

## CHAPTER V - RESEARCH METHODOLOGY

This chapter outlines the research method used in the study, encompassing, selection of measuring instruments, sampling procedures, data collection and relevant statistical analysis.

### 1. SELECTION OF MEASURING INSTRUMENTS

The key areas of this study are job satisfaction, work motivation and communication profile. Each of these constructs will be measured with specific measuring instrument.

#### 1.1 Job Satisfaction Measurement

The job satisfaction construct is measured by using the Job Descriptive Index (JDI) and Overall Job Satisfaction Index (OJS). These two measuring instruments were chosen as it has been shown by extensive research to be a reliable and valid measure of job satisfaction (Evans, 1969). He presented five different aspects of job satisfaction as follows:-

- i. job descriptive index
- ii. overall job satisfaction index

iii. goal aspiration

iv. goal attainment

v. goal importance

Smith, (1967) acknowledged five important features of a job, consisting, the work, supervision, co-workers, pay and promotion. Each of the above facets are closely related to the employees and their understanding to these facets strongly indicate the level of satisfaction. The measuring instrument used for these facets is the JDI, which is obviously an attitude scale.

The JDI consists of a number of items that are objectives, describing each facet of a job. In this regard, both positive and negative items are included too. Respondents are required to indicate one of the three responses that best represents their feelings, which is "YES", "NO" and "UNCERTAIN" to each item. The scoring scheme for each item in the JDI is, 3 points for positive (YES) responses and 0 points for negative (NO) responses. As uncertain responses are highly inclined towards dissatisfaction than satisfaction, these are given 1 point (Smith, 1967). For negative items the scores will be reversed with "YES" getting none and "NO" getting 3 points. Here again, the uncertain responses will be awarded 1 point. The mean score for each dimension varies from 0 to 3, points. A mean score between 0.00 - 1.30 shows low satisfaction, a mean score between 1.31 - 1.70 indicates neither low nor high satisfaction and a mean score between 1.71 - 3.00 shows high satisfaction.

Further, Smith (1967) found that the JDI measures have good discriminant and convergent validity, especially for the scales based on the most discriminating items. Finally, Vroom (1964) stated that JDI is an excellent scale of job satisfaction, which is well constructed for accurate measurement.

The overall JDI is measured by using the Brayfield Rothe (1951) scale. It represents a generalized affective orientation to all aspects of the job. This instrument consists of 20 statements (modified) relating to attitudes of respondents towards their job. Respondents are required to rate each statements on a Likert scale ranging from "strongly agree" to "strongly disagree". For each positive statement, a score of 5 points is given to "strongly agree", 4 points to "agree" 3 points to "undecided", 2 points to "disagree" and 1 point to "strongly disagree". The scores for negative statements are reversed, ie. 1 point to "strongly agree", 2 points to "agree", 3 points to "uncertain", 4 points to "disagree" and 5 points to "strongly disagree". Therefore, the possible range of total scores stands between 20 to 100 with "undecided" score at 60. The mean scores ranges from 1 to 5. A mean score of 1.00 - 1.50 show very low satisfaction; a mean score of 1.51 - 2.50 indicates low satisfaction; a mean score of 2.51 - 3.50 shows neither low nor high satisfaction; a mean score of 3.51 - 4.50 shows high satisfaction and mean score of 4.51 - 5.00 shows very high satisfaction. Hence, the higher mean scores for an individual the more satisfied he/she is and vice-versa.

## 1.2 Work Motivation Measurement

The work motivation is measured by using the Work Motivation Inventory (WMI) originated and developed by Abraham Maslow (1943) and later modified by various researches. The WMI is an assessment of the needs and values, which individuals consider to be important for motivation, making decisions and performing well in their work.

Every work situation is characterized by the existence of a number of needs and objects which are important for motivation and performance. Individuals within an organization are aware of these needs and objectives and they are sensitive to how well they are being met or satisfied. Lack of need satisfaction may lead to demotivation within an organization, which may translate into unrealized organizational goals. This is because, the performance of individuals is closely related to the amount of need satisfaction in their work. Indeed, the potential that a job has for providing the means for need satisfaction may be considered to be a major determinant of an individual's morale and productivity. For this reason, it is important to know what things a person values in his work, so that, his particular needs might be better matched to the potentials of a job.

The WMI is designed to assess the kinds of needs and values which individual see as important considerations for motivation and making decisions in their work. The five types of needs, evaluated in WMI are:

NEED LEVEL	NEED TYPE	NEED DESCRIPTION
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1	A	Basic Needs
2	B	Safety And Security Needs
3	C	Belonging Needs
4	D	Ego Status Needs
5	E	Actualization Needs

All the above needs are presented as, paired statements in WMI. The respondents are required to indicate which of the two alternative statements would be most characteristic of them. Some alternatives may be equally characteristic of the respondents or equally uncharacteristic. For each paired-statements, respondents will have 5 points that they may distribute between each alternatives according to their priority of importance. Thus there are six possible combinations of responses to each paired statements. Respondents are required to use only whole numbers and the total sum for each of the paired statements must be equal to 5. For

the purpose of this study, 10 paired statements covering all the five types of needs were used. Since, the WMI is based on 5 needs systems, respondents have made 10 work consideration with 20 responses and have allocated points to a given need 4 times. This means that, each need score will be based on 4 responses which the respondent has given. This procedure will give five different total scores - for each different type of need for each respondent. Each of these is representative of the strength of the given need system. The higher the score is the higher the need seem to be important in the respondent's work situation.

Therefore, factor scores may range from 0 to 5, and the score for each individual can fall in various combinations for each need system, between 0 (minimum) to 20 (maximum). Based on this, the mean scores of WMI can be interpreted as follows:-

MEAN SCORES	LEVEL OF MOTIVATION
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0.00 - 4.00	Very Low Motivation
4.10 - 8.00	Low Motivation
8.10 - 12.00	Neither Low Nor High Motivation
12.10 - 16.00	High Motivation
16.10 - 20.00	Very High Motivation

### 1.3 Communication Profile Measurement

The communication profile is measured by using the "JOHARI WINDOW", developed by Joseph Luft (a psychologist) and Harry Ingham (a psychiatrist). Respondents are required to answer 10 statements on a 5 point Likert scale. Basically, the 10 statements are to evaluate the respondent's "asking for information" profile and "giving the information" profile. The asking and giving information is very important for open communication in a dynamic teamwork. The "asking" scores and "telling" scores are added separately and its respective mean scores are evaluated. The asking and feedback responses of an individual may stand between 5 (minimum) and 25 (maximum). Based on the responses, the mean scores can be interpreted as follows:-

MEAN SCORES	COMMUNICATION PROFILE
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5.00 - 7.50	Very Low Communicator
7.51 - 12.50	Low Communicator
12.51 - 17.50	Neither Low Nor High Communicator
17.51 - 22.50	High Communicator
22.51 - 25.00	Very High Communicator

Further, a very low communicator is also called as funnel, low communicator as autocrat; neither low nor high communicator as interviewer; high communicator as compromiser and very high communicator as open communicator.

## QUESTIONNAIRE DESIGN

The primary data required for the study were collected through the use of a structured questionnaire. The questionnaire is divided into five sections as follows:-

SECTION 1 : Job Description Index

SECTION 2 : Overall Job Satisfaction Index

SECTION 3 : Work Motivation

SECTION 4 : Communication Profile

SECTION 5 : Demographic Characteristics of Respondents

Appendix 1 shows a copy of the questionnaire used in this study. Before the questionnaire is issued, it was pre-tested at random among the employees of other subsidiaries of SDG, with similar characteristics of the actual samples. Based on the pre-testing responses, necessary amendments were made to ascertain that, the refined questionnaire is clearly understood and fairly responded by the final samples of the study.

## SAMPLING DESIGN

This study focuses on the TBC employees and Non TBC employees of the following subsidiaries of SDG:-

- i. Pernas Sime Darby Trading
- ii. Sime Darby Marketing
- iii. Pernas Sime Darby Duty Free
- iv. Sime Tyres International
- v. Sime-Swede Distribution
- vi. Dunlop Malaysia Industries
- vii. Sime Rengo Packaging

The sampling frame for the TBC employees was obtained through the TBC participant's list from the SDGHRDD Department. Meanwhile, the sampling frame for the Non-TBC employees was obtained through the employees' list of the relevant subsidiaries. A non probability convenience sampling is used to distribute the questionnaire to the samples, quickly and inexpensively. This type of sampling is often used in exploratory and descriptive research where time and money are critical constraints, (Davis and Cosenza, 1993).

#### . DATA COLLECTION

The fine tuned questionnaire was administered to the samples over a two week period. It takes approximately 15-20 minutes to complete the questionnaire. Further, efforts were made to minimize the loss of questionnaire, damage to the questionnaire and poor return of the questionnaire, through the co-operation of the Human Resource Department of the relevant subsidiaries. Before the questionnaire is issued, the researcher clearly informed the respondents, the nature and purpose of the study. They were assured that all their responses would not be made known to the company and shall be used for academic purpose only. They were given a guarantee of complete anonymity. To ascertain the respondents anonymity, they were not required to write their name in the

questionnaire. Further a reply box was placed at the Human Resource Department of each subsidiaries and the respondents were requested to place their completed questionnaires in the box. All the above measures were taken to ascertain fair and balanced reply from the respondents with good response rate and without any inconvenience to them.

## 5. STATISTICAL ANALYSIS

Both the primary and secondary data of this study were analysed by using the Statistical Package for Social Sciences Program (SPSS). Before the raw data is analysed it was edited to check the completeness, eligibility and consistency. Relevant statistical analysis was done to obtain the required results.

Among the statistical analysis done were:-

- i. frequency analysis
- ii. reliability test
- iii. multiple regression
- iv. correlation analysis
- v. t-test