CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This study attempts to identify the various occupational stressors of Principal Assistant Registrars and Assistant Registrars of the University of Malaya. The study also aims to assess their stress level and their stress response.

Comparisons are made to see whether there are any differences between or among the following groups in terms of the level of stress, the stressors, and the stress responses:

(1)   Principal Assistant Registrars and Assistant Registrars,

(2)   administrators in central and non-central administration,

(3)   administrators with less than ten years, with ten to nineteen years and with more than nineteen years of service and,

(4)   administrators with less than six staff, with six to fifteen staff and with more than fifteen staff to control.

3.1 The Respondents

Principal Assistant Registrars and Assistant Registrars of the University of Malaya on permanent employment who were serving the university at the point of study were chosen for this study. Therefore Assistant Registrars who were on either study leave or no pay leave for long periods were excluded from the study. The two administrators who were doing counseling and were not fully involved in administration of the university were also excluded from the study. Altogether sixty-four administrators (twelve Principal Assistant Registrars and fifty-three Assistant Registrars) were chosen for this study. Responses were received from sixty-one administrators with the breakdown shown in Table 3.1.

TABLE 3.1

RESPONDENTS ACCORDING TO JOB POSITIONS

job position	freq.	%
Principal Assistant Registrar	11	18
Assistant Registrar	50	82
Total	61	100

Eleven out of twelve Principal Assistant Registrars (91.7%) and fifty out of fifty-three Assistant Registrars (94.3 %) responded. The high rate of response was probably due to the fact that the completed questionnaires were collected personally rather than by mail.

TABLE 3.2

JOB LOCATION OF RESPONDENTS

Placement	freq.	%
central administration	39	64
non-central	22	36
Total	61	100

Table 3.2 shows that 64 % of the respondents are from central administration while 36 % are not. Table 3.3 indicates the area of responsibility of the respondents.

TABLE 3.3

MAIN AREAS OF RESPONSIBILITY OF RESPONDENTS

responsibility	freq.	%
faculty/centre/department	18	29.5
human resource	14	23.0
development & maintenance	3	4.9
academic administration	8	13.1
student affairs	4	6.6
public relations	2	3.3
general administration	4	6.6
others	5	8.2
no response	3	4.9
total	61	100.0

Table 3.4 shows that 27.9 % of the respondents have less than ten years of service. This group of respondents being the junior group of administrators consists of only Assistant Registrars. That with ten to nineteen years of service made up 50.8 % and consists of both the Assistant Registrars and Principal Assistant Registrars. Those with more than twenty years of service made up 21.3 % and are mainly Principal Assistant Registrars. It can be concluded from Table 3.4 that the majority of the respondents have long service in the university as 72.1% have been in the service for ten years or more.

TABLE 3.4

LENGTH OF SERVICE OF RESPONDENTS

service	freq.	%
less than 10 years	17	27.9
10 to less than 20 years	31	50.8
more than 20 years	13	21.3
total	61	100.0

TABLE 3.5

NUMBER OF STAFF ASSIGNED TO THE RESPONDENTS

number of staff	freq.	%
less than 6	28	45.9
6 to less than 15	18	29.7
more than 15	15	24.4
total	61	100.0

Table 3.5 shows that 45.5 % of the respondents have less than six staff under their control; 29.7 % have six to less than fifteen staff while 24.4% have more than fifteen staff under their control. The last group has an enormous responsibility for people in their respective department.

3.2 The Measuring Instrument

The measuring instrument is in the form of a questionnaire. The stress instrument as used by Matteson and Ivancevich (1982) is selected for this study. The instrument meets the requirement of the study that seeks to identify the stressors, the stress level as well as the stress response.

The three sections in the questionnaire have a total of ninety-nine items. Section 1 consists of five items on the biodata of the respondents. Questions asked in this section include the job title of the respondents, their placement, their main area of responsibility, the length of service with the university as well as the total number of staff working for them.

Section 2 is the Stress Diagnostic Survey used by Matteson and Ivancevich (1982) for identifying the level of stress caused by the occupational stressors. This measuring instrument is divided into three main parts: (1) organizational stressors, (2) group stressors, and (3) job and career stressors.

The first part measures the following organizational stressors:

administrative policies (questions 6, 11 and 16),

structure, (questions 7, 12 and 17),

change (questions 8, 13 and 18),

territory (questions 9, 14 and 19), and

leadership (questions 10, 15 and 20).

The second part measures the following group stressors:

norm pressures (questions 21, 24 and 32),

lack of group cohesiveness (questions 22, 25 and 28), and

inadequate group support (questions 23, 26 and 29).

The third part measures job and career stressors. The following job stressors are measured:

role conflict (questions 30, 38 and 46),

role ambiguity (questions 31, 39 and 47),

work overload (questions 32, 40 and 48),

work underload (questions 33, 41 and 49),

responsibility for people (questions 34, 42, and 50),

time pressure (questions 35, 43 and 51) and

working conditions (questions 36, 44, and 52).

Career stressors are measured in questions 37, 45 and 53 on career development.

Respondents were asked to circle the stress condition they experience on a seven-point rating scale for questions 6 to 53. As stress results from a totally subjective cognitive appraisal of perceived coping incapacity, self-rating scales become potentially valid methods of measuring stress. The seven scales are:

1 if the condition is never a source of stress.

2 is the condition is rarely a source of stress.

3 is the condition is occasionally a source of stress.

4 is the condition is sometimes a source of stress.

5 is the condition is often a source of stress.

6 is the condition is usually a source of stress.

7 is the condition is always a source of stress.

Question 54 is added to Section 2 to give an overall assessment of the stress level. For question 54, respondents were provided with a five-point scale of no stress, low stress, moderate stress, high stress, and extreme stress.

Section 3 measures the stress response. The first part consisting of 15 questions measures the cognitive stress response. The second part also consisting of 15 questions is on the physical stress response. The third part is the behavioural stress response and it also has 15 questions. Respondents are asked to circle the stress condition they experience on a five-point rating scale for Section 3. The five points on the cognitive stress response are:

5 = I frequently have these thoughts.

4 = I often have these thoughts.

3 = I sometimes have these thoughts.

2 = I occasionally have these thoughts.

1 = I rarely or never have these thoughts.

For the physical stress response and the behaviour stress response, the five-point rating scale are as follows:

5 = Frequently has happened.

4 = Often has happened.

3 = Sometimes happens.

2 = Occasionally has happened.

1 = Rarely or never has happened.

3.3 The Form, Content And Language Of The Questionnaire

The standard of English language among the administrators is high as a fair amount of the administrative work (both written and oral) is carried out in the English language and therefore understanding of the English language to do the job is almost an essential requirement. To confirm on the language and content of the questionnaire as well as the suitability and coverage of the questions,

opinions were sought from the Head of the Counseling Unit, a Principal Assistant Registrar, and an Assistant Registrar of the University of Malaya.

All the three felt that translation into Bahasa Malaysia is not necessary for understanding of the questionnaire. They also felt that the stressors of administrators are well covered by the questions in Section 1. Arising from their suggestions, several minor changes were made to adapt the questions to suit the university setting. The word "organization" in the original instrument is changed to "university" in questions 8, 17, 25, and 37. The word "supervisor" in the original questionnaire is changed to "immediate officer" in questions 10, 15, and 20. It was felt that "immediate officer" is more suitable to be used in the university context. For question 11, the word "reports" is changed to "administrative papers" as it was felt that the word "reports" is rather limiting and is not commonly used in the university circle. The word "clout" in question 25 is changed to "influence" to facilitate better understanding of the word as it was felt that "clout" is not commonly used and may cause misunderstanding of the word.

Generally, the comments received about the instruments, especially on the form, content, and language used, showed that the questionnaire is clearly understood and not ambiguous and is suitable in the University of Malaya's context.

To further confirm this, the instruments were then pilot tested on the seven temporary Assistant Registrars who were excluded from the list of respondents. The questionnaires were given to them in

their office. They were asked to fill in the questionnaires as well as to note down any difficulties or comments they had regarding the questionnaires. The completed questionnaires were then collected after one week. They had no problems in understanding and answering the questionnaires. Only one of them was unclear of the word "standstill" in question 45 which states "I am at a standstill in my career." To rectify this, the word "stagnant" was added to explain "standstill". The pilot test showed that the administrators had no difficulty understanding the questionnaire.

3.4 The Scoring Of The Instrument

The score for Section 2 is obtained by summing the responses of the three items that measure a particular stressor and dividing the sum total by 3 to get the mean value of each stressor. Thus the mean value of all stressors are done in the following way:

<u>Organizational Stressors</u>

a. Administrative policies

Add items 6, 11 and 16; and divide by 3 to get mean value.

Structure

Add items 7, 12 and 17; and divide by 3 to get mean value.

c. Change

Add items 8, 13 and 18; and divide by 3 to get mean value.

d. Territory

   Add items 9, 14 and 19; and divide by 3 to get mean value.

e. Leadership

   Add items 10, 15 and 20; and divide by 3 to get mean value.

Group Stressors

f. Norm pressures

   Add items 21, 24 and 27; and divide by 3 to get mean value.

g. Lack of group cohesiveness

   Add items 22, 25 and 28; and divide by 3 to get mean value.

h. Inadequate group support

   Add items 23, 26 and 29; and divide by 3 to get mean value.

Job Stressors

I. Role conflict

   Add items 30, 38 and 46; and divide by 3 to get mean value.

j. Role ambiguity

   Add items 31, 39 and 47; and divide by 3 to get mean value.

k. Work overload

   Add items 32, 40 and 48; and divide by 3 to get mean value.

l. Work underload

   Add items 33, 41 and 49; and divide by 3 to get mean value.

m. Responsibility for people

Add items 34, 42 and 50; and divide by 3 to get mean value.

n. Time pressure

Add items 35, 43 and 51; and divide by 3 to get mean value.

o. Working conditions

Add items 36, 44, and 52; and divide by 3 to get mean value.

Career Stressors

p.   Career development

Add items 37, 45 and 53; and divide by 3 to get mean value.

The mean value ranges from the value of 1 to 7; with 1 as the minimum mean value and 7 as the maximum value. The following mean values indicate the various stress zones:

1 , 2 - low stress zone.

3 , 4 - moderate stress zone.

5   - high stress zone.

6 , 7 - dangerous stress zone.

The scoring for Section 3 is done by adding the number circled for each category to get the total. Thus there are three total scores, one for the cognitive stress response, one for the physical stress response and one for the behavioural stress response. The score for the cognitive stress response is obtained by adding the number circled for questions 55 to 69; the score for physical stress response is obtained by adding the number circled for questions 70 to 84 and the score for the behavioural stress response is

obtained by adding the number circled for questions 85 to 99. The total score for each of the categories is as follows:

Cognitive stress response scores

52 - 75 = high cognitive stress response

28 - 51 = moderate cognitive stress response

15 - 27 = low cognitive stress response

Physical stress response scores

49 - 75 = high physical stress response

29 - 48 = moderate physical stress response

15 - 28 = low physical stress response

Behavior stress response scores

53 - 75 = high behavior stress response

30 - 52 = moderate behavior stress response

15 - 29 = low behavior stress response.

3.5 Data Collection

The study employed the survey method of data collection. It was felt that the survey method suited the present status of the study. The cover letter explaining the purpose of the research and the

questionnaire were given to the respondents at their place of work. The respondents were given one week to complete the questionnaires and the questionnaires were collected personally.

3.6 Data Analysis

The data is analysed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics such as frequency counts and percentages are employed for the major part of this study.

A frequency table with frequency counts and percentages is used to display the level of stress experienced by the administrators. The stressors for the two groups are shown by simple frequency tables. These stressors are also ranked according to the intensity of their occurrence to determine the rank of the influence of these stressors. The stress responses are also shown by simple frequency tables. The stress responses are ranked according to their mean values. Lastly the differences in terms of the level of stress, the stressors, the stress responses for the various groups are tested using the t-tests or oneway analysis of variance to see whether there is any significant difference between or among the groups. Cross tabulations are also used to see the relationship of these differences.