

Chapter 3

Research Methodology

3.1 Research Instrument

Respondents were required to respond to questionnaire containing the measurement for job characteristics, organisational climate, stress symptoms and personal biodata. The instrument used for measuring job characteristics was adapted from Marshall & Cooper (1979). The number of items for measurement of job characteristics was reduced from the original 25 items to 20 items.

Organisational climate was measured using the instrument developed by Litwin and Stringer (1968) and subsequently adapted by Thomas (1985) in Singapore. It contains 50 items describing various aspect of the work environment. They were divided into 9 'a priori' dimension defined by Litwin and Stringer (Table 3.1).

Table 3.1 : The 'A Priori' Dimension of the Items in the Questionnaire

Item	Dimension
1 –8	Structure
9-15	Responsibility
16-21	Reward
22-26	Risk
27-31	Warmth
32-36	Support
37-42	Standards
43-46	Conflict
47-50	Identity

Respondents rate each item in the questionnaire on a 5 point Likert Scale from Strongly Disagree to Strongly Agree. Half of the item are reversed score. These items are 1, 3, 5, 10, 11, 12, 13, 16, 17, 18, 23, 25, 26, 27, 28,

31, 33, 35, 36, 37, 38, 44, 45, 47 and 48. Thus high score in each dimension indicated a negative perception of the organisation.

The General Physical Health Question was adapted from the research by Thomas (1985). The respondents were asked to mark the frequency of the 20 symptoms of ill health which they had experienced during the last 3 months.

The final sector of the questionnaire consists of demographic characteristics of the respondent, designed for the purpose of this study. It also includes items which were found to be related to job stress.

3.2 Sample

This study is undertaken in a local financial institution incorporated in 1965. The respondents are employees of the bank. However only employees from the Head Office and Klang Valley branches are included in this study. Respondents were randomly selected. Questionnaires were given to 150 employees and 137 was returned.

3.3 Data Collection Procedures

Self administrated questionnaires were used in this study. Respondents were requested to state their opinions on all statements in the questionnaires based on a 5 point Likert Scale. The questionnaires consisted of 4 categories as follows:

- Section A : Job Characteristics
- Section B : Organisational Climate
- Section C : General Physical Health Questions
- Section D : Personal Profile of Respondents

The questionnaires were administered to respondents at their workstations so that they could still attend to their work. Respondents were reminded to return the questionnaires in one week's time from date of distribution.

3.4 Data Analysis

Statistical analysis of the data from the survey was prepared using the Statistical Package for Social Sciences (SPSS). In the first part of the analysis, frequency distribution was used to provide a summary of the general demographic characteristics and major stress symptoms by respondent.

Subsequently, the mean score was applied to determine the importance of job characteristics and organisational climate items as causes of job stress.

Principle component analysis with Varimax rotations were employed to condense 20 statements on job characteristics and 50 statements on organisational climate into meaningful factors. Only eigenvalue (latent roots) of one and above were retained for further statistical analysis.

The Cronbach's coefficient alpha is employed to test the reliability of the General Physical Health Questions. Cronbach's coefficient alpha is the mean reliability for all possible ways of splitting a set of items in half. Nunnally's Guideline (Davis & Cosenza, 1988) was used on on the necessary value of alpha of a scale, depending on its intended usage as follows:

Table 3.2: The Value of the Alpha and Its Intended Usage

Alpha	Usage
0.5 to 0.6	Exploratory research
0.8	Basic research
> 0.9	Applied research where important decision are to be made based on the specific test score.

In the present study, which is exploratory in nature, a minimum alpha of 0.5 can be adopted.

Regression analysis was conducted to find the linear relationship of stressor as the major cause of job stress. The General Physical Condition is used as the dependent variable and the stress factors as the independent variable. A stepwise regression was also used to investigate the respective importance of these factors in shaping the distribution of the job stress.

T-test was used to observe if there were significant group difference between job characteristics and organisational climate stressors with selected demographic subgroup such as gender and marital status.

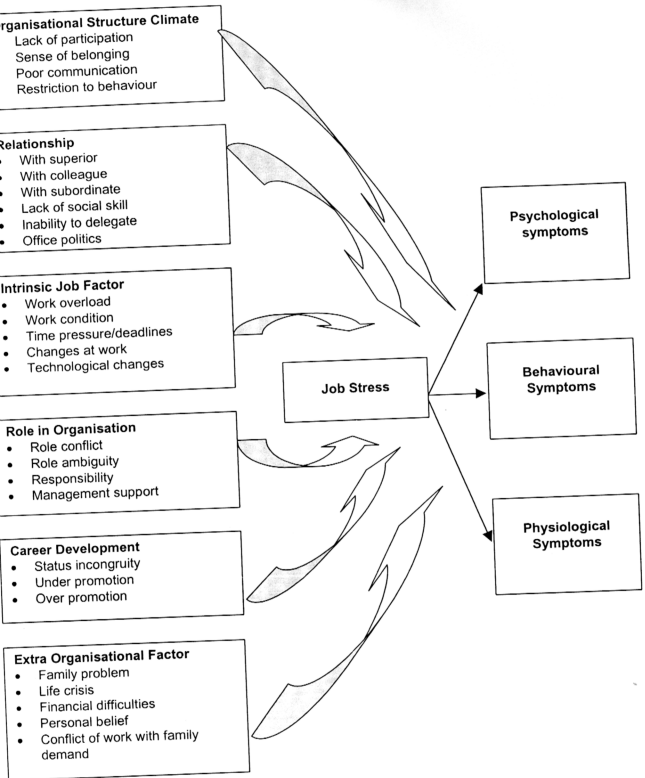
The T-test test hypothesis that the mean score for two sample/group (e.g. gender) or some interval or ratio scaled variables differed from each other. It assumes that the two groups are normally distributed and that their variable is same (homoscedasticity).

In interpreting printout from the SPSS analysis, if the observed significance level of the F-test is small (< 0.05), the separate variance T-test for means is used. Otherwise the pooled variable estimate is used.

3.5 Research Design

This study was based on a simplified research design which was adapted from Marshall & Cooper's Job Stress Research Model (Figure 3.1). The study was to uncover characteristics such as organisational climate and structure, relationship, intrinsic job factors, role in the organisation, career development and extra-organisational factors which cause stress to manager and executives at work. The personality factors were not included in this study as it requires further statistical input.

Figure 3.1: Job Stress Model



Source : Adapted from Marshall, J & Cooper, C.L. (1979, Executive Under Stress : A Psychological Study, New York: Praeger