

CHAPTER 3

RESEARCH METHODOLOGY

This chapter describes the research methodology of the study. This includes the research hypotheses, selection of the measures, sampling design, data collection procedure and data analysis techniques.

I. Research Model and Hypotheses

The relationship between overall job satisfaction and the following variables are studied here:

- i. **Economic factors:** pay and pay satisfaction
- ii. **Non-economic factors:** satisfaction with supervisor and trust in top management

The literature review highlighted that there is a positive correlation between the individual economic and non-economic factors studied and overall job satisfaction. Hence, it would be reasonable to propose that these factors all contribute to a certain extent to overall job satisfaction.

The literature review also highlighted that both the economic factors, pay and pay satisfaction, are positively correlated. Hence, this relationship will also be tested and confirmed in this paper.

The research model can be visualized as below.

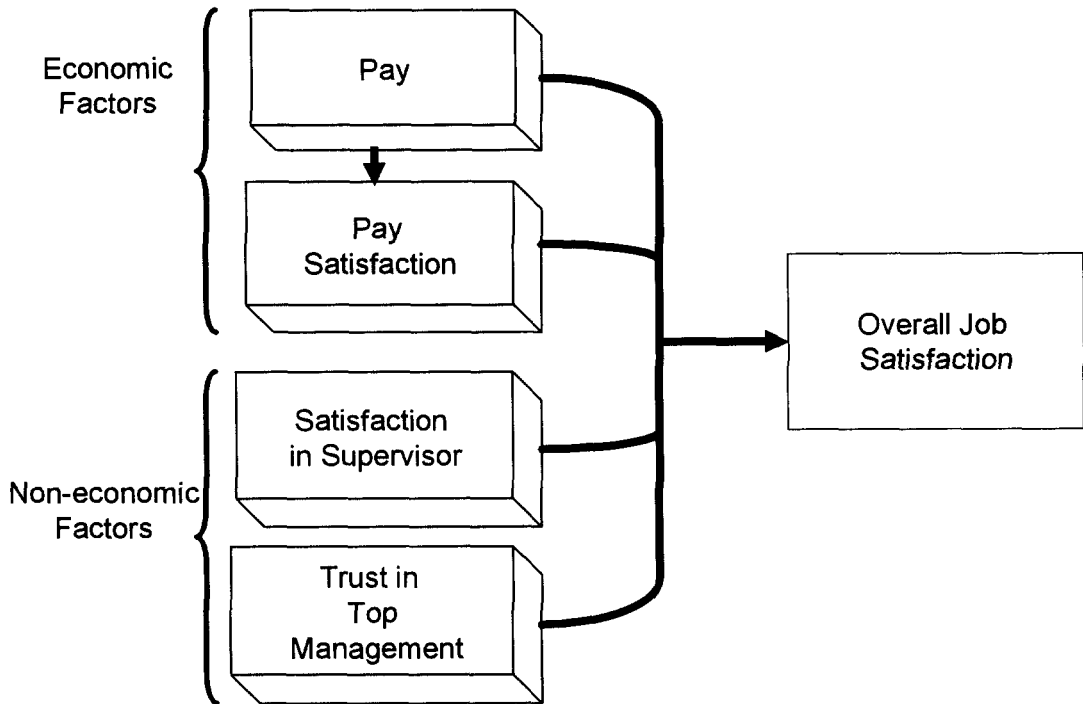


Figure 3.1
Research Model

Accordingly, the hypotheses are:

Hypothesis 1: Pay is positively related to overall job satisfaction

Hypothesis 2: Pay is positively related to pay satisfaction

Hypothesis 3: Pay satisfaction is positively related to overall job satisfaction

Hypothesis 4: Individuals who are satisfied with their supervisors are more satisfied with their jobs

Hypothesis 5: Individuals who trust their top management leadership are more satisfied with their jobs

II. Selection of Measures

This section explains the measures used for the variables being studied.

i. Pay

The demographic factor monthly pay was used to measure pay.

ii. Pay satisfaction

H. G. Heneman and Schwab (1985) hypothesized that pay satisfaction comprised four facets (pay level, pay raises, benefits and structure & administration). This measure consisting of 18 items were used to measure pay satisfaction.

iii. Satisfaction with Supervisor

The Satisfaction with My Supervisor Scale (SWMSS) was adapted to measure satisfaction with supervisor. According to Scarpello & Vandenberg (1987), the SWMSS exhibits convergent, discriminant, predictive and content validities.

iv. Trust in top management

This measure was adapted from Ellis and Zallaback (2001) who measured trust in top management from the communication perspective.

v. Overall Job Satisfaction

The Brayfield-Rothe job satisfaction index consisting of 18 items were used to measure overall job satisfaction. This approach to measure overall job satisfaction was used rather than a single item job satisfaction measure as evidence points toward an overestimation of job satisfaction when using single item job satisfaction measures (Kam, 2002).

Tale 3.1 in the following page provides a summary of the constructs and definitions of the constructs used in this study.

Table 3.1

Definition of Constructs

Construct	Constitutive Definition	Operational Definition
Pay	Salary received by respondents for work and services rendered.	The response to question 60 on the questionnaire
Pay satisfaction	Satisfaction with pay level, raises, benefits and structure and administration of pay.	The total score to questions 1 to 16 on the questionnaire
Satisfaction with supervisor	Satisfaction with the technical, human relations and administrative skills of their supervisor	The total score to questions 17 to 34 on the questionnaire
Trust in top management	Employee's faith in top management build through effective communication by top management	The total score to questions 35 to 40 on the questionnaire
Overall Job satisfaction	A combination of the person's feeling towards the different facets of job satisfaction.	The total score to questions 41 to 58 on the questionnaire

III. Sampling Design

The sampling strategy used is convenience sampling which involves the selection of sample members based on easy availability and accessibility. Information obtained from convenience sample could

still provide some fairly significant insights, and even could represent a useful source of data in exploratory research (Passmore & Baker, 2005).

From the population of Malaysian professionals, the sample selected were working professionals enrolled as part-time MBA students in a large university in Kuala Lumpur.

IV. Data Collection Procedure

Primary data was collected using self administered survey questionnaires. A combination of nominal, ordinal scale, attitude rating scales and categorical data was adopted for the questionnaire design (refer to Appendix 2 for the questionnaire).

Pre-testing with a sample of 20 users was done to ensure the questionnaire was user-friendly and could be understood. A few respondents were also timed to determine the average length of time taken to complete the questionnaire. From the feedback received, two questions were dropped from the questionnaire as they were considered confusing and 10 minutes was the average time taken to complete the questionnaire.

A total of 160 questionnaire forms were randomly distributed to the part-time students. To ensure high response rate, a class representative was appointed to collect the questionnaires before each class was over. As a result, 136 questionnaires were returned providing a response rate of 85%.

The survey questionnaire was divided into five parts. They were:

Part 1 was intended to find out pay satisfaction at their workplace.

The questionnaire uses the Likert attitude rating scale method. There were eighteen questions to test respondents in this area, and two questions were removed after the pre-testing phase.

Part 2 is intended to collect the satisfaction of respondents towards their supervisor. The questionnaire uses the Likert attitude rating scale method. There were eighteen questions to test respondents in this area.

Part 3 was intended to investigate the trust in top management. The questionnaire uses the Likert attitude rating scale method. There were six questions to test respondents in this area.

Part 4 was intended to find out the job satisfaction of respondents.

The questionnaire uses the Likert attitude rating scale method. There were eighteen questions to test respondents in this area.

Part 5 used dichotomous and determinant choice questions to gather demographics about the employees. Information such as the age, monthly pay, gender, education level, job classification and current tenure were gathered.

V. Data Analysis Techniques

Data analysis was done in SPSS (version 12.0) using the following techniques:

i. Data preparation

Before data can be analyzed, data preparation needs to be done. This process involved six main steps.

Firstly, **missing values** were identified in the data sheets. As there were more than 10 missing values in 4 of the collected questionnaires, these questionnaires were disregarded. The remaining questionnaires were filled completely and were used

for further analysis. Therefore, 132 questionnaires remained usable and this represents 83% of the total questionnaires distributed.

Secondly, 9 out of the 18 questions under the Brayfield-Rothe job satisfaction index consisting of 18 items were **reverse coded**.

Thirdly, the 5 point Likert scale for Part 1, 2, 3 and 4 of the questionnaires were **reduced to 3 point scales**. For Part 1 and Part 2 of the questionnaires, the following scales were grouped as follows:

- Very dissatisfied (1) and Dissatisfied (2) were coded as (1) to represent Dissatisfied
- Neither Dissatisfied nor Satisfied (3) was coded as (2) to represent Neutral
- Satisfied (4) and Very satisfied (5) were coded as (5) to represent Satisfied

For Part 3 and Part 4 of the questionnaires, the following scales were grouped as follows:

- Strongly Disagree (1) and Disagree (2) were coded as (1) to represent Disagree

- Neither Agree or Disagree (3) was coded as (2) to represent Neutral
- Agree (4) and Strongly agree (5) were coded as (5) to represent Agree

Fourthly, **demographic factors** were **dummy coded**, for example 1 to represent female and 2 to represent Male.

Monthly pay, as one of the variables studied, consisting of 6 different income ranges were combined to become 3 categories (to be consistent with the other variables which were reduced to 3 point scales). For example, Below **RM1,500** and **RM1,501 – RM3,000** were combined to represent Below RM3000 (coded as 1).

Fifthly, all the variables studied were recoded into different variables representing **total sum of each variable**.

Finally, this **total sum was recoded again** to represent a scale of 1, 2 and 3. For example, for overall job satisfaction index, which had 18 questions, the minimum total sum was $18 \times 1 = 18$ and maximum was $18 \times 3 = 54$. Therefore, the range of 18 – 27 was coded as 1, 28 – 45 as 2 and 46 – 54 as 3. This recoding

was necessary so that all variables have the same consistent scales when the data are correlated.

ii. Descriptive Statistics

Descriptive statistics is mainly used to explore questionnaire data, summarize and describe observations. In this research, descriptive statistics in the form of frequency percentages and graphs were used to obtain summary statistics of respondents including age, gender, monthly pay, job classification and current job tenure.

iii. Reliability Analysis

The reliability analysis was carried out to validate reliability of the questions that were significant to the data analyzed. From the results, questions not considered reliable will be dropped from further analysis. The model used was based on Cronbach Coefficient alpha. The acceptable Coefficient alpha according to Smith and Kendall (1969) should be equal or greater than 0.5.

iv. Correlation

Correlation may be performed between dichotomous or categorical variables or between continuous and categorical

variable. When the assumptions underlying correlation cannot be met adequately, a non-parametric alternative is Spearman's rank-order correlation (Coakes & Steed, 2003). Since the questions in the questionnaire used categorical variables with ordinal scales, in this research, a Spearman's rank-order correlation was deemed appropriate. A one-tailed test was used as the direction of the hypothesis is known.

To conclude, this chapter highlights the proven measures used to test the hypothesis developed from the literature review, describes the convenience sampling design, explains the data collection procedure of using a self-administered questionnaire and elaborates on the techniques used for data analysis in SPSS version 12.0. This practical use of this methodology will be apparent in the next chapter which touches on the research results.