright & Cooper, 2002). Job insecurity has been identified to be the most salient factors of stress (O'Driscoll & Cooper, 1996). For example, a quarter of the Industrial Society survey respondents rated job insecurity as one of the six most common causes of occupational stress. Source of pressure for three groups of staff namely are: administrators, faculty and coordinators were scored above average for career and achievement scales (Michailidis & Asimenos, 2002). In addition, Tytherleigh et al. (2005) found out that job insecurity was the most significant source of stress in all staff categories in 14 UK universities and colleges. Universities have also been linked to cuts in staffing levels (Winefield et al., 2003) and downsizing (Sarros et al., 1999).

Control – The experience of stress is strongly linked to perceptions of control. Lack of influence in the way in which work is organized and performed can be a potential source of stress (Cartwright & Cooper, 2002). Indeed, those who percepts that they can control the environment are less likely to suffer from stress than those who do not (Makin, Cooper & Cox, 2000). In the study by Boice and Myers (1986) on stresses and satisfaction of chairing in psychology, the 4 most powerful stressors of chairing involved faculty control: they are, faculty misbehaviors (e.g. loud arguments at faculty meetings, refusals to cooperate) rank first, followed by the awkwardness of giving faculty evaluative feedback, dealing with faculty complaints, and faculty politics.

Resource and Communication – To perform their job effectively, they need to feel that they have appropriate training, equipment and resources. They also need that they are adequately informed and are valued (Cartwright & Cooper, 2002). A number of sources (e.g. NIOSH, 1999; HSE, 2000; British Industrial Society, 2001) have associated all or some of these factors with

stress. Furthermore, poor communications were found to be the third most highly rated stressor (in terms of its commonality) in the British Industrial Society referred to earlier. The conservation of resource theory by Hobfoll (1989) stated that people will protect their resources if they are threatened. Issues like inappropriate training facilities for example, are a threat to their resource conservation strategy and therefore could cause stress. One of the general stresses of the department chair stress is the organizational constraints (Gmelch & Burns, 1994). University department chairs/heads in United States and Australia functioned under increased uncertainty and stress: such as a diverse student population, funding shortages, demands for great quality, finding the upside to downsizing, and balancing academic/administrative roles (Sarros et al., 1999). Big stressors for academic administrators were referred to as inter-playing multiple demands such as policy decisions, personnel and resource management (Academic Leader, 2009).

Pay and Benefits – The financial rewards that work brings are obviously important in that they will determine which type of lifestyle that an individual can lead. In addition, they often influence the individual's feelings of self-worth and value to the organization (Cartwright & Cooper, 2002). Salary/recognition stress was the sixth most important factor in the US and seventh in Australian deans' stress study (Gmelch et al., 1999). Despite the fact that these chairs advocating successfully for the faculty, they still feel that they are unappreciated of by the faculty members (Boice & Myers, 1986).

Aspects of the Job – The potential sources of stress can be related to the fundamental nature of the job itself. Factors, such as physical working conditions, type of tasks and the amount of satisfaction derived from the job itself are all included (Cartwright & Cooper, 2002). This subscale correlates highly with established measures of job satisfaction. Job dissatisfaction can be the outcome of work-related stress or can be a source of stress in its own right. When job dissatisfaction is a reflection of reality, for example, if an individual is dissatisfied because they have outgrown their job, it is likely to be a cause of stress rather than an effect (Lyne et al., 1994). According to the Northern Arizona University (NAU) study (Northern Arizona University, 2005), in comparison to the national norm, the administrators at NAU were less likely to identify aspects of their jobs satisfactorily. They are opportunity to develop new ideas, overall job satisfaction, teaching load, clerical/administrative support, relationship with administration, opportunity for scholarly pursuits, prospects for career advancement, quality of students, visibility for jobs at other institutions/organizations, salary & fringe benefits, and availability of child care at this institution.

Commitment and Health as the Human Consequences of Job Stress

In the Beehr and Newman's model (1978), the human consequences facet includes the human's physical and mental health. Stress affects commitment and health, according to Cartwright and Cooper (2002). Thus, employee's commitment and health will suffer once they have entered the stress arena.

Stress is the non-specific bodily response made to any demand (Selye, 1973) or commonly known as the General Adaptation Syndrome (GAS). According to his general theory of stress (Selye, 1976), the effects of stress are cumulated overtime, and are related to morbidity and pathology if not abated. In other words, the outcomes of stress are aggravated by the passage of time and the number and severity of stressors experienced, the eventual results will inevitably be serious disease and/or death of the organism.

Strain or the outcomes of stress (effects) is the reactions to the condition of stress (Dollard, Winefield & Winefield, 2003). According to the ASSET model of stress, stress outcomes or effects include four subscales, namely: *Commitment from the Organization, Commitment from the Employees*, *Physical Health,* and *Psychological Well-Being.*

Commitment of the organization to the individual – Employees expect to be trusted and respected and want to feel that it is worth "going the extra mile" for their organization (Cartwright & Cooper, 2002). However, issues other than workplace stress may affect employee's level of commitment. For example, industrial action such as a threatened union strike may affect employee's commitment to their organization. Administrative stresses such as too frequent meetings, having too heavy workloads, report writing deadlines, and frequent interruptions were ranked among the top ten most stressful for US deans (Gmelch et al., 1999).

Commitment of individual to the organization - Employers expect their employees to do their job as best they can and expect them to be loyal and dedicated to the organization (Cartwright & Cooper, 2002). Scholarly stress is ranked number two for Australian deans, whereby having insufficient time to stay current in their academic field, attempting to balance their leadership and scholarly responsibilities, and believing their academic career progress is not what it should be were common concerns. They also impose high self expectations to create excessive stress levels (Gmelch et al., 1999). University administrators also have been reported to be a misfit, have poor coping ability, and consider changing jobs due to stress (Blix & Lee, 1991; Boice & Myers, 1986).

Physical health – There are ample evidence showing that occupational stress has an impact on worker's mental and physical well-being (Kahn & Byosierre, 1992). According to Siu (2002) and Winefield, Gillespie, Stough, Dua and Hapuararchchi (2003), there is significant evidence that chronic and high levels of occupational stress, left unchecked, are related to mental and physical well-being, job dissatisfaction, absenteeism, stress-related injuries, turnover, and intention to quit. Administrators and coordinators all demonstrated a high level of poor physical health as the effects of stress (Michailidis & Asiemenos, 2001). Stress in head teachers had also been affecting their physical health (Phillips et al., 2008).

Psychological well-being – Psychological health refers to clinical symptoms indicative of stress induced mental ill health (e.g. constant tiredness, and irritability) (Viljoen & Rothmann, 2009). If untreated, psychological distress can cause more serious reversible health problems (psychosomatic illnesses, arterial hypertension, severe depression, alcoholism). Mental ill health was also found to affect the administrators and coordinators stress (Michailidis &

Asiemenos, 2001). Stress in head teachers had also been reported to affect their psychological well-being (Phillips et al., 2008).

Productivity as the Organizational Consequences of Job Stress

The sources of stress from the work environment cause human consequences that result in organizational consequences. This is called the stress process. According to Beer and Newman's general theory of stress (1978), organizational consequences consist of key aspects of organizational effectiveness that may be affected by job stress. Productivity or outputs of the Malaysian academics can be assessed through their teaching, supervision, publication, training, student service, administrative duties, and social responsibility. Teaching as a profession has been ranked as the second most stressful occupation (Johnson, 2005). This could be related to high emotional labor attached to it. Research has also been associated with stress (e.g. McKeachie, 1983). However, service is the least studied upon.

Interventional Development

There are three methods of interventions, namely, primary interventions, secondary interventions, and tertiary interventions (Cooper et al., 2001). These approaches are differentiated according to their scope, target, underlying assumption, and examples (refer to Table 1.2).

Primary interventions summarized that the most effective way to combat stress is by eliminating the stressors from the workplace. This will reduce the strain all together placed upon the individuals. This is the most effective, proactive, preventative, and systematic approach compare to other approaches when examining specific stressors. Secondary interventions focus on the individuals rather than the environment (primary). It represents the most common form of interventions in organizations e.g. stress management training, etc. to create awareness of their levels of strain and coping strategies. Another example would be the training for conflict resolution skills that can help them prevent conflict among themselves in the organizations. Thirdly, is the tertiary preventions which are focus on rehabilitating individuals who have suffered ill-health or reduced well-being as a result of strain in the workplace. For example, an employee assistance program (EAP) can help individuals (as well as organizations) deal with workplace stressors that cannot be removed structurally (through counseling) as well as examining any spillover between work and family issues. EAP also involve procedures to identify personal issues that interfere with their work performances.

Table 1.2: A Framework for Stress Management Interventions

Primary Interventions Scope: Preventative – Reduce the number and/or intensify of stressors Target: Alter work environments, technologies, or organizational structures Underlying assumption: Most effective approach to stress management is to remove stressors Examples: job redesign; role restructuring; organizational restructuring
Secondary Interventions Scope: Preventative/reactive – Modify individual's responses to stressors Target: Individual Underlying assumption: May not be able to remove/reduce stressors, so best to focus on individual's reactions to these stressors Examples: stress management training; communication and information sharing; "wellness" programs
Tertiary Interventions Scope: Treatment – Minimize the damaging consequences of stressors by helping individuals cope more effectively with these consequences Target: Individual Underlying assumption: Focus is on "treatment" of problems once they have occurred Examples: employee assistance programs; counseling

Source: Cooper et al. (2001)

Conclusion

Academic stress is a wide-spread phenomenon. Malaysian research universities will have to be careful to avoid stress in their workplace. Stress can come from the environment, or as a response to it. Through these interactions, organizations can suffer. Intervention programs are essential in order to eliminate stress at the workplace.

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