

CHAPTER 5

DISCUSSIONS AND CONCLUSIONS

5.0 Introduction

This chapter summarizes and discusses the findings of this study and makes recommendations based on the findings. It also discusses some of the limitations of this study and makes suggestions for future research.

5.1 Findings And Discussions

The findings of this study are organized into seven areas of discussion following the research questions as outlined in Chapter 1 and are as follows:

1. Level of occupational stress
2. Occupational stressors
3. Occupational stress responses
4. Differences between Principal Assistant Registrars and Assistant Registrars
5. Differences between administrators placed in central administration and non central administration
6. Differences among administrators with less than ten years, ten to nineteen years, and more than nineteen years of service

7. Differences among administrators with less than six staff, six to fifteen staff, and more than fifteen staff to control.

5.1.1 Level Of Occupational Stress

The administrators of the University of Malaya represent the skeleton of the organization. They form a vital part of the whole body to ensure that the system is running smoothly. Thus their stress levels have some effect on how well the organization is. The self-rated occupational stress level experienced by the Principal Assistant Registrars and the Assistant Registrars shows that 3.3% experienced no stress, 19.7% low stress, 54.1% moderate stress and 23% high stress.

With about a quarter of the administrators experiencing high stress, it can be seen that the stress situation is alarming. Moreover 54.1% indicate experiencing moderate level of stress. This figure shows that stress is prevalent among the university administrators and this finding is in line with the findings of Dua (1994) on 275 administrators of The University of New England in Australia where 75.7 % of these administrators are suffering from medium or high stress. If the findings of the present study is to be compared to the study by Dua (1994), it looks like more administrators of University of Malaya (23%) are experiencing high stress as compared to that of the University of New England (13.1%).

Job stress is associated with high cholesterol levels, increased heart rate, and other negative effects on the body (Matteson and Ivancevich, 1982). High stress can lead to burnout or the final stage of exhaustion in the General Adaptation Syndrome. Thus the high stress as experienced by

23% is unhealthy to the individuals themselves and to the organization. Even the 54.1% who experience moderate occupational stress presents a case for concern. Health is affected if one is subjected to a prolonged, unrelieved state of stress. This 54.1% of administrators are experiencing continuous, unrelieved stress and the human body cannot handle stress of continuous, low grade nature without affecting its health (Albercht, 1979).

Baharudin Ishak (1991) has emphasized that "the most critical success factor of an organization is its people" (Baharudin, 1991, p.10). The success or failure of the administrative machinery depends on the stress level and work orientation of this group of administrators. Stressful administrators hinder the proper running of the university, slow down the work process, increase bureaucratic red tape, and cause frustration and stress to other groups in the university. Therefore the very success or failure of the university depends on the condition of this group.

While University of Malaya is supplying and training administrators for the labour market, it cannot afford to neglect its own administrators without affecting its image as an institution of training and learning. Therefore it calls for some concern and action on the part of the management.

Stress management is of pertinent significance to the management of the University of Malaya in the light of its plans to corporatise the University. An already stressed out group of personnel cannot do much to assist in any ambitious plan; more so to frustrate it. Stress management is viewed by many to be the staff's own responsibility. However the need for stress management appears when administrators are unable to cope, anxious and suffering from

symptoms of physical and mental ill health and performing badly in their tasks and interpersonal relationships.

5.1.2 Occupational Stressors

The four broad group of stressors that are arranged in order of their rank of importance are that of career stressors, job stressors, organizational stressors, and group stressors. From the findings, it appears that career development is a major stressor among the administrators. Underpromotion, status incongruence, thwarted ambition are career stressors which not only cause occupational stress but also job dissatisfaction (Yates, 1979). Promotional lag was found to be significantly related to psychiatric illness in a study by Arthur and Gunderson (in Marshall, 1979). According to Professor M.P. Deva, 10% of Malaysians are mentally ill and mental illness is soon to be the second largest factor that contributes to economic decline (The Star, 22 October, 1966). Therefore career stressors such as that of promotional lag may bring about economic decline in the organization.

Job stressors (which consist of role ambiguity, role conflict, work overload, work underload, responsibility for people, time pressure, and working conditions) rank second in importance and amongst the more important job stressors are that of responsibility for people where 60.6% are in the high and dangerous stress zone, and time pressure where 50.8% are in the high and dangerous stress zone.

Among the job stressors, responsibility for people is the most serious stressor as 31.1% are in the high stress zone and 29.5% are in the dangerous stress zone. This study shows that responsibility for people faces greater level of stress and is in line with the findings of Crump; Kroes; and Otway and Misenta (Cooper and Davidson, 1987).

Time pressure is the other serious stressor as 26.2% are in the high stress zone and 24.6% are in the dangerous stress zone. The effects of time pressure on the body are harmful as a study by Friedman (Kasl, 1978) found that the cholesterol level goes up and blood coagulation is accelerated when deadlines approaches and both the cholesterol level and blood coagulation go back to normal only after two months after the deadline. Therefore, administrators who always face time pressure stress, especially the 50.8% who are in the high and dangerous zones may always have the cholesterol level and blood coagulation up, which can lead them to suffer from coronary heart disease. Research by Magnus, Matroos and Strackel, 1983 (Byrne and Byrne, 1991) found that time pressure is positively associated with coronary heart disease.

Working conditions caused 18% of the administrators to be on high stress. Common complaints on the work conditions in the University of Malaya include those of crowded office conditions, temperature being too cold or too hot, noisy environment caused by the printer or photostating machine placed too near, and poor quality and quantity of food served in the canteen. Heat stress is known to affect the cognitive and physical performance as discovered in a study by Lindstrom and Mantysalo (1987) which shows that task performance varies at different temperatures and in tasks requiring good concentration and clear thinking, performance deteriorates even in conditions of moderate heat or low temperature. Noisy environment causes

fatigue as shown in a study by Gulian (1974). With the noise and the heat stress, it is not surprising when this study shows that 32.8% occasionally, 34.4% sometimes and 4.9% often have trouble concentrating in their work. Corlett (1981) shows that workers can adjust to poor working conditions but it is at the expense of lowered productivity. Thus it is not surprising that 45.9% occasionally, 24.6% sometimes and 3.3% often experienced a decrease in job performance in this study.

Role conflict is another common stressor among the administrators as 32.8% are in the high and dangerous stress zones and 57.4% in the moderate stress zone. The administrators fall into the group of workers which are more prone to role conflict according to studies done by Cooper and Marshall (1976) and Shirom and co-researchers (Cooper, 1981) and the present study where over 90 % are in the moderate, high and dangerous stress zones confirms the findings of the above two studies. Role conflict is known to produce various kinds of emotional turmoil such as anxiety, tension, frustration, and a sense of futility (Kahn et al. 1964) and therefore is harmful to the administrators.

Role ambiguity is also a disturbing stressor among Assistant Registrars of the University of Malaya as 45.8% have moderate stress, 19.7% high stress and 9.9% dangerous stress. Assistant Registrars find it stressful when they are faced with a lack of clear idea as to the scope and responsibilities of their jobs, bothered about the evaluation of others, cannot get information required to do their job, do not have enough information about their advancement opportunities and are uncertain about how higher officers evaluated them. However role ambiguity is to some extent unavoidable as University of Malaya grows in size, complexity and changes. Several studies

(Latack, 1981) have found that role ambiguity is positively associated with job dissatisfaction, anxiety, boredom, tension, physical stress symptoms and propensity to leave and negatively associated with job performance.

Work overload caused 65.6% of the respondents to experience moderate stress, 11.5% high stress and 14.7% dangerous stress. This finding shows that work overload is affecting more than three quarters of the Assistant Registrars and is serious as it is found to be associated with certain behavioural malfunctions such as lowered self-esteem, low work motivation, and work absenteeism as confirmed by four major studies (Cooper and Davidson, 1987).

Organizational stressors are third in ranking of importance of which the more important ones are administrative policies where 45.9% are in the high and dangerous stress zones and change where 44.2% are in the high and dangerous stress zones. Administrative policies represent the most serious of the organizational stressors as 45.9% are in the high and dangerous stress zones and 47.5% are in the moderate stress zone. Administrative policies as a stressor can be divided into policy on work assignments, procedures, and personal conduct; and backing on matters of importance from the immediate officer.

Change is causing 44.2% to experience high or dangerous stress and 45.9% to experience moderate stress. It is not surprising that change has caused such levels of stress as University of Malaya has seen some major changes recently, such as the creation of new administrative units headed by academicians. Perhaps the most major change is that of the pending corporatization of the University of Malaya.

The present study shows 36.1% experiencing high or dangerous stress and 54.1% experiencing moderate stress on structure. Structure is therefore an important stressor to the administrators of University of Malaya. Territory is another stressor that is causing 60.7% in the moderate stress zone, 18% in the high stress zone, and 1.6% in the dangerous stress zone. Though it is not as severe as the earlier three organizational stressors, it is still stressful unless remedial action is taken by the management. The last of organizational stressor is that of leadership where the majority of 44.2% are facing low stress, 39.4% are facing moderate stress and 16.4% are facing high or dangerous stress. Therefore, leadership as a stressor does not appear to cause much stress.

The last in importance is that of group stressors and it does appear that social relationships are tolerable in the university's circle. The majority of the respondents face either low or moderate stress as far as group stressors are concerned. The most serious of the group stressors is that of inadequate group support where 13.1% are facing either high or dangerous stress with 44.3% in the moderate stress zone and 42.6% in the low stress zone. The administrators are quite a closely knit group as most of them have been colleagues for years in the close service of the university. This may be one of the reasons for the group stressors to be low in rank. However competition for promotion and other benefits may cause rivalry and lack of support from some of the administrators.

5.1.3 Occupational Stress Responses

Stress has affected the administrators cognitively as 4.9% are thinking stressfully and 60.7% are experiencing some negative thoughts though not yet serious. This means that stress has most affected the thoughts of respondents rather than the health or behaviour of the respondents. The thinking process may ultimately affect other aspects of the administrators. The overall cognitive stress response of the administrators is a telltale sign of stress in the occupational arena.

The study shows that 32.8% are moderate and 4.9% are high in their physical stress response. The more common physical stress responses are that of headache of which the mean is 2.48, dizziness of which the mean is 2 and lack of energy of which the mean is 2.34. Stress has caused some of these physical responses which signal the unhealthy stress situation of the occupation.

Behaviour stress response is the most uncommon form of stress reaction as only 34.4% have moderate behaviour stress response while 65.6% are low in behaviour stress response. While behaviour stress response is not as common as cognitive and physical stress responses, it is still producing negative effects on the productivity of the administrators. These three responses are indicating stress in the organization.

In conclusion and as suggested by Tinning and Spry (1981), a stressful administrator may:

1. Become physically ill, if the physical stress response escalates into diseases,
2. Develop a psychological illness if his cognitive stress response is dangerously high,

3. Adopt a socially deviant behavior, or act out his symptoms by absentism, aggression, lateness, or accidents for if he is high on behaviour stress response,
4. Regain the ability to cope through his own efforts or through some external assistance.

Therefore, occupational stress has to be properly managed by the individual himself or by other intervention of which the organization has the main responsibility. Various stress management approaches, such as counseling, training and exercises can help to decrease the stress level which ultimately decrease the various stress responses.

5.1.4 Differences Between Principal Assistant Registrars And Assistant Registrars

The differences in the stress level between Principal Assistant Registrars and Assistant Registrars were found to be significant at 0.05 level of significance. The study shows 45.5% of Principal Assistant Registrars and only 9% of Assistant Registrars are in the high occupational stress group. Thus between the two groups, more Principal Assistant Registrars experienced higher stress than Assistant Registrars. On the other hand, it was found that more Assistant Registrars (26 %) as compared to Principal Assistant Registrars (9.1 %) experienced no or low stress.

Principal Assistant Registrars occupy a middle position in the administrative structure and are therefore sandwiched between the top management and the lower group of staff. This middle position in the administrative structure has somewhat contributed to the higher stress level. The

stressful situation experienced by those in the middle administrative structure is also supported by a study by Dua (1994) on the administrative staff of the University of New England.

The t-test comparison shows that Principal Assistant Registrars and the Assistant Registrars do not face different organizational stressors, career stressors and group stressors. However other than time pressure, the rest of the job stressors are the same for both the groups. There is a significant difference between Principal Assistant Registrars and Assistant Registrars in time pressure as a stressor, with Principal Assistant Registrars facing more time pressure.

The delicate middle position of Principal Assistant Registrars subjects them to more time pressure as they receive orders and deadlines from the top management and compliants from the lower staff for the rushed work. Principal Assistant Registrars are responsible for the work of their departments and may feel more time pressure in the completion of work of others in their departments. Moreover with frequent meetings to attend, this leaves them very little time to complete their own work.

The t-test shows that the cognitive, physical and behavioural stress responses between the two groups are not significantly different. Principal Assistant Registrars and Assistant Registrars are all responding to stress in the same way. Therefore stress responses are not peculiar of job positions but rather of the individuals which was explained by researchers like J.L. Halliday, S. Grant and E. Rosoff (Rosoff, 1984) that one models the signs and symptoms taken by family members.

5.1.5 Differences Between Administrators Placed In Central And Non Central Administration

The t-test result shows that there is no significant difference in the occupational stress level, the occupational stressors and the stress responses between those placed in central and non central administration.

Thus the common complaint of differences in the workload between central and non central administration is not supported by this study. Neither is the common notion that it is more stressful to work in central administration supported by the findings of this study. It appears that the two groups are the same as far as stress level, the types of stressors and the stress responses are concerned.

5.1.6 Differences Among Administrators With Less Than Ten Years, Ten To Nineteen Years, And More Than Nineteen Years Of Service

The results show that the stress level of those administrators with more than nineteen years of service is significantly different from administrators with less than ten years of service, and also administrators with ten to nineteen years of service. Level of stress of those with more than nineteen years of service is higher than the other two groups, with the group with ten to nineteen years of service on a higher level of stress than those with less than ten years. These findings show that as one becomes more senior in the service, one gets more occupational stress. Senior

administrators are usually given more responsibility as compared to the junior ones and they are also expected to perform differently. Therefore status incongruence with additional responsibility and expectation from others add to the stress level as one becomes more senior.

The results show that the more senior the administrator the more stressful the occupation is. However the oneway ANOVA shows that there is no difference in the organizational, job, career, and group stressors for these three categories of administrators. Therefore, occupational stressors do not change as one becomes more senior in the service. On the other hand, the oneway ANOVA shows that there is a difference in the physical stress response between administrators with more than nineteen years of service and those between ten to nineteen years of service. The more senior group tends to react to stress physically such as becoming sick. This is not surprising for as one becomes more senior in service, one actually grows older in age. The stress of life has taken its bearings on the body. Therefore it is easy for stress to respond physically due to the culmulative effects of the wear and tear of the body.

Saxon (1993) in his study on educational administrators found that there is significant difference in his sample by years of service while Sullivan (1991) in his study on university employees comprising partly of university administrators found that years of experience do not affect stress level. Butler (1995), and Dua (1994) in their research on university administrators found that the younger staff faces more stress than older staff. Dua found the younger staff more stressful due to working conditions and work politics while the older staff face more stress due to workload. Thus the various research findings are not consistent.

5.1.7 Differences Among Administrators With Less Than Six Staff, Six To Fifteen Staff, And More Than Fifteen Staff To Control.

The oneway Anova shows that there is no significant difference in the occupational stress level, the stressors and the stress responses among administrators with less than six staff, six to fifteen staff, and more than fifteen staff to control.

The number of staff that one controls has no bearing on the stress level, the stressors encountered, and the stress response. Though responsibility for people is a strong stressor, quantity does not matter, that is, it makes no difference whether one is responsible for six staff, or six to fifteen staff or even more.

The number of staff that one controls does not determine the level of stress in the case of administrators of the University of Malaya, though research (Cooper and Davidson, 1987) has confirmed that responsibility for people is stressful, and that those given higher responsibility for people at work faces greater level of stress related reaction. However in line with the present finding, the research by Dua (1994) on the University of England shows that there is no significant difference in the job stress of those who supervise staff and those who do not.

5.2 Recommendations

Stress occurs when the work demands outstrip workers' capabilities. According to Lazarus (1966), the three components of stress are the idea of demands on the person, the idea of the

appraisal or interpretation to that threat or demand, and the importance of the response to that person. Stress is therefore very subjective as it depends on the idea of the individual. However to tackle the stress problem comprehensively, it has to involve both the administrators as individuals and also the management of University of Malaya as the organization.

5.2.1 The Individual Administrators

It is suggested that the 54.1% of the moderately stressed and the 23% of the highly stressed administrators learn to cope with the work environment. Obviously the cognitive, physical and behavioural stress responses have indicated that though there is a certain amount of successful coping among some administrators, 65.6% are still on moderate or high cognitive stress, 32.8% are still on moderate physical stress, and 34.4% are on moderate behavioural stress. Coping with the job or with the work environment is the adaptive response to the occupational stress which is intended to eliminate, ameliorate or change the stressors in the job situation or intended to modify the administrators' reaction to the stressful job situation in a beneficial way.

There are various methods to cope with occupational stress. While drug therapy is one of the possible methods, it is better to cope with stress using non-drug therapy. Using drugs continuously to cope with stress leads to other more serious problems. Some of the non-drugs methods suggested for the administrators are discussed below.

1. Relaxation

Relaxation and deep breathing are good for calming the nervous system. Relaxation is the opposite set of physiological changes to that of the fight-or-flight response. It can be elicited by psychological means. Relaxation can produce higher levels of Natural Killer (NK) cells in the body which are cells providing important defense against cancer and virus-infected cells, thereby suggesting that psychosocial factors can significantly enhance the immune function (Kiecolt-Glaser and Glaser, 1988). Relaxation may counteract the 39.3% of the moderate and high physical stress response, thereby taking away the headaches, lack of energy, backaches, stomach disorder, dizziness and other physical symptoms as indicated in Table 4.31.

2. Acupuncture

Acupuncture is recommended as one of the ways to relax the nerves. As noted by Pestonjee (1992), acupuncture "helps in tranquilisation and psychic elation and allows one to relax ... its clinical success has demonstrated that it has a definite role to play in coping with stress" (Pestonjee, 1992, p.198). This method has to be used with caution as there may be acupuncturists who are not properly trained to provide the desired effects and may produce more harm than good.

3. Body Massage

Body massage is almost similiar to acupuncture in its relaxing effects on the body and can be used by administrators who may prefer this mode of relaxation to acupuncture.

4. Exercise

Exercises provide an outlet for pent-up feelings of aggression and hostility. For stressful administrators exercise may well be their best "medicine"!

5. Counselling

Counselling can reduce the experience of stress by altering the perceptual and cognitive functioning of the 54.1% moderately stressed and 23% highly stressed administrators. One way is the elimination of disruptive irrational thought in occupational stress by using the rational emotive therapy by A. Ellis (Ibrahim, 1996). Once disruptive thoughts are challenged and changed, the accompanying unpleasant emotions and disturbances in behavior are eliminated.

Research suggests altering the cognition leads to useful changes of feelings and behavior (D. Meichenbaum, 1977 in Beech, 1987). Cognitions which are to change are those of distortion of reality and they involve the following:

- (1) overgeneralization where a conclusion is drawn from relatively few data.
- (2) selective abstraction where detail is taken out of context and given undue emphasis.
- (3) arbitrary inference where unwarranted inferences are drawn from the evidence.
- (4) magnification where exaggerated importance is given to an event.
- (5) dichotomous thinking where events are misclassified by being seen as having dire significance.
- (6) personalization where unpleasant events are seen as carrying personal implications when there is no logical basis.

6. Social Support

Talking out the problem that is causing the administrator much stress is another way to reduce the effects of stress. Social support, whether be it from colleagues, their supervising officer, the lower staff or from family members or friends helps to relieve or reduce the effects of stress. Research has shown that with a high level of social support, stressors bear no or little effect on health.

5.2.2 The Organization

University of Malaya as the employing organization can do much to help in the stress situation of its administrators. Some of the ways in which management can help to improve the stress situation are discussed below.

1. The Introduction Of Stress Audit

It is suggested that the university undertake stress audit which means to study systematically the dominant stressors prevalent in the university with the aim to explore and control stress. Stress audit should look at as many of the variables as possible such as the stressors, mediating variables like the effects of personality, culture, and contemporary non-work environment, and the end result variables like the stress reaction. Data can be collected through questionnaires, or clinical diagnostic interviews.

2. Changes In The Job Of The Administrators

As one of the stressors is the job itself, it is necessary to look at how to improve the job elements. It is important to tackle job stressors as job stressor represents the second most important stressor after career stressor. One is to look at the need for task variety as repetitive tasks can make the level of administrator's activation falls below his normal level whereby he experiences negative effects. The findings show that 29.5% are occasionally, another 29.5% are sometimes, 8.2% are often and 6.6% are frequently bored (Table 4.31). One of the ways to examine task variety is to enrich the job. However job enrichment can trigger changes in various areas of the job that may become a source of stress. A change in task, technology, structure or people can initiate a change in the other areas. Job enrichment leads to increase in other job activities, responsibilities, skill or a combination of any of these which make it necessary to increase the salary of the workers. Assistant Registrars should be made to expect that an enriched job leads to more promotions and higher salaries. To avoid more stress, rewards are necessary while enriching jobs. Decisions to participate in job enrichment should be voluntary.

Job engineering and job redesign are possible ways to help improve the stress situation. Occupational stress is often a misfit between the job and the person. Therefore job engineering and job redesign should be done by matching the work and Assistant Registrars for total effectiveness and this depends on the needs, values and behavioural patterns of the administrators as well as the objectives of University of Malaya. Job engineering involves an integrated socio technical approach where the job is a merger of the behavioural and the technical aspects.

Assistant Registrars can be given task autonomy, such as substantial freedom, independence and discretion in scheduling the work and determining its procedure. Experiencing responsibility for the job outcome is a valued psychological gain. With task autonomy, some of the stress connected with structure and administrative policies as stressors will be removed or lessened.

Task feedback in the form of performance appraisal is highly recommended to reduce the problem of role ambiguity. With task feedback, Assistant Registrars know how they are doing and what their supervising officers think of their work. Thus administrators placed in faculties or departments of study should be made clear whether the Dean or Director or the Registrar is the "supervising" officer and the assessment of the administrator concerned should be done by this "supervising" officer.

Autonomous time structuring is suggested to reduce the effects of time pressure. Time pressure is a serious stressor as 44.3% are on moderate stress, 26.2% are on high stress, and 24.6% are on dangerous stress due to time pressure. Autonomous time structuring gives increased flexibility to relieve stress from the work situation. More organizations in the West and in Malaysia have experimented flexible working hours with generally pleasing results. Administrators are allowed to schedule their work day within pre-established limits so that they have time for personal errands before and after work. Administrators with child-care requirements find it easier to attend to them. Thus the consequent feelings of freedom and the elimination of excessive rushing and time pressure leads to greater job satisfaction and lower stress levels.

Task and expectations should be made clear to the administrators to avoid any form of ambiguity. As ambiguity is common in any big organizations, it takes the conscious efforts of the management to reduce ambiguity so that the job related tension associated with ambiguity can be reduced, if not removed. It is suggested that the duties and the role of the administrators be discussed from time to time between the supervising officer and the administrator concerned. Any doubts should be given the opportunity to clear during such discussions.

3. Downward Communication

It is also suggested that the chain of command be made clear to the administrators so as to reduce any form of intrasender conflict. All administrators should only be responsible to one "supervising" officer. Higher management officers are suggested to go through the "supervising" officer for jobs which they want the administrator concerned to do. By receiving orders and directions from only one "supervising" officer, the administrator concerned will face less intrasender role conflict.

To avoid intersender role conflict, it is suggested that officers who are given responsibility for people should learn the principles of human resource management and be more understanding in giving impossible and conflicting demands. Instructions should be clear and can be managed within the time frame given.

4. Stress Awareness And Reduction Training

Research by Kagan, Kagan and Watson (1995) shows that stress reduction programmes are effective for occupational stress management. It is believed that programmes in stress reduction

training enable administrators to live life more effectively and to function better on the job. Such investment in time and resources will show that the university considers occupational health and well-being to be of importance.

Stress management skills that can be taught to the administrators include relaxation, meditation, and exercise; self analysis drill; self-management; lifestyle management; discussion of stress at work such as in the form of group counseling; skills for coping with people such as assertiveness training and human relations training.

5. Counselling and Employee Assistance Programme

Counselling and employee assistance programmes are recommended to assist staff who are facing problems. A study by Hayes and O'Connor has found counseling to be of benefit to stressful employees of the university.

Providing counselling services will help administrators to reduce stress by cultivating belief in self, developing inner directed personality, reducing blind drugs intake and cultivating positive habits such as exercise. Counselling is aimed at occupational health and mental hygiene and can be very useful for the very stressed administrators. Counselling has benefits for the organization in terms of sustaining productivity, holding down costs of absenteeism and turnover and also in meeting the social obligations of the university to the society. It is suggested that University of Malaya set up a staff counselling unit as recommended by Arthur Anderson Report. A full-time staff counselor or a contractual on-call relationship with one or more professionals can be used to meet the counselling needs of the administrators.

The counseling or employee assistance programme unit can contribute in the form of giving advice, information, and recommendation to the staff and authorities as well as running some of the health and social activities of the university. The definition of health can be enlarged to cover spiritual well-being in addition to the physical, mental and social well-being.

This unit can also assist in the dispersal of scientific information on how to face stressors and reduce stress within the university and outside. A way to disperse such information is through "Budiman", the official newsletter of University of Malaya. Such information may be in the form of dietetics, exercise, and meditation.

6. Preventive Measures By Human Resource Department

Preventive measures can be initiated by Human Resource Department and they include the following:

- A pre-placement examination to assess the psychological tendency of the administrators, including a review of his psychological history assists in proper placement of an administrator. This can be done by using an aptitude test and information on job expectations and capacity for coping with demanding work.
- A periodic examination done together with the staff counseling unit, through various tests such as in the form of questionnaires, for any significant behavioural change and/or psychological or psychosomatic disorder such as frequent complaints of fatigue or of suffering from an ailment that has no organic basis; and initiating action with the help of

the staff counselors or employee assistance officer to prevent ill-response. Changes should be recognized at an early stage.

- A programme monitoring the work environment and the stress and health of the administrators.
- Coordination with other services, management, and labour unions with a view to prevention.

7. The Organizational Climate

Stress caused by organizational stressors can be reduced if the organizational climate of the university be further improved. Very often stress arises due to the very formal system which does not encourage participation and leads to unnecessary alienation and polarization. One of the ways is to identify the degree of worker identification-alienation, where alienation is associated with workers openly criticizing the organization, opposing change, and taking little initiative while identification is taking pride in membership, cooperating in improvements, offering constructive suggestions and taking initiative. It is suggested that the management works towards workers' identification by introducing programmes such as the employees assistance programme where the staff can take pride in the caring hand of the management, facilitating greater interrelationship among workers to build positive relationships, opening new and improving old channels of communication, and sharing information to develop the worker's sense of identity with the organization.

It is also necessary to examine the extent of labour-management polarization. Union leaders often see themselves as reacting to the "atrocities" of the top management. Only by making

themselves more visible, university managers can make themselves more available. A videotape recording of the Vice chancellor giving the latest news or plans about the university and explaining new programmes can be played over monitors in cafeterias and other places providing a good way to increase executive visibility.

It is important to look into the perceived social norms. Top management can tune into workers' attitudes by using questionnaires and informal interviews and by simply opening their eyes and ears.

8. Stress Reduction Programmes

Some of the stress reduction programmes that can be taken by management is that of introducing compulsory exercise or breathing programmes. Such programmes have already been implemented abroad, particularly in Japan and in some private or public organizations in Malaysia and are believed to reap positive effects on the workers. The National Institute of Public Administration (INTAN) has weekly exercise sessions on Saturdays followed by some form of social work such as caring for the work compound. Social relationships are built along the way together with the benefits of the exercise. The exercise programmes may be organized for the whole organization weekly before, during or after office hours.

It is suggested that annual holidays be made compulsory unless there is good reason not to do so. Psychologist Hugo Munsterberg (Vecchio, 1991) recommended a rest period to solve the effects of fatigue. It is found that most staff of the university do not use their annual holidays but save for use in later years. Holidays are necessary to unwind the body system and to relax.

Workers who do not take holidays to do things different from their usual work routines are depriving themselves of the much needed rest and relaxation. The compulsory holidays may solve the problem of lack of energy as experienced by 31.1% who occasionally, 26.6% who sometimes and 18% who fairly often or frequently felt the lack of energy.

It is suggested that employees' activities during breaks at the work facility provide valuable avenue for psychological refreshment such as providing a ping-pong table and other games equipment. Such activities give the workers mild exercise, recreation and mental refreshment. Organization can also sponsor, after office, sports activities in the interests of a healthier work force.

An interesting break time activity found in Japan is the "aggressive exercise room" which is actually a small room containing a few punching bags or a few inflatable figures that bounce back when punched or struck with a small bat. Workers can take a break by giving a few punches or swings with the bat to rid themselves of pent-up hostile feelings which is found to be useful as a simple form of energy outlet for mental hygiene.

9. Career Development

Career stressors represent the most serious form of stressors. Other than helping the administrators to develop stress management skills to counteract the effects of these career stressors, the university can do much to reduce. Since corporatization is imminent and approval of posts is not dependent on the Government, the management can create more avenues for

promotional posts. The new posts should ease off some of the stress caused by lack of career development.

It is also suggested that training programmes be carried out to develop the skills and career of the administrators. Administrators can be given study leave to pursue courses of interest to both the individuals and management, extending even beyond the level of the Master degree.

Other incentives should also be introduced to compensate the slow movement of promotion. Various types of incentives should be given on a regular basis such as that which reward "the most hardworking administrator", or " administrator of the month" and so on. It is suggested that merit points and monetary gains be given for such events. The merit points should be put in the record of the administrators.

It is therefore hoped that the above recommendations will help to improve the occupational stress situation of Assistant Registrars and Principal Assistant Registrars of the University of Malaya. Only by the conscious efforts of all concerned can the distress of the administrators be changed into eustress.

5.3 Limitations Of The Study

One of the major limitations is that the study only looks at the level of stress, the stressors, and the stress responses. It cannot be denied that this linkage of stressors and responses is not

complete as the mediating processes through which Assistant Registrars react to the sources of stress are not focussed. As this study is under the umbrella of Program B of the Master of Education, and the requirements of the Program do not anticipate such indepth study; and also due to the constraints of time and resources, the mediating processes are not to be examined.

To obtain a full understanding of a worker's stress, it is necessary to look at man in his totality. It is artificial to study stress in isolation from the rest of his working life as well as his life outside work. The working man cannot be completely separated from the home man. Moreover, it would have been a more thorough study if the various traits or makeup of the person be included in the study of stress. The total picture has to include the positive as well as the negative outcome. Eustress has not been included in the study.

Another limitations of the study is that of the approach used, that is, a survey research of the respondents through the use of questionnaire. It is unfortunate that this is the approach of most studies using cross-sectional designs. Stress is a dynamic process that changes over time and across situations. Therefore, a longitudinal process-oriented approach studying how workers cope in specific stressful situations as they unfold over time is preferred. The process shows the actual interchange between the person and the environment and also the person's responses over time to the stress experienced. As time is of essence for researches under Program B, it is therefore not possible for this study to use a longitudinal process-orientation.

5.4 Recommendations For Future Studies

Since the respondents of this study are restricted to just those administrators working in University of Malaya, it is suggested that future research includes samples from other universities. Only in this way can the study be generalisable to the administrators at large. Such studies can also make comparisons among the various local universities so as to identify the cultural, structural and other differences between the universities that bring about the differences in occupational stress, stressors and stress responses.

It is also suggested that other methods of research be employed to study occupational stress of the university administrators. All known studies on stress are based mainly on the survey method while a small minority on the survey and interview methods of data collection. It may be time to use other research methods such as ethnography or even experimental studies to explore occupational stress.

All the stress studies known to the writer is on distress rather than eustress. All forms of measuring instruments have been designed for distress but not on eustress. Thus while it is good to look at the "daily hassles" which produce negative outcome of stress, it is time to look at the "daily uplifts" which produce the positive stress outcomes. Eustress is believed to have as much influence as distress. It is hoped that future research will address more on the positive stressors such as events producing a state of challenge together with disruptive pleasure. Some of the examples can be seen in a complimentary remark from work colleagues, an important project given

specially to an administrator, an inbasket free from unnecessary and troublesome paperwork, or a smile from a higher officer.

Research on occupational stress has always focussed on the organizationally valued outcomes such as job satisfaction, absenteeism, turnover, and performance. It is time to focuss on other relevant outcomes of stressful experience such as follows:

- Do creativity and innovativeness of Assistant Registrars suffer as a result of role overload and underutilization of skills?
- What are some of the consequences of stress due to experience of discrimination and failure to cope with an abrasive supervisory officer?
- How do stress-performance relationships change over time during an administrator's career and life?

The need for longitudinal studies as many moderating influences such as social support, social skills and coping effectiveness change over time. There is a need for knowledge on how Assistant Registrars change when they are unable to change the conditions of their jobs and must learn to live with a job that is either too demanding or not demanding enough. Longitudinal studies also allow research to go into identifying issues such as the nature of relationship between work stress and intellectual functioning.

A new direction for a more complete study on the occupational stress of Assistant Registrars is by looking at their various traits or makeup. Very often stress is very much dependent on the personal traits of these individuals. What is one man's meat is another man's poison. Future

studies can address issues like what kind of personality takes what kind of elements as stressors. Such studies may come with answers like what type of person is best employed for administrative work to take the type of stress commonly associated with administrators.

It is suggested that the extraorganizational factors and other aspects of the work life be examined in the future research of the occupational stress of Assistant Registrars. It is suggested that future research look at the Assistant Registrar as a person as it is artificial to study stress in isolation from the rest of his working life as well as his life outside work. The working man and the home man is one and the same person and cannot be completely separated. A good parting with the wife or a heated argument with one's spouse is believed to have some influence on occupational eustress or distress.

Lastly to do a more comprehensive research on occupational stress, one has to include the whole picture of organizational stressors, extraorganizational stressors, the traits or personalities of the individuals as well as the "personality" of the organization. It is believed that different organizations have different "personalities". Matteson and Ivancevich (1982) have identified organizations as either type A or type B in personality. While one administrator may be extremely uncomfortable in one setup, he may find it less stressful in another organization with a different setup. Thus, it is suggested that a stress study be all encompassing and comprehensive so as to get the true overall picture of occupational stress, not fragmented pieces of the picture.