Chapter 3

RESEARCH METHODOLOGY

3.1. Introduction

In this chapter, the researcher explains the research hypotheses and methodology employed in carrying out the implied descriptive study on managing styles of the Malaysian managers as predictor of managerial performance as measured by using psychometrics assessment profile. These include discussions on the variable model used, selection of measures, sampling design, data collection procedure and the statistical techniques used to analyse the research data.

3.2: Hypotheses

The following hypotheses will be tested on managing styles as predictor to managerial performance. The study to accept alternative hypotheses when correlation is equals to $-1$ to $+1$ as shown in H1 and level of significance is equal or less than 0.05 as illustrated in H2, H3, H4, and H5.

H1: There is a correlation between managing styles and managerial performance. That is $r = -1$ to $+1$.

The literature reviews support that there was a correlation between managing styles and managerial performance like Peters and Austin (1985), Blanchard and Johnson (1987), Abdullah (1993), Howie (1997), Walmsley (1998), Williams (1999), Drucker (1999) and Annette-Wellman (2001). However, research study carried out in determining this correlation among the Malaysian managers or in
the Malaysia settings is rare. The research is one such study that leads to the hypotheses that follows.

H2: Managing styles contribute to the prediction of managerial performance towards job promotion with level of significance at equal or less than 0.05.

Garfield (1986) stated that peak performance has an internal decision to excel like job promotion. Fadiman (1989) stated succinctly as those who set goals create their own future. As rule of thumb, managers employed by companies, are given job promotion when they are performing. Therefore the literature review support hypothesis 2.

H3: Managing styles contribute to the prediction of managerial performance towards performance bonus or incentives with level of significance at equal or less than 0.05.

Performing managers get their rewards such as performance bonus or incentives from their accomplishments. It is also part of the motivation to excel program for doing a good job and tracking of managerial performance (standards) known as rewards for achieving key performance standards in most companies such as Sara Lee, Avon, Nu Skin and many direct selling organizations with marketing and profit recognition plan. Studies show that recognition and rewards is still the greatest motivator of people (cited in Hackett, 1994).

LeBoeuf’s finding (1985) revealed that the greatest management principle in the world is that, the things that get rewarded get done. This comes with the magic question of “What’s being rewarded?” is but the key of getting results.

H4: Managing styles contribute to the prediction of managerial performance towards set targets and goals achievements with level of significance at equal or less than 0.05.
Set target and goals direct the competence in planning and organizing is clearly linked with managerial performance. There is an adage that says, "The successful manager knows where he is going." This is true at the personal and organizational level.

According to Goleman (1998), the need to achieve is the single strongest competence that sets apart star from average executives. In other words, achievement orientation and strong high achievement drive chiefly in attaining goals are known hallmark of high performance managers. Therefore, Charles Garfield (1986) also articulated that attaining predetermined targets and goals are standard of excellence for managerial performance. Therefore the literature review support hypothesis 4.

H5: Managing styles contribute to the prediction of managerial performance towards potential candidate for advancement with level of significance at equal or less than 0.05.

Hall and Donnell (1979) research over 1000 managers revealed that the managers' speed of career advancement was associated with their motivation to achieve (cited in Bass, 1990). This hypothesis H5 includes potential candidate for advancement as indicator to managerial performance is supported by Hall and Donnell (1979) study that is where there is potential for career advancement, there is managerial performance.

It must be noted here that the definition of managing style itself as defined by Pigors and Myers (1973) as, "The process of formulating and carrying out of objectives through the use of human and material resources" has already confirmed the correlation between managing styles and managerial performance. However the study would confirm if affirmation that managing styles contribute to
the prediction of managerial performance in the Malaysia context. Hence, rejecting null hypothesis.

3.3: Theoretical Model

The above hypotheses development has led to the building of the theoretical model for this study as illustrated in Exhibit 3.4. This model exhibits that managing styles predict and influence the managerial performance in this study for hypotheses testing.

Exhibit 3.3: Theoretical Model

<table>
<thead>
<tr>
<th>Independent Variables:</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Styles as follows,</td>
<td>Managerial Performance towards,</td>
</tr>
<tr>
<td>&gt;Extraversion style</td>
<td>&gt;Job Promotion</td>
</tr>
<tr>
<td>&gt;Introversion style</td>
<td>&gt;Performance Bonus or</td>
</tr>
<tr>
<td>&gt;Sensing style</td>
<td>Incentives</td>
</tr>
<tr>
<td>&gt;Intuition style</td>
<td>&gt;Set Targets and Goals</td>
</tr>
<tr>
<td>&gt;Thinking style</td>
<td>Achievements</td>
</tr>
<tr>
<td>&gt;Feeling style</td>
<td>&gt;Potential Candidate</td>
</tr>
<tr>
<td>&gt;Judging style</td>
<td>For Advancement</td>
</tr>
<tr>
<td>&gt;Perceiving style</td>
<td>Predict/Influence</td>
</tr>
</tbody>
</table>

3.4: Selection of Measures

In Malaysia, managers are found in all sectors of businesses, government and non-government organizations. In this study, managers are defined a one holding a management position and performs management duties as per Follet definition.
that is, "The art of getting things done through other people" (cited in *Management In Malaysia*, 1999).

As an illustration, the researcher will use the Kuala Lumpur Stock Exchange (KLSE) listed companies (alone) which make up of 889 listed companies as of 03 October 2003 to determine the numbers of managers in Malaysia (Business, 2003, October 4. *New Straits Times*). According to Lim M.N (General Manager), Eng Kah Corporation, a public listed company has approximately 70 management staff (personal communication, October 20, 2003). The researcher then infers that each corporation is assumed to have 70 management staff, which comes out to 62,230 managers (that is 889 listed companies multiplied by 70 management staff) in Malaysian public listed business organizations as a guide for exhibiting the stencil count of Malaysian managers. However, in this study the researcher will only take 215 Malaysian managers (including executives and officers) as samples using convenient sampling technique.

There is no accurate breakdown and definition of managerial workforce and non-managerial workforce in Malaysia. This could be due to no clear-cut definition of who is a manager and who is not a manager. For example, some workforce in the Bank may hold only a senior officer designation with staff such as junior officers and clerks reporting to them. How do we categorize them? This challenge will be dwelt in a discussion in the section of sampling design.

3.5. Sampling Design

Owing to the fact that the purpose of this research study is to investigate managing styles of Malaysian managers as predictor of managerial performance as measured by the psychometric profile, the survey is limited to Malaysian managers who qualify one of these two criteria.
Firstly, he or she must be currently holding a management position. Hence, these include individuals in organizations holding the titles of chief executive officers, managing directors, managers, heads of schools, supervisors, administrators, executives and officers.

Secondly, he or she performs management duties as per Mary Parker Follet definition on management. That is, "The art of getting things done through other people" (cited in Management In Malaysia, 1999, p. 73). This is because the art of management is intrinsic in the managing styles per se. Inherent in this, the process of planning, organizing, leading and controlling the efforts of the organization’s members, and directed at an organization’s resources (human, financial, physical, and information) with the aim of achieving organizational goals in an efficient and effective manner (Griffin, 1999).

Screening the answers provided in the questionnaire based on the reasons for the two criteria mentioned above were to identify the eligible respondents for this study before further analysis was carried out. Those respondents who are non-management staff were left out in this study. A sample size of 215 respondents conveniently selected with their identification to what a manager does daily at workplace that makes them a manager was collected to provide an adequate level of confidence in the study and higher level of reliability in data analysis. In other words, if you do not do these roles, then you are not a manager and will not qualify as study subjects in this sampling design.

3.6. Data Collection Procedure

The data collection procedure section will cover the mode of conducting the study, design of the instruments and the instruments.
3.6.1. Mode Of Conducting The Study

The method used to collect the data was by field survey. Primary data was obtained by using random sampling through self-administered method. The researcher making personal visits to organizations in Klang Valley and Kuala Lumpur, including mail drop-outs and e-mailing to administer psychometrics test on management staff and collect the data, which would be used to establish the research findings. The psychometrics test was an English version structured questionnaire to identify the managing styles as predictor of managerial performance of the study subjects.

The completed questionnaires were collected between eight to ten days later except for those completed on the spot given 30 to 40 minutes collected on the same day and those who responded via e-mails and mail drop-outs varied in timings. The data collection period stretched over a period of 3 months from September, October and November 2004.

The researcher used Likert's five-scale and numerical five-scale to access and interpret the information. Hence, using the guidelines provided by the MBTI manual that is A Guide To The Development Use Of The Myers-Briggs Type Indicator (Briggs Myers et. al., 1988) and the results would be tabulated using SPSS version 10. Also, the researcher would conduct face-to-face interviews to clarify any ambiguities arose from this psychometric test when needed.
3.6.2. Research Instruments and Its Design

The design of the survey instrument used was a structured 14-page self-administered questionnaire as exhibited in Appendix I. The questionnaire consisted of three main sections.

Section one of the instrument was designed to screen and determine that the study subjects qualified for this study. In section two of the instrument using the Myers-Briggs Type Indicator Self-Scorable Form M (1998) as profile questionnaires (with some adjustments made). This is one of the latest revised versions of the MBTI form.

The researcher had made adjustments and amendments to this MBTI profile questionnaires in order to convert the scale from forced choice to using Likert 5-point numerical scale for the purpose of this academic research. All the 93 items in the instruments were adjusted and converted from its original form of forced choice phrase questions using the bi-polar model to Likert scale of 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly.

This research instrument in section two was divided into four parts. Part one and three will test on how the respondents usually feel or act. For example,

"I would prefer to finish my work before I play rather than feel that I can play anytime."
1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree
It will be scored using the Likert scale from one to five.

Part two and four are word pairs (that is psychologically opposite) which instruction as follows: "Which words in each pair appeals to you more? Think
about what the words mean, not about how they look or how they sound”. The emphasis here is on word pairs that are rather psychological opposite than logically opposite using 5-point numerical scale from most appeal to least appeal.

That is,
Most appealing  5  4  3  2  1  Least appealing

For example: Between competent or compassionate.
Competent  5  4  3  2  1  Compassionate

If the word Competent is most appealing, you choose scale 5 (or 4).
(This will also mean that the word Compassionate is least appealing to you.)

If the word Competent is least appealing, you choose scale 1 (or 2).
(This will also mean that the word Compassionate is most appealing to you.)

Thereafter, 5-point numerical scale was converted to 3-point Likert scale for statistical analysis purpose using the SPSS version 10.0. This is but required in the Myers-Briggs Type Indicator Self-Scorable Form M (1998) as profile questionnaires. What matter most here is the combine score of all the four parts in section two in order to determine the managing styles of the respondents.

The reasons that this research chooses the MBTI instrument are as follows.

- MBTI is intended for use with the general population. No specific group.
- Its language is jargon-free everyday language about experiences and behaviours familiar to nearly everyone. It is written with newspaper reading level (ages 13 to 14). This is to a certain extent minimizing the language barrier where Malaysia’s national language is Malay.
- It has been tested to minimize the effect of social desirability.
• It is the most research and tested instrument with its history of over 50 years since its inception based on Carl G. Jung's theory in 1920s.

• It has reliability, validity data and normative data (MBTI Manual, 3rd edition, 1998).

• According to David Freeman, Its error rate is up to 25 per cent. Can be lower to 5 per cent error using personal interview and self-estimate of respondents. This is far better than the existing benchmark of 33 per cent error for any psychometrics tests. (personal communication, April 22, 2002).

MBTI is an instrument for sorting people or managers into types, rather than for measuring traits. Traits are seen as causing the behaviour liken to intelligence tests (means more intelligent or less intelligence), achievement tests, aptitude tests, but MBTI is type theories characterize people according to certain qualitatively distinct categories. Rather, behaviour is the expression of type. The scores in MBTI are merely preference clarity or degree of consistency in reporting preference. It is not the degree of extreme like 'how much' of a preference one has, as in 'she is an extreme Extravert.'

In sum, the MBTI sort people and managers into 4 opposite bi-polar dichotomies or preference scales as follows.

<table>
<thead>
<tr>
<th>E = Extraversion</th>
<th>I = Introversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>S = Sensing</td>
<td>N = Intuition</td>
</tr>
<tr>
<td>T = Thinking</td>
<td>F = Feeling</td>
</tr>
<tr>
<td>J = Judging</td>
<td>P = Perceiving</td>
</tr>
</tbody>
</table>
The combination of the four preferences provide as the fullest and the richest picture of psychological types of a manager (Briggs Myers, 1993).

There are sixteen combinations of type as shown here:

**Exhibit 3.7.2: Type Table to Categorize Managing Styles**

<table>
<thead>
<tr>
<th>Sensing Types</th>
<th>Intuitive Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISTJ</td>
<td>ISFJ</td>
</tr>
<tr>
<td>ISTP</td>
<td>ISFP</td>
</tr>
<tr>
<td>ESTP</td>
<td>ESFP</td>
</tr>
<tr>
<td>ESTJ</td>
<td>ESFJ</td>
</tr>
</tbody>
</table>

**Introverts Types**

<table>
<thead>
<tr>
<th>Extraverts Types</th>
</tr>
</thead>
</table>

Keys: Combination of four styles, where E = Extraversion, I = Introversion, S = Sensing, N = Intuition, T = Thinking, F = Feeling, J = Judging and P = Perceiving.

The MBTI preferences indicate the differences in people and managers that results from the following:

- Where they prefer to focus their attention and get energy (E - I).
- The way they prefer to take information (S - I)
- The way they prefer to make decisions (T - F).
- How they orient themselves to the external world (J - P).

(Briggs Myers, 1993).

Demographic profile of respondents including gender, ethnic group, age, marital status, education level achieved, occupation and work experience respondents
made up the third section. In section three, managerial performance towards job promotion, performance bonus or incentives, set targets and goals achievements and potential candidate for advancement were investigated. All the variables in section three were measured through close-ended multiple-choice format.

The completed questionnaire was subject to a pre-test using 20 respondents. The objective of the pre-test was to test the contents and clarity of the questionnaire. The feedback was obtained and reviewed that the respondents complained that too many questions to answer in the survey instruments. As a result, the final version of the questionnaire was developed to combine two questions as one in section two.

3.7. Data Analysis Techniques

The data analysis process entailed editing, coding, carrying out checks and finally summarising the findings. The Statistical Package for Social Sciences (SPSS) version 10.0 programme was used in data analysis.

The first part of the analysis provided a summary of the general demographic characteristic of the respondents including frequency counts and percentage. Followed by the managing styles and managerial performance of the respondents were analysed using descriptive statistic methods in a similar method. This included eliciting the more preferred and less preferred managing styles of the respondents from single style to combination of two styles and then combination of four styles.

Subsequent area of interest in the analysis was the correlation between managing styles and managing performance. Further analysis into managing styles contribute to the prediction of managerial performance towards job promotion, performance bonus or incentives, set targets and goals achievements and potential candidate for advancement were investigated.
Correlation coefficients, cross-tabulation, multiple regressions were statistical tools used to examine the relationship between managing styles and managerial performance, and the extent where managing styles contribute to the prediction of managerial performance. ANOVA F-value independent t-test and Pearson Chi Square were used to test the significant level of the relationship between the various dependent and independent variables. The level of significance for F-value and t-value are set at \( p \leq 0.05 \), which translated as the likelihood that these values to happen by chance is less than 0.05 per cent that is with the level of confidence at more that 95 per cent.

In the data analysis the researcher would make the following assumptions align to the use of MBTI tool. Assumption one, preferences are assumed to be inborn. Assumption two, environment (like family, culture, education, work, etcetera) influences managerial development. Assumption three, everyone uses all preferences and develop the skills and behaviour related to them. Assumption four, using non-preferred area usually requires more energy (Self-Study Guide For MBTI Training and Accreditation Program, 1999).