

Thesis
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**Managerial Selection in Peninsular Malaysia : A Study of
Selection Techniques and Practices of Large Organizations in
the Manufacturing Sector**

By

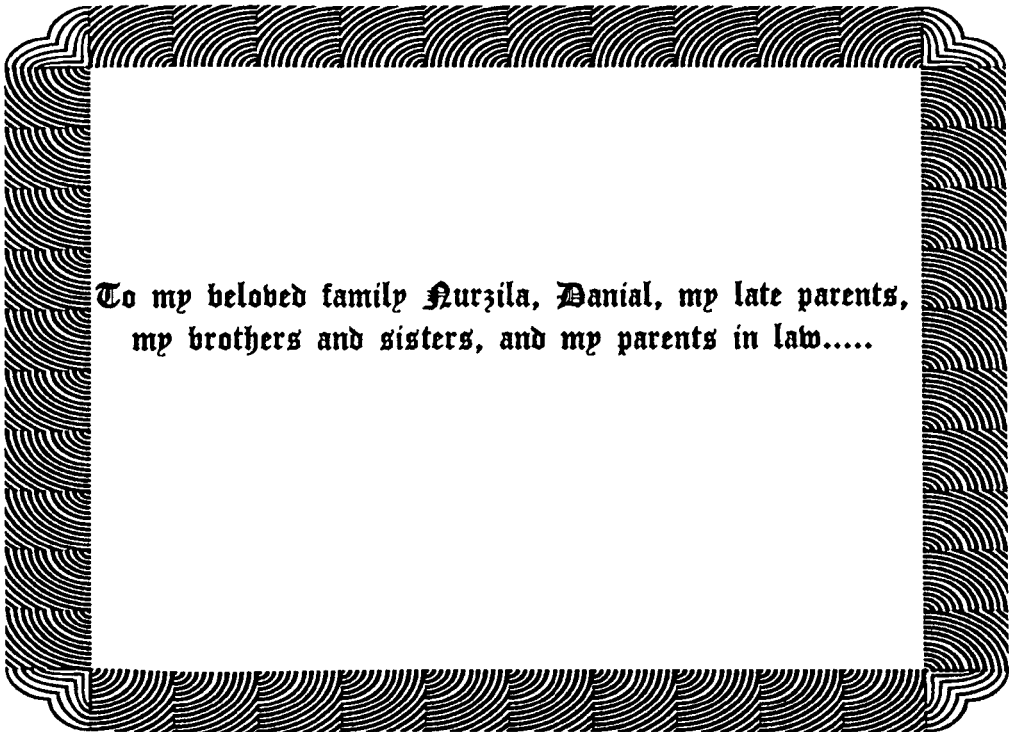
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**To my beloved family Nurzila, Danial, my late parents,
my brothers and sisters, and my parents in law.....**

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Abstract

Abstract

The importance of managerial selection process to the success of an organisation has long been acknowledged. Yet, while an increasing amount of research has been carried out in the West, very few studies of a similar nature has been undertaken in South East Asia. As a result, very little is known on the techniques and practices used to select managers of local and foreign firms operating in this region.

Focussing on firms operating in the Malaysian industry, this study attempts to bridge the knowledge gap by providing empirical evidence on the techniques and practices used to select managers of large local and foreign manufacturing firms operating in 3 areas of main industrial growth. It will also attempt to explain the reasons for employing these techniques and practices. This study also looks for any similarities or differences concerning the use of these techniques between these firms and those used in the West. Another concern of this study is to determine the factors which influenced these similarities or differences particularly between local and foreign firms.

Data collected by mail survey from 60 firms and personal interviews with 32 firms illustrates that some firms in this study employ techniques used in the West to select managers such as the application form, cvs, interviews (both structured and unstructured), psychological (both personality and cognitive) tests and the assessment centre (AC). None of these firms reported employing biodata, graphology and astrology.

The findings also revealed broad similarities between local (Malaysian) and foreign (non Malaysian) firms in terms of many of the techniques used : for example, both types of firms used the interview, application form, cvs, references, psychological (personality) test and the

Assessment Centre and did not use the biodata, graphology and astrology. Nevertheless, there were some differences : in particular, the local firms did not use psychological (cognitive) tests. This study has also identified several factors which influenced these similarities and differences. It also illustrates that both formal and informal selection techniques were used by some practitioners to select external and internal candidate for the post of managers at all or some levels.

Overall, this study supports the view that in HRM, the spread of ideas on selection techniques used to select managers is powerful although in practice, the differences in the way techniques are adopted rather than the differences in the types of techniques employed which allows for cultural influence to be most clearly felt.

Table Of Contents

Table Of Contents

	PAGE
Acknowledgements	ii
Abstract	vi
Table of Contents	viii
List of Tables	xii
List of Figures	xviii
List of Maps	xix
List of Appendices	xx
Chapter 1	Introduction
1.0	Introduction 2
1.1	Objective of the study 4
1.2	Focus of the study 5
1.3	Organisation of the study 6
Chapter 2	Literature Review : Managerial Selection Techniques And Key Factors Influencing Their Choice
2.0	Introduction 11
2.1	Defining the term selection 11
2.2	Selection process 13
Part I	
2.3	Selection techniques employed in the West to select managers 16
2.3.1	Application form and cvs or resume 18
2.3.1.1	Research literature evidence 21
2.3.2	Biodata 24
2.3.2.1	Research literature evidence 27
2.3.3	Selection Interview 29
2.3.3.1	Research literature evidence 33
2.3.4	Psychological Test (Cognitive and Personality) 43
2.3.4.1	Research literature evidence 46
2.3.5	Assessment Centre 51
2.3.5.1	Research literature evidence 55
2.3.6	References 61
2.3.6.1	Research literature evidence 64
2.3.7	Graphology (Handwriting Analysis) 67
2.3.7.1	Research literature evidence 68
2.3.8	Astrology 73
2.3.8.1	Research literature evidence 74
2.3.9	Physical or medical examination 76
2.3.9.1	Research literature evidence 76
2.4	Conclusions 78

Part II		
	2.5.0	Key factors influencing the choice of selection technique 79
	2.5.0.1	Culture 79
	2.5.0.2	Knowledge of research literature and the predictive Validities of Selection Technique obtained through formal Education or training or involvement of consultants or psychologists 92
	2.5.0.3	Presence of MNC's 95
	2.5.0.4	Existence of HRM Department 102
	2.6	Conclusion 103
Chapter 3		Malaysian Background : As a Possible Factor In The Choice of Selection Techniques Employed By Large Firms
	3.0	Introduction 108
	3.1	Background of Malaysia 108
	3.1.1	Areas and population 110
	3.1.2	Historical development 111
	3.1.3	Culture 115
	3.1.4	Government policies and programmes 118
	3.1.5	Education system 125
	3.1.5.1	The evolution of Malaysian education 127
	3.1.5.2	Management education 128
	3.1.6	Economic development and progress 138
	3.1.6.1	Manufacturing sector 139
	3.1.7	Employment 145
	3.1.8	Conclusion : Possible factor influencing the choice of selection techniques employed by firms 148
Chapter 4		Research Design And Methodology
	4.0	Introduction 152
Part I	4.1	Types of research 152
	4.2	Research design 154
Part II	4.3	Survey Research 157
	4.3.1	Method of data collection 158
	4.3.1.1	Personal interview 160
	4.3.1.2	Telephone interview 161
	4.3.1.3	Mail survey 162
	4.3.2	Method of sampling 164
	4.3.2.1	Sampling design process 165
	4.3.3	Development and administration of questionnaire 170
	4.3.3.1	Types and sources of questions 171
	4.3.3.2	Format of the questionnaire 174

	4.3.3.3	Scales of measurement	176
	4.3.3.4	Pretest of questionnaire	179
	4.3.4	Data analysis	181
Part III			
	4.4	Approaches and research design adopted in the study	182
	4.4.1	Implementation of the selected research design in the study	184
	4.4.1.1	Method of data collection chosen for the study	184
	4.4.1.2	Method of sampling chosen for the study	188
	4.4.1.2.1	Population identified in the study	188
	4.4.1.2.2	Management levels identified in the study	190
	4.4.1.2.3	Sampling frame identified in the study	191
	4.4.2	Mail survey	192
	4.4.2.1	Determination of sample size and method of selecting sample in the study	192
	4.4.2.2	Development and administration of questionnaire	193
	4.4.2.2.1	Types and sources of questions	193
	4.4.2.2.2	Format of the questionnaire	194
	4.4.2.2.3	Scales of measurement	195
	4.4.3	Personal interview survey	196
	4.4.3.1	Determination of sample size and method of selecting sample in the study	196
	4.4.3.2	Development and administration of questionnaire	196
	4.4.3.2.1	Types and sources of questions	196
	4.4.4	Mail and personal interview survey	197
	4.4.4.1	Pre - test and administration of mail and personal interview questionnaire	197
	4.4.5	Response rate	198
	4.4.6	Limitations of the study	200
	4.4.7	Analysis of data in this study	201
Chapter 5		Survey Findings And Analysis	
	5.0	Introduction	204
	5.0.1	Profile of respondents	206
Part I			
	5.1	Selection techniques	209
	5.1.1	Use of selection techniques	209
	5.1.2	Types of selection techniques	211
	5.1.3	Number of stages and types of selection techniques used in each stages	220
	5.1.4	Use of consultants	223
	5.1.5	Use of interview	226
	5.1.5.1	Types of interviews, number of interviews, interview structure, type of interviewer	226
	5.1.5.2	Forms of training for interviewers	232

	5.1.6 Use of psychological (personality and cognitive) test	232
	5.1.7 Use of references	238
Part II		
	5.2 Use of selection techniques	248
Section 1		
	5.2.1 Use of selection techniques by firm's ownership	248
	5.2.2 Types of selection techniques and stages involved by firm's ownership	252
	5.3 Similarities and differences in the use of selection techniques between different types of firms in the Malaysian Industry	258
	5.3.1 Factors which influenced similarities and differences in the use of selection techniques between different types of firms in the Malaysian Industry	266
	5.3.1.1 Factors which influenced similarities in the use of selection techniques between different types of firms	266
	5.3.1.2 Factors which influenced differences in the use of selection techniques between different types of firms	279
Section 2		
	5.4 Result of statistical test for significant differences between firms and types of selection techniques using Fisher Exact Test	285
	5.4.1 Explanations for statistically significant differences (at 5% significant level) between firms and types of selection techniques	288
	5.4.2 Explanations for trend approaching statistically significant differences (at 5% significant level) between firms and types of selection techniques	290
	5.5 Factors influencing the choice of techniques used by local and foreign firms	294
	5.6 Summary	303
Chapter 6	Overview, Conclusions And Implications Of The Study	
	6.0 Introduction	313
	6.1 Overview of the study	313
	6.2 Key findings of the study	315
	6.3 Conclusions, implications of the study and suggestions for further research	324
Bibliography		331

List Of Tables

		PAGE
Table 3.1	Growth of the manufacturing sector during IMP, 1986 - 1995 (%)	122
Table 3.2	Courses offered by private institution in Malaysia	132
Table 3.3	Employment by sectors ('000 persons)	146
Table 4.1	Summary of response rate	200
Table 5.1	Responses to the Management Selection Questionnaire by firms ownership and location	207
Table 5.2	Responses to the personal interview by firms ownership and location	207
Table 5.3	Types of selection techniques at each stage in selecting managers (%)	222
Table 5.4	Use of external consultants to select managers	224
Table 5.5	Breakdown of forms of training for interviewers and type of post under consideration	232
Table 5.6	Breakdown of types of assessors (cognitive test) and type of post under consideration	233
Table 5.7	Breakdown of forms of training for assessors (cognitive test) and type of post under consideration	234
Table 5.8	Breakdown of types of assessors (personality test) and type of post under consideration	234
Table 5.9	Breakdown of forms of training for assessors (personality test) and type of post under consideration	235
Table 6.0	Features of psychological test	236
Table 6.1	Use of references for all levels of management	239
Table 6.2	Breakdown of firms ownership and use of selection techniques	249
Table 6.3	Summary of types of managerial selection techniques by firms ownership	253
Table 6.4	Summary of stages involved in the selection of managers by firms ownership	254
Table 6.5	Types of managerial selection techniques used by Malaysian firms	256
Table 6.6	Breakdown of Malaysian firms and stages involved in selecting managers	257
Table 6.7	Types of managerial selection techniques by firms ownership (Malaysian versus non - Malaysian firms)	260
Table 6.8	Summary of selection techniques by features	268
Table 6.9	Background information of firms and personnel manager (Malaysian versus non - Malaysian firms)	272

Table 7.0	Factors (sources) influencing selection techniques used by firms (Malaysian versus non - Malaysian firms)	273
Table 7.1	Selection techniques and types of firms variables (Malaysian versus non - Malaysian firms)	287
Table 7.2 (a)	Selection techniques and Use of Consultants	298
Table 7.2 (b)	Selection techniques and Experiences of Personnel Managers	299
Table 7.2 (c)	Selection techniques and Education of Personnel Managers	300
Table 7.2 (d)	Selection techniques and HRM department (specialized recruitment and selection function)	301
Table 7.3	Summary of selection techniques used to select managers by size (%)	302
Table A 1.1	Firms using selection techniques at each stage in selecting senior managers	405
Table A 1.2	Firms using selection techniques at each stage in selecting middle managers	405
Table A 1.3	Firms using selection techniques at each stage in selecting junior managers	406
Table A 1.4	Firms using selection techniques at each stage in selecting trainees	406
Table A 2.1	Frequency and use of the interview method in the selection of senior managers	407
Table A 2.2	Frequency and use of the interview method in the selection of middle managers	408
Table A 2.3	Frequency and use of the interview method in the selection of junior managers	409
Table A 2.4	Frequency and use of the interview method in the selection of trainees	410
Table A 3.1	Breakdown of firms ownership and use of selection techniques/stages involved in selecting senior managers	411
Table A 3.2	Breakdown of firms ownership and use of selection techniques/stages involved in selecting middle managers	412
Table A 3.3	Breakdown of firms ownership and use of selection techniques/stages involved in selecting junior managers	413
Table A 3.4	Breakdown of firms ownership and use of selection techniques/stages involved in selecting trainees	414
Table A 4.1	Breakdown of firms ownership and selection techniques used to select senior managers	415
Table A 4.2	Breakdown of firms ownership and selection techniques used to select middle managers	416
Table A 4.3	Breakdown of firms ownership and selection techniques used to select junior managers	417

Table A 4.4	Breakdown of firms ownership and selection techniques used to select trainees	418
Table A 5.1	Breakdown of Malaysian firms and selection techniques used in selecting senior managers	419
Table A 5.2	Breakdown of Malaysian firms and selection techniques used in selecting middle managers	420
Table A 5.3	Breakdown of Malaysian firms and selection techniques used in selecting junior managers	421
Table A 5.4	Breakdown of Malaysian firms and selection techniques used in selecting trainees	422
Table A 6.1	Selection techniques by features (cost) : all firms	423
Table A 6.2	Selection techniques by features (degree of familiarity) : all firms	424
Table A 6.3	Selection techniques by features (ease of use)	425
Table A 6.4	Selection techniques by features (acceptability to applicants) : all firms	426
Table A 6.5	Selection techniques by features (acceptability to decision makers) : all firms	427
Table A 6.6	Selection techniques by features (accuracy in % of predicting managerial job performance) : all firms	428
Table A 7.1	Selection techniques by features (cost) : Malaysian firms	429
Table A 7.2	Selection techniques by features (degree of familiarity) : Malaysian firms	430
Table A 7.3	Selection techniques by features (ease of use) : Malaysian firms	431
Table A 7.4	Selection techniques by features (acceptability to applicants) : Malaysian firms	432
Table A 7.5	Selection techniques by features (acceptability to decision makers) : Malaysian firms	433
Table A 7.6	Selection techniques by features (Accuracy in predicting managerial job performance) : Malaysian firms	434
Table A 8.1	Selection techniques by features (cost) : non - Malaysian firms	435
Table A 8.2	Selection techniques by features (degree of familiarity) : non - Malaysian firms	436
Table A 8.3	Selection techniques by features (ease of use) : non - Malaysian firms	437
Table A 8.4	Selection techniques by features (Acceptability to applicants) : non - Malaysian firms	438
Table A 8.5	Selection techniques by features (Acceptability to decision makers) : non - Malaysian firms	439
Table A 8.6	Selection techniques by features (Accuracy in predicting managerial job performance) : non - Malaysian firms	440
Table A 9.1	Summary of selection techniques by features : Malaysian firms	441

Table A 9.2	Summary of selection techniques by features : non - Malaysian firms	442
Table B 1.1	Breakdown of size of firm and existence of specialized recruitment and selection function	443
Table B 1.2	Breakdown of size of firm and types of specialized recruitment and selection function	443
Table B 1.3	Breakdown of size of firm and no. of staff in specialized recruitment and selection function	444
Table B 2.1	Breakdown of size of firm and use of external consultant to select senior managers	444
Table B 2.2	Breakdown of size of firm and use of external consultant to select middle managers	445
Table B 2.3	Breakdown of size of firm and use of external consultant to select junior managers	445
Table B 2.4	Breakdown of size of firm and use of external consultant to select trainees	446
Table B 3.1	Breakdown of size of firm and use of selection techniques/no. of stages involved to select senior managers	446
Table B 3.2	Breakdown of size of firm and use of selection techniques/no. of stages involved to select middle managers	447
Table B 3.3	Breakdown of size of firm and use of selection techniques/no. of stages involved to select junior managers	447
Table B 3.4	Breakdown of size of firm and use of selection techniques/no. of stages involved to select trainees	448
Table B 4.1	Breakdown of size of firm and selection techniques used to select senior managers	448
Table B 4.2	Breakdown of size of firm and selection techniques used to select middle managers	449
Table B 4.3	Breakdown of size of firm and selection techniques used to select junior managers	449
Table B 4.4	Breakdown of size of firm and selection techniques used to select trainees	450
Table C 6.1	Use of consultants by types of firms	451
Table C 6.2	Backgrounds of personnel managers by types of firms	451
Table C 6.3	HRM department by Types of firms	451
Table D 6.1	Use of Open ended interviews by types of firms	452
Table D 6.2	Use of Structured interviews by types of firms	452
Table D 6.3	Use of Job specific interviews by types of firms	452
Table D 6.4	Use of One interview by types of firms	453
Table D 6.5	Use of Several interviews by types of firms	453
Table D 6.6	Use of One to one interview by types of firms	454
Table D 6.7	Use of Two/Three interviews by types of firms	454
Table D 6.8	Use of Panel interviews by types of firms	454

Table E 6.1	Managerial selection techniques by firms ownership	455
Table E 6.2	Selection techniques and use of consultants by firms ownership	456
Table E 6.3	Selection techniques and backgrounds of personnel managers (experiences - local and foreign) by firms ownership	457
Table E 6.4	Selection techniques and backgrounds of personnel managers (experiences - local) by firms ownership	458
Table E 6.5	Selection techniques and backgrounds of personnel managers (experiences - foreign) by firms ownership	459
Table E 6.6	Selection techniques and backgrounds of personnel managers (education - local) by firms ownership	460
Table E 6.7	Selection techniques and backgrounds of personnel managers (education - overseas) by firms ownership	461
Table E 6.8	Selection techniques and HRM department (specialised recruitment and selection function) by firms ownership	462
Table E 6.9 (a)	Pre - entry medical test requirement by firms ownership (for the post of Senior and Middle managers)	463
Table E 6.9 (b)	Pre - entry medical test requirement by firms ownership (for the post of Junior managers and Trainees)	464
Table F 6.1	Factors influencing the choice of selection techniques by firms ownership	465
Table F 6.2	Factors influencing the choice of selection techniques (presence of other firms) by firms ownership	465
Table G 6.1	Use of Open ended interviews between Malaysian and non Malaysian firms	466
Table G 6.2	Use of Structured interviews between Malaysian and non Malaysian firms	466
Table G 6.3	Use of Job specific interviews between Malaysian and non Malaysian firms	466
Table G 6.4	Use of One interview between Malaysian and non Malaysian firms	467
Table G 6.5	Use of Several interviews between Malaysian and non Malaysian firms	467
Table G 6.6	Use of One to one interview between Malaysian and non - Malaysian firms	468
Table G 6.7	Use of Two/Three interviews between Malaysian and non - Malaysian firms	468
Table G 6.8	Use of Panel interviews between Malaysian and non - Malaysian firms	468

Table G 6.9	Use of Consultants between Malaysian and non - Malaysian firms	469
Table G 7.0	Backgrounds of Personnel managers between Malaysian and non - Malaysian firms	469

List Of Figures

	PAGE
Figure 2.1	13
Figure 3.1	141
Figure 3.2	143
Figure 4.1	159
Figure 4.2	165
Figure 4.3	167
Figure 4.4	167
Figure 4.5 (a)	179
Figure 4.5 (b)	180
Figure 5.1(a)	210
Figure 5.1(b)	210
Figure 5.2 (a)	212
Figure 5.2 (b)	212
Figure 5.3	221
Figure 5.4	250
Figure 5.5	251
Figure 5.6	261
Figure 5.7	262
Figure 5.8	276
Figure 5.9 (a)	283
Figure 5.9 (b)	283
Figure 5.9 (c)	284
Figure 6.0	285

List Of Maps

		PAGE
Map 3.1	Malaysia	108
Map 3.2	Malaysia in South East Asia	109
Map 3.3	Major industrial estates in Peninsular Malaysia	112

List Of Appendices

	PAGE
Appendix 1.1	363
Appendix 2.1	365
Appendix 2.2(a)	368
Appendix 2.2(b)	369
Appendix 4.1	370
Appendix 4.2	371
Appendix 4.3	372
Appendix 4.4	373
Appendix 4.5	374
Appendix 4.6	398
Appendix 4.7	399
Appendix 4.8	400
Appendix 4.9	404
Appendix 5.1	470
Appendix 5.2	497
Appendix 5.3 (a)	498
Appendix 5.3 (b)	499
Appendix 5.3 (c)	500
Appendix 5.3 (d)	502
Appendix 5.4	503

Chapter 1

INTRODUCTION

1.0. Introduction

The quality of management is principally determined by the competence of the people who are appointed as managers (Vaughan and McClean, 1989). In addition, decision making by managers has a high impact on an organisation's productivity. Therefore, according to Koonz and Wehrich (1988), *"the quality of managers is one of the most important factors determining the continuing success of organisation. It necessarily follows that the selection of managers is one of the most critical steps in the entire process of managing"* (p.318). Similarly, Patrickson and Haydon (1988) argued that as a result, it is particularly important to select the best possible managers and frequently they influence and determine organisational policy. As Vaughan and Mclean (1989) point out, *"the management selection process offers one of the most direct and accessible means by which the business firm can control the quality of its management usually acknowledged to have an important bearing on the firm's performance"* (p.20). The significance of managerial selection¹ process has thus led to several studies (Kingston, 1971; Gill, 1980; Robertson and Makin, 1986; Bevan and Fryatt, 1988; Patrickson and Haydon, 1988; Vaughan and Mclean, 1989; Bastos, 1990; Harris, 1991; Shackleton and Newell, 1991; Taylor et al., 1993; Marsden, 1994).

The general conclusions of these studies, as shown at the end of this thesis in Appendix 1.1, indicated that for example in the UK, methods such as psychological tests, biodata and assessment centres (ACs) were frequently used, although the employment interview remains

¹ Term defined in Chapter 2

dominant. In New Zealand, the selection² methods adopted by firms in the study appears to be similar to those reported elsewhere, with interviews, personal history and references being the most commonly used. In Australia, most of the firms were reported to use personal biographical history, references, interviews and psychological test (personality and cognitive). However, 90% of the firms reported that they never employ assessment centres. In the US, virtually all firms used the application forms and interviews. The letters of references and the ACs are the most extensively used techniques. Physical examinations are part of the hiring process used in managerial selection. Nevertheless, the use of the psychological tests is declining.

All of the above studies, however, have been principally conducted within the context of advanced countries in the West³. Very few studies, if any, have attempted to illustrate the managerial selection techniques and practices of different types of firms operating in developing countries especially in South East Asia. There are exceptions such as Francesco's (1981) study of recruitment and selection of new employees in Hong Kong and Lawler et al. (1989, 1992) and Lawler and Atmiyanandana (1995) study of HRM practices (which includes recruitment and selection practices) of local and multinational firms in Thailand. Despite these studies, the managerial selection techniques and practices of firms operating in other South East Asian countries such as Malaysia remains unclear.

² *ibid*

³ The term West has been used by the researcher in this thesis to refer to advanced industrialist countries

1.1 Objectives of the study

The pace of development of the Malaysian economy over the past 20 years has been rapid. With these rapid, buoyant economic conditions, substantial changes might be expected to occur in the selection techniques and practices used at least for certain occupational groups, certain sectors and certain parts of the country. Hence, the objectives of this present study are three fold :

(1) to identify the selection techniques⁴ and practices employed to select managers by large local and foreign manufacturing firms operating in Malaysia particularly in areas of rapid industrial growth such as Kuala Lumpur/Selangor, Penang and Johor; it will also seek to explain the reason for employing these techniques and practices.

(2) to identify any similarities or differences concerning the managerial selection techniques employed between these firms and those used in the West.

(3) to determine the factors which influence these similarities or differences particularly between local (Malaysian) and foreign (non - Malaysian) firms.

In order to achieve these objectives, the theories, selection techniques and practices of

⁴ "Selection technique", as used in this thesis, implies formal selection technique used to select external candidate for the post of managers at all/some level(s). Term is further defined in Chapter 2.

countries in the West will be reviewed. These will then be used as a basis to compare with those adopted in Malaysia. In order to explain why there were any similarities or differences in the choice of selection techniques used by these firms, the researcher examined some important factors which influence the choice of selection techniques used generally by firms. The socio - cultural background of this country will then be considered⁵ to see whether it can influence the choice of technique used by employers. These factors will then be examined to assess the extent to which they influence any similarities or differences in the use of certain technique to select managers in this country.

1.2. Focus of the study

This study will focus on the techniques employed to select four different level of management. The classification of levels of management is based on similar studies by Kingston (1971) and Gill (1980) in the UK and Chikoti (1992) in Zambia. These studies levels which have been modified according to the Malaysian settings are defined as follows :

- **Level 1 (Senior manager) :** This is the decision making level which includes the managing director, general manager and executive director. This level is responsible for a major function and reports to a member of the board.

- **Level 2 (Middle manager) :** This is the decision making level which includes deputies and

⁵ See chapter 3

assistant to senior managers.

- Level 3 (Junior manager) : This is the execution and implementation level which includes the Head of department and sections. Managers at this level can either report directly to the senior or middle manager.
- Level 4 (Trainees) : This level includes staff receiving management training. During the process, they may hold managerial/supervisory posts in order to gain experience. Managers at this level normally report to junior managers.

The focus of the inquiry was on large local and foreign manufacturing firms in 3 areas of main industrial growth such as the Klang river valley (which includes Kuala Lumpur and Selangor), Johor and Penang.

1.3. Organisation of the study

This study is organised into 6 chapters. A uniform format for the presentation of each chapter is adopted. Each chapter commences with an introduction, then discusses the main issues and then ends with a conclusion and a summary. The main issues discussed in the six chapters are as follows :

Chapter One summarises and outlines the background, objective, scope and organisation of the study.

Chapter Two , the review of relevant research literature, is divided into two parts. Part I commences with defining the term “selection”. This is then followed by a brief description of a typical selection process. It then identifies and describes the specific managerial selection techniques employed by firms in the West particularly in UK, US, Australia, New Zealand and France. The research evidence of each of these techniques is also discussed. In part II, a summary of some of the most important factors which influence the choice of selection techniques is then presented.

Chapter Three assesses the socio - cultural and economic development of Malaysia and its likely impact on the choice of selection techniques employed by firms. It proceeds by describing the historical development of the country, its culture, Government policies and programmes and the country’s economic development and the progress it has undergone since achieving independence. A discussion on the manufacturing sector is included since this study focusses specifically on firms operating in this particular sector. It is then followed by an overview of the employment situation and the projected labour supply. This chapter then concludes with a hypothesis for the study based on this background and the literature review carried out in the previous chapter (Chapter Two).

Chapter Four comprises three parts which describe the methodology of this investigation. Part I highlights the broad approach to research followed by a brief overview of the generally used research design. Part II presents a review of the selected research strategy to guide the researcher in conducting the fieldwork. Part III describes the approaches adopted in the research and how the research design was implemented in this study. The response rate attained, limitations of the study and the statistical analysis used are also discussed.

Chapter Five which comprises of two parts, analyses the results of the survey. Part I reports the managerial selection techniques and practices employed by all firms in this study. This part also explains the reason for employing these techniques and practices. Part II consists of two sections. Section I describes the managerial selection techniques employed by all firms in terms of firm's ownership and the differences and similarities concerning the use of these techniques between different type of firms. It also identifies the factors which influence these similarities and differences. Section II attempts to indicate any statistically significant differences between local (Malaysian) and foreign (non Malaysian) firms. This section will also present an explanation as to why there were any statistical significant differences between these firms.

Chapter Six presents an overview of the thesis. It restates the assumptions of the study and compares it with the evidence obtained from the fieldwork. It then raises some of the key

findings of the study and suggestions for future research.

Chapter 2

LITERATURE REVIEW : MANAGERIAL SELECTION TECHNIQUES AND KEY FACTORS INFLUENCING THEIR CHOICE

2.0 Introduction

This chapter will be divided into two parts. Part I will identify and discuss the specific managerial selection techniques employed by firms in the West, particularly in the United Kingdom (UK), United States (US), Australia, New Zealand and France. Part II will highlight some of the most important factors which influence the choice of selection techniques.

However, before these substantive discussions begin, a comment will be made on the term “selection”. There will also be a brief description of a typical selection process. The reason for describing the stereotypical selection process is to illustrate that a number of steps or stages are usually involved, and that specific techniques can be employed in any stages of the selection process before selecting the most suitable candidate.

2.1 Defining the term selection

The term “selection” has been defined by writers in several ways. For example, Huse (1982) defines selection as the *“process of choosing the most qualified candidates”*(p.199). Similarly Putti (1987) defines selection as *“the process of choosing the best qualified person from among the potential applicants for job openings”*(p.178). Other writers such as Milkovich and Glueck (1985) define selection elaborately as *“the process by which managers choose from a pool of applicants, the person or persons who are most likely to meet the criteria of the job opening given*

the external and organizational conditions (p.286). In the same manner, Koontz and Wehrich (1988) also define selection as "choosing from among candidates, from within the organisation or from the outside, the most suitable person for the current position or for future positions"(p.318).

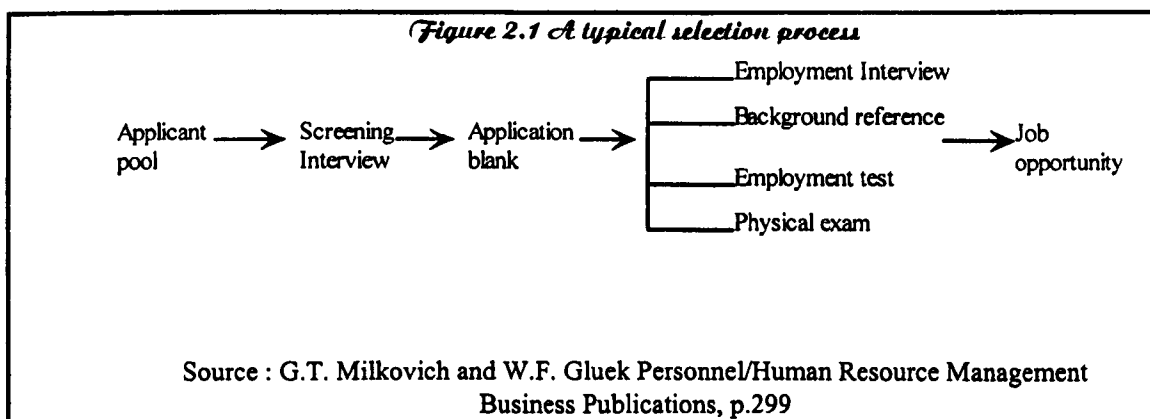
Other definitions of selection define it as a method of collecting and verifying information about applicants before extending an offer of employment. For example, Gatewood and Field (1987) define selection as a *"process of collecting and evaluating information about an individual in order to extend an offer of employment which could either be a first position for a new employee or a different position for an existing employee"(p.3)*. Nevertheless, other writers such as Ostell (1989) define selection as a *"process of predicting future job performance of applicants on the basis of matching information about them with the requirements which are believed to be related to successful performance of the job."(p.55)*. Similarly, Robertson and Iles (1988) argue that, the selection and assessment for a specific occupation such as a manager *"is fundamentally concerned with the prediction of job performance" (p.166)*.

All of the above definitions have been arranged in such a way to exemplify that the term "selection" has similar meanings and that they merely offer an expanded and not a contradicted definition. Therefore, in relation to this thesis, selection can thus be defined as *"choosing the most suitable or qualified applicant who matches a firm's criteria and has the potential for successful job performance"*. This definition indirectly implies that in order to

match these criteria and to predict an applicant's performance, specific information is needed. This will depend on the existence of certain instruments or techniques.

2.2 Selection process

A typical selection process consists of 7 steps, whereby each step in the process seeks to expand the selectors' knowledge about the applicant's background, abilities and motivation. These steps will increase the information for employers enabling them to predict the candidates potential for success and make the final selection. As shown below in figure 2.1, it includes multiple procedures to collect information about applicants. As an example, these steps might begin with an initial screening interview, completion of the application form, sitting for tests, a comprehensive interview, background investigation and/or reference checks, a physical examination, and the employer's decision regarding employment. (Robbins, 1978).



The research literature widely demonstrates a multi - stepped selection process. As stated by

Bedeian (1986), "*while smaller employers may take an informal approach to selection, larger ones typically rely on multistep procedures to eliminate unqualified job applicants*" (p.343). Bedeian suggested that the selection process might best be viewed as a series of steps through which applicants progress; candidates are screened and some are eliminated following each step. Huse (1982) also affirmed that "*the traditional managerial selection process is a series of hurdles*"(p.201). Likewise, according to Livy (1988), a selection procedure may consist of a number of steps depending on the degree of accuracy required and the complexity of the job requirements. At each step, a decision must be made as to whether a candidate should be considered further, and whether they merit progression to the next step, or need to be rejected. He also states that not every selection procedure needs to include all those steps illustrated in a typical selection process, and that these steps need not be in the order given because "*the more information one needs to have about a candidate, the more extended the procedure needs to be*" (p.108). Klatt et al. (1985) also assert that the sequences of steps in a typical selection process may vary. For example, the applicant initially may be required to fill in an application form, followed by a preliminary screening interview, employment testing, comprehensive interview, reference check and finally a physical examination. These steps are tools or techniques for collecting information designed to judge whether the applicant is suitable for a specific job. Nevertheless, whatever step a firm uses, the primary purpose of these steps is to collect and verify information about the applicant before making any decision to select the most suitable candidate (Putti, 1987).

From the above discussion, it thus appears that in any selection process, a number of hurdles, steps or stages are usually involved before any employment decision may be made. Specific and different techniques may also be used in any of these stages. For example, the most recent empirical study conducted in the West to illustrate the number of stages or steps and the types of techniques involved in selecting managers is by Bastos (1990) which indicated that selection process for a trainee's post in the UK basically involved 2 to 3 stages. It was also revealed that majority of the respondents used a 3 - stage selection process where application forms, interviews, and references or biodata were employed by all respondents¹ in the first stage. In the second stage, interviews were mostly employed, followed by a personality test, assessment center (AC)² and cognitive test. In the third stage, references were mostly employed, followed by interviews, personality test and cognitive test. Similarly, for a management post, the selection process basically involved 2 to 3 stages. The majority of the respondents also reported using a 3 - stage selection process where the application form, interviews and biodata was employed by most respondents in the first stage. In the second stage, interviews were mostly employed followed by cognitive, personality tests and AC. In the third stage, the references were mostly employed followed by interviews, personality tests and cognitive tests. Thus the research literature identified a common 2 to 3 - step process.

¹ Respondents refers to employers

² more fully discussed in the next section

PART I

2.3 Selection techniques employed in the West to select managers

A review of the available literature regarding some company practices in the West employ the following selection techniques specifically to select managers:

- Application form, curriculum vitae (cv) or resume (Kingston, 1971; Gill, 1980; Bevan and Fryatt, 1988; Patrickson and Haydon, 1988; Vaughan and McClean, 1989; Bastos, 1990; Shackleton and Newell, 1991; Taylor et al., 1993).
- Biodata (Robertson and Makin, 1986; Bastos, 1990; Shackleton and Newell, 1991).
- Interviews (Kingston, 1971; Gill, 1980; Robertson and Makin, 1986; Mackay and Torrington, 1986; Bevan and Fryatt, 1988; Patrickson and Haydon, 1988; Vaughan and McClean, 1989; Bastos, 1990; Shackleton and Newell, 1991; Taylor et al., 1993).
- References (Kingston, 1971; Robertson and Makin, 1986; Bevan and Fryatt, 1988; Patrickson and Haydon, 1988; Vaughan and McClean, 1989; Shackleton and Newell, 1991; Taylor et al., 1993; Marsden, 1994).
- Psychological tests which includes both personality and cognitive test (Kingston, 1971; Sneath et.al, 1976; Gill, 1980; Robertson and Makin, 1986; Bevan and Fryatt, 1988; Patrickson and Haydon, 1988; Vaughan and McClean, 1989; Bastos, 1990; Shackleton and

Newell, 1991; McCulloch, 1993; Taylor et al., 1993).

- Graphology or handwriting analyses (Briggs et.al., 1971; Levy, 1979; Gill, 1980; Robertson and Makin, 1986; Bevan and Fryatt, 1988; Mabey, 1989; Smith, 1991; Shackleton and Newell, 1991; Rocco, 1991; Cohen, 1993; Goss, 1994)
- Astrology (Robertson and Makin, 1986)
- Assessment centre (AC) (Gill, Ungerson and Thakur, 1973; Huse, 1982; Bridges, 1984; Robertson and Makin, 1986; Robertson and Iles, 1988; Wellin, 1988; Patrickson and Haydon, 1988; Vaughan and McClean, 1989; Shackleton and Newell, 1991; Taylor et al., 1993).
- Physical or medical examinations (Kingston, 1971; Gill, 1980; Vaughan and McClean, 1989; Marsden, 1994).

In this section, the research literature evidence on each of these selection techniques will be examined to first illustrate their usefulness and second, to indicate the extent to which they have been employed in the West for managerial selection. A study of each of these techniques' validity will also be attempted since validity is a crucial issue in a selection process. According to Patrickson and Haydon (1988), in selecting managers "*where the*

potential negative consequences, both direct and indirect, of poor selection decisions are more serious, there should be an increased reliance on the procedures which have demonstrated higher levels of predictive validity”(p.97). As Dessler (1991) points out, the term validity implies that the selection technique measures the characteristics or potential abilities it purports to measure. The predictive power of selection tools has often been expressed as validity coefficients. A validity or correlation coefficient describes a linear relationship between two measures such as scores on a predictor (for example a test) and a criterion (for example a performance appraisal); the coefficients range is from +1.00 to -1.00. The greater the number, whether positive or negative, indicate the greater the strength of the relationship between predictor and criterion (George, 1989). A score of 1.0 means perfect validity (Goss, 1994).

It should be noted that the purpose of describing each technique is not to review in detail their characteristics or features, but simply to provide a theoretical backdrop in offering an explanation as to why it was used by employers.

2.3.1. Application Form and CVs (Curriculum Vitae) /resume³

The application form is one of the most widely used techniques to select managers. It is a printed form that requests biographical and experiential information about a candidate (Huse,

³ In this section, the application form and cvs will discussed together although separate points regarding each of these techniques will be made in the research literature evidence.

1982). Robbins (1978) mentioned that, "*in general terms, the application form gives a synopsis of what the applicant has been doing during his adult life, his skill, and accomplishments*"(p.102). The application form thus provides a basis for the interview and subsequent actions in offering an appointment and in setting up personnel records (Armstrong, 1991).

A well designed application form is useful in the selection process. For example, the application form is designed to collect information in a standard format (Bevan and Fryatt, 1988). Ostell (1989) argues that because the application form is based on a standardised format, it provides comparable data for all applicants therefore simplifying the decision making process. Similarly, Torrington and Hall (1995) confirmed that information arranged in a standardised format simplifies sorting and shortlisting applications and enables interviewers to use it as a basis for their interview. A well - designed application form is also useful in testing the applicant's ability to spell, write legibly, and answer questions accurately since providing accurate information indicates one's sense of responsibility and honesty. The reason is because "*it is a popular belief that one's handwriting is a reflection of one's character*"(Putti, 1987 p. 186). Moreover, basic information obtained from the application form for interviewing purposes enables the interviewer to concentrate on obtaining deeper explanations that help to elicit character, motivation, initiative, etc. Perhaps for this reason, it was also reported by Molander and Winterton (1994) that French firms commonly requested candidates to fill in the application form in their own handwriting since a graphological analysis would be used as part of the selection process.

Apart from collecting biographical and other information about a candidate, the application form is also useful to reduce the number of applicants to a manageable short list (Molander and Winterton, 1994). It is, therefore, particularly important in the early stages of the selection process when decisions have to be made to reduce substantially the number of applicants under consideration (Anderson, 1993). Due to the application forms' usefulness, it is thus used by most firms to enable them to make a preliminary selection ensuring that all applicants are judged on the same factors (Kingston, 1971). It was also reported that majority of the firms in the UK make initial assessment of an applicant for managerial selection on the basis of the application form (Gill, 1980)

On the other hand, the curriculum vitae (cv) or resume is regarded as either a 'sales' tool or a form of persuasive communication important in creating a favourable impression that will lead to an employment interview (McDowell, 1987). Bevan and Fryatt (1988) also comment that *"the cv is often the applicants own interpretation of what represent the best projection of their qualifications and experiences"*(p.5). However, some firms give guidelines specifying the areas of information required, whilst other firms leave it to the applicants to design their own cvs; the way the cvs are constructed can supply additional information against selection criteria for the firm to use. It is an acceptable alternative to application forms for a more senior post (Torrington and Huat, 1994).

In summary, due to its usefulness in shortlisting applications and in simplifying the decision making process, the application form/cvs are extensively used in the initial assessment of a candidate for the post of a manager.

2.3.1.1. Research literature evidence

One important part of the research evidence on the usage of the application form and cvs relates to the interpretation of information from these techniques by employers. Early research by Mayfield and Carlson (1966), for example, showed that assessors varied greatly in their interpretation of applicants employment history. For instance, applicants with a long period of service with one particular firm were perceived to be stable and reliable; others perceived this as an indication of lack of drive. On the other hand, some assessors believed that applicants with a history of moving frequently between employers as an indication of possessing a wide variety of potentially valuable experiences; others perceived this to be an indicator of 'job - hopping' and lack of stability and perseverance. Other studies also demonstrated that assessors were rarely able to agree on the importance of various pieces of information about applicants. Hakel et al. (1970) discovered substantial variance in the weighting assigned by a number of assessors to factors such as educational attainment, work experience and interest/motivation. Furthermore, assessors were also subjected to biases and inconsistency.

A study on cvs by Olipant and Alexander (1982) revealed that in general, assessors rated married applicants of either sex more positively than applicants who were single. This study also demonstrated that female assessors were stricter than male assessors. In addition, a Herriot and Rothwell (1983) study on graduate selection, indicated that judgements made by looking through the application form and cvs were frequently reflected in the assessment of candidate after the interview. In this study, it was suggested that judgements of candidates made by scanning the form correlate ($r = 0.40$) with judgements made after the interview. Likewise, a study by Rasmussen (1984) who compared the influence of application forms, revealed that a good application form was always favourable for the applicants irrespective of the verbal and non - verbal content of the interview. Nevertheless, Dipboye et al.'s (1984) study reported that previewing the application form had little impact on how the interviews were conducted. However, recent research by Macan and Dipboye (1994) indicated that *"applicants were perceived as doing a better job in answering interviewer questions, displaying more sales - consistent traits and making more favourable statements, the more favourable their paper credentials"* (p.1291). Thus, information interpreted from the application form or cvs can have an influence in the positive or negative assessment of the candidate.

While the literature on the above research findings is mixed, this is not reflected in the usage of this technique by practitioners. An earlier survey by Kingston (1971) indicated that out of 179 UK firms, 74% of respondents used the application form even if cvs were provided. Gill's (1980) survey in the UK also showed that out of 335 firms, 65% make their initial

assessment of a candidate for managerial post by employing the application form, followed by the cvs (48%) and a letter of application (43%). In this survey, the requirement for an application form in standard format was found to be greater as the size of the firm increases; in the smallest firm's which have less than 100 employees, a cv or a simple letter of application is acceptable. Bevan and Fryatt's Institute Of Manpower studies /IMS (1988) study in the UK also indicated that out of 311 firms, the application form/cvs were used by almost 93% of respondents to screen applicants for managerial and professional jobs. This survey also suggests that the application form/cvs were very commonly used by UK firms as an initial filtering mechanism during recruitment. Thus, these techniques represented the first direct application of criteria to applicants, screening out applicants who did not meet a predetermined minimum level of attainment. Basto's (1990) survey in the UK also illustrated that out of 52 firms, 100% of the respondents used application forms in selecting managers. A recent survey by Shackleton and Newell (1991) also indicated that out of 73 UK and 52 French firms, application forms were used by 93.2% and 98.1% of these respondents respectively.

The extent that application forms or cvs are used in selecting managers also did not vary in New Zealand, Australia or in the US. For example, another survey by Taylor et.al (1993) in New Zealand indicated that out of 100 large firms, 97% of these respondents employed 'personal histories'. In another survey in South Australia by Patrickson and Haydon (1988), out of 500 firms, 89.5%, 91.1% and 89.5% of the respondents used written applications

(which included the completion of an application blank) to select first line supervisor, middle managers and senior executives respectively. A survey in Australia by Vaughan and McClean (1989) also indicated that out of 39 firms, 33 firms (85%) required applicants to supply biographical information. Similarly, in the US a survey by Marsden (1994) revealed that most selection efforts involved "*the distribution of forms for applicants to fill out. Applicants may then be further screened on the basis of applications or work histories*"(p. 288).

It can therefore be concluded that the application form or cvs as a technique, are widely used in the West.

2.3.2. Biodata

Another technique used to select managers is biodata. This technique represents a systematic way of using information about past events to predict future job success (Drakeley, 1989). It is also affirmed by other writers such as Hammer and Kleiman (1988) as a systematic method for assessing applicants on the basis of personal biographical history factors. Information pertaining to an applicant's personal history which can be gathered from the application form is given a mathematical weight to produce a 'score' for each individual. Livy (1988) suggested that weights applied to any of the factors have to be carefully devised according to the key criteria for success in the job. Thus, according to Storey and Sisson (1993), the biodata collected by some firms involved a highly structured series of multiple questions which appear in innocuous form and these are acquired by "*profiling the current successful*

incumbent population”(p.121). In broad terms, the idea is to model those profiles correlated with success and to exclude those profiles associated with lack of success.

The biodata technique is *“based on the premise that past activities, interests and behaviour as sampled by means of a biographical inventory are predictive of future behaviour”* (Robertson and Iles, 1988 p.169). Similarly, it has been widely and successfully employed in managerial selection based on the assumption that the best predictors of future behaviour is past behaviour. Nevertheless, careful and adequate research is necessary by an employer to prove that this technique is authentically useful as predictors of managerial success (Cascio, 1992)

This technique has also been used frequently as a pre - selection screening method for sorting systematically large numbers of applicants and producing a more reliable short list of candidates (Goss, 1994). It is designed as a filtering system in the initial or pre - selection stages of recruitment and its emergence is partly in response to the vastly increased volume of job applications; this technique is essentially recommended as a method of identifying those candidates who may be rejected rather than as a process for selection (Townley, 1992). Likewise, it is also most cost effective when used for preselection, particularly for organisations that routinely need to recruit from large labour pools (Sparrow and Hiltrop, 1994).

However, its use is not restricted to selecting candidates for entrance into the organisation but employed for other reasons in several organisations; for instance, it is employed in the financial sector to determine which workforce should have access to Management Development programmes (Townley, 1992). Another use of the biodata is that it can be extremely effective in predicting employee tenure (Lawrence et al., 1982). Wilkinson's (1997) study also indicated that biodata is a good predictor of vocational interest of individuals irrespective of their job or organisation. However, its critic points out that this technique *"could be misused so as to discriminate against individual or groups by, for example, focusing on aspects of biography beyond their control, or which reflect social prejudice"* (Goss, p.49).

Biodata instruments, were believed in the past, to need to be developed specifically for each firm. Nevertheless, Rothstein et al. (1990) have suggested that development of this technique as a generalizable instrument is possible. In spite of that, almost all biodata instruments in the past have been held in private ownership and unavailable to other firms (Taylor et al., 1993)

In conclusion, due to its versatility not only as a pre - selection screening technique, the biodata is also a valuable instrument to practitioners.

2.3.2.1. Research literature evidence

Several validity studies on the biodata technique indicated that it is among the best predictors of subsequent job performance. For example, early research by Asher (1972) demonstrated that most uses of biodata have validities of above 0.30. This was followed by Reilly and Chao (1982) whose study demonstrated that overall, biodata can have an average validity coefficient of 0.35 and 0.38 for a managerial post. Drakely et.al's (1988) study also showed that biodata can have a high predictive validity when historical data can be drawn upon and the methods used to interpret the data are free from rater bias. Meta analysis (or a study using statistical techniques that combine the findings of many published studies after correction has been made for differences and errors) by Hunter and Hunter (1984) showed that the validities of biodata range from 0.26 to 0.37. Schmitt et al (1984) also used meta analysis and demonstrated that biodata has an average validity coefficient of 0.24. Drawing on previous research, Smith and Robertson (1993) also reported that biodata has an average validity of 0.24 to 0.38.

Despite biodata's high validity as a predictor for a variety of occupational groups, it appears to have been rarely used by many practitioners. For example, in the UK, the Robertson and Makin (1986) survey indicated that there was minimal use of biodata. Only 5.8% of respondents reported using biodata and it was confined to those firms employing 500 or more employees. An analysis of informal 'write - in' comments from this survey suggested that the use of this technique was under serious consideration. Bastos's (1990) survey also shows

that out of 52 firms, 1.9% of the respondents used biodata in selecting managers. Other surveys by Shackleton and Newell (1991) also illustrated that out of 73 UK and 52 French firms, only 19.1% of UK firms and 3.8% of French firms used biodata to select managers. This is because in France, the use of biodata was restricted to large firms unlike in the UK where it was used in small and medium sized firms. It was concluded from this survey that there was an increased use of this technique over time by a greater proportion of the UK firms.

A survey by Hammer and Kleiman (1988) suggested that the biodata was rarely employed because many firms lacked the personnel, time and financial resources to utilise biodata in selection. Moreover, according to Bevan and Fryatt (1988), the immediate drawback of this technique is that a considerable amount of information needs to be collected in order to allow judgements regarding validity to be made and weightings ascribed on each item of the biographical data. Torrington and Hall (1995) also state that one of the obvious drawbacks of this procedure is the time that is involved and the sample size needed so that it is only feasible where there are many job holders in a particular type of position. Similarly, according to Makin and Robertson (1986), the items that are predictive will be unique to each job, so that large numbers of job incumbents are needed to identify the correct items. In addition, due to the possibility of decay over time, the items need to be checked perhaps every 3 years. Furthermore, two independent reviews by Asher (1972) and Reilly and Chao (1982) concluded that biodata requires constant updating and analysis to ensure its validity.

Sparrow and Hiltrop (1994) also affirmed that biodata scoring keys typically need to be re-assessed every 2 or 3 years.

In short, due to the biodatas' drawback, the use of this technique is often limited in the West to large firms or consortiums of recruiters who can pool information.

2.3.3 Selection Interview

One other instruments extensively used in the selection of managers is the employment interview. This technique, is the primary and often the sole predictor used in conjunction with the application form during the selection phase (Robertson and Makin, 1986). For a formal interview, employers generally use 3 types of interview : structured, semistructured and unstructured or open ended. These are as follows :

The structured interview is defined as *'a series of job related questions with predetermined answers that are consistently applied across all interviews for a particular job'* (Pursell et al., p.908). Milkovich and Gluek (1985) pointed out that the structured interview makes use of a standard form that has a set of predetermined questions and the interviewer notes the applicant's responses with a checkmark. This type of interview is very restrictive since there is less opportunity for the interviewer to adapt to the individual applicant and less information extracted from the applicant. As a result, applicants will not be able to elaborate

their answers (Hakel, 1982). In other words, a structured interview probes predetermined areas according to a detailed checklist (Huse, 1982). According to Pursell et al. (1980), the structured interview format reduces the subjectivity and inconsistency essential in the traditional employment interview. Weisner and Cronshaw (1988) also affirmed that recent research on employment interviews indicated that a structured interview has considerably greater predictive validity than an unstructured interview. Likewise, Baker and Spier (1990) state that the reliability and validity of an interview can be increased by using a structured interview. In addition, structured interviews can be used to obtain relevant information such as information on previous experiences (Arvey et al, 1987). Furthermore, it is rather simple, less costly and generally as valid as an assessment centre (AC) (Lowry, 1994).

The two most common types of structured interview approaches are (i) situational interviews and (ii) behavioural description interviews. The situational interview is based on the premise that an individual's expressed intentions are related to his or her behaviour (Makin and Robertson, 1986). Candidates in a situational interview are asked about their intentions as to how they would behave in a hypothetical job situation. This is obtained from 'critical incidents' identifying behaviours critical to effective performance in an initial job analysis. The expressed intentions of candidates about their behaviour are then marked by comparison with a scoring guide developed by job experts for evaluating responses (Robertson and Iles, 1988). The situational interview becomes a sample of job behaviour by concentrating on those intentions to behave in precise job situations (Makin and Robertson, 1986). On the

other hand, the development and administration of the behavioural description interview particularly the 'Patterned Behaviour Description Interview' (PBDI), follow closely the procedures chosen in the situational interviews : both are established on a comprehensive job analysis and ask only job related questions; both ask the same questions of all interviewees and have predetermined scales for scoring answers. The major difference is, rather than asking how one would respond to a situation in the future as in the situational interview, the PBDI questions ask how one has responded to them in the past (Wright et al., 1989). The PBDI is synonymous with the term 'experience - based' interview. This is because in an 'experience - based' interview, the interviewee is requested to relate how they handled situations in the past requiring skills and abilities vital for effective performance on the job (Pulakos and Schmitt, 1995). Firms that do not hire a large number of employees for the same position, as is the case in the smaller firms, usually cannot afford the development costs associated with situational interviews (Taylor et al., 1993).

Likewise, in a semi - structured interview, a set of major questions are predetermined in advance. Some follow - up questions in the areas of interest of the interviewer may also be prepared. This type of interview is more flexible than the structured approach since the interviewer has the opportunity to probe into areas that justify further investigation for different streams of applicants (Milkovich and Gluek, 1985). In other words, in a semi - structured interview, the interviewer follows an interview guide but may also ask other questions of the candidates (Koontz and Weihrich, 1988).

On the other hand, in an unstructured interview, there are no predetermined questions or prearranged sequence of topics to be discussed and "*spontaneity characterises this type of interview*"(Bedeaian, 1986 p.349). In this form of interview, there is a common topic to discuss with no pre - planned strategy (Klatt et al., 1985). Similarly, it needs little or sometimes no preparation by the interviewer. This type of interview also allows the interviewer to adapt to various situations for different kind of applicants; a skilful and a well trained interviewer is needed to avoid digressions or discontinuity during the interview (Milkovich and Gluek, 1985). In addition, although the interviewer employing an unstructured interview may have a job specification as a guide, questions posed to the applicants may be different (Beardwell and Holden, 1994)

In terms of interview structure, the form of interview can be one-to-one, sequential or panel. The one-to-one interview, involves only one interview, that is between the interviewer and interviewee. The sequential interview involves a series of interviews, with two or three interviewers. As the candidates move from one room to another, each interviewer ask questions to the applicants related to the interviewer's subject area. On the other hand, the panel interview comprises of 3 or more interviewers and has been known to consist of as many as 15 interviewers (Beardwell and Holden, 1994). The interviewers in a panel interview can include a personnel director and a representative from the department where there is vacancy, or some other person involved in the hiring process; it is similar to a press conference (Halloran, 1986).

In summary, because of the interviews' technique simplicity and versatile forms, it is commonly used to assess candidate for the post of a manager.

2.3.3.1. Research literature evidence

Research on the usage of interviews as an assessment tool have generated widespread doubt regarding interviewer validity and reliability. For example, early research by Heneman et.al (1975), Mayfield et al. (1980) and Zedeck et al. (1983) has demonstrated that interviews are neither reliable nor valid as predictors of subsequent job performance. Research by Farr (1973) and Webster (1982) also indicated that interviewers generally have made decision about an applicant within the first few minutes of an interview, and are rarely influenced by the ensuing factual information. Other research by Herriot and Rothwell (1983) also revealed that interviewers were more inclined to be influenced by negative information rather than positive information or behaviour on the part of applicant. Previous research by Carlson et al. (1971) and substantiated by Belec and Rowe (1983) also indicated that the rating of an applicant can be contaminated if he/she follows previous applicants who were rated either excellent or poor by the interviewer. This is because the interviewers have an inclination to assess applicants in relation to those made about previous applicants.

The interviewer's reliability and validity has also been questioned as illustrated in the following studies : early research by Arvey (1979) and subsequent research by Elliot (1981) also indicated that interviewers had a propensity frequently to rate male applicants higher

than female applicants although their qualifications were equal. Keenan and Logue's (1985) study also reported that female engineers were often subjected to discriminatory questioning by interviewers. Forsythe et al.'s (1985) study to determine the effect of female applicant dress on selection decisions for management decisions, revealed that masculinity of dress had a significant effect on interviewers' selection. Heilman and Stroeck (1985) also discovered in an experimental study with MBA students that physical attractiveness proved advantageous for women in non managerial (clerical) position but disadvantageous for women in managerial (management trainee) positions. However, in this study, male appearance had no effect which benefited them irrespective of the job applied. Gilmore et al.'s (1986) study of interview decisions which manipulated applicant sex, attractiveness, type of job and type of rater experimentally using resumes and interview transcripts for entry - level management trainee jobs, demonstrated that physical attractiveness had the most effect on employment decisions. In this study, professional interviews were biased in favour of female applicants and rated job applicants less leniently than student interviewers. A recent study by Pingitore et al. (1994) suggested that bias against hiring overweight job applicants does exist and that the decision not to hire an obese applicant was only partially mediated by personality attributions.

Nevertheless, a study by Parsons and Liden (1984) discovered that speech characteristics were relatively important cues as compared to personal appearance variables, and non verbal cues in general were highly related to qualifications. Gifford et al.'s (1985) study also

showed that social skill's were reasonably accurately inferred by interviewers through rate of gesturing, time spent in conversing and formality of dress whilst applicants' motivation were poorly inferred. An earlier study by Hollandsworth et al. (1979) also revealed that utterance content rather than style had a greater influence on favourable employment decisions in a job interview setting. However, a recent study by Anderson and Shackleton (1990) on the influence of candidate's non verbal behaviour upon interviewer impression formation in a graduate selection interview, demonstrated the existence of strong personal bias, 'similar to me' bias and prototype bias. The interview as a technique, thus raises considerable doubt concerning its reliability and validity in the assessment of candidate.

Several meta - analysis studies on the interview technique have generally shown that it has low validity. For example, a meta- analysis studies by Reilly and Chao (1982) discovered an overall predictive validity of 0.23 for the interview. Another meta -analysis study by Hunter and Hunter (1984) suggested that the interview validity seldom increased above 0.20. Drawing on previous research, Smith and Robertson (1993) also reported that the interview have an average validity of 0.14 to 0.23 which was considered by them to be very low although positive.

However, a meta analysis study on structured interviews indicated a higher validity score. For example, Wright et al.'s (1989) study on structured interviews resulted in an estimated

validity of 0.39. Another interview study by Arvey et al. (1987) has also produced even higher validity coefficients of up to 0.61. Campion et al.'s (1988) study of a highly structured interviewing techniques also demonstrate high interrater reliability and predictive validity. In this study, the following steps were employed : (i) developing questions based on job analysis, (ii) anchoring the rating scales for scoring answers with examples and illustrations, (iii) having an interview panel record and rating answers, (iv) consistently administering the process to all candidates and (v) giving special attention to job relatedness, and fairness and documentation in accordance with testing guidelines. A recent meta - analytic review by McDaniel et al. (1994) also discovered that the structured interviews have higher validity than unstructured interview and that the correlation with judgement were higher for structured interviews when the content of the interview was job related. Huffcutt and Arthur's (1994) meta - analysis study on interview validity for entry levels jobs, also suggested that the structure of the interview is a major moderator in interview validity and that interviews, particularly when structured, can reach levels of validity that are comparable to those of mental ability tests. However, it was also revealed in this study that although the validity does increase through the extent to which the interview is structured, there is a point at which additional structure yields essentially no incremental validity.

In addition, an earlier study by Maas (1965) indicated greater reliability for the 'patterned scale expectation interview' employing behavioural examples of typical traits required in a rating scale. Another study by Latham et al. (1980) on 49 hourly workers and 62 white male

supervisors pointed out that structured interviews such as the situational interview (mentioned in section 2.3.3) reported good internal consistency, inter - rater reliability and validity coefficients. A further study on the situational interview by Latham and Saari (1984) using peer and supervisor job performance evaluation, revealed significant correlations between what employees said they would do and what others observed them doing, but not between current performance and what they said they had done in the past. Another study by Weekly and Gier (1987) on situational interview for sales positions showed that that this form of interview was valid ($r = 0.45$) in the prediction of sales productivity. A recent study by Robertson et al. (1990) on the validity of situational interviews for administrative jobs (based on 63 candidates) in a large UK firm, demonstrated that that the correlations of potential and performance with situational interview scores was statistically significant and both predictor and criterion measures showed acceptable levels of reliability.

However, a recent study under tightly controlled situations by Pulakos and Schmitt (1995) revealed that the 'experience - based' interview questions yielded higher levels of validity than the situational interview questions. Another study by Campion et al. (1994) employing a 30 item structured interview with 15 future and 15 past questions and a battery of 9 tests on a sample of 70 pulp mill employees, also showed that the validity for past questions (0.51) were higher than future questions (0.39). In this study, 'past' questions indicated incremental validity beyond 'future' questions but not vice versa and that both of these types of questions had incremental validity beyond the tests.

Studies have also been conducted on the 'Patterned Behaviour Description Interview' (PBDI). For example, Janz's (1982) study on PBDI versus unstructured interview in terms of validity for predicting student ratings of teaching assistants, revealed a validity of 0.54 for PBDI. Another validity study by Orpen (1985) on PBDI relative to unstructured interviews for predicting the performance of life insurance salesmen, discovered a correlation of 0.48 between two structured interviews and supervisory performance ratings and a correlation of 0.61 between interview scores and dollar sales.

All of the above studies thus suggest that (i) other forms of structured interviews such as the situational interview and the behavioral description interview have higher validity than an unstructured interview and (ii) the 'experienced - based' interview or 'past' questions demonstrated higher validity than the situational interview or 'future' questions.

Regardless of this contradictory research evidence, the interview is still a very popular selection technique although it has poor validity (Goss, 1994). Writers such as Arvey and Campion (1982) suggested the interview is popular because the employers believe that interviews are cheap, comprehensible and easy to administer compared to other expensive techniques. Another reason is that the interviewers are confident in their judgements and ability to make correct selection decision. Moreover, it provides an efficient means of exchanging information, explaining the nature of the job to applicants and allowing

applicants to make judgements about the firm. Likewise, Herriot (1989) also mentioned that the interview is popular for two reasons : first, because the employers are able to see applicants face to face and believe that the interview is accurate in assessing several observable interpersonal dimensions of behaviour. Second, it offers the opportunity for applicants to make judgements about the firm and is also a good form of public relations. Furthermore, interviews are popular particularly among managers since this technique provides the opportunity to influence hiring decisions (Campion et al., 1988). In addition, apart from illustrating the 'sociability, interaction with others and verbal fluency', the interview is a realistic choice in terms of practicality, especially in situations where the number of applicants is too small to use a more elaborate selection procedure. It also allow opportunity for a firm to 'sell' itself (Anderson, 1992). Similarly, Lewis (1985) pointed out possible explanations for the popularity of the interviews : it is an ideal opportunity not only for a firm to 'sell' itself to the candidate but also provide a very effective means of easily meeting the candidate's need for information. Both employers and candidates also have an expectation that there ought to be an interview regardless of whether it actually helps in the selection process. Smith (1991) also cited that an awareness of the low validity of interviews, *"has led a number of employers to abandon the use of interviews as a selection device but to retain interviews as an opportunity where they can sell the advantages of the organisation to prospective employers"*(p. 32). According to Shackleton and Newell (1991), interviews also give candidates a chance to find out more about the firm and ensure that successful applicants will 'fit in' in terms of attitudes and personality rather than aptitude for the job.

The popularity of the interview to the practitioners has not diminished due to its usefulness. This is illustrated by Gill's (1980) survey in the UK which indicated that out of 281 firms, 92% relied almost exclusively on the interview to select managers or executives. In this survey, most firms had 2 interviews with candidates for a managerial position although the pattern varied to some extent with job level. For example, at senior management level, firms may have had up to 3 interviews but for middle and junior management level, the number was more likely to be 2. It is unusual to have more than 3 interviews with a candidate unless it is difficult in the final decision to select the right candidate and another person may be brought in to interview the shortlisted candidates. More than two-thirds of these respondents claimed that individuals involved in interviewing were trained in specific courses run by National Institute Of Industrial Psychology (NIIP), Institute Of Personnel Managers (IPM) and Saville and Holdsworth. In spite of that, an analysis of their responses suggests that only the personnel staff instead of the line managers usually received some form of interview training. The Bevan and Fryatt (1988) IMS survey in UK also indicated that interviews are used by almost 90.6% of respondents to fill vacancies for managerial and professional occupations. This survey also confirmed the view that the selection interview is a pervasive practice in the UK, where it is employed by many employers as an extension to the filtering process of using techniques such as the application form and cvs. Other findings by Robertson and Makin (1986), reported that majority of firms in the UK rely exclusively on interviews in selecting managers. In terms of number of interviews, this survey also revealed that 98% of firms used more than one interview whilst 50% of firms used one interview; these interviews were usually with line managers (97%) and personnel staff (89%) but rarely

with specialist recruiters (56%). Concerning the type of interviewers, 92% of the firms used two or three interviewers, followed by 83% employing the one-to-one interview. Only 34% of the firms used a panel interview although a later Mackay and Torrington (1986) survey suggested that the panel interview is the most important type of interview used in the UK to select managers. Bastos's (1990) survey in the UK also shows that out of 52 firms, 100% of the respondents used interviews in selecting managers. In this survey, for the selection of trainees, structured interviews were mostly employed; firms of all sizes, particularly large firms (42.1%) reported always using this form of interview. It was also revealed in this survey that more than one third of large firms always employ a job specific interview. The structured and job specific interview were also reported to be mostly employed for the selection of managers; 80% of the large firms in this survey reported not using the open ended interview for the selection of managers. Other survey's concerning managerial selection by Shackleton and Newell (1991) also showed that all (100%) of 73 UK and 52 French firms used interviews; only 87.3% of respondents in UK and 98.1% of respondents in France used more than one interview; this survey also reported that there is a greater tendency to use panel interviews in the UK since this form of interview "*permits the candidate to be seen by all concerned*" (p. 32); firms in the UK reported that the personnel department and line managers were more likely to be involved in the interviews and specialist consultants (internal and external) were less likely to be involved.

The interview was also reported to be the most popular technique in New Zealand, Australia and in the US. For example a survey by Taylor et al. (1993) on managerial selection revealed

that out of 100 large New Zealand firms, 97% of these respondents used the employment interview. Only 20% of these respondents used “very structured interviews”, 64% “somewhat structured” and 15% “very unstructured”. Multiple interviewers were typically used by these sample firms, where an average of 2.9 people in each firm interviewed candidates for management positions. The most frequently cited person involved in these interviews were the position manager; 16% of these respondents were position peers typically involved in interviews and only 1 firm typically included position subordinates. Most firms reported “occasionally” using panel interviews, slightly more for management position and slightly less for non management position. Only 46% of the respondents revealed that interviewers were given some form of training; the training session length ranged from 1 hour to 5 days, with a median of 1 day.

Management selection survey in South Australia by Patrickson and Haydon (1988) also illustrated that out of 500 firms, more than 90% of the respondents used interviews to select any level of management. Another survey by Vaughan and McClean (1989) also indicated that all (100%) of 39 Australian firms conducted at least one interview with applicants; 62% of the firms conducted more than one interview before making a final decision to appoint successful candidate. In this survey, only 10% reported that they used more than one interviewer and 75% claimed they mainly used only one interviewer. In terms of forms of interview, only 1 firm claimed that they always conduct a structured interview and 20 firms replied that they never used this form of interview; 14 firms claimed they occasionally

conduct highly structured interviews and only 7 firms reported using partially structured interviews containing only some pre - set questions. Overall this survey revealed a strong preference among firms for unstructured or minimally structured interviews.

In the US, virtually all firms indicated that they interview prospective employees in the course of hiring. It was reported that the mean length of interviews was over 2 hours for managerial/administrative employees (Marsden, 1994).

It can thus be concluded that interviews, despite differences in forms and structure and despite conflicting evidences on their validity, are the most popular and widely used assessment tool in the West.

2.3.4. Psychological test (cognitive and personality)

Another useful technique to select managers is the psychological test. It is devised to obtain data about the applicant and to predict their probable success as managers (Koontz and Weihrich, 1988). This test consists of the application of standard procedures to applicants which enables their responses to be quantified; the differences in the results represent differences in abilities or behaviour (Armstrong, 1986). Storey and Sisson (1993) pointed out that, *“while there are no absolute pass/fail, right/wrong answers when scoring these tests, there will be cut - off points and preferred scoring ranges for different jobs”*(p.121). Thus the preferred

or appropriate scoring ranges will be given by test providers, usually consultants who design, trial and market their test products.

The two most common and well known groups of test currently in use to select managers are the cognitive and personality test. The cognitive test is used to assess applicants on a range of abilities which include intellectual ability, spatial, clerical and motor ability (Bevan and Fryatt, 1988). Cognitive tests have been described as generally easy to administer, can be used with groups of applicants, and can be administered and scored by any individual with relatively little training. The cognitive test development needs and cost are low, since they are available 'off the shelf'. Nevertheless, special aptitude tests are often individually administered and need a higher degree of testing competence and are less generalisable in their use than intelligence tests (Robertson and Iles, 1988).

On the other hand, the personality test is an attempt to build up a profile of an applicant's personal and psychological character in order to assess them against a number of job related attributes that are felt to be related to successful performance (Bevan and Fryatt, 1988). For the selection of managers, personality tests are designed to reveal candidates' personal characteristics and the way candidates interact with others, thereby giving a measure of leadership potential (Koontz and Weihrich, 1988). It is also very useful since some studies have found that sociability and emotional stability factors, which can only be derived from

these tests, are valid predictors of managerial performance (Cascio, 1992).

However, the use of psychological (cognitive and personality) tests is costly in terms of both time and money; in the US it is subject to various legal restrictions that seek to guarantee employee privacy and prevent discrimination in employment on the basis of sex, race or age (Marsden, 1994). The personality test also needs to be treated with caution. This is because, for selection purposes, this test is almost meaningless if it has not been validated by a thorough correlation of test results with subsequent behaviour. Furthermore, this test should have been developed by a reputable psychologist or test agency on the basis of extensive research and field testing, and must meet the specific needs of the user (Armstrong, 1991). Moreover, certain psychological tests, such as personality inventories, require trained administrators (Muchinsky, 1986). In addition, while the administration and scoring of a personality test is relatively simple, the interpretation of the results is both difficult and complicated and should remain the preserve of qualified psychologists (Mackenzie Davey, 1991).

In short, psychological (cognitive and personality) tests are used to select managers due to their specific usefulness in assessing candidate on a range of abilities and personal attributes related to successful performance. Nevertheless, they also have shortcomings in terms of cost, difficulty to administer and legal restrictions.

2.3.4.1. Research literature evidence

Several validity studies have also been conducted on both the cognitive and personality tests. For example, Ghiselli's (1973) study demonstrated an average validity of cognitive tests in the range from 0.21 and 0.31 for job proficiency criteria. This is followed by Hunter and Hunter's (1984) study which showed that the average validity for cognitive test to be 0.53 by combining the cognitive and psychomotor scores. Using meta - analysis, Schmitt et al. (1984) reported an average validity of 0.27 for aptitude tests and 0.25 for general mental ability tests. In addition, drawing on previous research, Smith and Robertson (1993) also reported the average validity of 0.25 to 0.45 for general mental ability. It can thus be concluded from these studies that the cognitive test has a high validity. According to Bevan and Fryatt (1988), the generally high validity of this particular test is due to the fact that it measure skills and abilities actually used in the posts for which the candidates are being screened. This form of test also seems more valid for a post which is complex such as the managerial post (Hunter and Hunter, 1984; Schmidt and Noe, 1986)

On the other hand, Mischel (1973) and Jackson and Paunonen's (1980) studies concerning the personality test have discredited the view that personality traits are fixed over time. Other studies by Kenny and Zaccaro (1983) and Steinberg (1986) also demonstrated that a number of personality attributes change over time and are situational specific. Moreover Lawshe and Balma (1966) point out that it is not difficult to fake in a test. A study reported by Flippo (1983) of 65 college students showed a marked increase on the desirable personality traits

and a substantial decrease on undesirable personality traits; this was discovered when they were requested to answer 318 questions as if they were applying for a job. There is also less impressive evidence with regard to the most recent validity study reported for personality test. Although Ghiselli's (1973) study discovered an average validity coefficient of 0.28 for personality test which was considered high, Schmitt et al.'s (1984) study demonstrated an average validity coefficients of 0.15 for personality test. Furthermore, drawing on previous research, Smith and Robertson (1993) also reported an average validity of 0.15 for personality assessment. According to Bevan and Fryatt (1988), the previous research in relation to these low validity scores of the personality test has resulted in this technique being seen as less attractive and useful in the employment selection context. In spite of that, there is some promising evidence with regard to the validity of 'job related' personality tests. For instance, Day and Silverman's (1989) study on whether personality variables are predictors of job performance when carefully matched to the appropriate occupations, discovered 3 personality scales such as orientation towards work, degree of ascendancy and degree and quality of interpersonal orientation to be significantly related to important aspects of job performance.

In summary, studies indicated that cognitive tests have a high validity compared to the personality tests. However, there is some encouraging evidence concerning the personality test in assessing certain personality variables which are predictors of job performance.

The use of psychological (personality and cognitive) tests by practitioners varies in the West. An earlier survey by Sneath et.al (1976) in the UK showed that there was low penetration of the usage of such tests (17%) for managerial assessment. Kingston's (1971) survey also indicated that only 8% out of 179 firms used such tests regularly and only 25% sometimes used them. In this survey, it was revealed that the test assessors were other member of personnel department, followed by head of personnel, departmental management and psychologist (in - company or consultants); 63% of the assessors had training from NIIP or IPM and only 36% rely on their experiences. Gill's (1980) survey also indicated that out of 281 firms, only 9% used intelligence tests, 8% used aptitude tests, and another 8% used personality tests to select managers. Other survey by Robertson and Makin (1986) on a sample of 108 UK firms found that 36% of respondents used personality tests and 29% of respondents used cognitive tests for management post. Bevan and Fryatt's (1988) survey in the UK reported that 16% out of 268 respondents used cognitive tests, with 65% of them employing this technique for managerial and professional positions. This survey also indicated that 22% out of 272 respondents used personality tests as part of their selection process, with 64% of them employing this technique for managerial and professional positions. Bastos's (1990) survey in the UK also shows that out of 52 firms, 46.2% of the respondents used cognitive tests whilst 42.3% used personality test in selecting managers. A recent IRS (1991) survey in the UK also showed that a high proportion of managerial and graduate recruits are subjected to personality tests. Another survey on managerial selection by Shackleton and Newell (1991) also illustrated that out of 73 UK and 52 French firms, personality tests were used by 64.4% and 62.3% of these respondents respectively. On the

other hand, cognitive tests were used by 69.9% in UK compared to 48.9% in France. The psychological testing agency Saville and Holdsworth discovered in a survey of 361 large organisations in UK that between 57% and 71% used personality questionnaires and between 63% and 68% used cognitive tests at some point during management recruitment (McCulloch, 1993).

It can thus be concluded that there is an encouraging trend in the use of psychological (cognitive and personality) tests in the UK. Shackleton and Newell (1991) suggested that cognitive tests were increasingly used in the UK because firms see them as scientifically validated techniques; on the other hand, French firms prefer to use techniques which are often considered to be intuitive, interpretative and clinical such as personality questionnaires, multiple interviews and graphology.

Unlike in the UK, psychological tests appear to be less well used in US, Australia and New Zealand. In the US, based on a study conducted in 1991 drawn from the National Organisations Study (NOS), intelligence tests were found to be used by less than 14% of the 270 respondents in managerial selection (Marsden, 1994). According to Robbins (1978), the reliance on such tests in the US for selection purposes has decreased significantly due to legal rulings which require the employer to justify any test used as being job related. Likewise, Huse (1982) also affirmed that the use of psychological testing in the US is declining since

such tests can be used for employment decisions only if it is proven to predict job performance, if they are job related and if it can be shown that no discrimination is involved. In addition, O'Meara (1994) argued that it is considerably more difficult to show job relatedness when the 'test creator' knows nothing about the job for which the test was used and the employer does not know which answers are considered correct or what traits the 'test creator' intended to measure. Recently, Herman (1994) reported that some US states forbid the use of psychological tests since court decisions require employers to be able to show that test results predict job performance or in other words, that the test employed for selection is valid. Furthermore, the issue of fairness and discrimination have led to a stringent control over the use of tests in the USA. The reason, as Bevan and Fryatt (1988) remarked, is because given different social conditions, educational attainment level, and cultural norms, *"individuals from minority or disadvantaged groups (defined by race or gender) could well be subjected to discrimination through tests based on norms derived from the whole population"*(p. 51)

Similarly, Taylor et al.'s (1993) survey of 100 large New Zealand firms reported that 31% of the respondents used personality tests and 20% used cognitive tests to select managers. The psychological (personality and cognitive) tests were less used by these firms due to lack of knowledge about research on the validity of these techniques. A previous management selection survey in South Australia by Patrickson and Haydon (1988) found that psychological tests were used by 39.5%, 45.2% and more than 48.4% of 500 respondents to select first line supervisor, middle managers and senior executives respectively. It was

reported in this survey that the major assumption underlying the use of these tests was *"the belief that the additional information which they provide may be used to increase the accuracy of selection predictions"* (p.102). Another survey by Vaughan and Mclean (1989) in Australia indicated that out of 39 firms, only 23% used the personality test, 39% used the aptitude test and 23% used the IQ test to select managers. In this survey, it was suggested that psychological (personality and cognitive) tests were less used by these firms because Australian firms were generally less attentive to research reports and recommendations in personnel selection literature which advise practitioners to rely on techniques that have a higher predictive validity and reliability.

Hence, it can be concluded that the variation in the use of psychological (cognitive and personality) tests by practitioners in the West is due to legal restrictions and their insensitivity to research reports and recommendations concerning techniques that have high validity and reliability.

2.3.5 Assessment Centre

One other technique which is very useful to select managers is the assessment centre (AC). This technique is a selection procedure employing multiple methods such as tests, work simulation situations and interviews. It is thus used to measure the abilities, skills, behavioural characteristics and potential required to perform effectively on a job (Beardwell and Holden, 1994). This technique is also a process that evaluates an applicant's potential for

management posts from 3 sources : (i) multiple assessment techniques, such as situational tests, test of mental abilities and interest inventories; (ii) standardised methods of making inferences from such techniques since assessors are trained to distinguish between effective and ineffective behaviours of the candidates and (iii) pooled judgements from multiple assessors to rate each applicants behaviour (Cascio, 1992)

The AC represents perhaps the most detailed and specific technique for attempting to predict managerial performance (Robertson and Iles, 1988). Some examples of real - life but simulated exercises and selection techniques used in a typical AC are the (i) in - basket or in - trays, where the applicants are faced with reports, incoming phone calls, documents or materials collected in the 'in - basket' of a simulated job. These applicants are then required to take relevant written decisions within a limited time period and the results are then reviewed by trained evaluators (ii) the leaderless group discussions, where groups without a leader are given a discussion questions and required to make a group decision. Each applicants interpersonal skills, acceptance by the group, leadership, and ability to influence are then evaluated by raters (iii) management games, where the applicants are engaged in realistic problem solving and evaluated in terms of planning and organising abilities, interpersonal skills and leadership abilities (iv) individual presentations, where the applicants are required to make an oral presentation on an assigned topic and then evaluated in terms of communication skills and persuasiveness (v) tests of personality, mental ability, interests and achievements are administered to applicants and (vi) interview, where applicants will be

interviewed by at least one of the expert assessors. These applicants are then assessed in terms of their current interest, background, past performance and motivation (Dessler, 1991). The involvement of several assessors and the use of multiple techniques in an AC is an attempt to reduce subjectivity and improve the quality of decision making. A typical AC will last from 1 up to 3 days; the assessors, at the end of this time will try to agree on their assessment of the applicant's performance against predetermined characteristics which are believed to be important for successful job performance (Smith and Blackham, 1988). Apart from predicting managerial performance, the AC may be used to identify an individual's growth and potential (Seegers, 1992).

One of the advantages of the AC is that the applicants behaviour can be predicted from performance on work simulation. It thus eliminates the possible error that exists compared to other selection techniques such as psychometric tests and interviews. Further evidence also shows that tests based on behavioral consistency such as work samples are the most valid predictors of performance on the job (Sacket and Wilson, 1982). Moreover, the AC type exercise has a much greater appearance of validity and is therefore less subject to criticism; the combination of techniques in an assessment centre is seen as fair and useful since it enables the use of objective techniques and the opportunity for dialogue between applicants and the employer (Bratton and Gold, 1994). In addition, the performance in an AC generally correlates more highly with eventual job performance than other selection techniques (Torrington and Huat, 1994).

Nevertheless, the most important limitation of the AC procedure is its high cost (Klatt et al., 1985; Beardwell and Holden, 1994). In addition, it is time consuming to use this technique (Torrington and Hall, 1995). Other major problems of the AC encountered by large firms apart from its high cost, are lack of adequate expertise (Keel et al., 1989). Feltham (1989) notes that among the costs to be considered in setting up this technique are those of analysing jobs, developing and/or purchasing tests and exercises, training assessors, hiring accommodation and travelling expenses. There is also likely to be considerable investment of staff time in setting up and operating the AC since it typically lasts between 1/2 a day and 3 days. There may also be further costs related with feedback, counselling and career development if the candidates are existing employees. Koontz and Weihrich (1988) also noted similar problems of employing the AC. In detail, these are as follows : (i) it is costly in terms of time, especially since many effective programs may extend over a 5 day period (ii) training assessors is a problem, particularly in those firms which believe that the best assessors are likely to be experienced line managers rather than trained psychologists (iii) questions have been raised as to whether the AC exercises are the best criteria for evaluation and about the type of evaluation measures that should be applied to each exercise. In spite of such problems, promising evidence from 'utility analysis' study (such as investment appraisal technique study by which the benefits of alternative selection procedures are estimated in monetary terms) suggests that any professionally designed assessment procedures should produce benefit in terms of the subsequent performance of selected personnel (Boudreau, 1989).

Thus, the AC is a very useful technique to select managers because it can accurately predict applicants' performance as well as identify their growth and development possibilities. However, it is not used by some practitioners since it is very costly and time consuming.

2.3.5.1. Research literature evidence

There have been several studies in the past concerning the AC. The earliest AC study to identify managerial potential was conducted in a US firm, American Telephone and Telegraph (AT&T). In this study, a total of 274 managers were hired between 1956 and 1960; this total was reduced at the eight year and sixteen year follow up study . The AC exercises in this study, lasted for three and half days and information regarding each candidate was analysed by qualified assessors. These assessors were required to determine the probability of candidates getting promoted to the level of middle management within a period of 10 years. The results of this study obtained by AT&T demonstrated that ACs were valid predictors of managerial potential among new candidates (Bray et al., 1974). Another study was by Hinrichs (1978) which was followed up 8 years later, of 47 individuals evaluated in a management AC in 1967 of a large manufacturing company. In this study it was also revealed that the overall AC rating and a general management evaluation of potential derived from personnel files, were significantly related to the position level attained after 8 years for 30 individuals still with the company. A recent study by Chan (1996) also revealed that the AC ratings were found to be predictive of subsequent promotion but not of concurrent supervisory ratings of performance. Statistical analysis in this study also found that the AC ratings produced a significant and substantial validity increment in predicting

promotion over and above current supervisory ratings of job performance.

Other studies have also shown that the AC is a relatively fair selection technique. For instance, Moses and Boehm's (1975) study demonstrated that the ACs were valid predictors of subsequent managerial promotions for both women and men. Tziner and Dolan's (1982) study also showed that the AC programmes were reasonably successful in predicting performance across sub - groups. Another study by Ritchie and Moses (1983) not only indicated that the AC predictions of 1000 women managers were significantly related to career progress 7 years later, but also confirmed greater similarities in the relationship between specific dimensions ratings and progress for both men and women. Moreover, Russel's (1985) study of 10 assessors in an entry selection centre pointed out that the sex of the assessee had almost no impact on the way in which the overall assessment rating (OAR) is derived.

However, Huck and Bray's (1976) study of an AC with samples of black and white females indicated that white females received significantly higher ratings for some dimensions. In this study, factors such as administrative skills and effective intelligence, but not sensitivity had higher correlations with job performance ratings for white females as compared to black females. Another study by Walsh et al. (1987) on AC's revealed that male assessors rated female applicants more leniently. However, this may be partially explained by the fact that the AC concerned was one of a fairly short duration (10 hours), staffed by assessors with

relatively little training.

In spite of the negative findings from the above research, most of the validity studies for an AC are high and positive. For example, Schmitt et al.'s (1984) meta analysis study of 21 ACs demonstrated an average validity of 0.41. Similarly Hunter and Hunter's (1984) meta analysis study reported a mean validity of 0.43. According to Gaugler et al. (1987), evidence from a meta- analysis study of 50 ACs shows that it is valid and can accurately predict subsequent performance across a wide range of different job and firms. They also mentioned other findings which show that ACs have higher validities when (i) psychologists were on the assessors panels instead of managers and (ii) several different assessment methods were used and when peer assessment were included in the final evaluation. Similar results from this meta - analysis study have also been reported by Hunter and Hirsch (1987). Drawing on previous research, Smith and Robertson (1993) also show an average validity of 0.41 to 0.43 for the AC.

Nevertheless, the AC validity varies according to the criteria they are used to predict. According to Makin and Robertson (1986), *"their highest validity is with potential, as assessed by supervisors, and with later promotion. Their validity falls, however, if performance ratings are used."*(p.40). A previous study by Cohen et al. (1977) also revealed that the ACs predictive accuracy was highest for job potential (0.63), followed by job progress (0.40) and job performance (0.33). In addition, Gaugher et al. 's (1987) study also demonstrated that the

AC is more valid for predicting a candidate's potential (0.53) than for predicting performance (0.36). This has led Makin and Robertson (1986), to argue that the AC merely reflects the stereotype of what the assessors consider to be a good manager. Robertson and Iles (1988) also argue that assessors often are knowledgeable about the types of individuals who succeed in their organisation in terms of background, and personality and may give higher evaluations to those who 'fit the mould'. However, according to Feltham (1988), "*a well designed and operated AC can be highly accurate as methods of assessment and selection with many useful spins - off for perceived fairness, self selection, career development etc*" (p.417). Therefore, an AC if well designed and operated, can be very useful to practitioners.

Overall, the AC still remains a useful tool for selection and development to some practitioners in the West. According to Wellin (1988), the experience of an increasing number of successful organisations employing the AC suggests that it is the most accurate method available for assessing individuals. Earlier surveys in the UK by Kingston (1971) and Gill (1980) found that only 2% out of 179 firms and 5% out of 281 firms used techniques called Group selection methods. Gill (1980) suggested that this technique involves the simultaneous assessment of several individuals by a group of trained evaluators using a variety of selection methods. Group selection method is almost similar to the AC as it also incorporate the in - basket exercise, case study and group behaviour analysis etc. It is generally considered to be most suitable to graduate recruitment rather than at senior and middle management levels.

However, other surveys discovered an increased use of the AC in the UK and in US. For example, Gill, Ungerson and Thakur's (1973) survey indicated that 7% of UK firms used the AC to select managers. The Robertson and Makin survey (1986) reported that 21.4% of UK firms used AC type exercises to select managers as compared to previous studies of 19% by Bridges (1984). An analysis of 'write in' comments from this survey suggested that most exercises were of group discussions rather than the in - tray type. Bastos's (1990) survey in the UK also shows that out of 52 firms, 15.3% of the respondents used AC in selecting managers. Surprisingly, a survey by Shackleton and Newell (1991) indicated that out of 73 UK and 52 French firms, some 58.9% of UK firms⁴ and 18.8% of French firms used AC to select managers. As reported in this survey, these figures might be slightly understated since a few respondents in both countries reported using group discussions. It was also suggested that the UK firms tends to use a more scientifically validated methods as compared to the French firms which explains the reasons for the differences between these firms.

According to Huse (1982), large firms in the US such as AT&T, IBM, Sears, General Motors, Standard Oil, General Electric, Ford, and the US Department Of Agriculture are now using the AC approach in selecting, identifying and developing managers. Robertson and Iles (1988) also state that the use of AC in the US is widespread. It has been argued that the widespread use of the AC in the US is due to the need to demonstrate equal opportunity in

⁴ This high figure may be due to the fact that companies were drawn across all industrial sectors of the Times 1000 index. This index ranked companies by sector in terms of sales, net profits and capital employed.

selection decisions (Wellin, 1988).

Nevertheless, other survey evidence suggests that the ACs are not used as much as in New Zealand and Australia. For example, Taylor et al.'s (1993) survey indicated that out of 100 large New Zealand firms, 14% of these respondents used the AC. As reported in this survey, techniques such as the AC was less used since most firms reported a lack of familiarity with published research on selection procedures thus suggesting that improved dissemination of research results may lead to an increased adoption of this technique. In another management selection survey of 500 firms in South Australia by Patrickson and Haydon (1988) revealed that only 15.3%, 20.2% and 25.8 % of the respondents used AC to select first line supervisor, middle managers and senior executives respectively. Conversely, another survey by Vaughan and Mclean (1989) reported that out of 39 Australian firms, 35(90%) reported that they never employed AC's; only 2 very large firms and 2 smaller firms claimed that they used the AC occasionally. ACs were less used by these firms since it was suggested from this survey that generally Australian firms pay little heed to research reports and recommendations in management journals and texts which recommended practitioners to rely on techniques that have a higher predictive validity and reliability.

Thus, the use of the ACs varies between practitioners in the West. This technique is increasingly used in the UK because of the tendency for practitioners in this country to use a more scientifically validated techniques. It is also increasingly used in the US because of the

legal requirement to exhibit equal opportunity in selection decisions. However, it is used to a limited extent in New Zealand and Australia due to practitioners lack of awareness with published research on selection procedures which advise practitioners to depend on valid and reliable techniques.

2.3.6 References

One other technique used to select managers is references. This technique can provide 4 kinds of information about an applicant : education and employment history, character and interpersonal competence, ability to perform the job and the willingness of the past or current employer to rehire the applicant. It can thus be used to provide or check information that has been provided by the applicant on factual issues such as the dates of previous employment, attendance record, salary, and whether the applicants really have the experience which they claim (Cascio, 1992). The references can also be employed to predict the applicant's success in the new job from the referee's evaluation of the individual's personality and ability (Industrial Relations Review and Report, 1994). Similarly, the information obtained from employment references can be used to check information given by the job applicants, to help the employer predict performance or success of job applicants, and to provide other important information that may not be revealed by other sources. Furthermore, employment references can be used either to ascertain qualified applicants (i.e. selection) or to identify applicants who are not qualified (i.e. negative selection) (Paetzold and Wilburn, 1992). Nevertheless, many of the large scale recruiters in the UK are discontinuing references as a selection device. An interview with these recruiters revealed that references are only used as a 'contra

- indicator' which is, screening for factors that would disqualify an applicant such as criminal record (Makin and Robertson, 1986).

Some of the options employers must consider in obtaining references are whether the reference should be obtained orally or in writing; if in writing it is important first, to decide how the reference should be structured and what information is required. Second, how should the reference be used in the selection process : whether it may be used before other selection procedures are implemented or in parallel with other selection techniques, or at the end of the selection process. The telephone references may also be used as an alternative or an addition to written references; the advantages of a telephone conversation is that referees are more likely to give an honest opinion orally than having to commit themselves in writing. Moreover, it may save time to use the telephone (Anderson, 1993).

References are normally taken up after the selection interview as a final check before a job offer is made; they are also occasionally followed up before an interview, *"to allow prospective employers to feel that the decision to employ somebody has at least been taken with some regard for the opinions of an informed third party"*(Bevan and Fryatt, 1988 p.33).

The use of reference checks and letters of recommendation is based on the idea that the best predictor of future performance is past performance; this logic suggests that by obtaining

insight into an applicant's past behaviour, there will be an increased probability of a correct decision (Bedeian, 1986). However, the use of references as a selection technique especially in the US is questionable due to its legal ramifications. For example, under the Privacy Act, applicants have the right to examine reference checks unless the right is waived in writing; a referee who provides negative comments or feedback can be sued for defamation of character by a rejected applicant (Dube, 1986). Cascio (1992) also states that *"if an employer's policy is to disclose reference information, providing false or speculative information could be grounds for a lawsuit"*(p.183). In addition, according to Marsden (1994), *"like the use of tests, reference checking in the US is increasingly subject to legal regulations"*(p.288). The referees also do not like to reduce a former employee's chances for a job by furnishing unfavourable reviews or may provide favourable reviews to help an incompetent employee to leave (Dessler, 1991). Furthermore, references are seen by some employers as *"a little more than worthless pieces of paper"* since they *"tend to convey selected opinions of referees rather than wide ranging factual data about applicants"*(Ostell, 1989 p. 57). Therefore, it is often thought useful to collect at least 2 references in case there are disputes of data and opinion.

In short, references are a very useful technique for selecting managers since they help practitioners to verify information given by applicants as well as help them to predict the performance or success of applicants. This technique also supplements other essential information which may not be revealed by other sources. However, it has legal implications in certain countries such as in the US.

2.3.6.1. Research literature evidence

Several studies conducted on references have revealed conflicting evidence on its validity. For example, an early study by Peres and Garcia (1962) demonstrated that the most reliable information contained in references about former employers is their judgement on intelligence. A study by Knouse (1983) on the ratings of 98 personnel directors discovered that a subject's chances of being recommended increased if examples of specific performance are provided. However, Browning's (1968) validity study of reference material in relation to 500 teachers and their performance ratings 1 year later, found that references have very low validity against each of the measures he used. Reilly and Chao's (1982) meta - analytic study also showed that references have a very low validity of 0.14. Similarly, drawing on previous research, Smith and Robertson (1993) indicated that references have a low validity of 0.17 to 0.26.

Nevertheless, Carrol and Nash's (1972) study revealed that high validity can be achieved if a 'forced - choice' reference form were employed. Their study indicated a correlation of 0.64 between 'forced - choice' reference format and job performance in a sample of clerical workers. According to them, the predictive ability of references is increased when the recommender : (i) has sufficient time in different circumstances to observe the employee, (ii) is of similar sex, race and nationality as the recommendee and (iii) previous job and job applied for are similar in content. However, this type of reference is initially more expensive and complicated to develop than the traditional reference. Jones and Harrison's (1982) study

also concluded that reference reports could contribute usefully to selection if those conditions identified by Carrol and Nash (1972) were met. Their research suggest that the validity of references can be improved using a more structured reference form in which previous employer or referees rate candidates against criteria that must be related to significant aspects of job performance derived from job analysis. Therefore, references if structured, will be more reliable and valid.

In spite of these contradictory findings from research, this technique is widely used by practitioners. For example, surveys in the UK reported that most firms used references to select managers. An earlier survey by Kingston (1971) found that 88% of respondents requested references. In this survey, 96% of the firms requested 2 or more referees; 61% of the firms indicated that references were taken up after the acceptance of a job offer, whilst 34% of firms revealed that references were taken up before offering the job to the candidate. Some respondents requested references to be given by letter, some by a standard questionnaire or checklist and some preferred to take up references by telephone. In one or two key posts, the referees may actually be interviewed. The Robertson and Makin (1986) survey also revealed that 96.3% of UK firms used references to select managers. Bastos's (1990) survey in the UK also shows that out of 52 firms, 82.7% of the respondents used references in selecting managers. Similarly, Bevan and Fryatt's (1988) IMS Survey indicated that references are used by almost 85% of UK firms to fill managerial and professional vacancies. Another survey by Shackleton and Newell (1991) also reported that out of 73 UK

and 52 French firms, references were also used by 95.9% and 77.4% of these respondents respectively.

Other surveys in Australia and New Zealand also demonstrated that most firms employ references to select managers. For example, a survey by Taylor et al. (1993) illustrated that out of 100 large New Zealand firms, 99% of these respondents used references. Another survey of management selection survey in 500 firms in South Australia by Patrickson and Haydon (1988) revealed that 88.7%, 82.3% and 83.1% of the respondents always used a reference check/supervisor report to select first line supervisor, middle managers and senior executives respectively. A survey by Vaughan and McClean (1989) also indicated that out of 39 Australian firms, 35 firms (90%) requested referees reports on applicants in at least half of the applications they considered, whilst only 3 firms reported that they sometimes but not as often require these reports; 25(64%) of these firms reported that they never request applicants to supply written references but prefer to make their inquiries with referees over the telephone. This is because they were sceptical about the value of written references. Furthermore, applicants are unlikely to submit unfavourable written references to their prospective employers.

In the US, most firms also reported employing references to select managers. For example, a survey conducted in 1991 drawn out of 270 respondents from the National Organizations Study (NOS) indicated that letters of references are the most widely used method (more than

70%) in managerial selection (Marsden, 1994). Similarly, a recent empirical investigation of the preferences of personnel managers in Fortune 500 US firms shows that references are of great importance in obtaining interviews and positions (Lorentz et.al, 1993).

It can therefore be concluded that the references are a common technique extensively used in the West to select managers.

2.3.7. Graphology (Handwritng analysis)

Another instrument used to select managers is Graphology. This technique involves the examination of handwriting analysis such as the slant, size, pressure and rhythm and is used to assess personality traits or character such as temperament, cognitive abilities and sociability (Taylor and Sackheim, 1988). This technique can also be described as a process by which employers either through a graphologists or intuitively, infer personality characteristics from applicant's handwriting (Bevan and Fryatt, 1988). Bill Harms, director of instruction at the International Graphoanalysis Society in Chicago, USA says that by using special instruments, an analyst will measure how hard a person writes as well as the slant lines in each stroke of an individual's writing, to determine his or her emotional responsiveness. According to him, if an individual seems slow and phlegmatic to react, his handwriting probably has upstrokes that go straight up and down. He also mentioned that *"it's natural for most people to have a good forward slant to the handwriting which means they're a common, emotional person on the inside instead of a cool - headed, withdrawn person with a backslant"* (Hardin, 1995 p.67). Patricia Marne, one of Britain's leading expert on graphology,

believes that handwriting is as unique as a finger print. She also states that no graphologist would describe a person as dishonest or a criminal “*just on the strength of one or two give away clues*” and the analysis has to be based on what she calls the “*upper, middle, lower zones of handwriting*”(p.11). Nevertheless, according to her, the graphologist is still viewed with suspicion although graphology was started by the Chinese 2,000 years ago” (Walker, 1991). However, proponents of graphology claim that the muscles which control an individual’s writing reflect unconscious impulses in the brain and when properly interpreted, the strokes, pressures and loops of handwriting can reveal strengths, weaknesses and even hidden motivations. Lawrence Warner, head of the International Grapho - analysis Society, states that graphology works by revealing ‘anxieties that lie at the root of a person’s behaviour’. He uses graphology with his 100 corporate clients, which includes *Times* Top 1,000 companies and argues that graphology should never be used as a sole tool but provides additional understanding and helps make more informed decisions (Management Today, 1994).

Hence, due to its unique usefulness in assessing certain personality traits or characteristics of applicants, graphology has also been used by some practioners to select managers.

2.3.7.1. Research literature evidence

Numerous studies on graphology provide useful insights. For example, some studies on graphology by Rosenthal and Lines (1975), Lester (1977), Lester et al. (1977), Klimoski and

Rafaeli (1983), and Bayne and O'Neil (1988) discovered that there were no statistically significant relationships between graphological assessments and psychometric tests or personality tests and job performance. A study by Cox and Tapsell (1991) also revealed extremely small or negative correlations between graphology and assessment centre techniques. However, Fowler (1991) argues that the above findings are not conclusive enough due to 3 reasons : (i) graphological analysis involves a complex narrative personality description which is difficult to match against personality factors of any psychometric test. Hence, a statistical comparison with supervisor rating is impossible; (ii) a less practical inference can be drawn from comparisons with graphology since the personality tests have a very low validity coefficients of 0.15 as stated in the BPS (Booklet Psychological Testing) 1989; and (iii) Cox and Tapsell's (1991) study is actually not comparing graphology with other AC techniques but actual performance at work.

Previous studies by Sonneman and Kerman (1962) revealed a high correlations of 0.54 to 0.85 between graphologists predictions of 37 executives performance 'at the time of hire' with the ratings made subsequently by their senior managers. A study by Lemke and Kirchner (1971) also discovered a significant correlation between personality factors and graphology. Another study by Lomanaco and Harrison (1973) also showed a number of accurate matches of personality profiles by psychologists based on the TAT test and graphologists. Williams and Berg - Cross's (1977) study also found three distinct writing styles which correlated with personality attributes such as extroversion and introversion.

Nevertheless, Ben - Shakhar et al. (1986) state that there are deficiencies in the research to assess the validity of graphology in predicting job performance; such research according to them suffers from methodological problems such as non standardised assessments and flawed criteria which may result in the validation studies showing a mixed set of results. In addition, Furnham and Gunter's (1987) study questions the validity of graphology. In this study, a group of 64 adults completed the Eysenck Personality Questionnaire (EPQ), and copied out a set text in their own handwriting. When independent coders rated each sample of handwriting, the result of the correlation between the 4 personality measures (neuroticism, extraversion, psychoticism and lie) and 13 graphological measures demonstrated that less than 6% of the correlations were significant and most were marginal. Furthermore, a recent investigation in UK by the Institute Of Personnel Management (currently called Institute of Personnel and Development) was unable to discover any scientific evidence that proves the validity of graphology as a predictor of personality. Moreover, a British Psychological Society (BPS) assessment of 30 years scientific investigation into tests in 1993 used in the personnel field, "*concluded that graphology was mumbo - jumbo*" (*Management Today, 1994 p.17*). Overall, it appears that the above pieces of research evidence on graphology contradict one another but that the most recent research is generally sceptical of the value of graphology.

In spite of the above evidence, graphology is still used by some practitioners. According to Cascio (1992), graphology in Israel is more widespread than any other personality measurement. Rafaeli and Klimoski (1983) estimated that 3,000 US firms used this

technique and this number seemed to be increasing. They also reported that Continental European firms make much greater use of graphology. Similarly, Goss (1994) also affirmed that the use of graphology is widespread in Continental Europe. Rocco (1991) states that Swiss firms employed graphology in 75% of general management appointments and this technique is even common in France. Likewise, Cohen (1993) reported that some German firms have been known to use graphology. He also states that since an increasing number of French firms routinely subject hand-written letters to graphological tests for management positions, *"the loops, slants, margins and flourishes of hand-written letters have therefore assumed considerable importance and have become a crucial indicator of personal qualities and flaws"*(p.15). Cigarette manufacturers such as Seita, which have an annual sales exceeding US\$2 billion, routinely analyses the handwriting of potential corporate managers. Another firm, Moulinex, began using graphological analysis for management positions at the beginning of the 1990's (Cohen, 1993).

According to Driver et al. (1995), graphology is still used by practitioners since there is undoubtedly a degree of naiveness on the part of some of the potential consumers of graphology. It is appealing since it relies upon an actual sample of behaviour which is self generated. The styles of handwriting are individual and unique; a sample of handwriting is cheap and easy to obtain. Hence, using graphology may be intuitively appealing especially to those who are not experienced or trained HR professionals. Graphology is felt by some European selectors to be an additional but not an alternative tool to personality testing

because it supplement additional information (Sparrow and Hiltrop, 1994). In Europe, graphology tests are widespread both as a preselection procedure or as a backup to impressions gained through other parts of the selection procedure (Income Data Service, 1990). However, an earlier survey by Gill (1980) revealed that out of 281 firms in the UK, only 1% of the respondents employed graphology to select managers. The Robertson and Makin (1986) survey also indicated that only 7.8% of the firms used graphology to select managers. This survey also found that firms in the UK which used graphology all the time were subsidiaries of Continental firms. Mabey (1989) also reported that just 3% out of a sample of 300 large British firms used graphology. Bevan and Fryatt's (1988) IMS survey also discovered that just over 5% of UK firms used graphology as part of their selection decision - making. Conversely, Bastos's (1990) survey in the UK did not indicate the use of graphology in selecting managers. However, Smith (1991) states that the Saville Holdsworth survey in the UK confirmed the low level use of graphology. According to him, the informal information obtained suggested that the firms employing graphology tend to be either subsidiaries of French firms or firms which have strong links with Continental Europe. A survey by Shackleton and Newell (1991) also reported that out of 73 UK and 52 French firms, only 2.6% of UK firms but 77% of French firms used graphology to select managers. These differences were due to the fact that UK firms tend to use a more scientifically validated technique such as cognitive tests, assessment centres and biodata.

In conclusion, unlike some countries in the West such as in UK, graphology is extensively used among Continental European countries both as a preselection procedure, and as a

supplement to information about candidates' profile collected from other selection technique.

2.3.8. Astrology

One other tool rarely used to select managers is astrology. This technique began in Babylon about a thousand years before the Christian era. The ancients believed that the luminous bodies in the sky, the stars and planets, were made of 'heavenly' rather than 'earthly' substances. Thus, the Babylonians believed that the planets and their motions influenced the fortunes of kings and nations. Their culture was subsequently absorbed by the Greeks, and astrology began to influence the thinking of many people in the Western world which eventually spread to the Orient. It was the Greeks who then democratised astrology by developing the idea that the planets influence every individual. They particularly believed that the configuration of the planets at the moment of a person's birth affected one's personality and future (Crowe, 1990). This theory was also associated with the research by Mayo et al. (1977) which examined the link between various factors such as an individual's occupation, character, and astrological characteristics. Martha E. Ramsy, an astrologer and research member of the American Federation Of Astrology, Arizona USA states that employers needs the birthdate, birthplace and time of birth for an astrologer to make the applicant chart. There are 3 elements on each chart which dictate the personality type : the sun, the moon and the ascendant. Hardin (1995) explains that "*the sun represents a person's ego and the soul ; the moon is the emotions and the habits; and the ascendant represents the facade the individual puts on for the world*". He also commented that the chart can also "*tell to what degree an individual uses the potential and creative energy he or she has*" (p.67).

2.3.8.1. Research literature evidence

Several pieces of research have been undertaken on astrology to examine its validity. For example, an early piece of research by Mayo et al. (1977) studied the link between personality and the zodiac signs. Their results showed that individuals born with the sun in a negative sign (Taurus, Cancer, Virgo, Scorpio, Capricorn, Pisces) were more introverted whilst those born with the sun in a positive sign (Aries, Gemini, Leo, Libra, Sagittarius, Aquarius) were more extroverted. Conversely, Gauquelin's (1982) study on 52,188 character traits taken from biographies of 2,000 well known subjects such as sports champions, actors, writers and scientists selected from books written by 8 representative astrologers, discovered no correlation between predominant character traits and the sign under which each subject was born. In addition, a recent study by Smith and Knobil (1990) question the validity of astrology. In their study, the birth data of 47 female secretaries and 48 female sale assistants were gathered in random and were presented to a specialized astrologer. The astrologer was able to correctly identify the occupation of 45 out of the total sample of 95 respondents (which is less than 50%). Another study by Van Rooij (1994) which replicated the study by Mayo et.al., found that though the validity of astrology could not be demonstrated, it concluded that astrology may have a profound influence on people's self concept due to psychological processes like self - attribution : this is the tendency for people who know the alleged meaning of their zodiac signs, to shift their self - image toward the descriptions given by astrology. Moreover, an earlier study by Eysenck (1979), using Eysenck Personality Inventory to assess the degree of extroversion - introversion, also revealed that the extroversion - introversion effect could be accounted for by the subjects' familiarity with

characteristics attributed to their own zodiac signs. Later Eysenck and Nias (1982), using the same inventory found that the extroversion - introversion effect could not be duplicated with children who presumably have little knowledge of astrology. Another study by Saklofske et.al (1982), using the same inventory, could also not replicate Mayo et al. findings. Similarly, the study by Dean (1987) to determine whether astrologers using charts could produce more accurate interpretations than those who do not, selected 240 subjects with relatively extreme personalities judged to be particularly introverted, extroverted, stable or unstable in accordance to the Eysenck personality inventory. Birth charts from these subjects were distributed to 45 astrologers, who were each asked to indicate which extreme type the subject was and how confident they were in their judgement. The participating astrologers ranged from beginners to internationally well known experts. Another 45 astrologers were requested to assess subjects without the use of specific birth charts. The results of this study indicated that : (i) the use of charts made no significant difference in accurate assessment of personality; (ii) judgements made with high confidence were no more better than those made with low confidence; (iii) judgements on which astrologers agreed were no better than those on which they disagreed, and (iv) experts were no better at judging personalities than beginners. This study also revealed that subjects were not able to differentiate between the right and the wrong charts and that the judgements of astrologers who use birth charts are no better than those who simply guess. Therefore, all of the above studies thus revealed that astrology has low validity.

Astrology reliance on subjective intuition and its low validity means that it is rarely used by practitioners. The Robertson and Makin (1986) survey in the UK also indicated that the astrology was rarely used. Only 1% of the firms in this survey used astrology to select managers.

2.3.9 Physical or medical examination

Some firms require applicants to undergo physical or medical examinations to determine whether they qualify for the post of managers. Any medical limitations will be taken into consideration when placing these applicants. By identifying health problems, medical examination can also reduce absenteeism and detect 'communicable disease' that may be unknown to the applicant (Dessler, 1991). Furthermore, placing applicants with some disability on the job may open the firm to unreasonable or unwarranted compensation claims when he or she is involved in a small accidents (Putti, 1987). Thus, physical examinations are used to record physical and health problems at the time of hiring to protect the firm against unwarranted workers' compensation claims (Klatt et al., 1985) or as a useful means of acquiring baseline data for any future medical compensation claims (Bedeian, 1986)

2.3.9.1. Research literature evidence

The physical or medical examination has been reported to be employed by practitioners as part of the managerial selection process. For instance, an earlier survey by Kingston (1971)

revealed that out of 179 firms in UK, pre - entry medical examination were required by 50% for their managerial staff. Many firms in this survey indicated that the medical examination was only compulsory for a certain age range or responsibility level whilst others used it when the job involved frequent travel. The value of these medical examination also varies; some firms have turned down candidates due to reports made on their health but some employers regarded it merely as a formality. A cursory examination will only be made especially when they know the patient's medical history. Nevertheless, many firms in this survey regard a medical examination as useful especially where there are company insurance and pension schemes. Gill's (1980) survey showed that between 25% to 28% of firms in UK used the physical or medical examinations as part of the managerial selection process.

In the US, a study conducted in 1991 using 270 respondents from the National Organisations Study found that physical examinations are often part of the hiring process used in managerial selection (more than 40%). This is probably due to the concern with drug and alcohol abuse which has been rising in the US in recent years. This survey also showed that physical and 'drug/alcohol tests' are *"more apt to be required in large, formalised establishments that are parts of multisite organisations; in unionised workplaces, and in non managerial occupations"* (Marsden 1994, p.297).

A survey by Vaughan and Mclean (1989) in Australia also indicated that the pre - employment medical examination was commonly regarded as a 'final hurdle' requirement

mentioned by firms to assess the applicants superannuation and health insurance eligibility. In this context, applicants would not be selected because of their good health but could possibly be rejected if the medical examination uncovered evidence of poor health.

In summary, the physical or medical examinations are used by some practitioners in the West as part of the hiring process to select managers though frequently they seem to be used as a final confirming requirement rather than as a real factor in selection.

2.4 Conclusions

The discussions presented in part I of this chapter show that firms appear to employ selection techniques with which they are familiar or comfortable despite, in some cases, negative research evidence. Thus in practice, regardless of research literature evidence, selection techniques such as application form/cvs, biodata, interviews, references psychological tests (cognitive and personality), graphology, astrology and assessment centre were employed by some firms to select managers. These discussions also show that in certain countries in the West, some of these selection techniques were widely or increasingly used while some were rarely used or not used at all. In other words, there are variations in the choice of technique employed between practitioners in the West - some of the variations are by country, whilst some are by size of firm. It also indicated that physical or medical examination are part of the hiring process used in managerial selection by some firms operating in the US, UK and

Australia but mainly as a final check rather than as a key factor influencing selection. Many firms also regarded it as useful where there are company insurance and pension schemes, while some considered it merely as a formality.

The literature review presented in part I and the above conclusions will thus be used as an initial conceptual framework to investigate the techniques and practices employ by firms operating in Malaysia to select managers.

PART II

2.5.0. Key factors influencing the choice of selection technique

A review of the available literature suggested that some of the key factors which influence the choice of selection techniques by firms in general, are (i) culture, (ii) knowledge of research literature and the predictive validities of the selection techniques obtained by managers⁵ through formal education, training, or involvement of consultants or psychologists, (iii) presence of MNCs, and (iv) existence of HRM departments.

2.5.0.1 Culture

The term “culture” has been defined in a variety of ways by anthropologists, psychologists, sociologists, and historians. Tyler (1973) suggested that culture is a complex whole which includes knowledge, belief, art, law, morals, custom and other capabilities and habits

⁵ Manager(s) in this thesis refer to the personnel manager(s) .

includes knowledge, belief, art, law, morals, custom and other capabilities and habits acquired by man as a member of society. Hofstede (1984) defines culture as the shared characteristics such as language, religion, heritage and values that distinguishes one group of people from another or as the *"collective programming of the mind which distinguishes the members of one group or category of people from another"*(Hofstede, 1991a p.3). The group or category can be a nation, or an ethnic group within a nation or people holding a particular occupation or working in a certain type of business or employed by a certain firm. Asma Abdullah (1992), a corporate anthropologist, similarly defined culture as the *"beliefs and values or the shoulds and noughts of life of certain ethnic communities that were usually learnt early in life that individual is unaware of their influence"*(p.3).

According to Lawler et.al (1992), corporate culture refers to the values, perceptions, and behavioural inclination typically shared by organisational members; corporate cultures may develop spontaneously, or perhaps as a consequence of deliberate action by management. Schneider (1988) argues that corporate culture thus serves as a behavioural control, instilling norms and values that result in following 'the way things are done around here'. Hofstede (1991a) also affirmed that corporate culture is *"mainly a matter of practices that have to be learned by the newcomer"*(p. 11). However, according to him, corporate culture can only, to a limited extent, change individual's values once they have been hired. Adler (1986) also suggested that the national culture deeply ingrained until adulthood cannot be easily erased by any external force. In the context of selection, Cascio (1992) defined culture as the pattern

of basic assumptions that a given group has invented, discovered or developed in learning to adapt to both its external and internal environment. This pattern of assumptions *“has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems”*(p.176). In relation to all of these definitions, a model proposed by Kotter and Heskett (1992) as cited by Sparrow and Hiltrop (1994) helps to understand the concept of organizational culture. According to this model, organizational culture is represented at two levels which differ in terms of their visibility and their resistance to change. The first level, which is at the deeper and less visible level, refers to values and beliefs that are shared by the people in a group and that is prone to persist over time even when group membership changes. At this level, organizational culture can be extremely difficult to change partly because group members are frequently unaware of the values and beliefs that bind them together. Employees, after some time, may no longer be aware of how much their communications, justifications and behaviour are influenced by their shared basic assumptions. On the other hand, at the second level, which is a more visible level, organisational culture represents the organisation’s behaviour patterns or style which new employees are encouraged to follow by their fellow employees. Organisational culture at this level is still hard to change but not as difficult as at the basic values levels since group members are more inclined *“to behave in ways that teach these practices and values to new members, rewarding those that fit in and sanctioning those that do not”* (p.219).

Despite the many definitions of the concept of culture, according to Harzing and Ruysseveldt (1995), most authors agree on the following characteristics of culture : First, culture is not a

characteristic of individuals, but a collection of individuals who share common values, beliefs, and ideas. Second, culture is learned. People learn the culture of a group or collectivity when they become member. At different levels, the culture of a group is transmitted from generation to generation. For example, individuals are born and taught the values and norms of the society. Perhaps, at an even later stage, they become members of organisation and acquire the culture of that organisation. The third and related aspect of culture is its historical dimension. A particular nation's culture, for example, develops over time and is partly the product of that nation's history, its demographic and economic development, its geography and its ecological environment. To synthesise, culture is thus a set of values, perceptions, beliefs, habits, basic assumptions or the way of life of a group of people.

The most comprehensive study which has become the standard reference of cultural differences in the management literature was carried out by Hofstede (1980, 1991b) . His attitude surveys of 116,000 IBM employees isolated four basic dimensions⁶ that differentiated employees in 40 nations. He later added countries to increase his base to 50 nations (Hofstede, 1983). The data analysis showed that the dominant values of the employees in these national subsidiaries varied on these four primary dimensions of national

⁶ These four dimensions are : (i) the extent to which societies accept and expect power to be distributed equally (power distance); (ii) the importance of values such as assertiveness, acquisition of money and goods and not caring for others (masculinity); (iii) the extent too which individuals are integrated into groups or not (individualism); and the extent to which people in society feel threatened by ambiguous situations and try to avoid unstructured situations (uncertainty avoidance).

culture : large versus small power distance; strong versus weak uncertainty avoidance; individual versus collectivism; and masculinity versus femininity. The nations he studied were scored high or low on these four cultural dimensions and therefore given a distinguishable classification⁷. Based on these models, Hofstede (1991b, 1993) asserted that the way in which people see, perceive and understand management and organizations is culturally conditioned. Hence, management practices and theories are culture bound or constrained by national culture. Likewise, drawing on the seminal work of Hofstede(1980, 1991b), Clark and Mallory (1996) argue that management practices and theories cannot simply be applied from one culture to another. Therefore, models and theories of management and organizations such as MBO or HRM *“may have a limited applicability to countries outside of the culture cluster within which they were initially developed (that is, where the culture prerequisites are not favourable). As a consequence, notions of HRM developed in the USA may not be applicable, or at least may have to be considerably modified to become acceptable, in nations outside of the Anglo cluster” (p.18).*

Although Hofstede’s study has been universally acclaimed, a number of researchers have claimed there were shortcomings. For example, Hunt (1981) questioned the generalizations that could be drawn from one multinational organization. The research results could be contaminated through selection processes that sought individuals with predetermined

⁷ Refer to appendix 2.2.(a) “Country clusters and their natural characteristics” and 2.2(b) Placement of Pacific Rim countries on Hofstede’s four dimensions”.

personalities and values. According to Watson (1987), the research results could also be distorted as a result of subsequent acculturation, formal development and training that might lead to a typical set of norms and values in every respect of the corporate culture. Similarly, as pointed out by Moore and Ishak (1989), a drawback to Hofstede's study is that many of the nations looked at, such as Canada, Belgium, Malaysia and United States, are composed of more than one culture. This may have misrepresented Hofstede's portrayal of cultures of some nations because *"it is conceivable that members of some subcultural groups could have been over - or under - represented at the time in IBM's overseas branches"* (p.281). Another criticism is that it also ignore changes over time and is therefore a static analysis. Hofstede's main analysis occurred in the 1970s. It has been argued that the trend towards individualism has become more recognizable even in those countries with low individualism indices. Furthermore, Hofstede's model is methodologically imperfect. According to Hollinshead and Leat (1995), his sample was not only limited but, *"as he himself recognised subsequently, the four dimensions are too heavily drawn from Western concepts. He suggests that the 'Uncertainty Avoidance Dimension' may not be relevant in Eastern cultures. Other culture theorists have received equivalent criticism, much of it centring on the difficulty they have faced in lucidly and rigorously analyzing the diffuse and complex concept of culture"* (p.14).

Nevertheless, Hofstede's four dimensions have received significant recognition and cross - validation support from a number of cross - cultural researchers. Triandis (1982) states that Hofstede's study *"will stand as one of the major landmarks of cross - cultural research for many*

years to come" (p.90). Some studies have partially validated Hofstede's dimensions of individualism - collectivism (Bond and Fargas, 1984; Hui and Trandis, 1986) and power distance (Bond et al, 1985). Hofstede's dimension have also been replicated and validated employing other samples with other instruments (Ng et al., 1982; Shackleton and Ali, 1990). Moreover, Hofstede's cultural dimensions have also been used to study cross - cultural differences in several organizational subjects such as the behaviour of CEOs (Jackofsky et al. 1988), management control (Lebas and Weigenstein, 1986), goal setting (Erez and Earley, 1987), learning styles of managers (Hayes and Allinson, 1988), and team training (Kirkbride et al., 1990)

In addition, several studies have also indicated the extent to which HRM/Management ideas and practices were often modified when exported from one culture to another. For instance, a study of Japanese firms operating in South East Asia revealed that Japanese management practices are often modified to become consistent with the local environment and the local practices of the host nation (Ichimura, 1981). In addition, Choy and Jain's (1987) study of Japanese firms in Singapore also revealed that they modify their practices to adapt to the local environment. Similarly, evidence from Dicle et al.(1988) and Evan's (1993) study have also demonstrated that Japanese HRM practices in US and UK respectively, were adapted to meet local conditions. These studies strongly suggest that Japanese-style HRM/Management practises will not work if not modified to the local conditions and to meet the legal requirements of the host country. Francesco's (1981) study in Hong Kong also suggested

that the success of using Western influenced techniques in that country “*depend very much on the skill of local personnel managers in adapting the techniques to fit local conditions*” (p.13). Similarly, DiBella’s (1993) study across three cultural settings (i.e. Uganda, Phillipines and India), also concluded that when cultural differences existed, management practices need to be adapted to achieve the outcome that is desired.

All of the above studies seemed to support Hofstede’s (1991) general assertion that the original HRM ideas or policies needs to be adapted to fit the local culture and to attain the desired effect. However, in practice, they do not challenge the spread of ideas as such. They do not challenge the notion that the presence of expatriates in multinationals will spread ideas and practices between countries, or that education and training received by practitioners⁸ or involvement of consultants or psychologists with practitioners will do so⁹. The central issue in the above discussion is not whether ideas or practices will be adapted : rather it is a question of whether they will be modified in what way.

Cultural influences which includes the internal or corporate culture of the organisation and the national culture of host and parent firm’s home country, also have an impact on the Human Resource Management (HRM) practices¹⁰. For example, Easterby - Smith et al.’s

⁸ This refer to personnel manager (s).

⁹ The spread of ideas through these means will be discussed in section 2.5.0.2 and 2.5.0.3 in this chapter.

¹⁰ The term HRM practices in this thesis refer to ‘functional’ activities such as selection, manpower planning, appraisal, reward systems and management - union relations.

(1995) study suggested that due to cultural influences, there was a sharp difference between firms in UK and China with regard to the appraisal and reward systems. Concerning the appraisal procedures, the 3 key differences are (i) the use of hierarchical judgements versus peer and subordinate view (ii) the existence or non existence of a single formal interview and (iii) the UK focus on targets versus the use of a broader criteria in China. In their study, it was suggested that all of these differences were due to known cultural factors in China such as the importance of harmonious peer and subordinate relationships, preservation of 'face', and the fact that in China, relationship with employers are seen in terms of personal obligations rather than impersonal contract. With regard to the reward system, firms in China indicated a limited differential in salary between people at the top and those at the bottom. This is due to cultural factors such as the high levels of collectivism and the need to maintain harmonious relations within the organisations. Shaw et al. (1993) also pointed out that Chinese firms are less likely to have 'extensive promotion - from - within' policies to non family members compared to Anglo - American firms because of the Chinese emphasis on mutual obligations to family members. They also argued that Chinese firms will less likely have extensive 'performance appraisal and feedback systems' than Anglo - American firms due to the importance of 'face' and the Confucian emphasis on age rather than achievement as an indicator of respect and authority.

Another example of cultural influence on other HRM practice is reflected from Love et al. (1994) study in a Japanese - American joint venture assembly plant. He discovered that the

Japanese management philosophy prohibits developing a performance appraisal system. The Japanese managers suggested that individual performance appraisals would damage the 'team' concept held in high esteem throughout the plant. This is because, according to Maher and Wong (1994), differentiating between employees on the basis of job performance is an affront to the Japanese cultural beliefs which prefer a homogenous work - force.

In the past, the HRM practices of firms in India have also been affected by culture due to the hierarchical nature of Hinduism reflected in the caste system and the family structure. Close family relations promote social networking as a method for employment and securing promotion and raises in salary. However, a more structured HRM practices has eventually been generated due to the British colonial system that introduced a bureaucratic system and the sharp increase in joint ventures involving foreign multinational (Lawler et al., 1995).

The impact of culture on other aspect of HRM practices particularly in influencing the choice of techniques employed in selection are illustrated in an example illustrated in Thailand. The recruiting and selection system of family owned Chinese firms in this country are usually less sophisticated than MNCs. This can be linked to Lawler et al.'s (1995) study which revealed that the Chinese management system relies heavily on family connections and inter - family networks not only for internal co-ordination but also for developing and maintaining external relationships. Similarly, Redding (1986) also asserted that "*the small Chinese businesses are*

centralised, implicitly structured, paternalistic and nepotistic organisations which tend to rely on personalistic networks of business contacts for external linkages and exhibit little systematic planning or organisations"(p.790). Likewise, according to Francesco (1981), often in a typical small family - owned Chinese business, selection is based on family membership or personal recommendation. She pointed out that *"the concern is to recruit loyal, obedient, and hopefully, hard - working family and friends to work under the direction of the head of the family"* (p.8). Wong (1989) also argued that the essence of Chinese economic organisation is familism. Therefore, the selection practices in many Chinese firms tends to be based heavily on a few factors such as family/social background and credentials. As a result of these factors, the recruiting and selection systems within Chinese firms are likely to be much less extensive compared to other Anglo - American counterparts (Shaw et al., 1993). Furthermore, Lawler et al.'s (1995) study revealed that in a Chinese family owned firm, the use of interviews is not only used to identify and select employees but also as a means of *"utilising influence and expressing social credentials regardless of specific job competencies"*(p.336). It was also revealed in their study that internal and external references are also a reflection of the firm's reliance on influential people and the 'string pulling' process. Torrington and Huat (1994) argued that networking is an integral part of the informal hiring and selection practice for most jobs in typical family owned Thai firms. These are mostly owned by people of Chinese descent, and that *"knowing someone in the owner family or some key employees is often critical to obtaining a job"* (p.186). According to them, in larger contemporary Thai firms, while family members of important employees may have an advantage in being hired, an increasing number of jobs are filled by outsiders as these firms attempt to project a progressive and professional image by

attracting technically competent managers and professionals. However, in this type of firm, networking is still an important factor in securing employment. The selection process employed by these firms is usually less sophisticated than MNCs. Jayantha Wimalasiri's (1988) study also discovered that due to cultural influences, it is an accepted practice of the Chinese of most small and medium size firms in Singapore to employ relatives and friends since they "*are morally obliged to support their kith and kin*"(p.192).

Culture also has an impact on choosing a particular selection technique such as the psychological tests. The psychological method that work in one culture might require modification if it is to be employed in another. According to Moore and Ishak (1984), "*even the use of a highly regarded psychological instruments validated in one culture and back translated are suspected because their meaning and purpose change even if the words do not*".(p.298). Hambleton and Bollwark (1991) also state that "*when applying psychological tests in another culture, employers are cautioned to consider culturally - sensitive translation that*" (p.346). Sparrow and Hiltrop (1994) also affirmed that for tests developed in a foreign language using Anglo - Saxon cultural assumptions, there will be "*problems of linguistic inaccuracy, poor cultural relativity, and uncontrolled application*" (p.345). Furthermore, Desatnick and Bennet (1979) argued that the constraints of applying psychological tests that originated from the West to another country which have different cultural backgrounds, not only involved cultural or language translation difficulties but often an absence of management terminology in the society concerned. They also state that the local cultural patterns often produced an

intellectual profile deficient in those aptitudes regarded by Western management as essential for top management performance. In addition, as Toplis et al. (1988) point out, test materials developed in the US and other overseas countries sometimes have good technical information but *"require substantial adaptation before they can be used in the UK. Services of occupational psychologists should be retained to make this adaptation"*(p.40).

According to Shakleton and Newell (1991), it has often been claimed that in Continental European countries, *"psychology has undergone far less pressure to become scientific than in the English - speaking world"*(p.35). French firms prefer to employ selection techniques which are often considered to be more 'intuitive', 'interpretative', and 'clinical' such as personality questionnaires, multiple interviews and especially graphology as compared to the British firms which prefer to employ more scientifically validated techniques such as cognitive tests, AC and biodata. Quoting Payer's (1989) work, they suggested that French attitudes are heavily influenced by the Cartesian love of reasoning, where idea is more important than scientific evidence. As a result, French selection research and practices are more concerned with process than outcome. Therefore, a technique such as graphology is considered as an intellectually elegant approach in assessing candidate's personality, which is straightforward and unintrusive.

Organisational cultural influences may also have an impact on selectors decision to choose their own selection techniques. Wood (1986) speculated that selectors might not generally

approach their work as independent professionals but rather as members of a corporate culture in which professional values are communicated prescribing 'the company way of doing things'. In this context, Vaughan and Mclean (1989) assert that "*even if socialisation is resisted, selectors might still find it difficult to impose their own way of doing things*"(p. 32). They argue that due to the influence of internal or corporate culture, even the advise to follow text - book selection procedures would be expected to have minimal effect on selection practices of firms.

2.5.0.2. Knowledge of research literature and the predictive validities of selection technique obtained by managers through formal education or training or involvement of consultants or psychologists

The knowledge of research literature and the predictive validities of selection techniques acquired by managers also has a role in influencing the choice of selection techniques employed. This knowledge can either be transmitted through his or her formal education or training, previous work experience or involvement/interaction with consultants. In this context, any manager who has received a formal education in HRM/Management may be inclined to adopt the selection techniques and approaches used in the West. According to Westwood (1991), the vast majority of management course texts in academic institutions world - wide are of American origin and the curriculum is often based on the American or European models. The American - style MBA has become almost a universal model of management education. Therefore, "*Asian managers who have received any formal education in*

management will almost certainly have been exposed to Western materials, Western theories and Western practices” (p.24). This may include exposure to the Western approach to selection. Smith (1991) also states that as part of a movement towards professionalisation, managers receiving formal education or training, *“either as part of a business studies degree or as part of a postgraduate MBA course, are likely to include an element of behavioural science, which in turn, is likely to cover the rudiments of selection and assessment”*(p.27). In addition, as Patrickson and Haydon (1988) remarked, one would expect that the increasing professionalism might be reflected in increased familiarity with some of the more sophisticated selection procedures and a greater willingness to rely on more valid procedures, either by using them in - house or by employing external consultants who offer psychological services.

Comment has been made specifically about the way that Western techniques might be introduced into South East Asia. Thus, in Thailand there is a general tendency towards convergence of Thai management practices to Multinational corporations (MNCs). This phenomena, as noted by Lawler et al. (1992) is *“due to the growing prevalence of MBAs in Thai firms. There are numerous MBA programmes in Thailand, most modelled after the American system and relying heavily on American textbooks”*(p.30). Furthermore, Kidger’s (1991) study which examined HRM policies and practices of 3 pairs of firms in Hong Kong revealed that larger firms with professional manager were in general *“following the prescriptions of the western personnel management textbooks”*(p.158). This phenomena, according to this study, is due to the influence of the British and American values as a result of the presence of expatriate

managers and exposure to higher education, where most of the qualified young graduates have studied in the West.

The dissemination of information particularly on valid selection techniques through training or due to familiarity with published research on selection procedures, may also influence the choice of type of selection technique. Taylor et al. (1993) argued that most firms use less valid selection techniques such as the interviews, personal history and references in preference to selection techniques with higher validities such as biodata, psychological tests and ACs because most practitioners are not familiar with published research on the validity of their selection techniques. Similarly, Dakin and Armstrong's (1989) study found that failure to use a more effective predictors by practitioners was due to lack of knowledge or information regarding recent research on selection techniques, and a slow diffusion of research knowledge into practice. In addition, they also revealed that the persistent belief in their ability as effective interviewers was partly due to the absence of adequate feedback concerning interview decisions. Previous surveys by Gill (1980) and a recent survey by Harris (1991) also suggested that practitioners may not be employing more valid selection techniques due to the lack of knowledge concerning the predictive validity of various methods. In both of these surveys, practitioners were requested to rank order common selection techniques in terms of their predictive validity; it was revealed that the validity of adopted technique was overestimated compared with that suggested by research. Conversely, since a number of employers in the UK are *"aware of the literature on the validity of the interview and have taken heed of its findings."*(Smith, 1991 p.32), many firms are including

psychological test in their selection procedures, whilst others are tackling the problem of low interview validity by changing the form of the interview into what they believed to be situational and structured interview. According to Smith (1991) within most organisations there will be a personnel specialist with some expertise; the involvement of psychologists is in reality quite rare and confined to larger organisation or smaller organisations where psychologists are involved on an 'ad hoc' basis. Their involvement can thus have a considerable influence on the selection techniques employed. Similarly, the participation of consultants in a selection process may influence the type selection technique employed. A survey in UK indicated that training, recruitment and management development are the most important areas used in search for external expertise to complement the skills available internally in organisations. There are also some activities that are undoubtedly best undertaken by consultants such as the use of psychological tests in selection (Torrington and Hall, 1991). This is supported by Clark's (1993) survey on the selection methods used by executive search consultancies in France, Germany, Italy and the UK who found that they make use of the psychological test slightly higher than practitioners. Therefore, advise and training on the usage of the psychological tests are more likely to be offered by consultants to practitioners who hired them.

2.5.0.3. Presence of MNC's

Perlmutter (1969) described Multinational corporations (MNCs¹¹) as either ethnocentric,

¹¹ MNCs is defined by Glew et.al (1979) as an enterprise which owns or controls assets in more than one country. In practice, it operates in two or more countries, earns parts of its profits from its foreign operations and has part of its assets located in other countries.

polycentric or global. Thus, according to this typology, the management practices in foreign affiliates of MNCs could be similar to those of the MNC's home country (ethnocentric), could conform to local practices of the affiliate's host country (polycentric), or could follow to a worldwide standard (global). However, instead of viewing MNCs affiliates in terms of an overall orientation, some scholars have argued that it should be regarded as consisting of many separate practices, ranging from manufacturing, finance to human resources, each of which faces distinguishable pressures for global efficiency and for local responsiveness (Doz et al., 1981, Prahalad and Doz, 1987). This is because Permultters' view may not be adequate to describe the complexity within MNCs affiliates. As revealed in Soenen and Van den Bulcke (1988) study of foreign and Belgian owned firms, some affiliate practices (in manufacturing, finance or human resources) may tend to closely resemble their home - country or host - country practices, while others may be global in nature. A study by Rosenzweig and Nohria (1994) in the US also shows that German and Swedish MNCs demonstrated greatest differences in the case of specific HRM practices (such as the "extent of employee benefits" and "annual paid time off" to employees) to their parent firm. In this study, Japanese MNCs were also discovered to differ from local practices especially with regard to the "extent of annual paid time off" and "gender composition" of management. Furthermore, previous studies by Hamill (1984) of foreign owned firms in the UK indicated that American - owned MNCs were found to be much more centralised in matters pertaining to labour relations decision - making than European - owned MNCs. All of these findings seemed to support the view of MNCs as composed of differentiated practices.

The presence of MNCs also play a significant role in modernizing the HRM practices in Asia. For example, Ching and Choo's (1995) study discovered that the MNCs in Singapore are not only generally better managed and have higher overall business efficiency, but also "*bring to the country, modern business practices in various areas including Human Resource Management*" (p.244). Researchers have found that expatriates often served as "carriers" of culture in MNCs (Edstrom and Galbraith, 1977; Lincoln et al., 1978) thus tending to introduce some features of the parent country culture. Therefore, it is more likely that MNCs with a high presence of expatriates to closely follow the practices of their parent firm. Negandhi and Prasad (1975) also state that one of the positive strengths of the MNCs is their capability to train and develop high level managerial and technical personnel. As stated by Nik A.Rashid (1979), the executives in MNCs "*often train local people in production techniques, marketing, finance, personnel management, research and others*"(p.156). Moreover, expatriates are often seen to play a dual role of which the first, often played by the CEO, or the Financial controller, is to represent the financial interests of their firm. The second role, often played by the Technologist or Technocrat, ensures a smooth transfer of technology and that sufficient locals are being trained (Shepherd, 1992). According to Meleka (1984), training has to be provided to local people since many MNCs eventually face the fact that their expatriated staff must be reduced and replaced by national personnel due to legislative restrictions or rising costs of reallocating them. In addition, as Laurent (1986) points out, studies have also indicated that MNCs transmit some home country HR practices to their overseas location. Likewise, Kamoche (1994) also argues that the existing management style and HRM activities in Africa were the main result of influence from the West. According to

him, *"this is attributable, in the first place, to Africa's colonial history, and to the subsequent massive investment by multinational companies. Western management techniques have been introduced by expatriate managers or African managers who have been trained in the West or who have had a Western - style education...."* (p.261).

However, Capelli and McElrath (1992) argues that the tendency of MNCs to transfer parent - firm HRM practices to subsidiaries may vary by firm, by the country of origin of the parent firm and by the country in which the subsidiary is located. For instance, previous study by White and Trevor (1983) at 3 Japanese firms in the UK found no significant incorporation of Japanese - style employment techniques. Chong and Jain's study (1987) on the recruitment and other HRM practices of 7 Japanese subsidiaries in Singapore versus their parent firms in Japan, also discovered that the Japanese firms modified their HRM practices to adapt to the local environment. A study by Dicle et al. (1988) also revealed that HRM practices of Japanese firms located in US at Fort Custer Industrial Park, Michigan has been described as *"either a largely modified version of Japanese style management or a brand new management style composed of elements of both American and Japanese managerial practices"*(p.338). Another study by Evans (1993) on 2 Japanese firms (Sangin and Kensha) in UK, illustrated that the graduate selection procedures at Sangin were described as a 'cocktail' with a mixture of Japanese and British techniques. It initially involves consideration of the application letter and curriculum vitae (cvs). In addition to qualifications, expatriate Japanese managers emphasise the importance of selecting a candidate of the right sort of temperament and

personality such as being 'team oriented'. A number of interviews were included in the selection process to evaluate candidates on such factors. Interviewers usually included one or two of the three joint general managers as well as departmental managers and senior staff within the relevant department. This indicates the importance placed on the selection process. On the other hand at Kensha, selection procedures included the interviews and some short questionnaires. An effort was made to select candidates who were 'intrinsically motivated' and able to contribute to aspects of the company culture such as hardwork, teamwork, and putting the interests of the company first. A reasonably long tenure was expected for graduates employed at this stage. In addition to skills, both of these firms considered personal characteristics and candidates ability to become 'part' of their organization, a factor that would be similarly valued in Japan. Both of these firms received little guidance from headquarters regarding recruitment policies for local staff. Nevertheless, placement of expatriate Japanese was entirely under the parent firm or head office discretion. It was also reported that for the post of supervisor at Nissan (Sunderland), 3500 applications were reduced to 75 after initial screening and interviews. These remaining applicants were put through a specially developed Assessment Centre (AC) which involved the investment of 100 'manager' days to finally select 22 successful candidates (Wickens, 1987).

All of the above studies thus suggest that the selection practices of Japanese subsidiaries vary. According to Wilkinson and Oliver (1993) *"recruitment into Japanese companies in the UK and USA is characterised by careful selection procedures which emphasise attitude and potential*

rather than experience and acquired skills. The type of recruitment practice varies according to the operations of the companies concerned.(p.53). Nevertheless, Lawler et al.'s (1989) study (of US and Japanese firms operating in Thailand) revealed that the basis for Japanese firms to select managers and professional employees were through informal recruiting and screening process involving social networks although applicants were subjected to considerable formal testing. The reason for relying on networking to fill vacancies seems to be that new hires are likely to be quite similar to current employees and will presumably be as readily adapted to the Japanese system. Nevertheless, their studies on US subsidiaries found that these subsidiaries pursue HR strategies best characterized as systems of rational control. The employment methods are highly structured and frequently stipulated in formal, written procedures. Furthermore, these subsidiaries also have a preference for professional HR managers, either those holding professional degrees or having extensive experience with training in personnel administration.

In order to compete successfully at the global level, local firms may also emulate new HRM practices from MNCs. Large scale firms may also pursue similar HRM practices throughout the world or within broad geographical regions as a result of international competitive pressures (Lawler et al., 1995). Similarly, as Putti (1987) suggested, *"a high degree of objectivity can be seen in MNCs recruitment, selection of trainees, promotion, transfers, performance appraisals and reward system. By this objectivity, they draw the best local talent to work for multinationals. The local organisations are feeling this impact and as a result forced to be*

objective in their staffing decisions” (p.198). In addition, according to Kidger (1991), “*the managers under pressure to change and improve will look for and adopt ideas that are currently considered as contributors to excellence”(p.160).* Westwood (1991) also states that with the internationalisation of business, the US enterprises and their management methods are more directly visible in the various operations. As a result, this will influence the attitudes and management approaches of managers in other parts of the world who have come in contact with US business or who have had experiences working for US overseas firms. In addition, it has also been reported that in contrast to family enterprises in Thailand, the publicly held Thai firms are striving to upgrade their HR function. One of the reasons is that because these firms strive to compete internationally, they have sought to model themselves after Western MNCs (Lawler and Atmiyanandana, 1995). Conversely, according to Townley (1992), there is some indication that some UK based companies with established workforce such as Austin Rover and Ford are modelling themselves on non - Western firms such as their Japanese competitors and are paying increased attention to their recruitment and selection methods; at Austin Rover, recruitment currently involved 2 day assessments to which families are encouraged to attend to determine whether the ‘individual and company aspirations converge’. This study thus indicated a global approach to HRM.

Other reason for the general adoption of MNC management techniques with specific reference to Thai owned firms, is due to the belief that this enhances their prestige in the international business community and is thus symbolically important (Lawler et al., 1989).

In addition, according to Lawler et. al (1995), "*capital requirements for expansion have necessitated issuing stock to the public and this emerging sector of public traded firms has increasingly sought professional managers (p.327).*

2.5.0.4. Existence of HRM Department

There is a relationship between a formal HRM department and the adoption of sophisticated HRM practices, which includes the employment of reliable and valid selection techniques. According to Shaw et al. (1993), this may occur because HRM departments serve as a political force within the firm to promote HR practices and the existence of an HRM department may attract qualified HR professionals who will be able to develop sophisticated practices. It may also occur because the existence of an HRM department may be an indication of top management's commitment to HR practices and hence the lobbying done by HR professionals is more likely to be accepted. Klatt et al. (1985) also suggested that the HR staff department has the responsibility for improving selection and placement decisions via competence professional assistance and recommendations. For example, expertise in the construction, evaluation and interpretation of psychological tests requires professional training and experience which are usually furnished by either HR staff department or an external consultant collaborating with the HR staff department. Similarly, in the US, the proper and legal use of tests requires that those responsible for personnel selection to be knowledgeable regarding test validity and proper administration (Schmidt and Borman, 1993; Herman, 1994). Such knowledge as pointed out by Marsden (1994), will be common in firms that have created specialised departments to administer personnel and labour relations

and in those who have hired personnel professionals to operate these departments.

In the past, several studies have been conducted specifically to link or show the influence of a HRM department on HRM practices. This includes the types of selection techniques to be employed. For example, a study by Cohen and Pfeffer (1986) on a sample of establishments in the US, revealed that the existence of a designated HRM department has been found to correlate positively with selection standards. A study by Fisher and Shaw (1992) on 174 firms in Singapore, found that large firms used more selection methods since they are more likely to have HRM department capable of, or interested in using these methods. Another study by Shaw et al. (1993) on 151 firms in Hong Kong also suggested that the existence of a large HRM function within a firm may serve as an advocate for the development of more sophisticated HR practices. This study also indicated that *“the more important determinants of HR practices were the level of professionalism of the HR staff and the level of responsibility granted HRM within firms”* (p.812). All of these studies appear to illustrate that the existence of HRM department with increased professionalism level of the HR staff may also serve as an impetus for firms to favour a more extensive, sophisticated and systematic selection techniques.

2.6. Conclusions

Part I of this chapter has identified the range of selection techniques used in the West. Although the specific techniques employed vary between country and between firm, a range of commonly used techniques can be distinguished. In that part of the chapter, research

evidence on of all of these techniques was also reviewed . Interestingly, this showed that some of the most popular techniques had a low validity while other techniques that were less used such as the assessment centre (Acs) had a high validity. There are a number of possible explanations which may account for this finding :

(a) Some managers¹² still perceived¹³ that interviews were effective and reliable as a technique despite the research evidence. This may be because they were ignorant of the research evidence or because they did not accept its conclusions but instead believed that this technique can predict subsequent performance (Bevan and Fryatt, 1988; Bastos, 1990).

(ii) Some managers did not employ ACs despite the supportive evidence because they felt it was too expensive (Taylor et.al, 1993; Bastos, 1990) or because they had limited resources or qualified personnel to implement this technique. Some also perceived that while AC might have value, it was not relevant or appropriate for their industry, organisation or post (Taylor et.al, 1993).

Part II of this chapter has suggested that there are good reasons to believe that selection techniques developed in the West may be employed in Malaysia. This may be because :

¹² This refer to personnel manager(s)

¹³ The belief or perceptions by managers on other selection techniques are summarised in Appendix 2.1

(i) Many Malaysian managers have been exposed to Western techniques through educational programmes or published research on selection procedures.

(ii) Many large firms in particular, have developed specialist HRM departments. The research literature suggests that the establishment of such departments has led to the employment of more sophisticated techniques although it may not necessarily be techniques used in the West.

(iii) MNCs operating in Malaysia frequently used the same techniques in Malaysia as they use in Western countries. They may also act as a benchmark for indigenous firms.

However in practice, the above explanation for the use of Western techniques in Malaysia are not independent but may reinforce one another. Thus, MNCs usually have specialised HRM departments and employ HRM staff who have been trained in the West or have in the past worked for Western firms.

While there are reasons to believe that Western techniques may be used in Malaysia, there are also some reasons to believe that there will be pressure to modify such techniques or use different techniques. This pressure stems from the fact that techniques developed in one cultural setting may not be appropriate for use in another. Hofstede's (1980, 1991b) work

asserts that management practices and theories cannot simply be applied from one culture to another. As has been demonstrated, his argument has not gone unchallenged. Nevertheless many researchers still argue that cultural factors need to be taken into account.

The above discussion then does not give a simple, straightforward account of the extent to which selection techniques dominant in the West will be used in another context. Instead, it shows the existence of competing pressures. The key issue here is to determine in which situation these competing pressures will be prevalent. For example, the pressure to recognise the importance of cultural differences may be dominant if the factors referred above as supporting the adoption of Western techniques are not present. These are circumstances where managers that have not been trained in the West, or that have not had access to Western literature, or that have not been employed in the West or in Western - based firm or firms which do not have a specialist HRM department. This description most clearly fits a small Malaysian owned or even family - owned firm but is unlikely to fit a MNC. However, while many MNCs will initially think of adopting selection techniques that they are familiar with in other countries, some may recognise the importance of the local or cultural environment of a different country and therefore may modify the selection techniques they would have used. This issue is then complex and will need further discussion. The likely balance between these competing pressures will be discussed in the next chapter (Chapter 3) .

Chapter 3

MALAYSIAN BACKGROUND AS A POSSIBLE FACTOR IN THE CHOICE OF SELECTION TECHNIQUES EMPLOYED BY LARGE FIRMS

3.0 Introduction

This chapter attempts to review the background of Malaysia as a possible factor in the choice of selection techniques employed by large firms. After a brief introduction, this chapter will describe the historical development of the country, its culture, government policies and programmes. It will present an overview of the country's education system, and economic development and progress it has made since achieving independence. A discussion on the manufacturing sector will also be included in this section since this study specifically focuses on firms operating in that particular sector. This will be followed by an overview of the employment situation and the projected labour supply in Malaysia. Finally, the key factors (mentioned in Chapter 2) and all of the above factors which influenced the choice of selection techniques employed, will then be discussed in order to generate hypotheses related to this study.

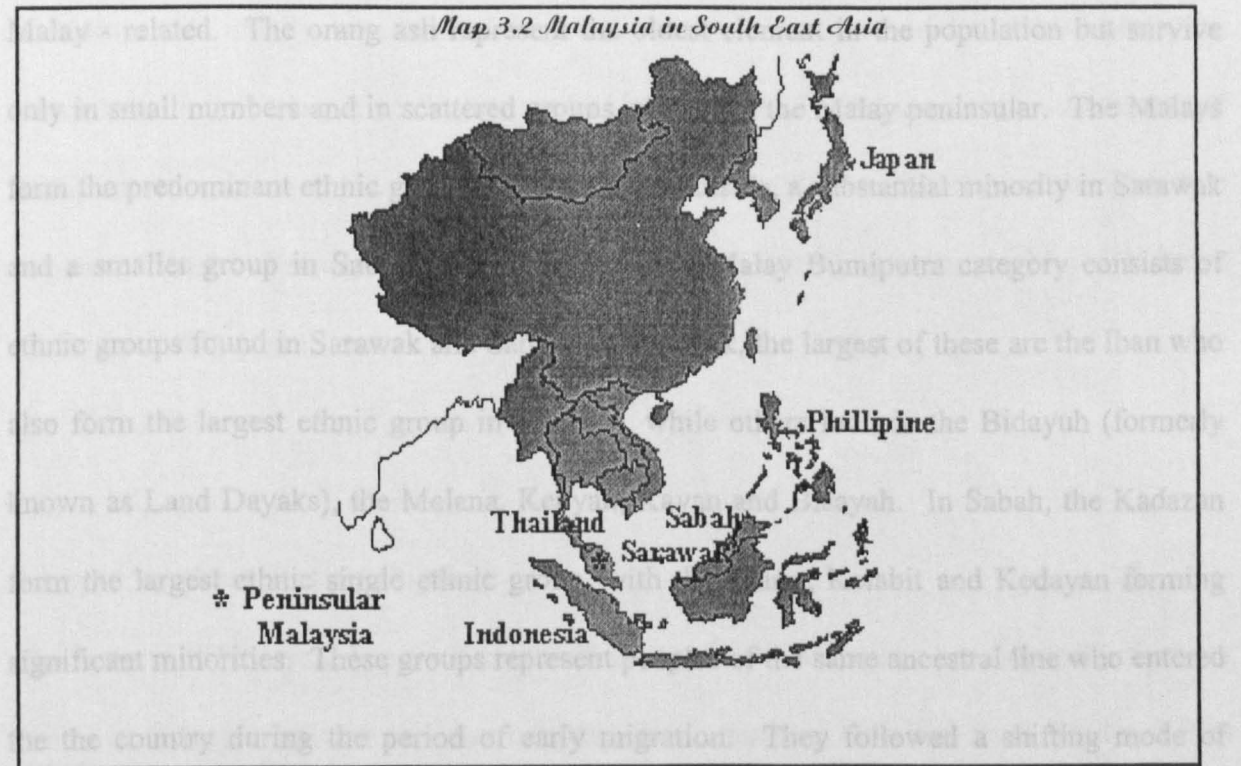
3.1 Background Of Malaysia



Source : SPC Software Publishing 1994, Harvard Graphics Version 2 ClipArt Images, map112.cgm

Malaysia is a federation of thirteen states. Eleven of the states representing West Malaysia are located in Peninsular Malaysia. Two of the states, Sabah and Sarawak, represent East Malaysia and are situated on the Borneo Island. As indicated in Map 3.1 on the earlier page, West Malaysia is separated from East Malaysia by the South China Sea. As cited in the FMM (Federated Of Malaysian Manufacturers) 1995, Malaysia commands a strategic position in one of the most dynamic regions in the world : The Asia Pacific region (see Map 3.2 as shown below). Located in the heart of Asia, roughly between 1 to 7 degrees North of the Equator, "Malaysia offers the perfect location for corporations seeking growth in the Asia Pacific region" (p.A10, FMM 1995 "Malaysia : Powerhouse of the Nineties")

and can be broadly categorised into three categories : (i) the aborigines (orang asli); (ii) the Malays; and (iii)



Source : SPC Software Publishing 1994, Harvard Graphics Version 2 ClipArt Images, map006.cgm

¹ Based on 'The World - a 3rd World guide', the land area of Indonesia and Thailand is 1,904,370 sq.km and 513,120 sq.km respectively.

3.1.1. Areas and population

Compared to other South East Asian countries such as Indonesia or Thailand¹, Malaysia is a small country with a land area of 329,758 sq.km, of which Peninsular Malaysia accounts for 131, 598 sq.km. The country has 20.1 million people of diverse ethnic origins. The main ethnic groups are the Malays, the Chinese, the Indian and indigenous races of Sarawak and Sabah such as the Dayaks, Ibans, Kadazans and Muruts. Malaysia's ethnic groups can be classified into two categories : those with cultural affinities indigenous to the region and to one another, who are classified as Bumiputra ('sons of the soil') and those whose cultural affinities lie outside. The Bumiputra groups are highly differentiated and can be broadly categorised into three categories : (i) the aborigines (orang asli); (ii) the Malays; and (iii) Malay - related. The orang asli represent the oldest element in the population but survive only in small numbers and in scattered groups, mainly in the Malay peninsular. The Malays form the predominant ethnic group in the Malay peninsula, a substantial minority in Sarawak and a smaller group in Sabah. The third or non - Malay Bumiputra category consists of ethnic groups found in Sarawak and Sabah. In Sarawak, the largest of these are the Iban who also form the largest ethnic group in the state, while others include the Bidayuh (formerly known as Land Dayaks), the Melana, Kenyah, Kayan and Bisayah. In Sabah, the Kadazan form the largest ethnic single ethnic group, with the Murut, Kelabit and Kedayan forming significant minorities. These groups represent peoples of the same ancestral line who entered the the country during the period of early migration. They followed a shifting mode of

¹ Based on 'The World - a 3rd World guide', the land area of Indonesia and Thailand is 1,904,570 sq.km and 513,120 sq.km respectively.

agriculture. The non Bumiputra groups primarily consist of the Chinese and the Indians with much smaller communities made up of Arabs, Sinhalese, Eurasians and Europeans. The Chinese population of Malaysia is derived largely from South China, with the Cantonese and Hokkien forming the largest dialect groups. The largest group among the Indians are the Tamils from South India and Sri Lanka, with significant Sikh and Malayalee minorities (see 'Malaysia Information 1995 Year Book').

Bahasa Malaysia is the official national language, but Chinese dialects and Tamil are still widely used in their respective communities, and most people speak English. The population of Malaysia is mainly concentrated in cities on the West coast of Peninsular Malaysia, particularly in the Klang River Valley area which includes Kuala Lumpur, the capital city of Malaysia. According to the East Asian Executive Report (1993), industrial growth has also been significant in Penang in the North West and Johor, near Singapore (see Map 3.3 shown on the following page).

3.1.2. Historical development

The history of Malaysia is one of continual interaction with foreign powers and influences due to its strategic position as a meeting place for traders and travellers from West and East between the Indian Ocean and the South China Sea (see <http://www.jaring.my> 'History', 1996). This country has been influenced by the presence of the Portuguese during the 16th

Map 3.3 Major Industrial Estates in Peninsular Malaysia



PERAK

- Sitiain
- Jelapang
- Kampung Acheh (Ph. I & II)
- Kamuning
- Kampung Tambahan
- Kardig (Phase I, II, III & IV)
- Kuala Kangsar
- Paya Muntar
- Seri Manjung
- Tanjong Meru 2A & 3B
- Tasek
- Tupai I, II & III
- Jelapang II FZ
- Kampung Tambahan II
- Kinta FZ
- Seremban Baru 10 (Phase II)
- Pengkalan Industrial Park
- Pengkalan II (Ph. I & II)
- Tanjong Meru Sdn. Berh. Lot 60'09

KELANTAN

- Gua Musang
- Joh
- MEL Lunding
- Pengkalan Chopra I & II
- Tanah Merah
- Kemubu

PERLIS

- Chuping
- Jaya
- Kuala Perlis Ph. I
- Jejawi Ph. 2A
- Padang Besar FZ

KEDAH

- Belar-Arang
- Bandar Darulnaim
- Kulim
- Mergong Beraja
- Mergong II & Mergong II Ext.
- Tikam Batu
- Sungai Petani LPK
- Lengkawi-Kespi
- Jenjang
- Langkawi Wang Tuk
- Pendang
- Belong IBatu 42
- Belang
- Ringai
- Sik
- Naka
- Sg. Tang
- Kulim Hi Tech Industrial Park

*** PENANG**

- Bayan Lepas III & IV
- Bayan Lepas FZ (Ph. I, II, III & IV)
- Mal Meridin
- Prati Prati IV
- Prati FZ; Prati Wharf FZ
- Pulau Jerai
- Seberang Jaya Industrial Park
- Bukit Tengah Industrial Park
- Techno Park Batu Maung
- Bukit Minyak Industrial Park

*** KUALA LUMPUR**

- Selasak/Hulu Klang
- Anson (Hulu Klang)
- Ampang (Hulu Klang FZ)
- Bangi
- Banting
- Batu Caves
- Beranang
- Bukit Raja
- Cheeras Jaya (Belakong)
- Petaling Jaya Selatan (ext. I)
- Sabak Tinggi
- Sekai Ketang Utara (Ph. I & II)
- Sriah Alam
- Seri Kembangan
- Sungai Way Subang FZ
- Sahang Jaya
- Teluk Panglima Garang FZ
- Pandamaran
- Tawian Industrial Park
- Sungai Besar
- Rawang/Batu Arang
- Alor Industrial Area
- Bukit Jalil
- Science & Technology Park
- Marine Industrial Park
- Pori Klang
- Kuala Selangor
- Foundry & Engineering Park
- Sepang

N. SEMBILAN

- Chembong I & II
- Kempung Dindin
- Nilai I & II/Nilai Mini
- Seremban
- Sungai Gadut
- Simpang Peranti

MELAKA

- Ayer Keroh I, II, III & IV
- Alor Gajah I, II, III & IV
- Batu Berendam FZ
- Tanjung Kling FZ
- Bukit Rambai I, II, III, IVA, IVB
- NC & V
- Morlimau I & II
- Tangga Batu
- Masyid Tanah
- Tekong

TERENGGANU

- Al Mukta'ibillah Shah
- Bukit Besi
- Cenah Bulawa Tanah
- Cendinong
- Dangari (Ph. III & IV)
- Gora Dadak
- Jakar I, II, III
- Koroh
- Seri Iman
- Teluk Kalong
- Seri Melong
- Katong Jaya
- Wakaf Tapau
- Ali

PAHANG

- Banting
- Gebeng
- Jerantut
- Kuantan Port Industrial Park
- Moran
- Musadzam Shah (Ph. I, II, III & IV)
- Parit
- Seremban
- Songgar
- Auripin
- Tan Abidin Faruk
- Jaya Gading
- Bandar Pusat Jengka (Ph. I, II & III)
- Paya Industrial Estate

*** JOHOR**

- Dangar Terengganu (Ph. I & II)
- Kluang I, II
- Kota Tinggi
- Parit Raja
- Pasir Gudang
- Johor Port Sdn Berh FZ
- Segamat
- Senai I, II, III
- Sri Gading
- Tanjung Agas
- Tebrau I & II
- Tongkang Pecah
- Pantian
- Pagoh
- Bandar Penawar (Ph. I, II & III)
- Tebau II (Ph. II)
- Pagar Gudang Tambahan
- Bukit Pagar
- Manjau
- Johor Technology Park
- Tanjung Lingsat

* MAIN INDUSTRIAL GROWTH REGION

Source : FMM Directory 1995, pp.A40

and 17th centuries in Malacca, the Dutch who took Malacca from the Portuguese in the 18th century, and finally the British in the Malay Peninsular and the North Borneo states in the 19th century and early part of the 20th century. The country was also under the Japanese occupation for 3 years between 1942 - 1945 in the Second World War.

The formation of Malaysia occurred in stages. The Peninsular States which was formerly Federation Of Malaya, achieved its independence from the British on 31st August, 1957. Tengku Abdul Rahman, a prince who led the independence movement, became the first prime minister. A Federation of 11 states was established within a parliamentary system with a monarch chosen every 5 years from among the 9 state rulers or "sultans". (see 'The World - a 3rd World Guide', 1995/1996)

The communities of the Malays, Chinese, Indians, etc., struck a constitutional bargain in which citizenship was granted to the non Malays whilst the Malays were recognized as indigenous people to be accorded special privileges in education and public sector jobs. The Malay language or Bahasa Malaysia would be the official language. In 1963, the British colonial states of Singapore, Sabah, and Sarawak obtained independence and joined Malaya to form the Federation of Malaysia. As a result of major disagreements over ethnic policy, Singapore withdrew from the Malaysian federation in 1965 to become an independent republic. The Conservative Alliance Party ruled from 1957 to 1969 when it lost many seats

to the Islamic PAS Party and especially to the Chinese based Democratic Action Party and Gerakan. The post election race riots in May 1969 led to the suspension of the parliamentary system. The country was then ruled for 2 years by the National Operations Council. When the parliament resumed operations in 1971, Tun Abdul Razak became the prime minister. The Malays were dissatisfied with their share of corporate equity, because in 1970 they made up over 50% of the population, but had only 1% of the income. A New Economic Policy (NEP) was then formulated to deal with this dissatisfaction which set targets to increase the share of the corporate equity of Malays and other Bumiputra to 30% by 1990 whilst foreign share would drop from 70% to 30%. The share of the non Bumiputra citizens (mainly the Chinese and the Indians) was targeted at 40%. The NEP included a number of affirmative action programs in education and employment which required organisations to ensure that their employment patterns reflected the ethnic make of the population and also to reserve a large share of University places for Bumiputras (see 'The World - a 3rd World Guide', 1995/1996) The ruling Coalition Alliance party broadened its base from 3 to 10 parties and changed its name to the National Front. It won over two - thirds of parliamentary seats in elections in the 1970s and 1980s. The present prime minister, Dr. Mahathir Mohamad took office in 1981 and embarked on a national heavy - industry program involving steel and automobile projects. Currently, the NEP has been replaced by the National Development Policy (NDP). One of its key features is it sets no time frame to achieve the NEP's original objectives of 30% Bumiputra ownership of corporate equity. Although this policy emphasizes the old NEP's programs on education and training, it relies less on ethnically based quotas and job reservations (East Asian Executive Reports, 1993)

3.1.3. Culture

Malaysia has often been described as “a minefield of multicultural sensitivities due to its diverse racial and ethnic composition” (Asma Abdullah², 1992 p.2). Each principal ethnic group such as the Malays, Chinese and the Indians has distinct cultural values³ which may be contributory elements to the manner in which HRM is practised in this country.

The Malays traditionally live in a cooperative, communal style. Any work is done in a cooperative way and the term ‘gotong royong’ are used to describe working together in accomplishing a common object (Gong Weng Ai, 1979). In addition, the basic social unit of the Malays is the village or ‘kampung’. According to Wolfe and Arnold (1994) “The self-sufficient ‘kampung’ were small and dispersed which fostered a strong sense of community and interdependence” (p.94). In order to meet the labour intensive needs of the society, work was divided among the villagers. This was originally necessary for the survival of the community that depended upon the close cooperation of the inhabitants which eventually became interwoven into the cultural ethos. This strong sense of collectivism remains even with the urbanization and industrialization which has occurred since independence in 1957. For example, the spirit of cooperation remains especially when work is undertaken for the

² Asma Abdullah is regarded as a corporate anthropologist. She speaks, writes, publishes and conducts training workshops on the subject of culture and how ethnic values influence one’s behaviour at the Malaysian workplace for both private and public sector organizations. She studied in Australia, the United States and Malaysia and is married to a British. She works as a human resource development professional for a US multinational based in Kuala Lumpur.

³ Refer to Appendix 5.3 (a), (b), (c), (d) at the end of this thesis for “list of ethnic values in Malaysia”, “Significant Malay value orientation”, “Malaysian values - How others see them” and “Values underlying Management practices in Malaysia” respectively.

benefit of the community; all members will help to the extent they can to accomplish a required task. Furthermore, *“It is not uncommon for firms of all nationalities to recruit groups of friends and relatives from the same kampung”* (Wolfe and Arnold, 1994 p.94).

On the other hand, to the Malaysian Chinese, the moral code of Confucianism is the social philosophy behind their family system. It is the principle of social structure and social control. Due to their particular emphasis on the family, certain laws of social behaviour arise. A common phenomena is mutual help among relatives which includes members of the immediate family and members of the extended family such as uncles, cousins and in - laws as well as members of the same clan (i.e. those possessing the same surname and the same ancestor). There is a public disapproval if mutual help is absent and this mutual help between kinsman and clansman extends to the provision of employment which frequently results in nepotism (Gong Weng Ai, 1979).

The social structure of the Malaysian Indian is derived from the caste system which is based on one's birth and the kind of occupation one holds. For example, one of the rules of the system is that it restrains the interaction of Indians of different castes in a more definite way than class distinctions among non - Indians. The Indians of a particular caste tend to group together and one of the feature of the caste system is its hierarchic structure. This distinction is sometimes based on vague feelings of higher social status relating to occupation or ritual

cleanliness. The lower class or the Harijan (the Untouchable's) usually do menial jobs and the upper class maintains higher ranking jobs and do not want to do the jobs traditionally carried out by members of the lower caste. During the British colonial period, the estate owners used the caste system as a means of exploiting the rubber plantation workers who are mostly Indians from the lower caste. The caste system may also have an impact on the selection practices of firms. An employer of Indian origin may show preference for individuals of the same caste background (Gong Weng Ai, 1979).

In addition, each of the Malays, Chinese and Indians languages, customs and racial identity give rise to communal feelings which are difficult to overcome. Each race in Malaysia has a strong sense of belonging to their own ethnic group and strive for racial betterment (Gong Weng Ai, 1979). As Sharifah Maria Alfah⁴ (1992) points out "*the practice of nepotism is considered socially and morally expected of the person by his ethnic community. Otherwise, the person could be criticised or even ostracised by his community*" (p.72). Nevertheless, some of the values common to all Malaysian ethnic groups are summarised as 'relationship - oriented', and 'focus on collectivity'. For instance, the Malaysians tend to focus on relationships more than task, even in a commercially - oriented interaction. It is therefore, not easy to separate the business and private lives of individuals since this value is often well integrated in ethnic

⁴ Syarifah Maria Alfah is presently General Manager, Human Resources Division of Aetna Universal Insurance Sdn Bhd (Malaysia). She holds a Masters in Management from the Asian Institute of Management, Manila, Phillipines. Her 20 - year career has mainly been in the field of human resources management as corporate executive, trainer and consultant, with extensive involvement in the areas of recruitment and orientation. She conducts training programmes as well as selection and training skills.

based relationships. As a result, an individual from a particular ethnic group, will prefer to conduct business dealings or work with others from the same ethnic group. The other value which is 'focus on collectivity', implies that the Malaysians are also group oriented regardless of ethnicity. As a result, it is very important for each individual to fulfill obligations to family members, close relatives and even friends. (Asma Abdullah, 1992).

However, these values may change over time. A study by Sarachek et.al (1988) on Malaysian trainees enrolled in various Government sponsored management training courses revealed that the respondents in most respects had absorbed values "*appropriate to modern, Western industrialised society*"(p.188). Furthermore, according to Gong Weng Ai (1979), with industrialisation and development progressing at a rapid rate, inter - racial harmony, while an arduous trek, is imminent. Nevertheless, this comment is considered as too optimistic since the language, customs and racial identity may still give rise to communal feelings and racial tensions which are difficult to overcome.

3.1.4. Government Policies and Programmes

As mentioned earlier, the Malaysian Government since independence has introduced several development programmes and policies directed at spurring the country's growth, such as the National Economic Policy (NEP), the Industrial Master Plan (IMP) and the most recently, the National Development Plan (NDP). The impressive growth which the country has achieved

is perhaps, a reflection of the Government's policies and programmes.

The NEP is a series of 5 year plans spanning 1970 to 1990. The primary objective of the NEP was to promote rapid economic development and a more equitable distribution of income. However, the NEP developed into an aggressive affirmative action policy aimed at increasing the economic power and participation of the Bumiputras (Wolfe and Arnold, 1994). Thus, the NEP included all of the following initiatives :

- to provide formal education to a greater proportion of Bumiputras
- to increase Bumiputra representation in prestige occupations such as doctor and lawyer
- to increase the share of capital owned by Bumiputras
- to increase the proportion of Bumiputras in the middle and upper income strata

In 1990, the National Development Plan (NDP) was introduced to replace the NEP. Spanning 1990 to the year 2000, the NDP is basically similar to the NEP. Both policies aimed to eradicate poverty and restructure Equity ownership and employment. They also both aimed to ensure a more balanced sharing of ownership and employment among the Bumiputras and non - Bumiputras such as the Chinese and the Indians. The main differences between these two major policies are ones of emphasis, priority and timing. The NDP concentrates on Human Resource Development to meet both the objectives of alleviating and eradicating poverty and restructuring ownership and employment (see <http://www.jaring.my> 'The Malaysian Economy : Challenges and prospects for 2020', 1996).

The most important aspect of both the NEP and NDP is the employment guidelines. The

Government requires that employment in all sectors should reflect the racial composition of the country and in practice, both local and foreign firms are required to hire as many Bumiputras as possible for key positions. Employers are required to report the racial composition of the workforces to the Government and those who fail to meet the target levels for Bumiputra representation, must justify their failure to comply with this policy. Moreover, each employer must submit a plan for 'Malaysianisation' of its workforce. Firms are pressured to hire Bumiputras for entry - level positions, to train and develop them, and to promote them to middle and upper management positions as soon as possible. In enforcing these employment guidelines, all expatriates are required to have work permits. The Government can refuse to grant a work permit if it determines that the relevant work can be performed by a Bumiputra instead of an expatriate or a non Bumiputra national. The Government has also set time limits on the work permits that it has granted and these time limits pressure employers to hastily prepare low - level Bumiputra managers to replace higher level expatriates. The Government also has the power to revoke a firm's license to operate in Malaysia if it determines that the firm is not complying to the affirmative action policies (Wolfe and Arnold, 1994)

The Industrial Master Plan (IMP) which aimed to boost Malaysia's economic growth, was introduced with a strong emphasis on the continuation of the export - led industrialisation strategy. It focussed on further diversification and deepening of both the resource - based and non resourced based industries. The plan thus provided a framework for the development of

a broad - based manufacturing sector during the period of 1986 to 1995. It outlined the structural shift from an agriculture and primary production - based economy to one in which the manufacturing sector would assume a greater role. The plan also emphasised the importance of preparing the workforce with technical and industrial skills and the need to develop indigenous skills in product design and production technology. According to the Second Industrial Master Plan Study Report (1996 - 2005), the IMP thus had 3 broad objectives :

- to ensure a continued rapid expansion of the economy through the accelerated growth of the manufacturing sector to meet the objectives of the NEP
- to promote the optimum and efficient utilisation of the nation's natural resources through value - added manufacturing activities
- to lay the foundation for the development of indigenous technological capability

With the implementation of the IMP, the Promotion of Investments Act, 1986 (PIA) replaced the Investment Incentives Act, 1968. It provides a wide range of incentives in the manufacturing, agricultural and tourism sectors. The PIA incentives were also formulated for the development of promoted activities and products. The Income Tax Act, 1967 also provided tax incentives for training, R&D and reinvestments. During the IMP period, the Government gradually reduced corporate tax from 40% to the 30% level in 1995. These changes were introduced to complement the PIA. These developments, including the liberalisation of the licensing provisions of the Industrial Co - ordination Act (ICA) 1975, provided the impetus for the rapid expansion of the manufacturing sector post - 1988 and the

recovery of the economy.

Manufacturing output expanded significantly during the IMP period. Exports of manufactured goods expanded by 28.6% during the IMP period surpassing the target of 9.4%. The share of manufacturing exports to total merchandise exports increased to 79.6% in 1995 from 32.8% in 1985. As shown below in Table 3.1, manufacturing value - added registered an average growth of 13.5% per annum during the same period, higher than the forecasted 8.8%. The share of manufacturing value - added to GDP also increased to 33.1% as compared to the targeted 23.9%.

Table 3.1
Growth of the Manufacturing sector during IMP, 1986 - 1995 (%)

	Target	Actual
GDP	6.4	7.8
Manufacturing value - added	8.8	13.5
Share of Manufacturing value - added to GDP (1995)	23.9	33.1
Manufacturing Exports	9.4	28.6
Manufacturing Employment	6.8	8.9
Manufacturing Employment ('000 workers) (1995)	1,464	2,051

Source : *The Second Industrial Master Plan Study Report 1996 - 2005*, pp.8

Most of the targets set in the IMP have been achieved. During the early years of the plan, almost all sub - sectors experienced slower growth due to the economic slowdown in the industrialised economies. The manufacturing sector grew rapidly in response to increasing world demand for goods and services, partially aided by domestic and international structural adjustment policies only in the second half of the 1980s.

The implementation of the IMP highlighted new challenges for the further development of the Malaysian Manufacturing sector. Based on the Second Industrial Master Plan Study Report (1996 - 2005) these include :

- the need to improve requisite economic conditions in order to sustain the growth of the manufacturing sector. These include continuous improvement in terms of quantity and quality of human resources, development of indigenous R&D capability and technology, adequate supply of modern infrastructure, and the provision of efficient business support services.
- the need to accelerate and diversify the manufacturing sector and enhance greater linkages between and within industrial subsectors
- the need to accelerate the development of indigenous technology and capability, and international marketing and distribution capacity. This is because the rapid growth of the manufacturing sector were driven by a greater dependence on foreign direct investment as opposed to domestic investments
- the need to strengthen economic linkages, both inter and intra - sectoral, through the further development and expansion of intermediate and supporting industries. In 1995, the imports of components and parts for the electrical and electronics industry group was valued at RM62.9 billion while the machinery and equipment industry group was RM30.9 billion. This significant outflow of funds needs to be addressed urgently . At the same time, this provides an opportunity for the development of domestic component manufacturing industries to subsequently become net exporters of their products thus helping to reduce the deficit in the trade balance.

The Second Industrial Master Plan (IMP2) which spans from the year 1996 to 2005 aims to build upon the success of the IMP. It will also address issues and challenges that have been identified to sustain and enhance the growth momentum of the manufacturing sector. IMP2 emphasises moving beyond a focus on manufacturing operations to include R&D and design

capability, the development of integrated supporting industries, packaging, distribution and marketing activities. The 5 strategic thrusts of the IMP2 based on the Second Industrial Master Plan Study Report (1996 - 2005) are :

- **Global Orientation.** It necessitates the manufacturing sector to focus on the changing global market by becoming world scale and world class manufacturers. The manufacturing sector should develop a global marketing capability, to compete internationally, and not rely entirely on cost advantages.
- **Enhancing Competitiveness.** The competitiveness of the manufacturing sector will be continuously enhanced by focussing on cluster development through the deepening and broadening of industrial linkages and productivity enhancement.
- **Improving Requisite Economic Foundation.** This will provide a focus on the development and management of human resource, technology acquisition and enhancing absorptive capacity, physical infrastructure, supportive administrative rules/procedures, fiscal and non fiscal incentives and business support services.
- **Malaysian - owned Manufacturing firms must assume greater importance in the next phase of the industrialisation of the country.** This will be achieved through the increased participation of Malaysian owned firms in the broad range of manufacturing activities especially in clusters that have been identified to be of strategic importance for the future development of the manufacturing sector. This will lead to higher retention of income and increased domestic share of the value added of the manufacturing sector. This strategy will provide the impetus for the development of Malaysian enterprises to become large firms geared towards the regional and global markets.
- **the adoption of information - intensive and knowledge - driven processes in manufacturing and in related activities such as in R&D, product design, marketing, distribution and procurement, and the increased use of information technology will form the essential foundation for the future development of the manufacturing sector.**

During the IMP2 period, the economy is expected to maintain the current momentum of growth of around 8%, in line with the Seventh Malaysia Plan. The IMP2 forecast of future prospects for the Malaysian economy is premised on the manufacturing sector's ability to sustain the current momentum of growth given the contribution of the other sectors of the economy and continuance of the current attractive climate for investment (see 'The 2nd Industrial Master Plan : 1996 - 2005', 1996).

However, in view of the present economic crisis due to the widening of the balance of payment current account deficits and the currency crisis, the government has decided to adopt certain policies to steer the economy forward such as reducing imports and increasing exports, cutting unnecessary expenditures, deferring or rescheduling major projects and other 'economic adjustment' drives. (see [http :/www.maid - plc.com/htbin/worldsearch](http://www.maid-plc.com/htbin/worldsearch) 'Analysis - budget to set Malaysian economy on right path', 1997)

3.1.5. Education system

Malaysia has an education system which provides a reasonably high level of primary education and opportunity for higher education of international standards and quality. As a result, there exists a widespread and expanding system of private schools and institutions. Its education system is modelled on the education systems of economically and technologically advanced Western countries (see <http://www.jaring.my> 'Malaysia : Education', 1996).

Primary education starts at six years of age, and may be completed within five to seven years. At this level, the emphasis is on acquiring strong reading and writing skills and building a sound foundation in mathematics and basic sciences. Students' performances are evaluated in Year 3 and 6 by two examinations. Students who perform well at primary three can opt to go straight into Year 5. On the other hand, Secondary school offers a comprehensive education programme. At this level, the curriculum includes a wide range of subjects. These are from arts and sciences and vocational as well as technical subjects which provides a 'practical and hands - on' approach to learning. Following an assessment examination⁵ at Year 3, students move into a more specialised fields of study based on choice and aptitude and re -evaluated at Year 5 through another assessment examination⁶. Several technical and vocational schools have also been set up to provide technically academic education and pre - employment skills. Some secondary schools offer a programme⁷ which qualifies students for entry into the national universities, colleges and teacher training institutions. At the University level, its courses and programmes are demand - driven and sensitive to changes in the global environment. Malaysia's first university, the University of Malaya, was set up in 1949 in Singapore. Today there are 9 Government Universities and Institutions and numerous private institutions. Presently these cater for 16.6% of those within the tertiary education age group. The national target is to achieve a substantial increase in the present supply of graduate to around 40% by the year 2000 to meet the needs of future development objectives (see <http://www.moe.gov.my/frmstruk.htm> 'Education in

⁵ This assessment examination is called PMR (Lower Secondary Assessment examination).

⁶ This assessment examination is called SPM (Malaysian Certificate of Education).

⁷ This is known as Malaysian Higher Certificate (STPM) programme.

Malaysia', 1998).

3.1.5.1. The evolution of Malaysian education

During the colonial era, education was regarded merely as a social service. However, in the post independence era, the focus was on the creation of national outlook through a common language and content. The education system was further improved through subsequent modifications. In 1971, with the advent of the New Economic Policy (NEP), education became a tool for the eradication of poverty, through its positive effects on productivity and the restructuring of society. At the tertiary level, the 1970s and 1980s were a period of very rapid expansion of the educational system. Achievements made under the NEP allowed the nation to shift the thrust of its development policy towards sustained growth. With the launching of the National Development Policy (NDP), education's economic role gained greater emphasis and the Sixth Malaysia Plan has accorded high priority to education and training as it contributes significantly to the objectives of the NDP. There has also been a rapid increase in the number of private institutions and in enrollment in these institutions. Expansion of places at the tertiary level through twinning programmes and preparatory courses in the country is expected to reduce the outflow of foreign exchange and improve the services account in the balance of payments. It is also expected that twinning with reputable foreign institutions will ensure quality and thus make it possible for Malaysia to become an Asian centre for private education which has quality. Private colleges, apart from equipping Malaysian youths with much needed skills in technology and management are also encouraged to recruit foreign students to turn the country into a net exporter of education.

The Government is concerned about high outflow of foreign exchange through education, is now amending the Universities and University Colleges Act 1971 and is introducing a new enactment called the Private Higher Education Institution Act. These policies will soon allow foreign universities to set up branch campuses in Malaysia. The government also intends to establish a National Accreditation Authority to act as the regulatory body of private educational institutions. These measures are part of a comprehensive package of reforms to turn Malaysia into a centre of excellence in education. The long term strategy is to attract students from other countries as well as local students to pursue their higher education in Malaysia. Nevertheless, although more educational and training facilities will be expanded and established by both the public and private sectors, Malaysians will still be encouraged to study abroad and gain valuable overseas experience. This will enable Malaysians to bridge the technological gap by learning new technologies and management techniques (Lim Kok Wing, 1995)

3.1.5.2 Management education

In Malaysia, management programmes are offered by institutions which are classified into 4 categories : Institutions of Higher Education and Private Institutions, Government Training Institutes, Professional Management Institutes and Management Consultant Firms. These are as follows :

- Institutions of Higher Education

Currently, there are 9 Government Universities and Institutions. These are as follows :
University Of Malaya (UM), University Of Science Malaysia (USM), National University Of Malaysia (UKM), University Of Technology Malaysia (UTM), Universiti Putra Malaysia (UPM), International Islamic University (UIA), Northern University Malaysia (UUM), Universiti Malaysia Sarawak (UNIMAS), and Universiti Malaysia Sabah (UMS). Included in this classifications of institutions are the colleges such as Institut Teknologi MARA (ITM), Kolej Tunku Abdul Rahman, and Politeknik Ungku Omar.

The University Of Malaya (UM) was established in 1962, succeeding the former University Of Malaya in Kuala Lumpur which was a division of the University Of Malaya established in Singapore in 1949. The University Of Science Malaysia (USM) was established in 1969. From an institution which started off by occupying temporary premises in the 'Malayan Teachers College', this University now stands in a campus of its own and has 2 branch campuses located in the state of Kelantan and Perak. The National University Of Malaysia (UKM) was established in 1970. This university is the apex of the national system of education in Malaysia which uses Bahasa Malaysia as the medium of instruction. The University Of Technology Malaysia (UTM) was established in 1972 and is the 3rd youngest university in Malaysia. The main campus is in Skudai, Johor Bahru. The original campus in Kuala Lumpur is still in use and remains as a branch of the University. The Universiti Putra Malaysia (UPM) was established in 1974 as Universiti Pertanian Malaysia and changed to its

current name as of 3rd April 1997. The International Islamic University (UIA) was established in May 1983 as a result of the treaty signed between the Government of Malaysia and 7 other Muslim countries and the Organisation of the Islamic conference (OIC). It is located temporarily in Petaling Jaya. The Northern University of Malaysia (UUM) is Malaysia's 6th university and its 1st intake of students was in July, 1984. It is located in Sintok, Alor Star and was established for the pursuit and development of management education. The Universiti Malaysia Sarawak (UNIMAS) was established in 1992. It is located in Semarakan, Sarawak and is the first full - fledged University to be set up in East Malaysia. The Universiti Malaysia Sabah (UMS) is Malaysia's 9th University and temporarily located in Menggatal and Likas area, while its permanent campus is being developed in Teluk Sepangor, Kota Kinabalu. (see <http://www.jaring.my> 'Universities in Malaysia', 1996)

The first management course at an institution of higher education was offered by the Faculty of Arts at Universiti Malaya in the early 1960s. Later, various types of management education programmes have been offered by all the institutions of higher education. These programmes include certificate and diploma courses ranging from 1 to 3 years duration, bachelor's degree programmes of 3 to 4 years duration, master's degree programmes of 2 to 3 years duration and Ph.D programmes by research work over a minimum period of 3 years. The first masters in business administration (MBA) programmes were introduced in 1980 when Universiti Kebangsaan Malaysia started its programmes. This was followed by

Universiti Malaya in 1982 and subsequently by Universiti Putra Malaysia in 1984. Institut Teknologi MARA also started its Executive MBA programmes in collaboration with the University Of Ohio in the United States. A degree in business administration was also offered by Institut Teknologi MARA in collaboration with the University of Ohio. A similar system of collaboration was set up between Kolej Tunku Abdul Rahman and Campbell University in the United States. Programmes to prepare students to sit for external examinations offered by the professional institute of accounting, banking, chartered secretaryship, insurance, marketing and transport were also offered by Institut Teknologi MARA and partly by Kolej Tunku Abdul Rahman (Gregory Thong, 1991). Currently, certificate, diploma and bachelors programmes in Business and Management are also conducted in private institutions (see <http://www.jaring.my> 'A Guide To Academic Courses Offered By Institution', 1996). These are illustrated in Table 3.2 on the following page.

- Government Training Institutes

In Malaysia, there are two major Government training institutes which conduct management courses, and these are the Institut Tadbiran Awam Negara (INTAN/ National Institute of Public Administration) and the National Productivity Centre (NPC).

Institut Tadbiran Awam Negara (INTAN) is recognised as one of the largest government training institutes in the region. Between 1963 and 1972, it trained about 20,000 civil servants and approximately 25% of the participants were from the managerial level. Between 1972 and 1982, the total number of courses offered annually increased from 123

Table 3.2
Courses offered by private institution in Malaysia

Courses	Private Institution
Advance Diploma in Business Management	Binary Business School Institut Teknologi Tun Abdul Razak (ITTAR) Rima college Sal college Systematics Groups of Colleges TL Management Centre
Higher Diploma in Business Management	Rima College
USBC Australia Ltd. Advance Diploma in Business	Systematics Group of Colleges
Associate Diploma in Business Studies	Institut Teknologi Tun Abdul Razak (ITTAR)
Bachelor of Business Adminisytration	Binary Business School
Bachelor of Arts in Business Administration/Business Stu	Emile Woolf College of Malaysia Inti College Kolej Damansara Utama Institut Perkim - Goon
Bachelor of Arts in Business	Stamford College Taylor's College
Bachelor of Arts in Business Administration	Inti College
Advance Diploma in Business Management	Binary Business School
	Institut Teknologi Tun Abdul Razak (ITTAR)
	Rima college
Bachelor of Arts in Accounting, Financial Managem Economics	Taylor's College
Bachelor of Business	Help Institute Rima College Stamford college Sunway College
Bachelor of Business Mangement	Yayasan Pelajaran Mara
Bachelor of Business (Economics & Finance)	Metropolitan College
Bachelor of Business (Finance & Management)	Taylors College
Bachelor of Business Administration	Kolej Inpens Sunway college Metropolitan College
Bachelor of Business in Business Administration	Malaysian Institute Of Management
Bachelor of Business in International Trade	MSC - Syme Business School
Bachelor of Business in Management	MSC - Syme Business School
Bachelor of Business in Administration /Business Studies	Kolej Bandar Utama
Bachelor of Commerce in Business Administration	Sedaya
Bachelor of Commerce (Management)	Binary Business School
Bachelor of Financial Management	Rima College
Bachelor of International Relations	Yayasan Pelajaran Mara
Bachelor of Management Studies	Sunway college

Source : <http://www.jaring.my> "A guide to Academic course offered by local institution"
[Accessed 17/05/1996]

Table 3.2 (Contd)

Courses	Private Institution
Bachelor of Office Administration	Rima College
Bachelor of Public Administration	Yayasan Pelajaran Mara
Bachelor of Science	Metropolitan College
Bachelor of Science in Business & Economics	Metropolitan College
Bachelor of Science in Business & Management (Accounting & Finance)	Taylor's College
Bachelor of Science in Business Administration	Metropolitan College
Bachelor of Science in Business & Management (Production)	Taylor's College
Bachelor of Science in Business & Management (Marketing)	Taylor's College
Bachelor of Business in Marketing & Management	Taylor's College
Bachelor of Arts in Business Studies & Economics	Taylor's College
Bachelor of Business in Finance & Marketing	Taylor's College
Bachelor of Business in Finance & Economics	Taylor's College
BTEC/HND in Business & Finance	Enile Woolf College of Malaysia Kolej Bandar Utama
Certificate in Business Administration	Rima College Institut Perkim - Goon
Certificate in Business Studies	ATC School of Business Laws Institut Perkim - Goon PAAC Sdn.Bhd Stamford College
Certificate in Business Studies & Computer	Institut Bina Usahawan
Certificate in Management Programme	Malaysian Institut of Management
Certificate in Office administration & Technology	Jaya Diri Institute of Technology
Sijil Pengurusan Perniagaan	Institut Teknologi Tun Abdul Razak
Diploma In Business Studies	Kolej Negeri Sembilan
Diploma In Construction Management	Institut Teknologi Pertama
Diploma In Management (Taxation)	Strategic Business School
Diploma In Administrative Management	Kolej Damansara Utama
Diploma In Business	Systematics groups of colleges
Diploma In Business & Management	Institut Teknologi Tun Abdul Razak Rima College TL Management Centre
Diploma In Business Administration	Binary Business School Juara Akademi Professional Tutors Rima College Sal College Sedaya Sunway College Stamford College

Source : <http://www.jaring.my> "A guide to Academic course offered by local institution"
[Accessed 17/05/1996]

Table 3.2 (Contd)

Courses	Private Institution
Diploma In Business Studies	ATC School of Business Laws Kolej Bandar Utama Rima College Saito Academy of Graphic Design Institut Perkim Goon Systematics Group of College
Diploma In Business Studies & Computer	Institut Bina Usahawan
Diploma In Manufacturing Management	Strategic Business School
Diploma In Office Administration & Technology	Jaya Dir Institute of Technonogy
Diploma In Supervisory Management	Malaysian Institute Of Management
Diploma In Training & Development	Malaysian Institute of Training & Development
Diploma of Business (Hospitality Management)	Systematiccs Group of Colleges
Diploma Pengurusan Perniagaan	Institut Teknologi Tun Abdul Razak
Diploma Pentadbiran Pejabat	Institut Teknologi Tun Abdul Razak
USBC Australia Ltd. Diploma in Business	Systematiccs Group of Colleges

Source : <http://www.jaring.my> "A guide to Academic course offered by local institution"
[Accessed 17/05/1996]

to 296 and the number of participants increased from 2, 124 to 9,948. On the other hand, the National Productivity Centre (NPC) in Malaysia was established in 1962. It started off with an initial offering of 5 courses for 105 participants in 1962. The number of management and management - related courses increased to 351 with 5,998 participants in 1988. Approximately, 50% of the courses offered were conducted by the 5 regional centres (Gregory Thong, 1991).

- **Professional Management Institutes**

The professional institutes available in Malaysia includes the Malaysian Institute Of Management (MIM), the Malaysian Institute of Personnel Management (MIPM), the Malaysian Association of Productivity (MAP) and the Malaysian Institute of Training and Development (MITD).

The Malaysian Institute Of Management (MIM) was established in 1966. Both short term courses (2 weeks duration) and medium term programmes (2 years duration) were offered. The medium term programmes includes courses such as the diploma in management, diploma in professional secretaryship, diploma in supervisory management, the MIM - Bath executive MBA, the diploma in business studies and the certificate in small business. The Executive MBA programmes were introduced in 1987 while the diploma in business studies and certificate in small business courses were introduced in 1988. The short term courses offered by this institute included public programmes for participants from both the private and public sectors organizations. In house programmes were also offered and conferences were organised as well as briefings conducted on the functional areas of management. This institute has over the years received grants from the Asia Foundation and the Konrad Adenauer Foundation to run specific programmes and workshops on environmental management, small business management and case study writing.

The Malaysian Institute Of Personnel Management (MIPM) was established in 1975, and located in Petaling Jaya. Its operation is similar to MIM and it has branches located in Penang, Johor Bahru and Sabah. The medium long term programmes offered by this institute includes courses such as the certificate in personnel management and the diploma in personnel management. The certificate programmes were first introduced in 1976 and conducted over a period of 5 months whilst the diploma programmes were first introduced in 1985 and conducted over a period of 18 months. The inaugural programmes were conducted

in collaboration with the Faculty of Management of Universiti Kebangsaan Malaysia. (UKM). The short term courses offered by MIPM are in the areas of human resources management, organizational behaviour and management development. In house programmes were also offered.

The Malaysian Association Of Productivity (MAP) was initially set up in 1969 as the professional arm of the NPC. Later, the NPC relinquished its influence on the association to enable it to operate independently and it has branches in Penang, Kuantan, Johor Bahru, Kuching and Kota Kinabalu. The medium term programmes offered by the MAP include courses such as diploma in marketing, diploma in business administration, diploma in investment analysis, certificate and diploma in accounting. The duration of all the diploma programmes are 2 years while the certificate programme is 1 year. In addition, short term public courses are also offered.

The Malaysian Institute Of Training And Development (MITD) was established as a society registered under the Societies Act in 1966. Its headquarters is in Penang with branch offices in Kuala Lumpur, Johor Bahru, Ipoh and Alor Star. The medium term programmes offered by MITD include the 2 year diploma in management and the diploma/certificate in marketing. The diploma in management programme is conducted in collaboration with the association of Business Executives (U.K.) whilst the diploma/certificate in marketing

programmes are conducted in collaboration with the Marketing Institute of Singapore (MIS) and the Institute of Marketing (U.K.). This institute also offered short term management courses (Gregory Thong, 1991).

- Management Consultancy firms

The demand for MBA programmes has increased tremendously in recent years. This demand has been recognized by both local management consultant firms and overseas institutions of higher education. The local management consultant firms were not granted the power to award degrees. As a result, some of them have approached foreign degree awarding institutions to enter into agreements of collaboration. Such agreements for example include those between PA Consulting Services (M) Sdn Bhd. with Cranfield Institute of technology (U.K.), Kassim Chan Management Consultants Sdn Bhd. with Brunel University (U.K.) and the Henley Staff College (U.K.) and Centre for Research Education and development of Organizations (CREDO) with the University of East Asia (Macau). The International Management Centre of Buckingham (IMCB), located in Malaysia offers an MBA programmes through action learning. The P.J.Community College collaborates with the Oklahoma City University (U.S.A.) in offering an MBA programme. Management consultant firms and some of the business colleges also specialize in offering short term public courses and in house courses on management. Furthermore, most of these firms and colleges also organize conferences and seminars on management themes for fee paying participants. The successful operation of professional management institutes, the expertise that is available, and the low cost of setting up such activities have contributed to the increase

in the business of conducting management courses, conferences and seminars as money making propositions (Gregory Thong, 1991).

3.1.6. Economic development and progress

In the last two decades, the Malaysian economy has undergone significant transformation from a plantation based agriculture and natural resource extraction to an industrialized based sector. In other words, Malaysia has been transformed from a commodity - based economy into a manufacturing - based economy. This transformation can be attributed to macro - economic and structural adjustment policies and strategies undertaken by the Government in the mid - eighties, which significantly contributed to major inflow of foreign direct investment and the rapid growth of the manufacturing sector (see 'The 2nd Industrial Master Plan : 1996 - 2005', 1996). Malaysia also leads the ASEAN (Association Of South East Asia Nations) countries in economic growth (Sato, 1994).

For the years following independence (1956 - 1960), the economy was growing at an average rate of 4.1% per annum. In the 1970s, it grew rapidly at an annual rate of 7.8%. A deep recession in the mid - 1980s however marred the country's impressive record with the gross domestic product (GDP) registering a negative growth rate for the first time in 1985. The economy has since recovered remarkably and smoothly achieving high real GDP growth rates of 5.4%, 8.9%, and 8.8% in 1987, 1988, 1989. In 1990, GDP growth exceeded 10% (M. Ariff, 1991). The economic growth rate decelerate slightly to 8.6% in 1991 (Malaysian

Economic Report, 1991/1992). For the period of 1991 to 1994, the economy grew rapidly at an average rate of 8.3% per annum and became one of the most dynamic and fastest growing economies in Asia (Gan Khuan Poh, 1995). In 1995, the Malaysian economy recorded another year of strong performance. Growth in real GDP increased at a rate of 10.2% in the 1st quarter, before recording a moderation to 9.6% in the 2nd quarter and 8.9% in the 3rd quarter. Growth picked up again in the final quarter to increase by 9.2%. As a consequence, the overall GDP growth for 1995 averaged 9.5% representing eight consecutive year of sustained high growth as compared to 9.2% in 1994 (Bank Negara Malaysia Annual Report, 1995). Driving this growth is the manufacturing sector which grew by an average of 14% from 1987 to 1995. Other dynamic sectors includes the construction, financial and transport services sectors, which in varying degrees, influence the performance of the manufacturing sector (MITI Report, 1995/1996). In 1996, the Malaysian economy registered a real GDP growth of 8.2%, which is the ninth consecutive year the economy has recorded strong growth (see [http: thestar.com.my/current/business.html](http://thestar.com.my/current/business.html) 'Economic Report 96/97', 1997). In 1997, its economic growth maintained at 8% although the value of the ringgit had dropped by 30% (see [http: thestar.com.my/current/business.html](http://thestar.com.my/current/business.html) 'Anwar shows he's in control of the deficit', 1997). Malaysia is expected to register a moderate growth of 7% in 1998 (see [http: thestar.com.my/current/business.html](http://thestar.com.my/current/business.html) 'Budget Allocation 1998, 1997).

3.1.6.1. Manufacturing Sector

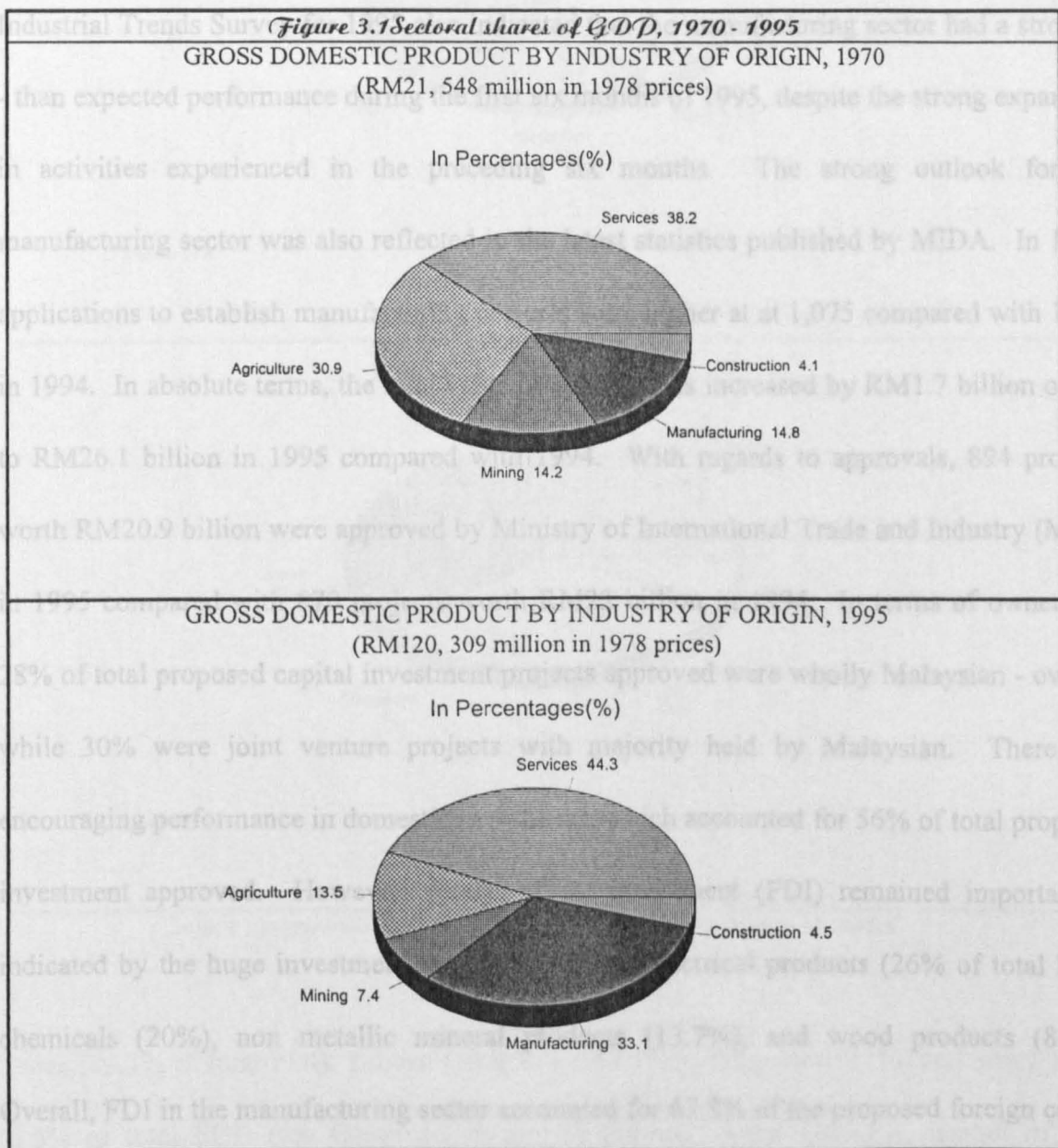
The manufacturing sector presents most distinctly the modernisation of the Malaysian economy. The growth of this sector began in the 60s and accelerated with the introduction of

the Investment Incentives Act, 1968 and the promotion of free zones (FZs) in 1971. These incentives attracted many large multinational corporations (MNCs) to establish export oriented operations supported by relatively low wage, good infrastructure facilities and a stable political and economic environment. In the early 1980s, the Government undertook measures to develop certain selected heavy industries such as iron and steel, petrochemicals, cement and automobiles to broaden and strengthen the industrial base, and to further develop indigenous capabilities in the manufacturing sector. Value - added in the manufacturing sector grew at an average of 12.3% from 1970 to 1980 and further increased to 13.4% from 1980 to 1990. Its share of the GDP rose from 14.8% in 1970 to 19.7% at the end of 1985 and further increased to 33.1% at the end of 1995 as shown in Figure 3.1 on the next page (see 'The 2nd Industrial Master Plan : 1996 - 2005', 1996)

The year 1995 also marked the final year of the Sixth Malaysia Plan, during which the manufacturing sector registered an average annual growth rate of 13.3% and accounted for 30.4% of GDP. Expansion in both the export - oriented and domestic market - oriented industries was maintained at 15.2% and 13.5% compared with 16% and 13.5% achieved in 1994, thus reflecting sustained external demand as well as continued strong domestic demand. The expansion in the export - oriented industries was spearheaded mainly by the strong growth in the electronics and electrical products sector, while growth in the domestic market - oriented industries was primarily in industries producing fabricated metal products, transport equipment, petroleum products, construction - related materials and rubber

products. The strong performance of the manufacturing sector in 1995 was largely the result of private sector initiatives responding to market opportunities and Government policies aimed at promoting sustainable growth. Double - digit growth in the manufacturing sector was also reported in the Bank Negara Malaysia Annual Survey of Companies for 1995.

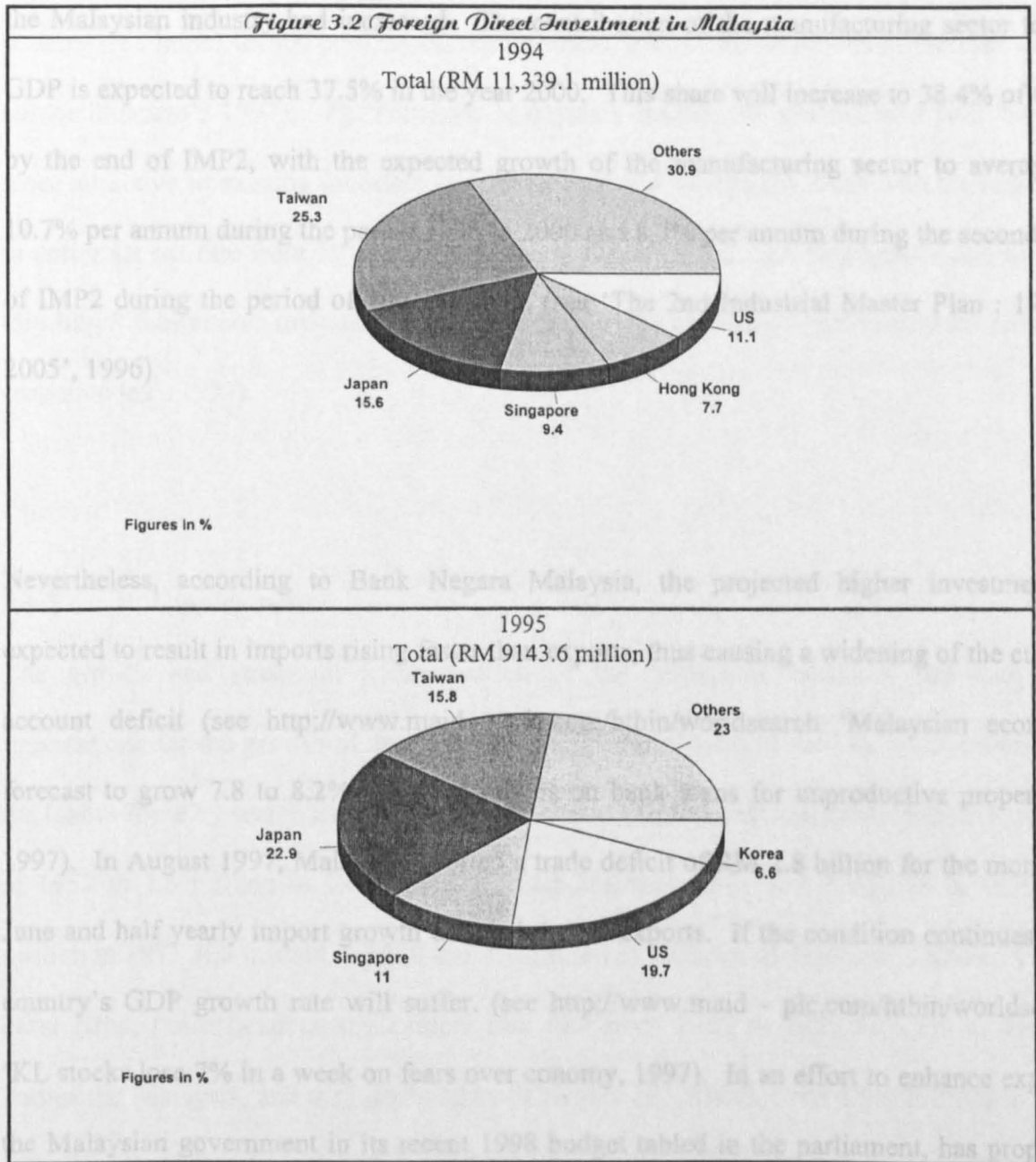
16.3% -respectively. The Malaysian Industrial Development Authority (MIDA) BI - Annual



Source : Economic Reports, Ministry of Finance In *The 2nd Industrial Master Plan Report 1996 - 2005*, pp.4.

This survey which covers 357 companies from 13 major industries, showed that the performance of the sector remained strong with a growth rate of 15.9% as compared to 22.6% in 1994. Reflecting the broad-based expansion, both the export-oriented and domestic market-oriented industries continued to register double-digit growth rates of 15.2% and 16.3% - respectively. The Malaysian Industrial Development Authority (MIDA) Bi-Annual Industrial Trends Survey for 1995 also indicated that the manufacturing sector had a stronger-than expected performance during the first six months of 1995, despite the strong expansion in activities experienced in the preceding six months. The strong outlook for the manufacturing sector was also reflected in the latest statistics published by MIDA. In 1995, applications to establish manufacturing projects were higher at 1,075 compared with 1,018 in 1994. In absolute terms, the total value of applications increased by RM1.7 billion or 7% to RM26.1 billion in 1995 compared with 1994. With regards to approvals, 894 projects worth RM20.9 billion were approved by Ministry of International Trade and Industry (MITI) in 1995 compared with 870 projects worth RM23 billion in 1994. In terms of ownership, 28% of total proposed capital investment projects approved were wholly Malaysian-owned, while 30% were joint venture projects with majority held by Malaysian. There was encouraging performance in domestic investment, which accounted for 56% of total proposed investment approved. However, foreign direct investment (FDI) remained important as indicated by the huge investment in electronics and electrical products (26% of total FDI), chemicals (20%), non-metallic mineral products (13.7%), and wood products (8.1%). Overall, FDI in the manufacturing sector accounted for 67.8% of the proposed foreign capital investment. The 5 major investing countries were Japan (22.9% of total FDI), the United

Figure 3.2 Foreign Direct Investment in Malaysia



Source : <http://www.jetro.go.jp/> "Foreign Direct Investment In Malaysia"
[Accessed 15/7/1997]

States (19.7% of total FDI), Taiwan (15.8% of total FDI), Singapore (11%) and South Korea (6.6% of total FDI) (see figure 3.2 as shown above). As a result, the number of large multinationals with headquarters in these countries such as Matsushita, Sharp - Roxy,

Hitachi, Philips, Volvo, Nestle, Esso, Shell, Texas Instruments, Harris, Intel etc operating in the Malaysian industry had increased. The contribution of the manufacturing sector to the GDP is expected to reach 37.5% in the year 2000. This share will increase to 38.4% of GDP by the end of IMP2, with the expected growth of the manufacturing sector to average at 10.7% per annum during the period 1996 to 2000 and 8.3% per annum during the second half of IMP2 during the period of 2001 to 2005. (see 'The 2nd Industrial Master Plan : 1996 - 2005', 1996).

Nevertheless, according to Bank Negara Malaysia, the projected higher investment is expected to result in imports rising faster than exports, thus causing a widening of the current account deficit (see [http://www.maid - plc.com/htbin/worldsearch](http://www.maid-plc.com/htbin/worldsearch) 'Malaysian economy forecast to grow 7.8 to 8.2% this year : curbs on bank loans for unproductive properties', 1997). In August 1997, Malaysia reported a trade deficit of RM 2.8 billion for the month of June and half yearly import growth doubled that of exports. If the condition continues, this country's GDP growth rate will suffer. (see <http://www.maid - plc.com/htbin/worldsearch> 'KL stocks lose 7% in a week on fears over conomy, 1997). In an effort to enhance exports, the Malaysian government in its recent 1998 budget tabled in the parliament, has proposed tax incentives in the manufacturing sector based on the export value. Companies exporting goods with value - added of 30% would be given tax exemption of up to 10% of the increase in export value. Likewise, companies exporting products with value - added of 50% would be given tax exemption of up to 15% of the increase in export value. The tax incentives

represent an attempt by the government measures to ensure that the cost of doing business in Malaysia does not affect export competitiveness and continues to attract investors in this country (see [http:// thestar.com.my/current/business. html](http://thestar.com.my/current/business.html) 'Tax incentives to increase export competitiveness', 1997). Furthermore, Malaysia's investment environment will become more attractive to existing investors as well as potential foreign investors with the reduction in corporate tax rate from 30% to 28% which is almost at par with Singapore's rate of 27% (see [http:// thestar.com.my/current/business. html](http://thestar.com.my/current/business.html) 'FMM commends government for reducing corporate tax', 1997).

3.1.7. Employment

The growth and structural transformation of the Malaysian economy has had great implications for the growth of employment and unemployment as well as the distribution of the labour force by sector and occupation. The total employment has grown from 2.1 million in 1957 to 2.6 million in 1965 for Peninsular Malaysia only, to 4.0 million in 1970, 4.2 million in 1975, 4.8 million in 1980 and 6.1 million in 1988 for Malaysia as a whole. On the other hand, the official unemployment rate rose from 6.0% in 1957 to 6.3% in 1965 in Peninsular Malaysia, and then declined for Malaysia as a whole, from 7.8% in 1970 to 7.0% in 1975, 5.7% in 1980 and 4.6% in 1982, before rising to 8.2% in 1987 and then declining again (Jomo, 1990).

In 1995, the employment situation remains tight amidst another year of strong economic performance. Total employment was estimated to increase at a more moderate rate of 2.8% or 214, 000 persons to 7.8 million at the end of 1995 compared with an increase of 3% or 222,000 persons in 1994.

Table 3.3 below illustrates that employment in the manufacturing sector increased at an average rate of 8.9% during the IMP period. Its total share of employment was 15.8% at the end of 1984 ('The 2nd Industrial Master Plan : 1996 - 2005', 1996). In 1995, this sector continued to be the major source of employment rising to 25.5% from 24.7% in 1994 . The number increased although at a more moderate rate of 6.3% or 119,000 persons to 2 million persons in 1995 (increase of 7.8% or 136,000 persons in 1994) thus reflecting the expansion of manufacturing activities.

Table 3.3
Employment by sectors ('000 persons)

	1984	%	1995	%	Average 1986 - 1995	%
Agriculture	1724.0	31.0	1428.7	18.0	1695.2	25.5
Mining	47.2	0.8	40.7	0.5	35.5	0.5
Manufacturing	878.9	15.8	2051.6	25.9	1400.6	20.3
Construction	442.3	7.9	659.4	8.3	458.0	6.7
Government Services	811.4	14.6	872.0	11.0	852.2	12.7
Business and Other Services	1660.9	29.9	2863.0	36.3	2336.6	34.3
Total	5564.7	100.0	7915.4	100.0	6778.1	100.0
Labour force	5907.0		8140.0		7133.6	
Unemployment	342.3		224.6		355.5	
Unemployment rate	5.8		2.8		5.0	

Source : Economic Reports 1984 - 95/96 Ministry of Finance In *The 2nd Industrial Master Plan 1996 - 2005*, pp.6

The slower growth in employment during the year 1995 reflected the current shift from labour intensive towards more capital - intensive production activities as well as increased automation and mechanisation within existing industries. Statistics on approved investment from the Ministry of International Trade and Industry (MITI) revealed that the capital investment per employee increased to RM177,602 in 1995 from RM168,115 in 1994 and RM65,492 in 1987 (Bank Negara Malaysia Annual Report, 1995).

The total labour supply is also expected to grow at an average annual growth rate of 2.6% between 1990 and 2020. Employment is thus expected to increase from 6.6 million to around 15 million during the next 30 years. The share of professional, technical and related workers is projected to increase from 8.8% in 1990 to 13.5% in the year 2020 whilst the share of administrative and managerial workers is expected to increase from 2.5% to 4.3%. A projected 2.0 million persons will be employed in professional and technical occupations. Many of these will be engineers and engineering assistants especially in the chemical, mechanical, electrical, electronics and mechatronics fields. Great demand is also expected for multi - skilled craftsmen in tool and die making, fabrication, machining, electrical and electronics. The demand for managers and supervisors who are technologically oriented will also increase strongly (see <http://www.jaring.my> 'The Malaysian Economy In The Year 2020', 1996)

3.1.8. Conclusion : Possible factor influencing the choice of selection techniques by firms in the Malaysian industry

The review of the literature in Chapter Two, pointed to a number of variations in the use of selection techniques between Western firms. Some of the variations were by country, some by size of firm. Nevertheless, there were some broad similarities. Francesco (1981) has argued that there is a distinctive Western approach to selection. He says that it *"puts more emphasise on finding a person whose qualifications fit the job specifications. The method is more involved, including a job analysis; a choice of selection technique(s) such as an application blank, interview, paper and pencil test, or assessment centre; and finally, validation of the whole process"* (p.8). Thus in hiring managers, Western firms generally use application forms/cvs, references (structured and/or open -ended), interviews (structured and/or open - ended). They also sometimes use psychological tests (cognitive and personality), assessment centres (ACs) and biodata. Physical or medical examinations have also been employed as part of the selection process. These are the reasons for the researcher to believe that such Western techniques will be widely used in Malaysia : (i) historical development of Malaysia, which is one of continual interaction with foreign powers and influences; (ii) managers responsible for the selection process which have experience in a Western - based firms and/or educated in the West; (iii) presence of multinational corporations (MNCs) which may cause local firms to eventually emulate and adopt the selection techniques employed by these MNCs in order to remain competitive in the labour market; (iv) interaction with consultancy firms particularly those which are foreign - based, that may influence employers to use selection techniques originated in the West; and (v) existence of HRM department with professional HR (Human

Resource) staff which may serve as an impetus for firm to develop more extensive, sophisticated and systematic selection techniques.

Despite this, the differences in the Malaysian culture might be expected to have some effect on how the Western techniques are used (or adapted) and whether they are used. As explained earlier in section 3.1.3 of this chapter, each principal ethnic group such as the Malays, Chinese and the Indians has distinct cultural values. Western values such as individualism, equality, assertiveness, competition, frankness, and openness are likely to mean adoption of selection techniques based on finding the best candidate technically qualified for the job. Hence, this may mean employing a systematic and objective selection techniques. On the other hand, the Malaysian values of 'Budi' (tacit system of reciprocal obligations), loyalty, indirect, family oriented, non - confrontational, respect for hierarchy (see Appendix 5.3 (a), (b), (c) and (d) at the end of the thesis) are likely to mean in all cases, a greater emphasis on informal methods of recruitment and selecting family members, close relatives and even friends. It is also the case that firms in Malaysia have been pressured by the Government to give preference to Bumiputras. Thus, this may mean that systematic and objective selection techniques are either not used or are modified. The key question here is how these competing pressures will be balanced : in what circumstances will the pressure to adopt Western selection techniques be greatest and in what circumstances will the pressure to adopt to the Malaysian culture will be greatest.

On the basis of the above discussion, one might hypothesise therefore that :

(i) Local firms are likely to use selection techniques developed in the West if : (a) personnel managers have been educated in the West; (b) personnel managers have been employed previously by Western - based firms; (c) consultants have been used to provide advise on recruitment and selection and (d) the firm has a large HRM department. Local firms that do not share these characteristics are less likely to use selection techniques developed in the West or are likely to modify them significantly.

(ii) UK or US Multinational firms operating in Malaysia are likely to use selection techniques developed in the West despite the fact that they are operating in a different culture.

(iii) Japanese Multinational firms are likely to modify their selection techniques to take account of the Malaysian culture.

(iv) Western European Multinational firms tend to be more polycentric and therefore are more likely to adapt their selection techniques to take account of the Malaysian culture.

The following chapter (Chapter 4) will describe the research methodology used in this study.

Chapter 4

RESEARCH DESIGN AND METHODOLOGY

4.0 Introduction

The purpose of this chapter is to describe the approaches adopted and the research design employed in the study. In order to do so, this chapter will be divided into three parts. Part I will highlight the broad approach to the research followed by a brief overview of the generally used research design. Part II will present a review of the selected research design to guide the researcher in conducting the fieldwork. Finally, part III will describe the approaches adopted in the research. This part of this chapter will also outline in detail how the selected research design was implemented in this study.

PART I

4.1 Types of research

There are basically two broad approaches to research : (i) Qualitative and (ii) Quantitative. Qualitative research involves collecting, analyzing and interpreting data that cannot be meaningfully quantified, that is summarised in the form of numbers. Any study using nonstructured questioning or observation techniques can be labelled as qualitative research. Another distinguishing feature of this type of research is that it typically involves only a relatively small number of respondents or units. The non structured and small sample features of qualitative research techniques are intended to provide initial insights, ideas or understanding about a situation or a problem (Parasuraman, 1986). In qualitative research, the researcher wants to obtain a deep understanding of why and how something is happening. In addition, qualitative research can produce rich data, probing into people's unconscious

attitudes and needs and because the sample is small, there is no attempt to measure responses (Birns et.al, 1990).

In contrast to qualitative research, quantitative research supplies a number to anything that can be measured and is based on sizeable surveys (Birns et.al, 1990). Similarly, according to Reaves (1992), quantitative research is an approach that involves measuring the quantity of things, usually numerical quantities. This form of research is also characterised by a more structured and by a larger, more representative respondent sample (Parasuraman, 1986).

In general, it can be said that quantitative research is concerned with 'describing and measuring', while qualitative research is concerned with 'explaining and understanding' (Goodyear, 1990). Quantitative research is sometimes backed by a qualitative follow - up to explore the subject in more depth (Meier, 1990). Although qualitative research provides insight and richness of information, it lacks the conviction and credibility which are associated with quantification. Thus, some have argued that ideally a researcher should use both approaches - *"qualitative research to inform the researcher of the nature and parameters of a problem and quantitative research to derive empirical generalisations which may be used to determine future courses of action"* (Baker, 1991 p.212).

4.2 Research design

According to Baker (1991) *"it is vital to stress that although the two approaches (quantitative and qualitative research method) are distinctly different, they are complementary and most sophisticated research designs will contain elements of both"* (p.32). Furthermore, Bryman (1992) argues that, *"while particular research design tend to be associated with research methods, a distinction is useful, because one does not necessarily imply the other"*(p.28). Hence, the research design is thus classified by Bryman (1992) as : experiments, survey research, case study, qualitative and action research. These are briefly described as follows :

- **Experiment** : This form of research measures the effect of manipulating one variable on another variable (Robson, 1995) or the effect of a change in one variable on another variable. This requires the researcher to introduce the change into the environment and then measure the resulting effect (Aaker and Day, 1986). The particular strength of this research strategy is that it allows the researcher to make strong claims about causality - *"that one thing has an effect on something else"* (Bryman, 1992 p.71). The ability to set up a situation for the express purpose of observing and recording accurately the effect on one factor when another is deliberately changed, permits researchers to prove or disprove a hypothesis that they could otherwise only partially test. It is for this reason that experiments have been the basis for the advancement of knowledge in most scientific field (Boyd et.al, 1989). There are two classifications of experimental research design : laboratory and field experiment. In a laboratory experiment, the researcher creates an environment or an artificial setting by manipulating the desired variables and controlling

the irrelevant variables. The effect of the manipulation can then be observed. In a field experiment, the researcher in a realistic situation, manipulates one or more independent variables under as carefully controlled conditions as the situation will permit. Thus the laboratory experiment is distinguished from the field experiment in terms of environment. The researcher creates a setting for a laboratory experiment, while a field experiment is conducted in natural setting (Aaker and Day, 1986; Churchill, 1987).

- Survey research : This form of research is a structured collection of data by mail, telephone or personal interviews directly either from a sample of respondents (Aaker and Day, 1986) or from the population on a whole (Churchill, 1987). Surveys are well suited to descriptive studies but can also be used to explore aspects of a situation or to seek explanation and provide data for testing hypothesis. Sample surveys are the most common approach and in such circumstances careful attention needs to be paid to how samples are drawn. The interest is not usually on individuals per se, but on profiles and generalized statistics drawn from the total sample and generalized to the population (Robson, 1995). It should involve a clearly defined purpose, problem and objective (Adams and Schvaneveldt, 1985). Surveys are often cross sectional studies where the focus is on the make - up of the sample, and the state of affairs in the population at just one point in time. The value of this approach depends crucially on choosing a representative, non biased sample which is usually large enough in size to ensure that through statistical means, the researcher has a high degree of confidence as to the state of

affairs in the population. When the main interest is in describing or assessing change or development over time, some form of longitudinal study is the method chosen where the same set of people, and/or the same issues or situation is studied over a period of time (Robson, 1995).

- **Case Study** : This form of research entails the detailed examination of one or a small number of 'cases' (Bryman, 1992). The 'case' is the situation, individual, group, organization or whatever the the researcher is interested in (Robson, 1995). The unit of analysis is often the organisation, but can equally be either departments and sections in organisation or inter - organisational network (Bryman, 1992). The collection of information is via a range of data collection techniques including observation, interview and documentary analysis (Robson, 1995). The case study approach is particularly helpful when deeper understanding is needed and when there is little concern about generalizing to a large population (Adams and Schvaneveldt, 1985). In general, case studies are the preferred strategy when "how" or "why" questions are being posed, when the researcher has little control over events, and when the focus is on a contemporary phenomenon within some real life context (Yin, 1994).
- **Qualitative research** : This form of research is based on unstructured interviews with small samples, usually intended to generate ideas and hypothesis. The three primary modes of

data collection are (i) expert opinion which is, discussions with people who have specialized insights (ii) depth interviews where the emphasis is on the depth and richness of information from a few respondents and (iii) focus - group interviews where groups of 6 to 10 people engage in lengthy discussion of subjects related to the research question (Aaker and Day, 1986). The emphasis tends to be on understanding what is going on in an organisation in participants' own terms rather than those of the researcher (Bryman, 1992).

- Action Research : This form of research is where the researcher is involved, in conjunction with members of an organisation, in dealing with a problem that is recognized as such by both parties. The researcher feeds information about advisable lines of action and observes the impact of the implementation of the advised lines of action on the organisational problem. Hence, in this form of research, the researcher becomes part of the field of investigation (Bryman, 1992).

PART II

4.3 Survey Research

Survey research is the most widely used formal research design (McGown 1979). According to Tull and Hawkins (1990), survey research is "*a systematic gathering of information from respondents for the purpose of understanding and/or predicting some aspect of behaviour of the population of interest*"(p.138). Similarly Aaker and Day (1986) define survey research as "*a structured collection*

of data directly from representative samples of respondents”(p.55).

The above definition thus implies that the information from respondents or from representative samples of respondents has been collected with some version of a questionnaire. One of the mode of gathering information in survey research therefore is a questionnaire which can either be self-administered through a postal survey, or conducted via a face to face personal interview or telephone interview.

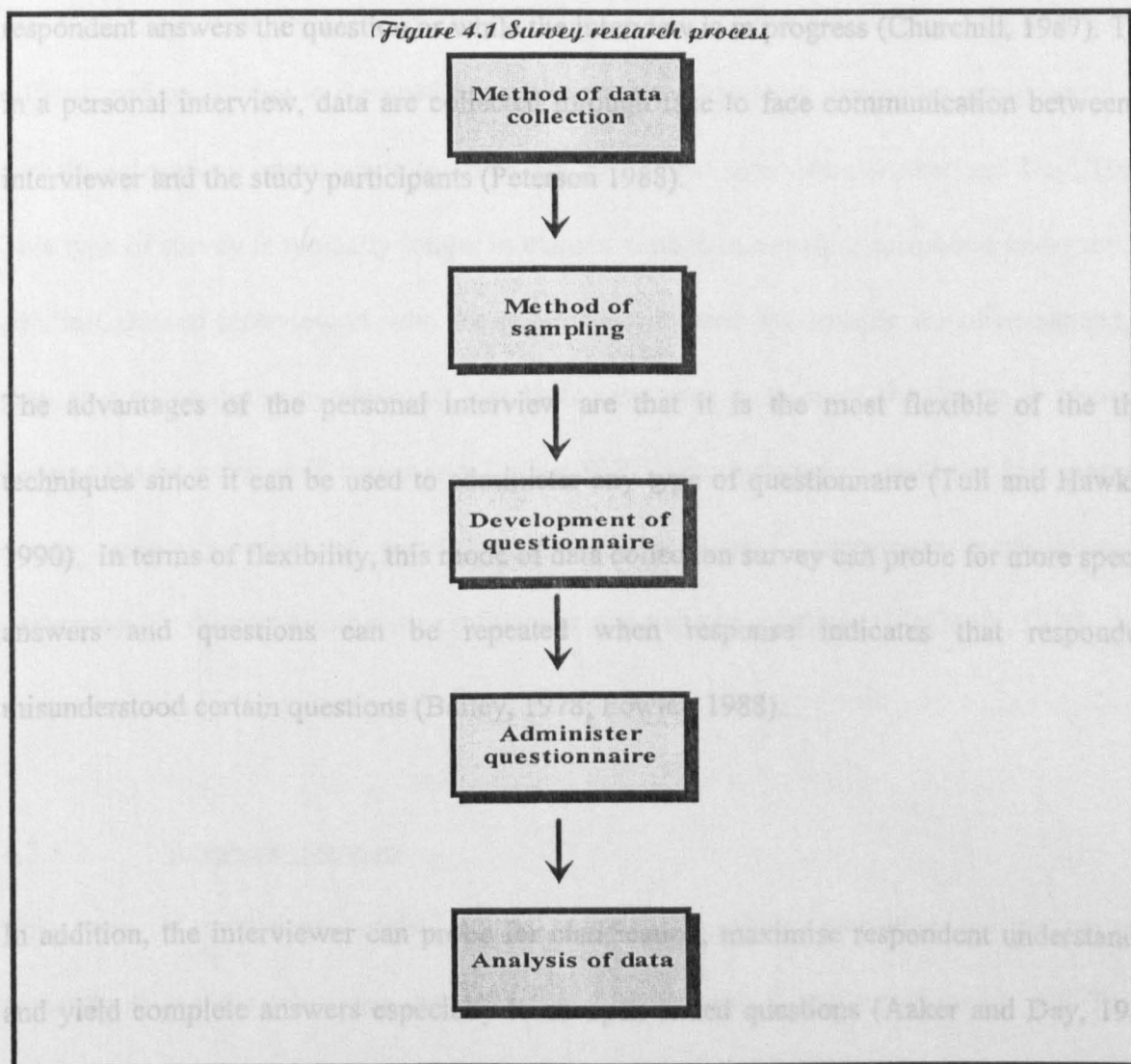
According to Churchill (1987), *“there is never a single, standard, correct method of carrying out a research”(p.71).* Similarly, Tull and Hawkins (1990) also state that there is no one method of survey data collection which is best for all situations. According to them, the primary consideration is to determine *“which technique is capable of generating appropriate information from the appropriate sample at the lowest cost””(p.155).* Whatever data collection method employed, the researcher must be concerned with sampling, questionnaire design, questionnaire administration and data analysis in a survey research process (Areck and Settle, 1985). A typical survey research process thus involves several stages as shown in figure 4.1 on the following page (Churchill, 1987; Tull and Hawkins, 1990). These stages will be elaborated in the following sections.

4.3.1 Method of data collection

The first step in the survey research process is to determine the data collection method to be

employed in the study. The three primary modes of data collection strategy employed in survey research are (i) personal interview (ii) telephone interview and (iii) self administered procedures or mail survey (Aaker and Day 1986; Fowler 1988; Churchill 1987; Peterson 1988). In practice, though, all these modes of data collection strategy are frequently combined or mixed in a survey research (Peterson, 1988).

Figure 4.1 Survey research process



Adapted from Gilbert A Churchill (1987), *Marketing Research : Methodological Foundations* (4th ed), Dryden Press, p.25 and Donald s. Tull and Dell I. Hawkins, *Marketing Research : Measurement and Method* (5th ed), Macmillan Publishing Company, p.45

4.3.1.1. Personal interview

This form of interview consists of an interviewer asking questions to one or more respondents in a face to face situation. The task of the interviewer is to contact the respondents, ask questions and record answers given by these respondents (Kinnear and Taylor, 1979). It also implies a direct face to face conversation between the interviewer and the respondent or interviewee and the recording of answers is done immediately after the respondent answers the question or while the interview is in progress (Churchill, 1987). Thus in a personal interview, data are collected through face to face communication between an interviewer and the study participants (Peterson 1988).

The advantages of the personal interview are that it is the most flexible of the three techniques since it can be used to administer any type of questionnaire (Tull and Hawkins, 1990). In terms of flexibility, this mode of data collection survey can probe for more specific answers and questions can be repeated when response indicates that respondents misunderstood certain questions (Bailey, 1978; Fowler, 1988).

In addition, the interviewer can probe for clarification, maximise respondent understanding and yield complete answers especially to an open ended questions (Aaker and Day, 1986). The personal interview can also record spontaneous answers where the respondent does not have the opportunity to retract his or her first answer. Spontaneous answers may be more

informative than answers about which a respondent has had time to think. Furthermore, this type of survey is probably the most effective method of enlisting cooperation for most of the population where it is possible to build rapport and confidence with the respondents (Fowler, 1988).

The disadvantage of the personal interview are that it is time consuming, administratively difficult and costly due to the need to travel between interviews, setting up appointment and perhaps scheduling return visits to complete interrupted interviews (Aaker and Day, 1986). This type of survey is typically longer in elapsed time than a mail or telephone interview. In addition, trained interviewers who are geographically near the sample are often needed. It may also cause the respondents to bias their responses because of the desire to please or impress the interviewer (Kinneer and Taylor, 1979). Furthermore, interviewer bias may also occur especially when a poorly trained or motivated interviewer consciously or unconsciously distorts or otherwise influences responses to questions (McGown, 1979)

4.3.1.2. Telephone interview

This form of interview consists of an interviewer asking questions to one or more respondents via the telephone instead of by direct personal contact (Kinneer and Taylor, 1979). This type of survey can also be described as a conversation between the interviewer and respondent over the phone (Churchill, 1987). Thus in a telephone interview, data are

collected through telephone communication between an interviewer and study participants (Peterson, 1988).

The advantage of the telephone interview are that it is the fastest mode of data collection survey (Kinnear and Taylor, 1979). In addition, it has the potential to be used for short data collection period (Fowler, 1988). This mode of data collection survey also dominates personal interviews with respect to speed and absence of administrative problems (Aaker and Day, 1986).

The disadvantage of the telephone interview is that it is impossible to pick up visual cues. Furthermore, the interviewer cannot observe the respondent to ensure further that the instructions are understood (Tull and Hawkins, 1990). Similarly, it has the inability to employ visual aids or complete complex tasks (Aaker and Day, 1986). In addition, questions with complex descriptions cannot be adopted with this method of survey (Fowler, 1988). Moreover, this form of interview may also bias the sample (to those who have telephones) and may be impractical in some countries where telephone ownership is limited.

4.3.1.3. Mail survey

These are generally questionnaires mailed to respondents. The completed questionnaire is returned by mail to the researcher (Tull and Hawkins, 1990). A cover letter usually

accompanies the mail questionnaire (Churchill, 1987). This survey, similar to the telephone interview, ideally requires a listing of both names and addresses of the populations (Kinnear and Taylor, 1979). Thus, in a mail survey, data are collected through mail communication between a researcher and study participants (Peterson, 1988).

One of the advantages of the mail survey is that it is a favoured way of seeking to acquire data from a large number of respondents (Howard and Sharp, 1993). It is also suitable and more attractive for collecting data from a population that is highly literate and highly interested in the study. In addition, in the mail survey, it is easier to ask questions with long or complex response categories (Fowler, 1988). This method of survey is also appropriate for study where the research design involves structured questions with simple instructions which can be answered easily by the respondent (Kinnear and Taylor, 1979). There is also consistent evidence that mail surveys yield more accurate results among those completing the survey. This is because, *"the mail questionnaire is answered at the respondent's discretion, the replies are likely to be more thoughtful and others can be consulted for necessary information"* (Aaker and Day, 1986 p.157). Furthermore, there is no immediate time pressure for answering questions as in a telephone interview (Peterson, 1988).

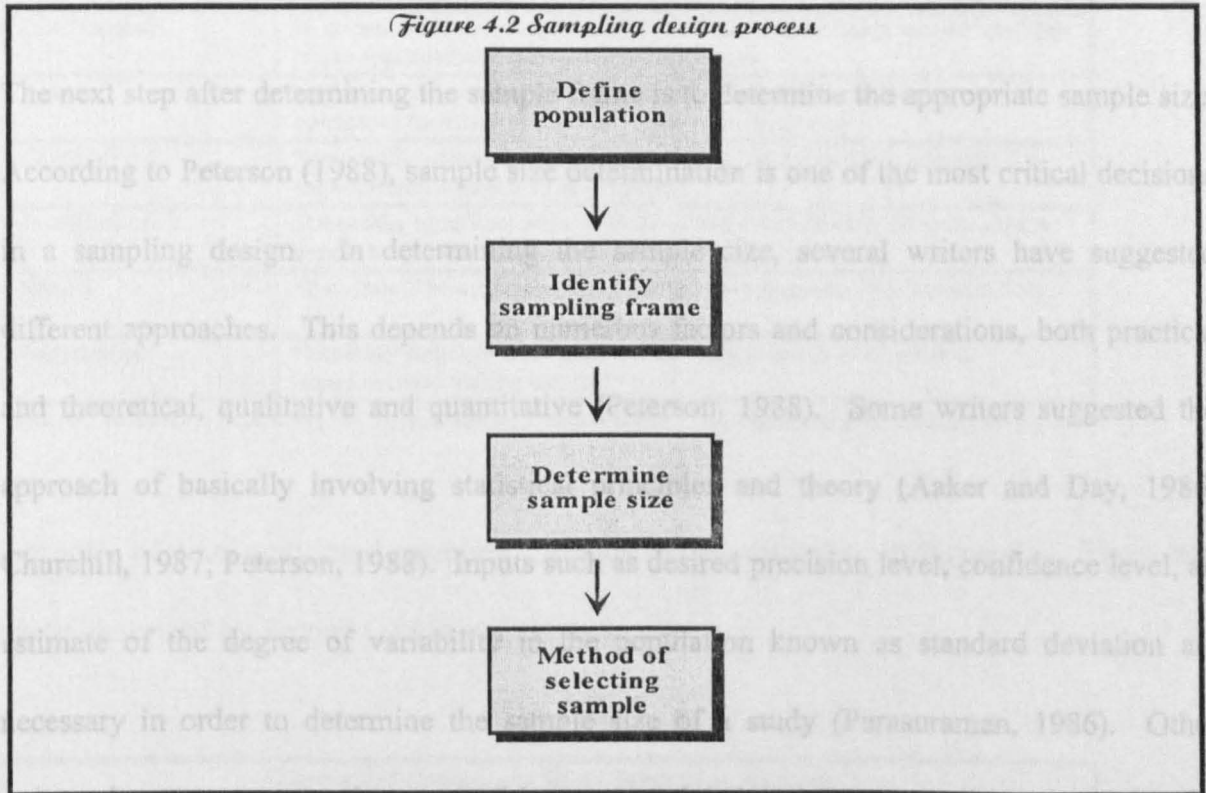
The disadvantage of the mail survey is that the researcher has little control over who actually completes the questionnaire (Fowler, 1988). Moreover, the researcher also has insufficient

control over the speed of response and respondents have no opportunity to seek clarification of confusing questions or terms as a consequence many respondents return their questionnaires partially completed. The mail survey also offers the greatest chance for inaccurate results because of confusion (Aaker and Day, 1986). This method of survey also raises particular problems of non response error. The response rate is difficult to forecast and there is a substantial risk that an acceptable rate cannot be achieved (Kinnear and Taylor, 1979). Furthermore, mail surveys are limited to situations where a mailing list is available. There is a possibility that any list might be flawed through obsolescence, omissions, duplications, etc makes it difficult to find an ideal list (Aaker and Day, 1986).

4.3.2 Method of sampling

The next step in a survey research process is to determine the sample from which information is to be collected. There are two methods of collecting information. One of the methods, known as census is to collect information from each member of the population by completely covering the population; the other method is to collect information from a portion or a sample of the population and on the basis of information collected, make inferences about the population (Churchill, 1987). Research surveys conducted by census are very costly and information obtained will often be obsolete by the time the census is completed and the information processed. A novice researcher might choose a sample over a census for purposes of accuracy (Churchill, 1987). On the other hand, research surveys conducted with samples are more quickly, easily and cheaply secured than by a census (McGown 1979;

Kinney and Taylor 1979). Furthermore, most research surveys are conducted with samples rather than populations since it is usually too expensive and impractical to use populations (Sproull, 1995). In order to conduct a research survey based on a sample, it is thus necessary to follow typical steps as suggested by Churchill (1987) and Peterson (1988) in a sampling design process as shown below in figure 4.2.



Adapted from Gilbert A Churchill (1987), *Marketing Research : Methodological Foundations* (4th ed), Dryden Press, p.433 and Robert A. Peterson (1988), *Marketing Research* (2nd ed), Business Publications Inc, p.299

4.3.2.1 Sampling design process

The first step to be taken in a sampling design process is to define the population which is specified as all members of a defined category of elements such as people, events or objects.

The second step is to identify the sampling frame, which is a list or other representation of the elements in a population from which the sample is selected. The elements in a population must be represented in some way such as membership names, completed application forms, organisation directories, and telephone directories (Sproull, 1995).

The next step after determining the sample frame is to determine the appropriate sample size. According to Peterson (1988), sample size determination is one of the most critical decisions in a sampling design. In determining the sample size, several writers have suggested different approaches. This depends on numerous factors and considerations, both practical and theoretical, qualitative and quantitative (Peterson, 1988). Some writers suggested the approach of basically involving statistical principles and theory (Aaker and Day, 1986; Churchill, 1987; Peterson, 1988). Inputs such as desired precision level, confidence level, an estimate of the degree of variability in the population known as standard deviation are necessary in order to determine the sample size of a study (Parasuraman, 1986). Other writers, however suggested several ad hoc approaches known as “sampling rule of thumb” (Aaker and Day, 1986; Peterson, 1988). Like all rules, according to Peterson (1988), *“they are subject to severe caveats and exceptions abound”* (p.350). Guidelines for “sampling rule of thumb” are shown on the next page in figure 4.3.

Figure 4.3 Sampling Rules Of Thumb

Rule 1	A minimum sample size of 400 is required when estimating a single population parameter
Corollary 1.1	If a population consists of 400 or fewer study subjects, conduct a census
Justification	With a sample size of 400, research results are generally reliable. Above a sample size of 400, the incremental gain in precision typically does not offset the added cost of sampling
Rule 2	Always have a minimum sample size of 30
Corollary 2.1	A sample size of 30 also holds for subgroups in a sample that are to be analyzed separately from the total sample
Justification	30 is traditionally mentioned as the cut-off point where "large sample" statistics can be applied since estimates begin to stabilize.
Rule 3	A pilot study or pretest requires about 5% of the sample size of the substantive (conclusive) research project to be conducted
Corollary 3.1	Numerically, about 60 study objects are ideal for a pilot study or pretest if a large-research project is to be conducted
Justification	Statistically significant research findings with approximately 60 study objects usually translate into findings that are practically significant
Rule 4	There should be a minimum of four study participants per questionnaire item
Justification	Four study participants per item usually result in data that are reliable from a decision making perspective

Source : Robert A. Peterson (1988), *Marketing Research* (2nd ed), Business Publications Inc, p.351

Examples of commonly used sampling methods are shown below in figure 4.4. These are briefly described by Sproull (1995) as follows :

Figure 4.4 Commonly Used Sampling Methods

RANDOM METHODS	NON RANDOM METHODS
Simple random sampling Stratified random sampling (i) Stratified proportional sampling (ii) Stratified constant sampling	Systematic sampling Convenience sampling Purposive sampling Quota sampling

Source : N.L. Sproull (1995) *Handbook Of Research Methods : A Guide For Practitioners And Students In The Social Science* (2nd ed), Scarecrow Press Inc, p. 112

A random sample is a method which has a high probability of a sample representing a

population. Examples of commonly used random methods are as follows :

(i) A simple random sample is a probability sampling method in which each element in the population has an equal, known and non zero chance of being selected. The advantages of this form of sampling method is that it is bias free, thus the sample has a high probability of being representative of the population. However, it requires a sizable number of elements to attain representativeness.

(ii) A stratified random sampling is a probability sampling method in which elements are randomly selected from each designated subpopulation or stratum of a population. The advantage of this form of sampling is that it provides controls for variables which are possible sources of influence on a major variable. The disadvantage of this form of sampling is that it is often more time consuming and usually more costly than using a simple random sampling since information on the stratification variable is needed for each element in the population. There are two types of stratified random sampling : (i) stratified proportional sampling (ii) stratified constant sampling. In stratified proportional sampling, the number in the sample is determined by selecting from each stratum in a predetermined proportion to the size of that stratum in the population. On the other hand, in stratified constant sampling, the same number of elements is selected from each stratum regardless of the size of the stratum in the population.

A non random sample is a potentially biased method which can yield non representative samples. Examples of a non random sample method are as follows :

(i) A systematic sampling method is a non random sampling method in which every nth element is chosen from a list of numbered elements. Thus every element does not have a chance of being drawn once the starting point is selected. The advantages of this form of sampling is that it is easier, faster and less expensive to carry out particularly with a large population than is simple random sampling. However, this form of sampling is a potentially biased sampling method. A bias and consequent misleading conclusions are particularly likely if the lists of population are ordered or periodicity exists.

(ii) Convenience sampling is a non random sampling method in which the researcher uses some convenient group or individuals as the sample. The advantages of this form of sampling is that it provides easy access to a sample and is usually quicker and cheaper than other methods. However, it is a non random potentially biased method where often the population has not been defined and the results cannot be generalized to a nondefined population.

(iii) Purposive sampling is a non random sampling method in which the sample is arbitrarily selected because characteristics which they possessed are deemed important for the research.

The advantage of this form of sampling is that the sample possess the characteristics desired by the researcher. However, it is a non random, potentially biased method which can lead to large sampling errors.

(iv) Quota sampling is a non random sampling method in which elements of the sample are selected until the same proportion of selected characteristics which exists in the population is reached. The advantage of this form of sampling is that the sample is proportional to the population in selected characteristics. Nevertheless, it is a non random, potentially biased sampling method which can lead to large sampling errors.

4.3.3 Development and administration of questionnaire

The third and the fourth step in a survey research process is to develop and administer the questionnaire. One of the most delicate, yet critical research tasks is constructing a questionnaire (Peterson, 1988). Aaker and Day (1986) also regard questionnaire construction as a very imperfect art. According to them, there are no established procedures that will lead to designing a good questionnaire. Similarly, Kinnear and Taylor (1979) also state that there are no series of steps, principles, or guidelines which guarantee an effective and efficient questionnaire. Nevertheless, according to McGown (1979), questionnaires are the major instruments used in obtaining primary data from respondents. There are several key aspect that can used as a guidelines in developing questionnaires and these are as follows : types and

sources of questions, format of the questionnaire, scales of measurements and pretest and pilot test of the questionnaire.

4.3.3.1. Types and sources of questions

Survey questions can be classified into (i) nonstructured or open ended and (ii) structured (fixed-response) or closed ended (Chisnall 1973; Parasuraman 1986; Peterson 1988; Fowler, 1988). Both of these types of survey questions has its advantages as well as its drawbacks which will be described below :

(i) Non - structured or open ended question

One of the advantages of this form of question is that respondents are not influenced by a predetermined set of response alternatives and can freely express views which differs from researcher's expectation. Moreover, this type of question provides insights, comments, and the final analysis may include quotations "*to bring realism and life to the more structured research findings*" (Kinneer and Taylor, 1979, p.457). Answers from open-ended questions can provide extremely insightful data since respondents can provide answers in their own words and no researcher bias is introduced by suggested response. This type of question is "*necessary as probes*" which provide insights and "*often make good study quotes*" (Peterson, 1988 p.207). Furthermore, an open ended question can describe more closely the real views of respondents (Fowler, 1988) and can elicit creative and original information (Sproull, 1995).

However, open ended questions also has have their disadvantages since they are time consuming both during interview and tabulation; each respondents answers must be assigned to one or more category which involves subjective judgements that are prone to error (Chisnall, 1973). In other words, for a large survey, extensive coding procedures are required to summarize the divergent responses in a format useful for data analysis and presentation (Kinnear and Taylor, 1979). This procedure thus requires much researcher time for both coding and tabulation of data (Sproull, 1995). In addition, the answers from open ended questions take more time and effort to analyse and interpret due to verbosity bias. This type of bias occurs when some respondent's answers to a question are longer and more complex than other answers to the same question (Peterson, 1988). The open ended questions also have a high potential for interviewer bias since the interviewer rarely records the respondent's answers in exactly the same words. This usually occurs if the interviewer writes slowly and fails to record parts of the answer due to time constraints. As a result, the more the interviewer summarizes and edits the respondent's answers, the more the recorded responses will vary from actual responses. Open ended questions are also less suitable for self administered questionnaires since respondents tend to write more briefly than they speak and there is a problem of illegible handwriting (Kinnear and Taylor, 1979).

(ii) Structured or closed - ended question

The structured or closed ended question has an overall advantage over the open ended questions with respect to speed, cost of data collection, analysis and convenience to

respondents. There are (a) more issues which can be covered in the interview or questionnaire of a given length (b) less time to respond as well as to record responses (c) it is cheaper since interviewer time and skill levels required to record and interpret data are usually lower than open ended questions (d) less chance of interviewer and respondent errors in recording answers and (e) it is more convenient to respondents in terms of time needed to response and ease of responding (Parasuraman, 1986). Furthermore, apart from reducing interviewer bias, cost and time, it is difficult to obtain respondent's cooperation for self administered questionnaires unless most of the questions are structured (Kinnear and Taylor, 1979). In addition, it is easier for a researcher to tabulate and analyse data and respondents take less time to answer structured questions. Moreover, the most significant advantage of the structured questions in a large scale survey is that answers are directly comparable from each respondent assuming that each respondent interprets the words in the same way (Aaker and Day, 1986). Using the structured questions, there will also be less interviewer bias introduced and verbosity bias is eliminated.

Conversely, it may take more time to design a structured questions unless the researcher has a clear idea of the question to ask and the specific responses to anticipate (Parasuraman, 1986). This is because this type of question is difficult to develop and good exploratory work is necessary to ensure that all potentially important response alternatives are included (Aaker and Day, 1986).

4.3.3.2. Format of the questionnaire

In general, a questionnaire should be designed to facilitate its completion (Peterson, 1988). The physical appearance of the questionnaire can be influential in securing cooperation of the respondent particularly with mail surveys (Kinneer and Taylor, 1979). The physical layout of the questionnaire will also have an influence as to whether the questionnaire is interesting and easy to administer. The quality of paper, clarity of reproduction and appearance of crowding are important variables (Aaker and Day, 1986). The physical characteristics of the questionnaire can also affect the accuracy of the replies that are obtained. It can also affect how respondents react to it and the ease with which the answers can be processed. If the questionnaire looks untidy, the respondents are likely to feel that the study is unimportant and refuse to cooperate despite mentioning the importance of the study. This is particularly true with mail questionnaires and questionnaires administered by personal interviews (Churchill, 1987).

The quality of paper and printing often determines the respondent's first reaction to the questionnaire. It is important for the name of the organization sponsoring the survey and the title of the survey to appear clearly on the first page (Kinneer and Taylor, 1979) or on the cover if the questionnaire is in bookform. It is also important that good quality paper used for the questionnaires to be printed and not mimeographed or photocopied (Churchill, 1987).

A self administered questionnaire of more than four pages long looks more professional in booklet form than when the pages are stapled together (Peterson, 1988). In addition, multiple sheets need to be used when all of the questions do not fit on the front and back of one sheet and made into a booklet rather than stapling or paperclipping the pages together. This not only facilitates handling but also reinforces an image of quality (Churchill, 1987)

The issue of the length of the questionnaire construction has two aspects. The first aspect is the length of individual questions. It is advisable to keep each question as short as possible in order to minimise respondent confusion or misunderstanding. The second aspect is the total questionnaire length. Conventional wisdom, holds that the questionnaire should be kept as short as possible or the respondent will be bored filling it out and this will affect the response rate (McGown, 1979). Furthermore, it is considered unwise to have a questionnaire requiring more than about fifteen minutes to fill in or covering more than ten pages; too long a questionnaire is likely to reduce remarkably the percentages of responses (Howard and Sharp, 1993). Nevertheless, the extent to which the length of a self administered questionnaire affecting cost and response rates varies with the population being studied and the topic (Fowler, 1988). In addition, there is no direct correlation between length of a questionnaire and response rate (McGown, 1979) and a number of experiments suggested that longer questionnaires can be used effectively by mail; the manner in which the proposition is presented and the appearance of the first page may have more to do with completing the questionnaire than length (Boyd et.al, 1989). Furthermore, although a short questionnaire

seems easier to complete, if it is crowded, it has a bad appearance, and can thus lead to errors in data collection and also result in shorter and less informative answers (Churchill, 1987).

4.3.3.3. Scales of measurement

Measurements are used in every research survey. The types of measurements used in a questionnaire have major impact for analysis of data. According to Sproull (1995) *"the level of measurement for each variable determines which type of statistical analysis may be used"*(p.67) In addition, statistical analysis is appropriate for certain levels of measurement (Peterson, 1988; Tull and Hawkins, 1990). Four types of measurements used in a questionnaire are nominal, ordinal, interval and ratio (Churchill, 1987 ; Peterson, 1988 ; Tull and Hawkin, 1990 ; Sproull, 1995)

(a) nominal measurement

nominal level of measurement is defined as numbers assigned to objects or events which can be placed into mutually exclusive and exhaustive categories (Sproull, 1995). Applying a nominal scale is essentially a process of classification or categorisation. Objects sharing a certain characteristics are assigned the same identifying symbol and placed in the same class or category (Peterson, 1988). This level of measurement is also defined as being comprised of numbers used to categorize objects or events and a nominally scaled number serves only as a label for a class or category (Tull and Hawkins, 1990). This type of measurement is the lowest level of measurement because numbers are assigned to variables only to classify or

categorize them. With nominal level of measurement, statistical analysis appropriate for nominal data must be used (Sproull, 1995). Furthermore, a mean or a median cannot be calculated for nominal data but a mode can be used. The percentage of elements within each category can also be determined and a Chisquare statistical test can be conducted to determine if differences between numbers falling into various categories is likely to be the result of chance or randomness (Tull and Hawkins, 1990). Similarly, nominal scale data can also permit those mathematical or statistical operations based on counting such as frequency, modes, percentages, and statistical techniques such as Chisquare analysis (Peterson, 1988).

(b) ordinal level of measurement

The ordinal level of measurement is defined as numbers assigned to objects or events which can be placed into mutually exclusive categories and can be ordered into a greater or less than scale (Sproull, 1995). It can also be defined as numbers, letters, or other symbols used to rank items. This level of measurement thus indicates the relative position of two or more items on some characteristics but not the magnitude of the differences between the items (Tull and Hawkins, 1990). Only statements of greater than or less than are permitted in this level of measurement (Peterson, 1988). In addition, the numbers assigned at the ordinal level provide more information than at nominal level because it establishes an ordering of the objects or events and statistical analysis appropriate for ordinal data must be used (Sproull, 1995). Measurements such as a mode or a median but not a mean can be used and the percentages of the total appearing in each rank may be calculated (Tull and Hawkins, 1990).

Furthermore, the order property of ordinal scale allows the use of statistics based on centiles (Peterson, 1988)

(c) interval level of measurement

The interval level of measurement is defined as numbers assigned to objects or events which can be categorized, ordered and assumed to have an equal distance between scale values (Sproull, 1995). This level of measurement is also defined as numbers used to rank items such that numerically equal distances on the scale represent equal distances in the property being measured (Tull and Hawkins, 1990). In addition, the statistical techniques which can be used on an interval scale data include all those applicable to nominal and ordinal scale data (Peterson, 1988). In other words, almost the entire range of statistical analysis can be applied to interval scales. For example, descriptive statistics such as mean, median, mode, range and standard deviation are applicable. In addition, bivariate correlation analyses, t-test, analysis of variance test and most multivariate techniques applied for purposes of drawing inferences can be used on interval scaled data (Tull and Hawkins, 1990)

(d) ratio level of measurement

The ratio level of measurement is defined as numbers assigned to objects or events which can be categorized, ordered, assumed to have equal intervals between scale points and have a real (non arbitrary) zero point (Sproull, 1995). It can also be defined as numbers that rank items such that numerically equal distances on the scale represent equal distances in the property being measured and that the number zero has an absolute empirical meaning (Tull and

Hawkins, 1990). The ratio scales thus provide information about equality of objects, rank order of objects, and absolute extent of differences between objects (Peterson, 1988). In addition, all descriptive measures and inferential techniques are applicable to ratio scaled data (Peterson, 1988; Tull and Hawkins, 1990). A typical example of scales of measurements is illustrated below in figure 4.5 (a) and figure 4.5 (b) on the following page.

4.3.3.4. **Pretest of questionnaire**

According to Peterson (1988), “despite the precautions and care taken when constructing a questionnaire, the finished product must still be evaluated” (p.228). Questionnaire sequencing, design and format must also be evaluated and potential difficulties in analyzing data obtained from the questionire must be considered.

<i>Figure 4.5 (a) Scales of measurements</i>		
Scale	Basic comparisons	Typical examples
Nominal	Identity	Male-female User-Nonuser Occupations Uniform numbers
Ordinal	Order	Preference for brands Social class Hardness of minerals Graded quality of lumber
Interval	Comparisons of intervals	Temperature scale Grade Point average Attitude towards brands
Ratio	Comparison of absolute magnitudes	Units sold Number of purchasers Probability of purchase weight

Source : Gilbert A. Churchill (1987), *Marketing Research : mathematical foundations* (4th ed.), Dryden Press, p.317

Figure 4.5 (b) Scales of measurements

Scale	Rules for Assigning Number	Typical Application
Nominal	Objects are either identical or different	Classification (by sex, geographic area, social class)
Ordinal or rank order	Objects are greater or smaller	Rankings (preferences, class standing)
Interval	Intervals between adjacent ranks are equal	Index numbers, temperature scales, some attitude measures
Ratio	There is a meaningful zero point so comparisons of absolute magnitude are possible	Sales, incomes, units produced, costs, age

Source : S.S. Stevens (1946), "On the theory of scales of measurement", In Aaker and Day (1986), *Marketing Research* (3rd ed.) John Wiley and Sonsp.208

Moreover, virtually every questionnaire should be changed in some way to make it easier for respondents and interviewers to meet the researcher's objective (Fowler, 1988). Hence, pretesting a questionnaire involves evaluative and refinement procedures.

As Churchill (1987) points out, 'the pretest provides the real test of the questionnaire and mode of administration' (p.302). According to him, data collection should never begin without an adequate pretest of the instrument. The trial run offers the researcher the opportunity to change and clarify the wording of the questions and make final revisions. (McGown, 1979). Pretesting a questionnaire is thus vital before the actual survey because once final questionnaires are printed and data collection has started, it is expensive and difficult to make changes to these questionnaires (Fowler, 1988).

There are two methods of conducting a pretest. The first method of pretesting a questionnaire is by using a convenience sample of spouses, friends, neighbours or co-workers. This usually involves personally administering the questionnaire. Major problems associated with proposed questions and the questionnaire can be identified and corrected as a result of such a pretest. A second method of pretesting, sometimes termed as pilot study, consists of administering the questionnaire under simulated or actual data conditions. If data in the research survey are to be collected by mail or personal interview, this type of pretest should be the same (Peterson, 1988). According to Fowler (1988), a pilot study or survey *"is thus the researchers last safeguard against the possibility that the main survey may be ineffective"* (p.51). This is because the pilot study specifically provides guidance on the non response rate to be expected. The probable number of refusals and non contacts can be can be roughly estimated and comparison can be made on the effectiveness of various ways of reducing non response. The pilot study also provides guidance on the adequacy of the questionnaire, such as whether there are signs that respondents misunderstand the questions or insufficiently informed to give sensible answers etc. Hence, a pilot test should be conducted to assess any flaws in the questionnaire or its administration (Sproull, 1995).

4.3.4 Data analysis

The purpose of analysis is to obtain meaning from the collected data. There are two types of analysis : (i) qualitative analysis which is for words, and other data which come in a non - numerical form and (ii) quantitative analysis, which is for numbers, and other data that can be

transformed into numbers (Robson, 1995). In quantitative analysis, the data can be computed by using (a) descriptive statistics, which are measures used to describe and summarise data such as measures of central tendency, variability and relationship and/or (b) inferential statistics which are statistical procedures used to draw inferences about a population by using sample data from that population. Examples of statistical tests used for inferences are t-tests, Chi-square tests and analysis of variance test (Sproull, 1995).

PART III

4.4 Approaches and research design adopted in the study

Having reviewed the two approaches of research, it was decided to combine both the quantitative and qualitative approaches for this study. The reason for adopting the quantitative approach was because this study involves describing the selection techniques and practices employed by large local and foreign manufacturing firms operating in Malaysia. In addition, the aim was to make inferences or generalisation on the types of selection techniques and practices employed by these firms. Furthermore, this study also involves measuring (in numerical quantities) the number of firms employing certain managerial selection technique. On the other hand, the reason for also adopting the qualitative approach was because this study involves explaining the reason for choosing a particular selection techniques to select managers between these firms. This approach was also suitable in providing the researcher with rich information to further enhance the understanding of selection practices of these firms in the manufacturing sector.

After deciding that both the quantitative and the qualitative approaches should be used for this study, the research design that was considered as the most practical for this study was the cross sectional survey research. This is because this study has a clear and specific objective which as stated earlier, is first to describe the managerial selection techniques and practices employed by large local and foreign manufacturing firms operating in Malaysia and second, to indicate any similarities or differences concerning the selection techniques employed by these firms and to explore the possible factors which influence these similarities or differences. A longitudinal survey research was considered unsuitable due to time and financial constraints.

Experimental research was ruled out since this study was not primarily concerned with causality. Moreover, this study did not involve controlling or manipulating any variables. The case study research was also ruled out since this study did not require detailed examination of one or small number of organisations but rather sought to understand the position across a wide range of employers (i.e. by firms ownership). Furthermore, the intention of this study is not to expand and generalize theories (analytic generalization) but to enumerate frequencies (statistical generalization). Action research was also ruled out since this study did not involved the researcher to become part of the field of investigation. Moreover, this study did not include dealing with solving a particular problem but merely involved descriptive studies, exploring as well as explaining any similarities or differences concerning the use of managerial selection techniques between firms in the Malaysian

industry.

4.4.1 Implementation of the selected research design in the study

4.4.1.1 Method of data collection chosen for the study

The mail survey and the personal interview were considered the most appropriate data collection strategy in this study.

The mail survey was considered appropriate since (i) the aim this study was to acquire data from large number of respondents (ii) it was possible to design structured questions with complex response categories and (iii) the survey population (i.e. personnel managers) was highly literate and used to completing postal questionnaire.

In addition, since this study also attempts to seek specific answers (as to the factors which influence any similarities or differences concerning the use of techniques to select managers between local and foreign firms in this country), the personal interview was deemed to be the most appropriate data collection strategy due to (i) its flexibility (ii) ability to probe for more specific and informative answers and (iii) effectiveness in building rapport and confidence with the respondents.

The telephone interviews were seen to be less appropriate than either personal interviews or mail surveys for this research. Personal interviews offer more flexibility than telephone

interviews and a mail survey allows more complex information and instructions to be set out. (for example, instructions such as filling in a table or ticking boxes are more easily undertaken through a questionnaire survey)

However, both the personal interview and the mail survey also has its disadvantages and several steps have been taken to avoid these drawbacks. Steps taken to overcome the drawbacks of the personal interview were as follows :

(i) The time wasted and the cost incurred to travel between interviews were minimised since the respondents selected for this study were located not far away from each other, that is in each of 3 main areas of industrial growth.

(ii) In order to facilitate setting up appointments and avoid interrupted interviews, letters requesting access and cooperation in the survey and interview were sent in advance (Appendix 4.1). Telephone calls were subsequently made to the respondents to set up a tentative appointment date to conduct the interview. A fax (Appendix 4.2) outlining the set of questions to be used in the interview was sent before the interview to these respondents not only to remind them of their appointments but also to help these respondents prepare some answers beforehand. These steps were also taken to minimise the time needed to interview these respondents. Subsequent telephone calls were made to

reconfirm the appointment date to conduct the interview.

(iii) To avoid employing trained staff or interviewers and to reduce interviewer bias, a structured-direct interview, which is a prespecified set of relatively direct or obvious questions, were used. According to Tull and Hawkins (1990), a structured-direct interview *“allows the use of less highly trained interviewers and interpreters”* (p.141) and *“interviewer bias tends to be at minimum in structured interview”* (p.140). According to them, this is possible since the duties of an interviewer using this type of interview are basically confined to reading questions and recording answers.

Steps taken to overcome the drawbacks of the mail survey were as follows :

(i) A letter requesting access and cooperation in conducting the survey (Appendix 4.1) and the cover letter that was attached together to the questionnaire (Appendix 4.3) specifically mentioned that *“this survey requires information from key manager/personnels responsible the selection process in your organisation”*. This statement was made in order to have more control over who actually completes the questionnaire used in this study.

(ii) Telephone calls were made to all of the respondents to enquire whether they had received the questionnaires; it was very easy for these respondents to be aware of this

survey since the questionnaire had a title 'Management selection Study'. Furthermore, both the cover letter and the questionnaire were printed in light green. These respondents were then given the opportunity through the telephone to seek clarification on any ambiguous questions or terms, once they confirmed that they had received the questionnaire. These measures were taken to avoid questionnaires being returned partially or not completed at all.

(iii) Steps such as follow-ups or reminders as suggested by McGown (1979), Aaker and Day (1986) and Howard and Sharp (1993) were employed to increase the response rate of the mail survey. In this context, telephone calls and suitably worded follow-up letters (Appendix 4.6 and 4.7) requesting completion and return of the questionnaire were used as a reminder to the respondents. The researcher also employed other measures considered necessary to increase the response rate as suggested by McGown (1979) such as preliminary or advance notification by telephone to respondents that they would be receiving questionnaires. These telephone calls were made after sending letters to the organisation requesting access and cooperation to conduct the particular survey. Another step as suggested by McGown (1979) and Aaker and Day (1986) known as selective concurrent techniques was also employed such as providing a stamped return envelope to facilitate questionnaire returns. Deadlines as suggested by McGown (1979) were also included in the cover letter (Appendix 4.3) attached to the questionnaire. In order to increase the response rate, as also suggested by McGown (1979), the objectives of the

study were explained, the anonymity of the respondents reassured and a copy of the final results of the survey was also offered in the cover letter. These measures were taken to increase the respondent's motivation and interest since according to Fowler (1988), respondents who are particularly interested in the research will be the one most likely to return questionnaires. Other measures taken were enclosing together with the questionnaire a letter from supervisor (Appendix 4.4) requesting assistance for the survey and using the researcher's institution logo and telephone number on each letter and fax.

(iv) To avoid possible flaws in the mailing list such as obsolescence, omissions, etc., a recent and complete list of respondents (manufacturing firms) from the Federation Of Malaysian Manufacturing Companies (FMM) published in 1995 was used.

4.4.1.2. Method of sampling chosen for the study

Due to practicality of the fieldwork, this research survey was conducted based on samples rather than by census. The sampling design process implemented in this study was as follows:

4.4.1.2.1 Population identified in the study

The population identified in the study comprised all large local and foreign manufacturing firms located in 3 areas of main industrial growth. Large firms were defined as those firms

which employed more than 500 employees. The classification of size was based on similar studies on selection techniques conducted in the past by Robertson and Makin (1986), Bastos (1990), Shackleton and Newell (1991) in the UK and Chikoti (1992) in Zambia. In comparison to small and medium firms, large firms might be expected to use more sophisticated, reliable and objective selection techniques or a standardised assessment procedures. This is due to the pressure of having to administer large numbers of applicants especially for managerial posts (Vaughan and McClean 1989). Furthermore, in smaller business, selection is likely to be done on a rather informal basis whereas in a large firm, selection may be a very costly formalized procedure (Klatt et.al, 1985). Moreover, older and larger firms which employ more personnel specialist would thus be *“even more likely to use sophisticated selection procedures than smaller firms which do not generate enough selection work to justify full - time staff”* (Patrickson and Haydon, 1988 p.98). Large firms are also more likely than small ones to have the resources required to implement costly selection methods (Marsden, 1994) or can invest resources into developing effective selection systems because of the quantity of positions they fill. On the other hand, economies of scale typically prevent small and medium firms from investing in and developing various selection methods (Taylor et.al 1993).

Significant changes in managerial selection techniques and practices are likely to occur in areas of main industrial growth. It is assumed that in order to remain competitive, firms in these areas are inclined to use similar or different and better selection techniques as other

firms. The 3 main areas industrial growth identified in this study are the Klang River valley, which includes Kuala Lumpur, Johor and Penang.

The manufacturing sector has emerged as the fastest and dynamic growing sector of the Malaysian economy. In 1995, this sector registered an average annual growth of 13.3% and accounted for 30.4% of GDP (Bank Negara Malaysia Annual Report, 1995). Moreover, total employment in manufacturing sector had increased from 1.5 million to 1.7 million in 1993 and forecasted to be 2.0 million in 1995 (Malaysian Economic Report 1994/1995).

Hence due to the above reasons, large firms in this sector were deemed to provide the best insight and opportunity to be investigated in this study.

4.4.1.2.2. Management levels identified in the study

Four levels of management were covered in this study. The classification of managers were based on similar studies by Kingston (1971) and Gill (1980) in the UK and Chikoti (1992) in Zambia. These classifications, which have been modified according to the Malaysian setting are as follows :

- senior manager : this is the decision making level which includes managing directors,

general managers and executive directors. This level is responsible for a major function and reports to a member of the board

- middle manager : this is the decision making level which includes deputies and assistants to senior managers.
- junior manager : this is the execution and implementation level which includes Heads of departments and sections. Managers at this level can either report directly to the senior and middle manager.
- trainee : this is the level which includes which includes staff receiving management training. During this process, they may hold managerial or supervisory posts in order to gain experience. Managers at this level normally report to junior managers

4.4.1.2.3. Sampling frame identified in the study

The samples were drawn from the Federation Of Malaysian Manufacturing Companies (FMM) published in 1995. The listing of firms was already stratified and classified into locations as well as sectors according to the International Standard Of Industrial Code (ISIC). This directory consisted of a complete list of manufacturers and sufficiently detailed information about members of the population investigated which includes names, addresses and telephones of companies, contact persons, types of products manufactured, number of employees, sales and number of subsidiaries. However, there was no information from the

list which indicated the nationality of the firm, that is whether the firm was local or foreign firm.

4.4.2 Mail survey

4.4.2.1. Determination of sample size and method of selecting sample in the study

In this study, a total of 200 large firms representing various sectors were identified. In order to ensure a good response rate, 50% of the population¹ or 100 firms was targeted for the mail survey. According to Sproull (1995), the idea of randomness is important in research because random selection of elements is an unbiased (no systematic errors) sampling method which is most likely to yield a representative sample. In addition, a random sample is a method which has a high probability of a sample representing a population. On the other hand, a non random sample is a potentially biased method which can yield non representative samples. Hence, a stratified random sampling procedure was used in this study since each and every member of the population have a known chance of being selected. The population were stratified according to location but not nationality since the FMM list does not give such information.

The method of selecting the random numbers in this study was one of employing the random numbers table available from Reaves (1992) "Quantitative Research For The Behavioral

¹ In this survey 50% of the population of each location was randomly selected. Thus out of 124 firms in KL/Selangor, 41 firms in Johor, and 35 firms in Penang, 62 questionnaires were sent out to KL/Selangor, 20 questionnaires were sent out to Johor, and 18 questionnaires were sent out to Penang.

Sciences”. Consecutive numbers were assigned to each population. The direction to proceed in the random numbers table were determined as vertical to the right.

4.4.2.2. Development and administration of of questionnaire

4.4.2.2.1. Types and sources of questions

In this study, the structured questions were only used in the mail survey. Apart from its advantages as mentioned in section 4.3, this form of question was easier to analyse and tabulate. Furthermore, less time was taken by respondents to answer these questions since this type of survey was self administered and respondents were located in 3 different areas.

In order to reduce the time taken to design a structured questions and to ensure that all potentially important response alternatives were included, a number of previous and related studies were consulted and used as guidelines (Kingston 1971; Robertson and Makin 1986; Shackleton and Newell 1991; Bastos 1990; Chikoti, 1992). The final questionnaire which was modified and restructured according to the objectives of this study, incorporated several questions from similar studies especially from questionnaires used by Bastos (1990) and Chikoti (1992) survey which were originally designed by Professors Robertson and Makin of University Of Manchester Institute Of Science and Technology (UMIST). This implies that the questions from these studies have been established and the variables can be relied on to measure a construct or phenomenae. Hence, these questions were not only considered

reliable but also valid. The questionnaires used in this study were written in English. It was considered unnecessary to translate it into the local language as the vast majority of the managers responsible for the selection process of their firms in the manufacturing sector understood and were able to respond in English

4.4.2.2.2. Format of the questionnaire

The questionnaire used in this study appears lengthy but certain measures were taken to ensure a reasonably good response rate. For example much effort were devoted to ensure that the layout of the questionnaire was pleasing to the eyes of the respondents. As suggested by Kinnear and Taylor (1979), Aaker and Day (1986) and Churchill (1987), a high quality paper light green in colour was used to print the questionnaire; the questionnaires were also printed on a laser printer as advised by Sproull (1995) to make it appear professional. It will also give credibility to enhance the probability of potential respondents participating willingly to the survey. A combination of different font sizes, font styles (bold and italic), and underlined words were used to emphasize certain instructions and questions in order to improve the questionnaires's appearance. The title of the survey on the first page of the questionnaire and the name of the researcher's institution which was also the sponsoring organisation, were included on the cover letter. This is to influence the respondents' reaction to the questionnaire as mentioned by Kinnear and Taylor (1979) and Churchill (1987). The questionnaire used in the study was made into a booklet in order to make it look professional as suggested by Churchill (1987) and Peterson (1988). This is because, it was quite lengthy.

It was also typed and laid out in such a way so that it appear clear and uncluttered. Photoreduction or other strategies for grouping many questions on a page were avoided. According to Fowler (1988), these strategies actually reduces the response rate in comparison with questions that were spaced attractively over more pages.

The length of individual questions was kept as short as possible in order to minimise respondent confusion or misunderstanding as suggested by McGown (1979). Questions were deliberately grouped into sections and sub - sections using sub - numbering systems to enhance the format of the questionnaire. Therefore, these questions were grouped into sections where each sub-section contained up to six questions. Following the suggestions made by Fowler (1988), the respondents were only required to check or tick a box or bracket. They were also required to fill in tables using the appropriate codes to ease the task of respondents answering the questions.

4.4.2.2.3. Scales of measurement

In the questionnaire used for the survey research, all four types of scales of measurement were used. As indicated in section 4.3, this is necessary because all these scales of measurement made it possible to employ descriptive as well as inferential statistics such as means, modes, cross tabulation and Chisquare test to analyse and describe the data obtained from the fieldwork.

4.4.3. Personal interview survey

4.4.3.1. Determination of sample size and method of selecting sample in the study

For the personal interview, the Peterson's (1988) rule of thumb of "always have a minimum sample size of 30" was applied. As a follow - up from the questionnaires received, a total of 32 local and foreign firms were selected and identified. These firms selected were based on 3 criteria : (i) firms employing selection techniques such as application form, cvs, interviews and references (ii) firms employing selection techniques such as psychological (personality or cognitive) test and (iii) firms employing selection techniques such as the Assessment Centre.

4.4.3.2. Development and administration of questionnaire

4.4.3.2.1. Types and sources of questions

In this study, the open ended and semi structured questions were employed. Extremely insightful data were needed to probe into this study. Hence, the open ended questions were only used in the personal interview. In order to reduce the interviewer or verbosity bias, the questions were semi-structured and a tape recorder was used as suggested by Kinnear and Taylor (1979) to record the respondents answers in exactly the same words.

4.4.3.2.2. Format of the questionnaire and scales of measurement

The questionnaire in this study was not lengthy. This is because its purpose was as a follow - up to the "Management Selection" Questionnaire in order to probe into factors which influence firms to employ certain types of technique to select managers. As a result, none of

the scales of measurement was used in this questionnaire. Furthermore, using short and simple questions served to ensure better co-operation from respondents since this questionnaire was sent earlier by fax to help them prepare some answers beforehand.

4.4.4. Mail and Personal interview survey

4.4.4.1. Pre - test and administration of mail and personal interview questionnaire

In this study, both the mail and personal interview draft questionnaire were pretested by using a convenience sample of colleagues and research students specifically to check on its clarity and contents. Special advise were also sought from the researcher's supervisor, Professor M.P. Jackson and co-supervisor, Professor M.D. Hughes. Modifications were made on their recommendations. Ambiguous and difficult terms and words were clarified and reworded and questions that were inadvertently omitted were added. Steps were also taken to improve both of these questionnaire's layout and appearance. The final draft was printed for a pilot study after obtaining the researcher's supervisor and co-supervisor approval (refer to Appendix 4.5 and Appendix 4.8 at the end of the thesis)

The second method of pretesting the mail survey questionnaire, which is a pilot test was undertaken in Malaysia. According to Peterson's rule of thumb (refer to figure 4.3), a pilot study requires about 5% of the sample size of the research project to be conducted. A sample of 30 firms were selected for this pilot study, instead of 5 firms (5% of 100) as suggested by

these rules of thumb. This is because this quantity was considered small and insufficient to provide guidance on non response error and adequacy of the questionnaire. The respondents were given two weeks to respond to the questionnaire but it was observed that it took them more than two weeks to reply. Telephone calls were made and it was discovered that the delay was due to problems with the postal service. Another reason is because some respondents were either busy or have other questionnaires from other survey that needs to be filled. Apart from this, no other problems were detected regarding the questionnaire.

On the other hand, the second method of pretesting the personal interview questionnaire was considered unnecessary since the researcher has full control of obtaining some response from the respondents especially during the interviewing process.

The mail survey questionnaires together with cover letter and stamp returned envelope and fax enclosed with the personal interview questions were sent to 100 firms and 32 firms respectively directed to personnel manager or other managers responsible for the selection process of their firm.

4.4.5. Response rate

22 responses were received after the first mail out and a further 13 responses were received after follow up. Another 14 responses were received after the second follow - up. Finally,

another 12 responses were received after the third follow - up. This results in a total of 60 questionnaires available for analysis. Only 1 questionnaire could not be used since most of the sections were not filled in by the respondent. Table 4.1 on the next page indicated a summary of the response rate after each mailing. A response rate of 61% was achieved inspite of such lengthy questionnaire. This response rate was considered good since according to Sproull (1995), *"some researchers consider a 35% to 40% response rate as acceptable"* (p.193).

One possible explanation for the good response rate could be due to the sponsorship and novelty of the research. This is because this survey is an academic research project sponsored by an established university. The respondents do not feel threatened by disclosing information. Moreover, since there have been no studies or few studies of this nature conducted in Malaysia, it has generated great interest in the topic among respondents thus influencing them to participate. In addition, this survey was directed to only one particular respondent that is the personnel manager from each firm. Furthermore, as mentioned in section 4.3, several steps have also been taken to overcome the drawbacks of the mail and personal interview survey. Although the mail survey questionnaire was lengthy, it did not discourage managers responsible for the selection process of the firm to response.

This supports McGown's (1979) view that there is no direct correlation between length of a

questionnaire and response rate. This fieldwork thus indicate that a lengthy questionnaire does not necessarily deter respondents from completing it.

Table 4.1
Summary of response rate²

First Mailing	22
First follow - up	13
Second follow - up	14
Third follow - up	12
Total number of questionnaires received	61
Usable questionnaires	60
Response rate	61%

4.4.6. Limitations of the study

Although every effort has been extended in the planning of the study and the development of the research design, the results of this study should be interpreted with a degree of caution. Although an attempt has been made to gain an overall view of the techniques and practices employed to select managers, in practice data was only collected from the manufacturing sector and just 3 locations of main industrial growth. As a result, this is clearly not a representative sample of all firms in Malaysia.

² Out of 62 questionnaires being sent out to KL/Selangor, there were 29 returns. Out of 20 questionnaires being sent out to Johor, there were 19 returns. Out of 18 questionnaires being sent out to Penang, there were 12 returns. There was an exceptionally good returns in Johor, since the researcher was based in this location to closely follow up on the questionnaires that have been distributed to all respondents.

Similarly, although every effort was made to maximise response from the questionnaire survey (as explained in the previous sections), there was still a non - response rate of 39%. This non - response rate is not out of line with other similar surveys and indeed is better than many of them. However, the impact of the response rate still needs to be considered. It was interesting to note that more than 60% the firms (or 24 firms) that did not respond³ have less than 700 employees and were located in KL/Selangor. Thus, it can be assumed that either these firms may used a simple or informal selection techniques or that they may feel that this survey was irrelevant to them. There are also other possibilities, that these firms may be too busy with other important business matters or questionnaires received from other researchers which will benefit them if they respond. Therefore, the conclusion of this survey have to be interpreted with caution

4.4.7. Analysis of data in this study

This survey covered a large variety of questions, only some of which are directly reported in the analysis; many others were only used as background information to support the analysis. The analysis of data for the mail survey questionnaire was carried out using SPSS for Windows version 6.0. A total of 60 cases were included in the data analysis.

³ In this survey, respondents consisted of 49 firms which have more than 700 employees and 11 firms have less than 700 employees.

Both qualitative and quantitative analysis were employed in this study to analyse the data obtained from the personal interview and the data obtained from the mail survey. In quantitative analysis, descriptive statistics such as frequencies, modes and cross tabulations were computed and inferential statistics such as a Fisher Exact test were also performed to indicate any statistically significant differences between variables in this study. On the other hand, in qualitative analysis, data will be extracted and interpreted from tape recording made during the personal interview. These data will then be presented in the form of quotations. Details of the data analysis will be reported in the next chapter (Chapter 5).

Chapter 5

SURVEY FINDINGS AND ANALYSIS

5.0 Introduction

This chapter which is comprised of two parts, analyses the results of the survey that were obtained from 60 firms which have responded to the Management Selection Questionnaire and 32 firms which participated in the personal interview. The profiles¹ of these respondents in terms of ownership and location will be indicated in section 5.0.1. of this chapter. In accordance with the objectives of this study, the analysis of the data will first identify the selection techniques and practices used to select managers (senior, middle, junior managers and trainees) by large manufacturing firms in Malaysia especially in the areas of main industrial growth; it will also attempt to explain the reason for employing these techniques and practices. Second, it will look at any similarities or differences concerning the use of selection techniques between these firms in terms of ownership and those used in the West. Third, seek to identify the factors which influenced these similarities or differences particularly between local (Malaysian) and foreign (non - Malaysian) firms.

Part I will therefore : (a) seek to establish whether these firms used any selection techniques such as application forms, curriculum vitae (cvs), interviews, references, biodata, handwriting analysis, astrology, psychological tests, and assessment centre (AC); (b) attempt to identify the number of stages involved and the types of selection techniques used at each stage in the selection process. This part of the chapter will also focus in detail on the interviews, psychological tests, and references used in selecting managers. It will inquire (a) whether external consultants were used to select all or some level of management and who decide to

¹ Also see appendix 5.4 at the end of the thesis for names of respondents.

use these consultants; (b) the types of interviewers involved, forms of training of interviewers, types of interviews, number of interviews, and the interview structure; (c) the types of psychological tests assessors involved, forms of training of these assessors, and features of these tests such as whether these tests originate from the West and require modification; (d) and whether candidates were requested to give the names of referees, number of referees, importance of various categories of referees and a pre-entry medical test was required for candidates seeking all level of management posts. In addition, this part of the chapter will also find out why these techniques or practices were employed.

Part II will be divided into two sections. Section 1 will look for any similarities or differences on the use of selection techniques between different types of firms operating in Malaysia. It will also try to investigate the reasons for these similarities or differences using information extracted from the personal interview and also based on analysis from the questionnaire. On the other hand, section 2 will look at one particular issue, whether there are any statistically significant differences between local and foreign firms (using Inferential Statistics). This section will also present an explanation as to why there were any statistically significant differences between these firms.

In the following section (section 5.01), the firms which participated in the survey were classified according to firm's ownership². Firms that have their own distinct Malaysian style

² In order to compare the type of selection techniques by firms ownership, firms were classified as Malaysian, US, British, Japanese, "Other foreign non - Asian" and "Other foreign - Asian" firms. However, to compare the hypotheses and evidence of the study, firms were thus classified as Local Malaysians, US, Western European, British, Japanese, Foreign - Asian and Australian as shown in Appendix 4.9 at the end of the thesis.

such as the Malaysian, American, British and Japanese firm were classified individually. Other firms were classified into groups as “other Foreign Non Asian” which consisted of Anglo - Dutch, German, Swiss, Italian/France (a joint venture firm), Australian and Dutch and “other Foreign Asian firm” which consisted of only Taiwanese and Singaporean firm. In addition, this survey will seek to identify whether there were any similarities or differences on the use of selection techniques between family and non family owned Malaysian firms.

SPSS (Statistical Package for Social Science) for windows version 6.0 was used to analyse the raw data. Quantitative data extracted from the survey questionnaire will be used to describe this study. Qualitative data³ will also be used to amplify this quantitative data by using quotations extracted from tape recordings made during the personal interviews. These quotations have been translated since almost all respondents used a mixture of two languages (i.e. English and Malay) during the interview session.

5.0.1. Profile of respondents

As stated earlier, there were 60 respondents to the Management Selection Questionnaire and 32 firms which participated in the personal interview. Table 5.1 on the following page shows the breakdown of these respondents to the questionnaire by ownership and location.

³ The summary of responses from the personal interview conducted by firm ownership is also available in Appendix 5.0 at the end of this thesis.

TABLE 5.1
Responses to the Management Selection Questionnaire by firms ownership and location

Forms of ownership	Location			Total firms
	KL & Selangor	Johor	Penang	
Malaysian	13 [61.9] (21.7)	4 [19] (6.7)	4 [19] (6.7)	21 (35)
American	3 [50] (5)	2 [33.3] (3.3)	1 [16.7] (1.7)	6 (10)
Other foreign non Asian	6 [54.5] (10)	2 [18.2] (3.3)	3 [27.3] (5)	11 (18.3)
British	3 [75] (5)	1 [25] (1.7)		4 (6.7)
Japanese	3 [23.1] (5)	8 [61.5] (13.3)	2 [15.4] (3.3)	13 (21.7)
Other foreign Asian	1 [20] (1.7)	2 [40] (3.3)	2 [40] (3.3)	5 (8.3)
Total firms	29 (48.3)	19 (31.7)	12 (20)	60 (100)

TABLE 5.2
Responses to the personal interview by firms ownership and location

Forms of ownership	Location			Total firms
	KL & Selangor	Johor	Penang	
Malaysian Bumiputra	5 [62.5] (15.6)	2 [25] (6.3)	1 [12.5] (3.1)	8 (25)
Malaysian Chinese	2 [100] (6.3)			2 (6.3)
Malaysian Indian	1 [100] (3.1)			1 (3.1)
American	3 [60] (9.4)	1 [20] (3.1)	1 [20] (3.1)	5 (15.6)
Other foreign non Asian	4 [50] (12.5)	1 [12.5] (3.1)	3 [37.5] (9.4)	8 (25)
British	2 [100] (6.3)			2 (6.3)
Japanese		3 [100] (9.4)		3 (9.4)
Other foreign Asian		2 [66.7] (6.3)	1 [33.3] (3.1)	3 (9.4)
Total firms	17 (53.1)	9 (28.1)	6 (18.8)	32 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

Overall, in terms of ownership, the majority of these respondents were Malaysian (35%), followed by Japanese (21.7%), other foreign non - Asian (18.3%), American (10%), other foreign Asian (8.3%) and British (6.7%). In terms of location, most of these firms were located in KL/Selangor (48.3%), followed by Johor (31.7%) and Penang (20%). Table 5.2 on the earlier page, shows the breakdown of respondents that participated in the personal interview. Overall, in terms of ownership, the majority of the firms that participated in the personal interview were Malaysian (34.4%), followed by other foreign non - Asian (25%), American (15.6%), Japanese (9.4%), other foreign Asian (9.4%) and British (6.3%). In terms of location, most of these respondents were located in KL/Selangor (53.1%), Johor (28.1%) and Penang (18.8%). Although both of these tables indicated that all type of firms responded to this survey, this data should be interpreted with caution due to the small and uneven number of firms in some cells. Similarly as indicated earlier in section 4.4.6 of Chapter 4, there are a number of issues related with the response rate which need to be considered. More than 60% of firms with less than 700 employees failed to return the mail questionnaire. It is difficult to anticipate what effect this has had but evidence from the research literature suggested that larger⁴ firms are more inclined to use formal selection techniques. Therefore, the fact that the response rate in this study is bias towards large firms might imply that the results of this survey overstate the use of formal selection techniques and understate the extent to which some firms do not employ such techniques.

⁴ In this thesis similar to other studies, firms are classified as large if they have between 500 to 1500 employees, larger if they have between 1501 to 3500 employees and largest if they have more than 3500 employees. The selection techniques employed vs the size of firm are illustrated in Table B1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.2, 3.4, 4.1, 4.2, 4.3, 4.4 and 5.0 in Appendix 4.9 at the end of this thesis.

The overall mean number of years these firms have been in operation is 25 (24.669) years thus suggesting that they have been well established in Malaysia.

PART I

5.1. Selection techniques

The survey sought information on the selection techniques used by respondents in the last 5 years to select managers. These respondents consist of personnel manager or other managers responsible for the selection process of their firms.

5.1.1. Use of selection techniques

The results of the survey as shown on the next page in figure 5.1(a) and (b) indicated that out of 60 firms, 81.7% of the firms used selection techniques to select managers. These are firms which used formal techniques to select external candidate for the post of managers at all⁵ /some⁶ levels. Firms in this category, may also used informal techniques. These will be the categories that this study will be referring to in subsequent discussion. It is important to note that based on the interview data, the remaining firms (18.3%), comprised of firms which may sometimes⁷ have used formal techniques to select internal candidate for the post of managers at all/some levels though they did not use such techniques to appoint external candidates (in

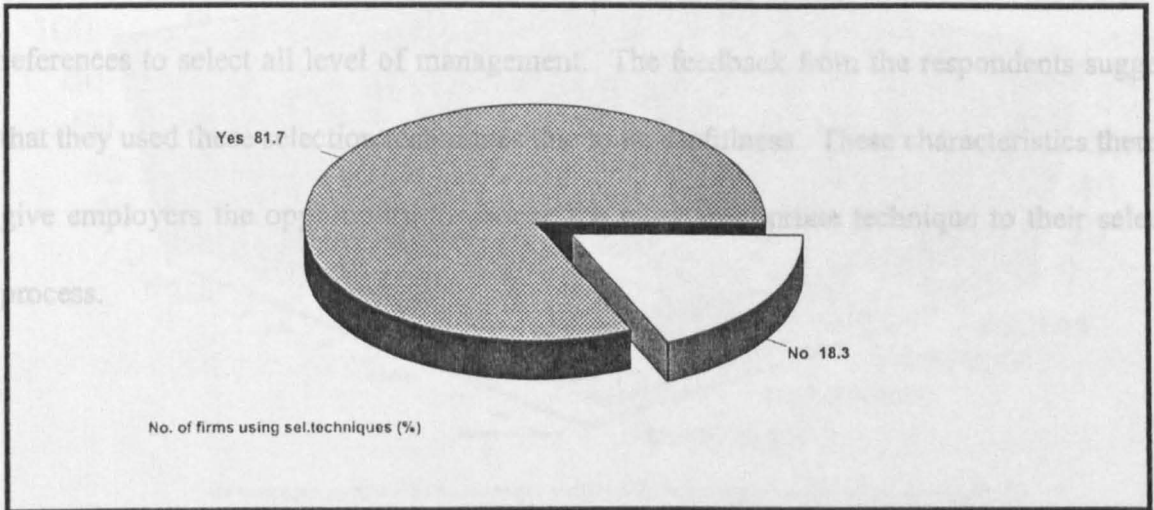
⁵ "all" levels refers to senior, middle, junior managers and trainees

⁶ "some" refers to the condition whereby not every firm possesses the above 4 categories (i.e senior, middle, junior manager and trainees). Firm, for example, use techniques to select only "some" levels of management such as junior manager and trainees

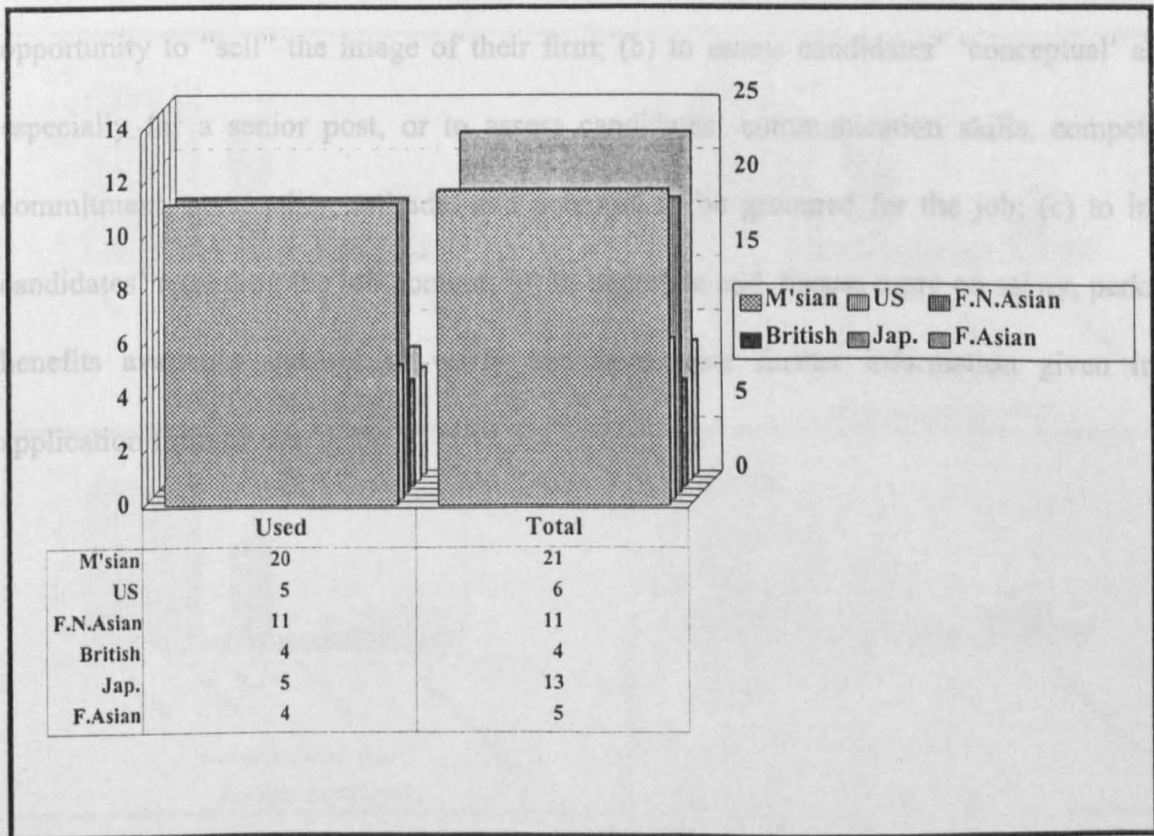
⁷ The researcher recognises that 'never' using any selection techniques is a potential possibility; however, in the data collected for this thesis, each respondent used some selection techniques albeit formal or informal.

practice in many cases, this was because they only normally selected management personnel from within the firm).

(Figure 5.1(a))
No. of firms (%) using managerial selection techniques



(Figure 5.1(b))
No. of firms using managerial selection techniques



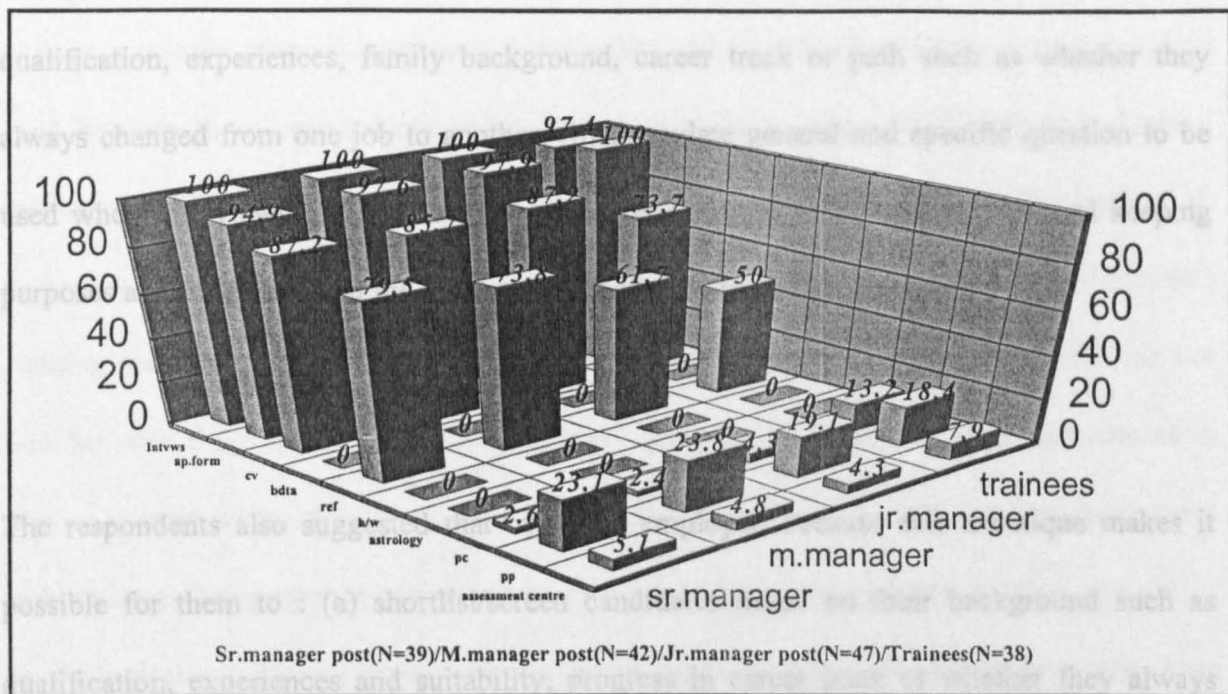
5.1.2. Types of selection techniques

Concerning the types of selection techniques used to select managers, figure 5.2(a) and (b) on the following page, illustrate that overall, it is common for firms in the Malaysian industry similar as those used in the West to use interviews, application forms and cvs as well as references to select all level of management. The feedback from the respondents suggested that they used these selection techniques due to its usefulness. These characteristics therefore give employers the opportunity to choose the most appropriate technique to their selection process.

According to these respondents, they used interviews because it allowed them : (a) an opportunity to “sell” the image of their firm; (b) to assess candidates’ ‘conceptual’ ability especially for a senior post, or to assess candidates’ communication skills, competency, commitment, personality, attitude, and potential to be groomed for the job; (c) to inform candidates’ regarding the job content; (d) to negotiate and discuss more on salary, perks and benefits available and (e) to verify and investigate further information given in the application form or cvs.

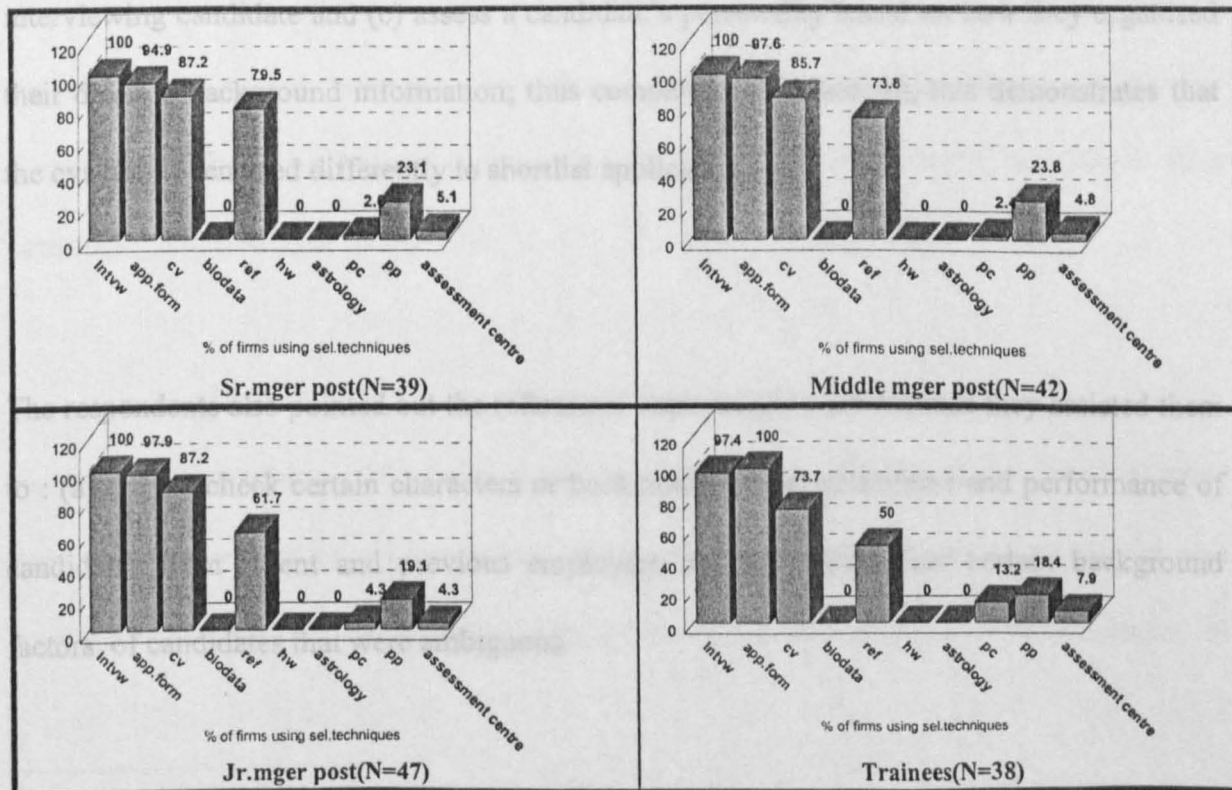
(Figure 5.2(a))

Summary of the types of managerial selection techniques used by firms (%)



(Figure 5.2(b))

Summary of the types of managerial selection techniques used by firms (%)



On the other hand, the respondents also mentioned that they used application forms because they provided the means to : (a) shortlist/screen candidates based on their background such as qualification, experiences, family background, career track or path such as whether they always changed from one job to another; (b) formulate general and specific question to be used when interviewing candidate; (c) provide background information for record keeping purposes and (d) ensure that the information needed by them is consistent.

The respondents also suggested that cvs were employed because this technique makes it possible for them to : (a) shortlist/screen candidates based on their background such as qualification, experiences and suitability, progress in career track or whether they always changed from one job to another; (b) formulate general and specific question when interviewing candidate and (c) assess a candidate's personality based on how they organised their detailed background information; thus compared to (a) and (b), this demonstrates that the cvs have been used differently to shortlist applicants.

The respondents also pointed out the references were mainly used because they assisted them to : (a) cross - check certain characters or backgrounds or contributions and performance of candidates from recent and previous employers and (b) substantiate certain background factors of candidates that were ambiguous.

Psychological (personality and cognitive) tests and ACs were not widely used by the firms covered in this survey compared to those used in the West. As revealed from the interview with respondents, psychological tests (personality and cognitive) and ACs were not widely used because these respondents believed that they have other established and effective selection techniques. This belief stems from their contentment with the performance of all managers who have been selected using other techniques such as interviews and references⁸. Another reason for not using psychological tests and ACs is that these respondents were not familiar with these techniques since they were not exposed to any of these instruments in previous firms where they were once employed. In addition, they also considered these techniques as inappropriate and unnecessary because based on their observation, the use of psychological (cognitive) tests were an insult especially to senior managers who have experiences and professional qualifications. They also mentioned that other techniques such as the open - ended interview were more suitable in assessing the 'conceptual' ability of candidates for senior manager posts than using other techniques such as the AC. Furthermore, these techniques (personality and cognitive tests) were considered time consuming and costly.

Nevertheless, psychological (cognitive) tests were used by a few respondents since it allowed them to assess an applicant's intellectual ability particularly for a trainee's post. It was also employed to judge the applicant's attitudes and characters based on their responses or

⁸ As extracted from the interview data.

reactions in terms of eagerness or nervousness. Thus, the score of this test carries no weight in the selection process but was used for record keeping purposes. On the other hand, the psychological (personality) tests were used since it provided the respondents with information concerning an applicants' personality. This technique was also employed for record keeping purposes to be used as references in the future, if there was any opportunity for promotion. The assessment centre (AC) was used since this technique allow respondents to accurately predict the subsequent performance of candidates.

None of the firms as compared to some firms in the West reported employing biodata, handwriting analysis (graphology) and astrology. The interviews with the respondents reflected that biodata was not used because they assumed this technique to be time consuming, costly, inappropriate and unnecessary. These respondents also believed that they have other established and effective selection techniques such as interviews, application forms, cvs, and references. Their judgement of the effectiveness of these techniques was based on their perception of the satisfactory performance of candidates selected as a result of this process during and after probationary period. The respondents also mentioned that they were not familiar with biodata, graphology or astrology because they did not have any experience or exposure to these techniques. There were also remarks which indicated that these respondents were not aware of the existence of these techniques. For example, as one personnel manager commented *"I have never come across this technique (biodata). I only knew of other techniques such as psychological tests, Assessment Centres.....and biographical data*

by simply looking at the application forms or cvs". Nevertheless, some respondents mentioned that they may consider the biodata technique if their firm expands and if they have enough resources or if the number of applicants increases. A number of respondents also suggested that they would also consider this technique only if they were sure that it would help improve the selection process and if it was not costly, or provided their department (HR) has been fully computerised. There were also comments from the respondents which suggested that they did not employ graphology and astrology because both these techniques were considered too subjective.

Instead of employing biodata or graphology, these respondents suggested in the interview that they used a range of informal techniques. For example, they mentioned that *"instead of assigning some mathematical weight to produce a score for each applicant, we usually sift through their backgrounds based on certain criteria that we have in mind"* and that *"we do not analyse applicants handwriting based on certain strokes, but based on their handwriting neatness and legibility, we can judge their characters"*

The cvs were less employed to select trainees; references also appear to be less employed to select junior managers and trainees. As extracted from the interview data, respondents felt it to be inappropriate to use cvs for the post of a trainee. This is because they assumed recent graduates have not been previously employed. On the other hand, references were less

employed to select junior managers and trainee because they consider senior and middle manager posts more important than the junior managers and trainees post. The following is a sample of statements from these respondents :

"Most of the trainees are fresh graduates with no working experience. Therefore, their cvs will reflect very few working experiences such as practical attachment or training and some extracurricular activities; the only referees that can always be provided by these graduates are just lecturers or professors who will usually give good feedback on them. Due to this, we felt that it is inappropriate to request the cvs from them"

"The post of junior managers and trainees are not considered by us as important as senior managerial posts where decision making is very crucial for the survival of our firm. Any decision made by a very junior manager or trainee usually needs approval and will always be counterchecked by managers who usually have very sharp judgement due to their wealth of experiences. Furthermore, guidance by a more senior manager and training can always be provided to improve their skills and performances".

The psychological (cognitive) test seemed to be employed more in selecting trainees than other levels of management to assess their attentiveness. A typical statement from such respondents was : *"We used the IQ test especially on graduates who apply for a trainees post to test their mental alertness. Since training will be provided to these trainees, we need to know from this test whether they can easily learn or comprehend faster whatever that we taught them.*

Furthermore, graduates with a high IQ as revealed from this test usually have potential to complete our training programmes successfully”.

As disclosed from the interview data, the use of this test was considered unsuitable for senior managers. Some frequent comments from the respondents are illustrated below :

“We consider the use of the cognitive test for senior post to be inappropriate. Since these senior managers have a wealth of experience and a string of professional qualifications, the use of this technique is considered as an insult to them”

“The use of this technique on senior managers is seen as an insult to them. These candidates may form a negative impression of our company and may decide not to accept our offer”.

The results of the survey also showed that the personality test seemed to be much more attractive than the cognitive test. In the interview, it appeared that respondents believed that applicants could easily be trained; therefore it is only necessary to assess their personalities rather than intelligence. An illustrative comment from the interviews was *“We used the personality test since all of the applicants for senior post or trainees are graduates who usually will have some intelligence⁹ gained through formal education. Instead of assessing their intelligence, we feel that it is better to assess their personalities to see whether it fits with our company’s culture.”.*

⁹ According to these respondents, the term “intelligence” is synonymous to candidates’ quickness of understanding any instructions given by their immediate superior.

In addition, a number of respondents gave the impression that personality is a more important characteristic than intelligence, and that having identified this characteristic regard it as useful as a reference. Opinions expressed about them varied as is shown below :

"We believe that personality is a more important attribute than intelligence, since with the right personality and attitude, any individuals or managers can be easily trained and perform any job effectively in any circumstances".

"We believe that any candidate's personality which fits with the job requirement will have the potential to contribute more to our company's progress".

"As compared to the intelligence test, we employ this technique for record keeping purposes and recommendation in the future should there be any vacancy for promotion"

One respondent for example, commented that this test has also been capable of assessing a candidate's suitability for the job. His remark was, *"We currently employ this technique and will continue doing so since it has proven to be effective in assessing whether candidate's personality fit with the job"*.

5.1.3. Number of stages and types of selection techniques used in each stages

As shown in Figure 5.4 on the following page, this survey indicated that more than 48% of firms used a 3 stage selection process to select senior, middle and junior managers and more than 50% of firms used a 2 stage selection process to select trainees. During interview, respondents suggested that the selection of candidates for a management post are particularly important. As one of the respondents put it “ *We have to make sure that we have the right candidate to be employed as a manager, especially for a senior post, since this post requires special attributes and qualifications*” Therefore, a 3 stage selection process was preferred in order to filter out unsuitable candidates.

On the other hand, the fact that a 2 stage selection process was used to select trainees may suggest that this post is not considered to be as important as other managerial posts. Furthermore, candidates selected for the post of trainee will need to complete training programmes to improve their skills and knowledge; their performance and suitability will also be assessed by employers during this period. These can be well represented by the following quotations.

“We usually employ two or more stages in our selection process as a check and balance and also not to rely on one particular method of judgement”

“We consider selecting suitable candidates for the post of a junior manager and trainee as taking a slightly lower risk. We do not have much of a problem in identifying the right guy”

"We are not very particular in selecting candidates for the post of a trainee as compared to other senior posts because they will usually undergo some form of training to enhance their skill or knowledge".

Figure 5.3
Summary of stages involved to select managers by firms (%)

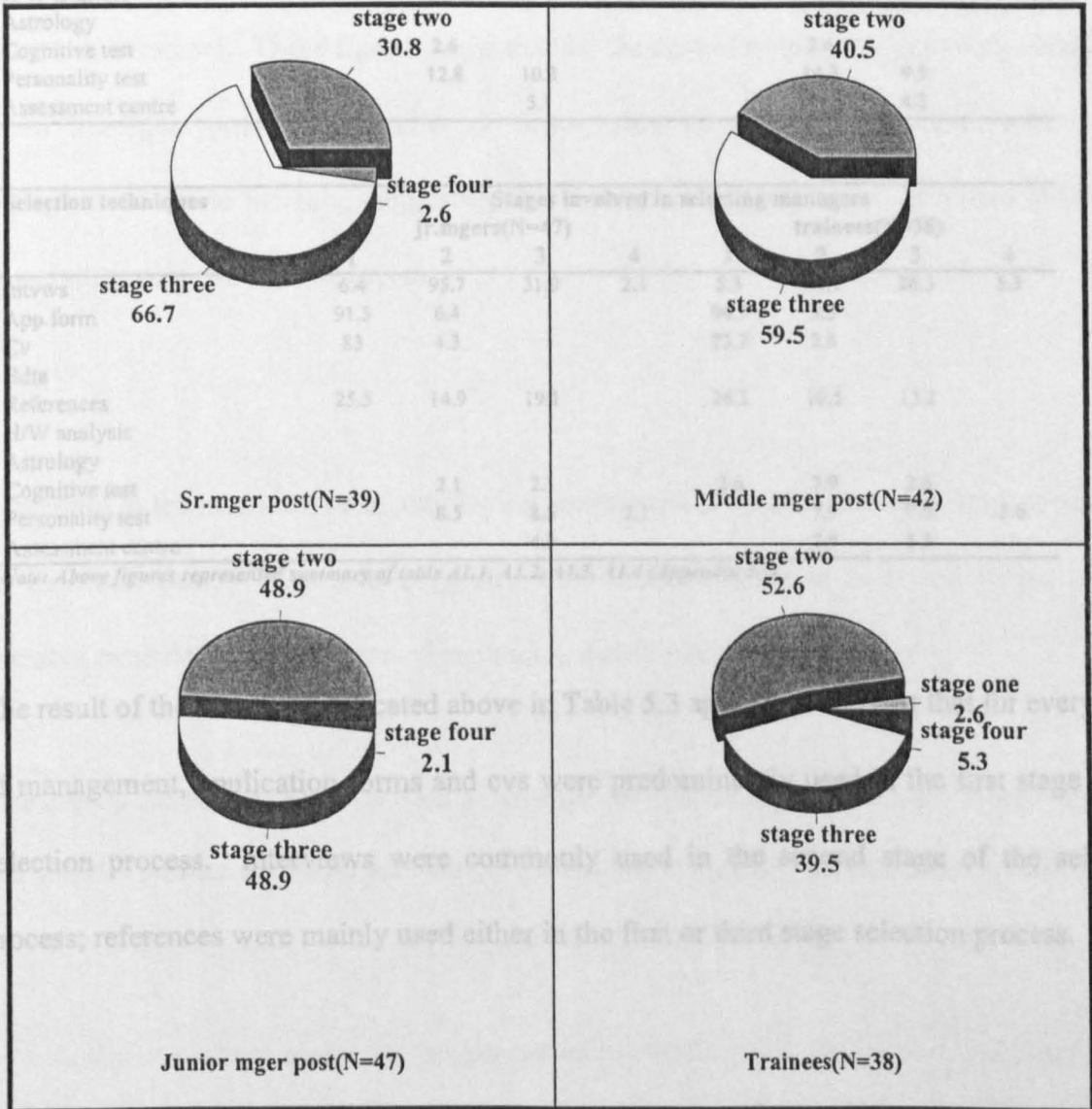


TABLE 5.3
Types of selection techniques at each stage in selecting managers(%)

Selection techniques	Stages involved in selecting managers							
	sr.mgers(N=39)				middle managers(N=42)			
	1	2	3	4	1	2	3	4
Intvws	5.1	87.2	51.3	2.6	4.8	95.2	38.1	
App.form	84.6	10.3			90.5	7.1		
Cv	82.1	5.1			81	4.8		
Bdta								
References	33.3	17.9	30.8		28.6	14.3	28.6	
H/W analysis								
Astrology								
Cognitive test		2.6				2.4		
Personality test		12.8	10.3			14.3	9.5	
Assessment centre			5.1				4.8	

Selection techniques	Stages involved in selecting managers							
	Jr.mgers(N=47)				trainees(N=38)			
	1	2	3	4	1	2	3	4
Intvws	6.4	95.7	31.9	2.1	5.3	94.7	26.3	5.3
App.form	91.5	6.4			94.7	5.3		
Cv	83	4.3			73.7	2.6		
Bdta								
References	25.5	14.9	19.1		26.3	10.5	13.2	
H/W analysis								
Astrology								
Cognitive test		2.1	2.1		2.6	7.9	2.6	
Personality test		8.5	8.5	2.1		7.9	7.9	2.6
Assessment centre			4.3			2.6	5.3	

Note: Above figures represented summary of table A1.1, A1.2, A1.3, A1.4 (Appendix 5.0)

The result of the survey as indicated above in Table 5.3 appears to suggest that for every level of management, application forms and cvs were predominantly used in the first stage of the selection process. Interviews were commonly used in the second stage of the selection process; references were mainly used either in the first or third stage selection process.

5.1.4. Use of consultants

The respondents were requested to indicate whether they used external consultants to select managers and who makes the decision to use external consultants. As shown in table 5.4 on the next page, for all categories of managers, few firms used external consultants. Only one-third of the firms used consultants to select senior managers and 3% used consultants to select some trainees. These figures show that for the post of trainees up to junior, middle and senior managers posts, the number of firms using external consultants to select some managers seemed to increase, suggesting that for a more important post or higher level post, consultants were usually employed.

According to the interview data, employing consultants is usually necessary for a specialised or important post. They also suggested that consultants know how and where to find potential candidates. A selection of comments from these respondents were :

"We employ consultants since we need professional or competent candidates for a very important and sensitive position and could not afford to make mistakes in selecting incompetent candidates."

"We employ consultants especially for specialized and senior posts and when it is difficult to find suitable candidates. These consultants know how and where to find suitable candidates"

“Consultants are usually employed by us especially for senior posts when the market is competitive and where there are shortages of skilled staff”

TABLE 5.4
Use of external consultants to select managers

Qns. Does your firm use external specialists/ consultants to select senior managers?				
	senior managers	middle managers	junior managers	trainees
Yes, to select all	2 (3.3)	1 (1.7)		
Yes, to select some	20 (33.3)	10 (16.7)	6 (10)	2 (3.3)
No	38 (63.3)	49 (81.7)	54 (90)	58 (96.7)
Total firms	60	60	60	60

Qns. If yes, who generally makes the decision to use external specialists/consultants?				
	senior managers	middle managers	junior managers	trainees
Managing Director	15 (68.2)	4 (36.4)	1 (16.7)	
Director	4 (18.2)	3 (27.3)	1 (16.7)	
Head of personnel	11 (50)	10 (90.9)	5 (83.3)	
Functional managers/ Line managers		2 (18.2)	1 (16.7)	2 (100)
Total firms	22	11	6	2

Note : Numbers in () are the percentages of the column total which the numbers represent

One of the respondent also suggested that the use of consultant was only necessary for a managerial post that was occasionally advertised. He believed that the quality of candidates who responded to any advertisement will not be as good as those selected by consultants. According to him *“More often, candidates who apply through advertisement may not be as*

committed, dedicated or interested in challenges as compared to the candidates identified by consultants”.

Some of the reasons for not employing consultants as revealed from the respondents were because they either felt that it was expensive to use consultant or believed that consultant do not have the knowledge about their company. Other remarks indicated that they had bitter experiences employing consultants. Several views expressed by them were as follows :

“We have not considered using external specialist or consultants. We try to avoid employing them due to high cost and there is no guarantee of selecting the right candidate”.

“We do not employ consultants because we believe that they do not have the expertise in the company’s daily operation. We are more knowledgeable in selecting the right candidate”

“We have in the past employed consultants but due to unpleasant experiences, we do not employ them anymore”

This study thus indicated a trend in the manufacturing sector that the managing director generally makes the decision to use external consultants in selecting senior managers the Head of personnel makes the decision to use external consultants in selecting senior and

middle managers and the functional managers/line managers makes the decision to use external consultants in selecting trainees.

5.1.5. Use of interview

5.1.5.1. Types of interviews, number of interviews, interview structure, type of interviewer

Respondents were requested to indicate (a) the frequency of use of the interviews to select all levels of management. In this survey, interviews were classified by (i) types of interviews, that is whether it is open ended (open ended discussion varying from candidate to candidate), structured (general standard format covering personal qualities and experience) and job specific (format involving tailored questions drawn from detailed job analysis) (ii) number of interviews, that is one or several (iii) interview structure that is whether involving one to one, two or three interviewers or panel interviewers (more than three interviewers) (iv) type of interviewer, whether involving personnel department, line managers or functional managers, external specialists/consultants, internal specialists/consultants, managing director or general manager or peers/ colleagues. A rating scale from 1 to 5 was used, where 1 indicated that the respondents never used the type of interview, number of interviews, interview structure type of interviewers and selection techniques and a rating of 5 indicated that the respondents always used it (b) the forms of training received by interviewers to select all level of management.

For senior middle and junior managers post, (as illustrated in Table A2.1, A2.2, A2.3, and A2.4 in appendix 5.0 at the end of the thesis), the open ended interview was the most popular followed by job specific interview and structured interview employed by firms¹⁰ in selecting senior, middle and junior managers. For the selection of trainees, the most popular interviews employed by firms were still the open ended interview followed by both job specific or structured interview.

It appeared from the interviews conducted that the open ended interview was popular in Malaysia because it provides the opportunity for employer to project itself and is the best means to assess candidate's character and strong commitment. Some of statements made are quoted below :

"We used this form of interview as an opportunity to 'sell' the image of our company such as prospects of being employed with us and our company's background"

"We use this form of interview to assess whether candidate's personality fits or conforms to our company's culture"

"We believe that using an open ended question, we can get the best from these candidates. They are able to ease themselves up, and from their gestures and the way they answer some questions, we can

¹⁰ For types of interviews in terms of firm's ownership, refer to Table D 6.1 to D 6.8 and Table E 6.1 to E 6.8 available at the end of this thesis.

easily judge their personality traits and discover their roots when they speak about their backgrounds”

Another reason as disclosed by the respondents was because the open ended interview enabled them to verify any information given in the application form/cv and assisted them to measure candidates conceptual ability particularly for a senior manager post. Opinions expressed about the open ended interview varied as is shown below :

“This form of interview is one of the best means to investigate further whatever information is given in the application form, cvs regarding candidate’s career track or experiences”

“Since senior managers already have experience, we do not ask structured questions related to operational level but open ended questions related to the strategic and corporate level. We want candidates to talk more about corporate vision, strategic alliances etc”.

For the selection of senior, middle and junior managers, almost 90% of firms prefer to use several interviews except for the selection of trainees where one and/or several interviews were the norm¹¹. The remarks of personnel managers reported earlier (in section 5.1.2.,) appeared to suggest that for the selection of trainees, only one interview was used because

¹¹ Ibid

this post was not considered as crucial as other managerial posts. Moreover, training will be provided to successful candidate applying for this post.

This survey also indicated that for the selection of all levels of management, more than 60% of firms prefer to employ two or three interviewers, followed by a panel interview and one to one interviews. Typical statements from the respondents interviewed were :

“We prefer to employ two or three interviewers rather than a panel interview due to the practicality of this approach. It is not easy to get all four or five interviewers together. On the other hand, if we use one to one interviews, we may be biased or make wrong judgements”

50% of firms always involved the personnel department in selecting senior managers and almost 70% of firms always involved managing director/general manager (MD/GM) as interviewers. Likewise, to select middle, junior manager and trainees, more than 80% of the firms always involved the personnel department and very few firms included line managers as interviewers.

The respondents interviewed indicated that the MD/GM were usually involved as interviewers to select senior managers because the MD/GM needs to ensure that they select

the most suitable and qualified candidates who fit into their company's culture. Some frequent comments are given below :

"MDs are usually involved as a final endorsement of findings. He has a final say especially in selecting the right candidate for a senior post"

"Our MD is usually involved as a final evaluation to see whether the candidate suits the job or fits into our company's culture"

"The MD and GM are usually involved as a final selection or screening to choose the right guy particularly for a more senior post"

"The use of the Personnel department is for screening and validation of candidates, the MD/Chairman are usually involved to ensure that we hire the right person that fit into our company's culture"

Nevertheless, there was one respondent who mentioned that his department's role was only involved in establishing 'selection' procedures to other department. According to him *"Our Department (Personnel) will give guidelines. We are usually not involved since we do not have any technical expertise. Only for senior position and technical post will the MD be involved"*

There were also another respondents who suggested that both the personnel department and MD's involvement was to enquire more on the personality of candidate who had sat the psychological (personality) test. He mentioned that *"The final interview which usually involves the personnel department and the MD is to probe deeper through the results obtained from the personality test"*

On the other hand, other comments from other respondents pointed out that the personnel departments were always involved as interviewers for the selection of all level of management to screen and negotiate salary with the candidates. Some of these comments were :

"The first interview is usually with the Personnel Department, the second interview with the Department Head, and if the point (score) is very close, HR Director and Department Head will be involved".

"We (personnel department) are more involved in the negotiation of perks and benefits"

"The Personnel department has a final say especially in salary negotiation and the terms offered apart from assessing candidate's technical aspect or job knowledge"

This survey also indicated very limited use of external and internal consultants as interviewers for the selection of managers at all level.

5.1.5.2 Forms of training for interviewers

This survey as shown in Table 5.5 on the following page revealed that the overwhelming majority of respondents (more than 97%) had some prior experience of interviewing and that a lesser proportion but still a majority (60%) had gained knowledge about interviewing through a recognised professional qualification. When the respondents were interviewed all of those concerned indicated that they have attended a short course related to interviewing technique. As one respondent remarked *“We regularly send our staff for a short course on ‘effective interviewing techniques’ run by MIM (Malaysian Institute Of Management) or MIPM (Malaysian Institute Of Personnel Management). This course usually last between 3 days to a week”*

TABLE 5.5
Breakdown of forms of training for interviewers and type of post under consideration

Forms of training for interviewers	Type of post under consideration and total firms using interviews							
	senior mger	total firms	middle mger	total firms	junior mger	total firms	trainees	total firms
Experience only	39 [100]	39	41 [97.6]	42	47 [100]	47	38 [100]	38
Recognised prof.qualifications	25 [64.1]	39	25 [59.5]	42	28 [59.6]	47	23 [60.5]	38

Note : Numbers in [] are the percentages of the row total which the numbers represent

5.1.6. Use of psychological (personality and cognitive) test

The psychological tests used by firms are divided into two categories, one of which is cognitive or aptitude tests and the other or which is personality tests. These tests may also be included by some firms as part of the AC exercises. The respondents were required to indicate (i) who is involved as assessors and (ii) the forms of training received

by their assessors. This includes those who have attended a recognised testing course run by a consultant or have attended a university psychology course or have qualifications in psychology. They were also asked to say whether these psychological tests used originate from the West and require modification.

As illustrated below, table 5.6 shows that the Head of Personnel plays an important role as assessor of cognitive tests usually followed by MD/GM for the selection of senior, middle and junior managers. For the selection of trainees, the Head of personnel usually plays an important role as an assessor of cognitive tests followed by other members of the personnel department.

TABLE 5.6
Breakdown of type of assessors (cognitive test) and type of post under consideration

Type of assessors	Type of post under consideration and total firms using cognitive test							
	senior mger	total firms	middle mger	total firms	junior mger	total firms	trainees	total firms
Head of personnel	2 [100]	2	2 [100]	2	3 [100]	3	6 [85.7]	7
Other member of personnel dept.					2 [66.7]	3	4 [57.1]	7
Departmental management							2 [28.6]	7
In-house psychologists/consultants							1 [14.3]	7
External psychologists/consultants							1 [14.3]	7
MD/GM	1 [50]	2	1 [50]	2	1 [33.3]	3	2 [28.6]	7

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE 5.7
Breakdown of forms of training for assessors (cognitive test) and type of post under consideration

Forms of training for assessors	Type of post under consideration and total firms using cognitive test							
	senior mger	total firms	middle mger	total firms	junior mger	total firms	trainees	total firms
Experience only	2 [100]	2	2 [100]	2	3 [100]	3	7 [100]	7
R.ecognised prof.qualifications	2 [100]	2	2 [100]	2	3 [100]	3	6 [85.7]	7

Note : Numbers in [] are the percentages of the row total which the numbers represent

Overall, it can be inferred from table 5.7 above that all of these firm's assessors have experience and almost all of them have been trained by the originator of this test or are registered to use this form of test.

TABLE 5.8
Breakdown of type of assessors (personality test) and type of post under consideration

Type of assessors	Type of post under consideration and Total firms using personality test							
	senior mger	total firms	middle mger	total firms	junior mger	total firms	trainees	total firms
Head of personnel	9 [90]	10	10 [90.9]	11	9 [90]	10	6 [66.7]	9
Other member of personnel dept.	3 [30]	10	3 [27.3]	11	6 [60]	10	6 [66.7]	9
Departmental management	3 [30]	10	3 [27.3]	11	3 [30]	10	2 [22.2]	9
In-house psychologists/consultants								
External psychologists /consultants	1 [10]	10	1 [9.1]	11			1 [11.1]	9
MD/GM	1 [10]	10	1 [9.1]	11	1 [10]	10	1 [11.1]	9

Note : Numbers in [] are the percentages of the row total which the numbers represent

The results of the survey as shown above in table 5.8 suggest that for the selection of senior, middle and junior managers, the Head of personnel, followed by other members of the personnel department and departmental management, play an important role as assessors of personality test. For the selection of trainees, the Head of personnel and other members of

personnel department followed by departmental management usually play an important role as assessors of personality tests.

As shown below in Table 5.9, all of the firms assessors which used the personality test to select all levels of management have experience of such tests. In addition, most of these firms assessors who used this form of test to select all levels of management have a recognised professional qualification. It can thus be inferred that they have been trained by the originator of this test or are registered to use this form of test.

TABLE 5.9
Breakdown of forms of training for assessors (personality test) and type of post under consideration

Forms of training for assessors	Type of post under consideration and Total firms using personality test						trainees	total
	senior mger	total	middle mger	total	junior mger	total		
Experience only	10 [100]	10	11 [100]	11	10 [100]	10	9 [100]	9
Recognised prof. qualifications	8 [80]	10	8 [72.7]	11	8 [80]	10	8 [88.9]	9

Note : Numbers in [] are the percentages of the row total which the numbers represent

The respondents were requested to indicate whether the psychological tests employed to select all levels of management originate from the West and require modification to be used in Malaysia. Table 6.0 on the next page illustrates that all of the psychological tests used by firms in Malaysian industry originated from the West and less than half of these firms indicated that the psychological tests require modification. From this figure, it is thus difficult to reach any conclusion due to the small number of firms which responded to this

question. Nevertheless, this might reflect that psychological tests which originated from the West are applicable in the Malaysian industry.

TABLE 6.0
Features of psychological test

Qns. Do the psychological tests for all level of managers originate from the West and require modification to be used in Malaysia?		
Features	Cognitive test	Personality test
Originate from the west	7 (100)	11 (100)
Require modification	3 (42.9)	5 (45.5)
Total firms	7	11

Note : Numbers in () are the percentages of the overall total which the numbers represent

In addition, some comments from respondents pointed out that the personality tests employed by them do not require modification since they are based on common traits. Other comments indicated that since most candidates have the necessary qualifications, they should not have any problem responding to the list of questions available in the personality or cognitive test. Some typical statements from respondents interviewed are as follows:

"The personality tests that we use do not require modification since this technique is based on universal traits. Any interpretation can be tailor made to our Malaysian culture"

"We do not modify the psychological test (personality and cognitive) that we used since most candidates have the necessary educational background, hence they should not have any problem responding to the list of questions available in the test"

Only one respondent revealed from the interview that the psychological (personality) test employed required modification particularly on activities in the job specification to suit the company's requirement. He mentioned that *"The personality tests employed by us originate from Australia. The job specification needs to be customised to our company's requirements. For example, we may have the same job title, but activities may vary"*

The feedback received from respondents interviewed also suggested that there are some selection techniques which originate from the West that require modification such as the AC and the work sample test. Their comments are as follows :

"The assessment centre (AC) technique that we use originates from UK. Part of this technique which requires modification is the Case study technique to suit our local setting. Candidates are given freedom to answer in the Malay language. In addition, we also need to update or revise the version that we currently have to something new".

"The AC that we employ which originates from the UK requires modification especially the Case study. Our parent company in the UK also used consultants that have a local office in Malaysia which will adjust this technique according to our local needs".

"The Case study and the work sample test that we use has been modified regularly and after a certain period of time has lost its originality"

However, there are other techniques which also originate from the West that do not require any modification such as the structured interview. As one respondent commented "*The structured interview which is also open ended originates from the US. It does not require any modification since this technique is based on a behaviour dimension which is universal*"

5.1.7. Use of references

The respondents in this survey were requested to indicate whether candidates for managerial posts are required to give the names of referees, the number of referees, when these references are taken up and whether candidates are required to have a pre-entry medical tests. These respondents were also required to give a rating from a scale of 1 which means least important, to 5 which means most important on certain categories of referees such as previous employer, politicians/well known figures, relatives employed in the firm and from networking/contacts with other firms.

As shown in table 6.1 on the next page, this survey illustrated that for the posts of senior, middle and junior managers, more than 50% the firms indicated that candidates were requested to give the names of referees. However, less than half of these firms (48%) indicated that candidates were requested to give the names of referees for the post of trainees. Almost all respondents pointed out that contacts were made with the previous employer instead of the recent employer although candidates were not requested to give the names of

referees. This is because, they conveyed from the interview that the recent employer will usually provide 'positive but not truthful' comment in order to 'get rid' of their employee. This demonstrates a significant difference in Malaysian references. For example, the most recent/present employer will give a good reference only if they are dissatisfied with the employee and wish to place them elsewhere; whereas, a Western firm will frequently not give a good reference to a poor employee because they may not feel the same responsibility for the person's welfare regardless of their need to get rid of this employee.

TABLE 6.1
Use of references for all levels of management

Qns. Are candidate requested to give the names of referees?				
	senior manager	middle manager	junior manager	trainees
Yes	36 (60)	34 (56.7)	37 (61.7)	29 (48.3)
No	21 (35)	19 (31.7)	16 (26.7)	25 (41.7)
No, but contact made with previous employer	3 (5)	7 (11.7)	7 (11.7)	6 (10)
Total firms	60	60	60	60

Qns. If yes, how many?				
	senior manager	middle manager	junior manager	trainees
1 referees	1 (2.8)	1 (2.9)		
2 referees	34 (94.4)	32 (94.1)	35 (94.6)	27 (93.1)
3 referees	1 (2.8)	1 (2.9)	2 (5.4)	2 (6.9)
4 referees				
Total firms	36	34	37	29

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE 6.1 (contd)
Use of references for all levels of management (contd)

Qns. If yes when are these references taken up?				
	senior manager	middle manager	junior manager	trainees
Before offer	33 (91.7)	31 (91.2)	32 (86.5)	25 (86.2)
After acceptance of offer	3 (8.3)	3 (8.8)	4 (10.8)	3 (10.3)
Not taken up				
Only when necessary			1 (2.7)	1 (3.4)
Total firms	36	34	37	29

Qns. If yes, how important are the following categories to you in the selection of senior managers?					
categories of referees	least imp.	less imp.	imp.	more imp.	most imp.
Previous employer		1 (2.8)	6 (16.7)	9 (25)	20 (55.6)
Politicians / wellknown figures	22 (61.1)	8 (22.2)	5 (13.9)	1 (2.8)	
Relatives employed in the firm	15 (41.7)	11 (30.6)	8 (22.2)	1 (2.8)	1 (2.8)
Lecturers					
Networking/contacts (friends from other firm)			1 (2.8)	1 (2.8)	2 (5.6)
Total firms	36	36	36	36	36

Qns. If yes, how important are the following categories to you in the selection of middle managers?					
categories of referees	least imp.	less imp.	imp.	more imp.	most imp.
Previous employer		2 (5.9)	4 (11.8)	8 (23.5)	20 (58.8)
Politicians / wellknown figures	21 (61.8)	8 (23.5)	4 (11.8)	1 (2.9)	
Relatives employed in the firm	13 (38.2)	8 (23.5)	10 (29.4)	1 (2.9)	2 (5.9)
Lecturers					
Networking/contacts (friends from other firm)			1 (2.9)	1 (2.9)	
Total firms	34	34	34	34	34

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE 6.1 (contd)
Use of references for all levels of management (contd)

Qns. If yes, how important are the following categories to you in the selection of junior managers?

categories of referees	least imp.	less imp.	imp.	more imp.	most imp.
Previous employer		2 (5.4)	4 (10.8)	10 (27)	21 (56.8)
Politicians / wellknown figures	24 (64.9)	10 (27)	3 (8.1)		
Relatives employed in the firm	13 (35.1)	8 (21.6)	12 (32.4)	3 (8.1)	1 (2.7)
Lecturers					
Networking/contacts (friends from other firm)	1 (2.7)			2 (5.4)	
Total firms	37	37	37	37	37

Qns. If yes, how important are the following categories to you in the selection of trainees?

categories of referees	least imp.	less imp.	imp.	more imp.	most imp.
Previous employer	1 (3.4)	5 (17.2)	6 (20.7)	4 (13.8)	13 (44.8)
Politicians / wellknown figures	19 (65.5)	6 (20.7)	2 (6.9)	2 (6.9)	
Relatives employed in the firm	10 (34.5)	5 (17.2)	10 (34.5)	3 (10.3)	1 (3.4)
Lecturers			2 (6.9)	2 (6.9)	
Networking/contacts (friends from other firm)				2 (6.9)	
Total firms	29	29	29	29	29

Qns. Are candidates required to have a pre-entry medical test?

	senior manager	middle manager	junior manager	trainees
Yes, by company doctor	34 (87.2)	32 (76.2)	34 (72.3)	29 (78.4)
Yes, by own doctor	1 (2.6)	2 (4.8)	3 (6.4)	
No	3 (7.7)	7 (16.7)	9 (19.1)	7 (18.9)
If indicated health problem during interview	1 (2.6)	1 (2.4)	1 (2.1)	1 (2.7)
Total firms	39	42	47	37

Note : Numbers in () are the percentages of the column total which the numbers represent "

This table (table 6.1) also shows that for the post of managers at all level, more than 90% of firms in the Malaysian industry requested candidates to give the names of 2 referees with most of these references taken up before the job offer. The reason, as suggested from respondents interviewed, was to confirm certain elements of the character or background of candidates. Some common statements from the respondents were :

"We used references before the job offer to cross check the character or background of candidates from previous employers"

We used references before offering the job to substantiate the background of candidates that was ambiguous"

All of the respondents interviewed also pointed out that they contacted previous employers by telephone. They seemed to suggest that this was the most practical means of acquiring feedback from previous or recent employer. As one respondent remarked :

"References are usually taken up before the job offer since they have a lot of bearing. Sometimes, candidates performed well in an interview, but references will reveal their actual performances with their former employer. We usually contact previous employers but not the recent employer over the phone. This is because some recent employers will give good remarks to get rid of this particular candidate. We normally listen intensely; if a former employer mentioned that there is 'nothing much about this candidate', it implies that this is just an average candidate".

There were however, remarks from respondents which indicated that their references were taken up after the job offer. They appeared to rely more on other selection techniques because they felt that checking references was not an effective technique. According to them, *“more often than not, former employers may not want to be frank regarding the candidate’s unsuitability.”* This may be due to the Malaysian norm of being less specific and indirect¹². In addition, references will only be employed to probe further any ambiguity reflected from the interview. The use of references in this manner (which is not an actual part of the selection process set by the firm) thus suggests that this technique has been used informally to select external candidate. As one respondent put it *“References are usually taken up after deciding to appoint the candidate and to probe further if the feedback received from the interviewers was negative.”*

These figures obtained from the survey also showed that to select senior, middle and junior managers, previous employers were considered as the most important referees by more than 50% of these firms. However, previous employers were considered as the most important referees by less than 50% of these firms to select trainees. This may be because this post was mostly filled by recent graduates who usually have less working experiences or do not have any relevant working experiences.

¹² This refers to the Malays or Bumiputra ethnic values. Also refer to Appendix 5.3 for a list of ethnic values in Malaysia.

In the selection of all levels of management, politicians were considered by more than 60% of the firms as the least important referees and relatives employed in the firm were considered by more than 30% of the firms as the least important referees¹³. From the interview data, it appears that this is because they wish to avoid any political pressure and favouritism. Common opinions expressed by respondents were :

“As far as possible, we avoid any political influence. We do not want to be politically involved as our company may not be able to progress”.

“References should be directed to a previous employer instead of politicians to avoid biasess in favour of candidates”.

Furthermore, there were some remarks which indicated that the respondents did not have any belief in any testimonial or written recommendation from any well known politicians. As one personnel manager commented : *“Politicians are not important as referees since they hardly remember a candidate when contacted by us”*

Very few firms indicated that networking and contacts with friends from other firms were considered as important referees. Nevertheless, there were statements from respondents who

¹³ However, as shown in table 6.1, there were a few firms which indicated that these categories were considered as important referees in the selection of all level of management.

believed that politicians are important referees especially for very senior posts. They felt that this may carry weight depending on the level of importance and association of the particular politician with their firm. Thus one remark was :

"Politicians as referees are important in terms of networking and benefits the company will receive in future"

The feedback from the respondents interviewed also indicated that relatives employed in the firm might be important referees. According to these respondents, they encouraged family members to be employed provided that there will be no bias or favouritism. A selection of such feedbacks is :

"We consider relatives as an important referee since we also encourage family members to be employed as long as there is no conflict of interest. Family members or relatives will be allocated to different departments and this can cultivate a linking or an easily available commitment to work with us".

"A relative is considered as an important referee since we encourage family members to be employed provided there is no conflict of interest. We also like to be seen as caring by our employees".

Another respondent gave an impression that relatives were useful as references because they can judge the personality of applicants or to check whether candidates can easily acclimatise to their work culture. Some of the opinions expressed by them were :

“A relative is considered as an important referee since the character or attitudes of a candidate is reflected from the character or attitude of a relative employed with us”.

“The use of a relative is important especially if he is a ‘militant’ union leader. This background is useful to predict the character of applicants”.

“Relatives are only used as references to check a candidate’s acceptability and degree of adaptability to our work culture”.

One respondent also indicated the usefulness of relatives as referees especially when deciding to choose which is the most suitable applicant. According to him *“Relatives are considered important referees especially if all other criteria of the applicant assessed by us are equal. Priority will be given to candidates who have a relative employed by us”.*

Another respondent also disclosed that a candidate recruited in this manner will have a commitment to perform well. He suggested that *“the candidate will feel a sense of obligation to perform well so as not to embarrass the relative who recommended him into the organisation”.*

On the other hand, there were other respondents who did not consider relatives to be important referees because they either wish to avoid any impartiality or their selection criteria were based solely on suitability instead of using references. Their statements were :

"We do not use relatives as references to avoid any conflict of interest".

"In the past, relatives were considered as important referees, but as our business grew and in order to become a 'world class' organisation, selection is presently based on skills and qualifications".

This survey also revealed that lecturers were only considered as important referees in the selection of trainees (less than 7%) but not in the selection of other levels of management. More than 72% of the firms in this survey also reported that candidates were required to undergo a pre-entry medical test by their company doctor. The interview data indicated that none of the respondents used or knew of the existence of a 'forced - choice' or structured references. They also pointed out that a pre - entry medical test is the last, remaining selection requirement, which is not an original part of the selection process set by their firm. It is therefore perceived that the medical test is simply a formality prior to joining the firm. However, there were remarks which emphasised that potential candidates may not get the job offer if there is any indication of serious health problems reported in the pre - entry medical test¹⁴.

¹⁴ For example, candidates with high blood pressure are often declined a position in senior management because it is thought that the stress/pressure of the position will only deteriorate their health further.

PART II

5.2 Use of selection techniques

This part of the chapter is divided into two sections : section 1 attempts to establish (a) whether local and foreign firms used selection techniques; and (b) to determine the number of stages involved and the types of selection techniques employed by these firms in selecting managers. This section will also try to explain why these techniques were employed. In addition, it will (a) indicate any similarities or differences in the use of selection techniques between these firms; and (b) seek to determine the factors which influence these similarities or differences based on analysis from the questionnaire used in the survey and information extracted from the personal interview. section 1 will thus use descriptive statistics. On the other hand, section 2 will use inferential statistics to look for any statistically significant differences between local and foreign firms. Section 2 will also present an explanation as to why there were any significant differences between these firms.

Section 1

5.2.1. Use of selection techniques by firms ownership

In terms of firms ownership (i.e. in accordance to the nationality their parent company), the results of the survey as shown in table 6.2 on the following page, indicated that apart from the Japanese firms, more than one - third of both local and foreign firms used selection techniques to select external candidates for the post of managers at all levels. This table also illustrated that more than half of the Japanese firms do not use selection techniques to select external candidates for the post of managers. The interview data suggested that they only

external candidates for the post of managers. The interview data suggested that they only employ selection techniques to recruit and appoint internal or external candidates for the post of 'executives' which is not equivalent to any management post. Candidates will be given on - the - job training and if qualifies will subsequently be promoted to a management post. Common remarks from personnel managers of Japanese firm were :

"All of our senior managers are internally promoted. We do not have any trainees posts for fresh graduates. These graduates or staffs within our company are usually recruited and appointed as executives. They do not have to undergo any training programmes and it will take them several years before they are given any managerial post ""

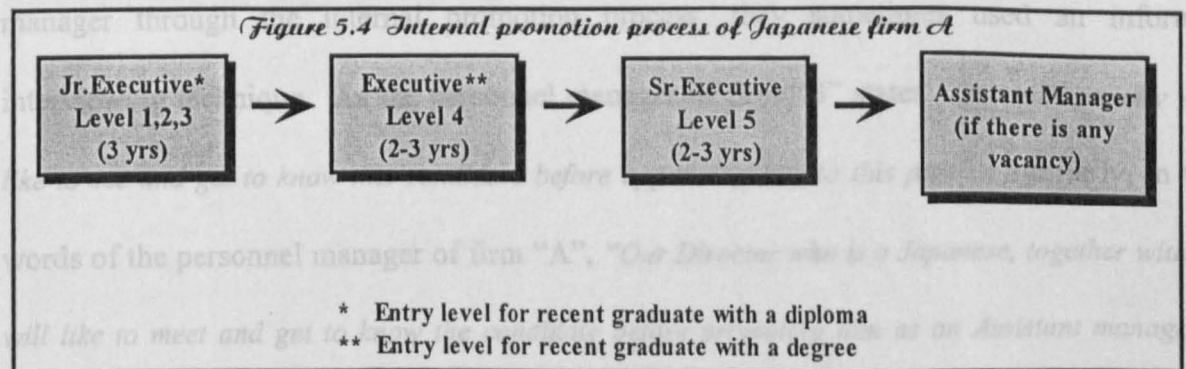
TABLE 6.2
Breakdown of firms ownership and use of selection techniques

Forms of ownership	Selection techniques							
	Sr.mger		M.mger		Jr.mger		Trainees	
	Used	Total	Used	Total	Used	Total	Used	Total
Malaysian	20 [95.2] (33.3)	21 (35)	19 [90.5] (31.7)	21 (35)	19 [90.5] (31.7)	21 (35)	16 [76.2] (26.7)	21 (35)
American	2 [33.3] (3.3)	6 (10)	4 [66.7] (6.7)	6 (10)	4 [66.7] (6.7)	6 (10)	5 [83.3] (8.3)	6 (10)
Other foreign non Asian	9 [81.8] (15)	11 (18.3)	9 [81.8] (15)	11 (18.3)	11 [100] (18.3)	11 (18.3)	7 [63.6] (11.7)	11 (18.3)
British	3 [75] (5)	4 (6.7)	3 [75] (5)	4 (6.7)	4 [100] (6.7)	4 (6.7)	3 [75] (5)	4 (6.7)
Japanese	3 [23.1] (5)	13 (21.7)	3 [23.1] (5)	13 (21.7)	5 [38.5] (8.3)	13 (21.7)	4 [30.8] (6.7)	13 (21.7)
Other foreign Asian	2 [40] (3.3)	5 (8.3)	4 [80] (6.7)	5 (8.3)	4 [80] (6.7)	5 (8.3)	3 [60] (5)	5 (8.3)
Total firms	39 (65)	60 (100)	42 (70)	60 (100)	47 (78.3)	60 (100)	38 (63.3)	60 (100)

*Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent
Above figures represented summary of tables A3.1, A3.2, A3.3, A3.4 (Appendix 5.0*

Based on interviews with personnel managers of 2 Japanese firms, figure 5.4 and 5.5 shown on the next page, illustrates a typical internal promotion process of Japanese firms in Malaysia. In Japanese firm “A”, a recent graduate with a diploma in any discipline will be recruited as a junior executive at level 1. In this firm, a junior executive post has 3 levels which is level 1, 2 and 3. From level 3 to be promoted to level 4 which is an executive post, the duration is between 2 to 3 years. On the other hand, a recent graduate with a degree in any discipline can also be recruited directly as an executive at level 4. From level 4 to be promoted to level 5 which is a senior executive post, the duration is also between 2 to 3 years. From level 5 to be promoted as an assistant manager, if there is any vacancy, the duration is also between 2 to 3 years.

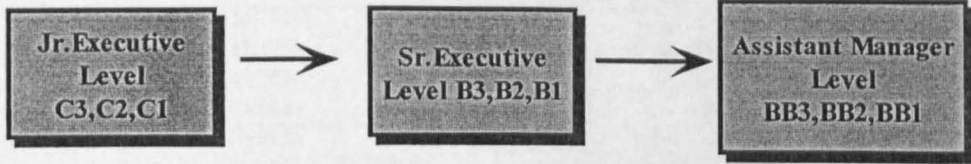
Thus a recent graduate with a diploma will take almost 9 years to be promoted as a manager, whilst a recent graduate with a degree will take almost 6 years to be promoted as a manager in Japanese firm “A”.



Source : Personal Interview, February - May, 1995

and firm "B", the above examples have shown that...

(Figure 5.5 Internal promotion process of Japanese firm B)



From C3 to BB3 (Duration 5-6 yrs)

- * Entry level for recent graduate with a diploma
- ** Entry level for recent graduate with a degree

Source : Personal Interview, February - May, 1995

by all types of firm.

In Japanese firm "B", recent graduates with a diploma will be appointed as junior executives at level C3. From level C3 to be promoted to level BB3 as assistant manager, the duration is between 5 to 6 years.

None of these firms reported using the British, Japanese, foreign Asian and American...

Psychological (cognitive) tests were used very little by these...

The feedback received from these personnel managers also revealed that they used a formal selection techniques such as interviews, application form/cvs, or references to select candidates for the post of an executive. Nevertheless, to be appointed as an Assistant

manager through the internal promotion process, they sometimes used an informal

interviewing technique. As the personnel manager of firm "B" states "Our MD usually will

like to see and get to know this candidate before appointing him to this post". Similarly, in the

words of the personnel manager of firm "A", "Our Director who is a Japanese, together with us

will like to meet and get to know the candidate before promoting him as an Assistant manager".

Although the duration for recent graduates to be internally promoted varies between firm "A"

and firm “B”, the above examples thus appear to confirm that Japanese firms in Malaysia operates on a similar concept of ‘promotion by seniority’ as in Japan.

5.2.2. Types of selection techniques and stages involved by firms ownership

As shown on the following page in table 6.3, this survey by firm’s ownership indicated that interviews, application forms and cvs are the most common selection techniques employed by all types of firm.

None of these firms reported using the biodata, handwriting analysis and astrology. Psychological (cognitive) tests were used very little by foreign firms (foreign non Asian, British, Japanese, foreign Asian and American firms). Similarly, psychological (personality) tests were also used very little by local and foreign firms (foreign non Asian, British, Japanese and foreign Asian firm). ACs were also used very little by local and foreign firms (foreign non Asian, and British firms).

TABLE 6.3
Summary of types of managerial selection techniques by firms ownership

Sel.tech	Post	Forms of ownership					
		M'sian	US	F.N/Asn	British	Japanese	F./Asian
<i>Intvws</i>	<i>sr.mger</i>	20(100)	2(100)	9(100)	3(100)	3(100)	2(100)
	<i>m.mger</i>	19(100)	4(100)	9(100)	3(100)	3(100)	4(100)
	<i>jr.mger</i>	19(100)	4(100)	11(100)	4(100)	5(100)	4(100)
	<i>trainees</i>	15(93.8)	5(100)	7(100)	3(100)	4(100)	3(100)
<i>A/form</i>	<i>sr.mger</i>	19(95.0)	2(100)	9(100)	2(66.7)	3(100)	2(100)
	<i>m.mger</i>	19(100)	4(100)	9(100)	2(66.7)	3(100)	4(100)
	<i>jr.mger</i>	19(100)	4(100)	11(100)	3(75.0)	5(100)	4(100)
	<i>trainees</i>	16(100)	5(100)	7(100)	3(100)	4(100)	3(100)
<i>Cv</i>	<i>sr.mger</i>	15(75.0)	2(100)	9(100)	3(100)	3(100)	2(100)
	<i>m.mger</i>	14(73.7)	4(100)	9(100)	3(100)	3(100)	3(75.0)
	<i>jr.mger</i>	14(73.7)	4(100)	11(100)	4(100)	5(100)	3(75.0)
	<i>trainees</i>	8(50.0)	4(80.0)	7(100)	3(100)	4(100)	2(66.7)
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-	-
<i>Ref</i>	<i>sr.mger</i>	17(85.0)	2(100)	7(77.8)	2(66.7)	2(66.7)	1(50.0)
	<i>m.mger</i>	17(89.5)	2(50.0)	6(66.7)	2(66.7)	2(66.7)	2(50.0)
	<i>jr.mger</i>	15(78.9)	3(75.0)	5(45.5)	2(50.0)	2(40.0)	2(50.0)
	<i>trainees</i>	11(68.8)	2(40.0)	2(28.6)	-	2(50.0)	2(66.7)
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-	-
<i>PC (Cognitve. test)</i>	<i>sr.mger</i>	-	-	-	-	1(33.3)	-
	<i>m.mger</i>	-	-	-	-	1(33.3)	-
	<i>jr.mger</i>	-	-	-	1(25.0)	1(20.0)	-
	<i>trainees</i>	-	1(20.0)	1(14.3)	1(33.3)	1(25.0)	1(33.3)
<i>PP (Personlty test)</i>	<i>sr.mger</i>	2(10.0)	-	4(44.4)	-	2(66.7)	1(50.0)
	<i>m.mger</i>	2(10.5)	-	4(44.4)	-	2(66.7)	2(50.0)
	<i>jr.mger</i>	2(10.5)	-	3(27.3)	1(25.0)	2(40.0)	1(25.0)
	<i>trainees</i>	2(12.5)	-	2(28.6)	1(33.3)	2(50.0)	-
<i>AC (Assessmt. Centre)</i>	<i>sr.mger</i>	-	-	1(11.1)	1(33.3)	-	-
	<i>m.mger</i>	-	-	1(11.1)	1(33.3)	-	-
	<i>jr.mger</i>	-	-	1(9.1)	1(25.0)	-	-
	<i>trainees</i>	1(6.3)	-	1(14.3)	1(33.3)	-	-
Total firms	Post	(N)	(N)	(N)	(N)	(N)	(N)
	<i>sr.mger</i>	20	2	9	3	3	2
	<i>m.mger</i>	19	4	9	3	3	4
	<i>jr.mger</i>	19	4	11	4	5	4
	<i>trainees</i>	16	5	7	3	4	3

Note: Numbers in () are the percentages of the column total which the numbers represent
Above figures represented summary of table A4.1, A4.2, A4.3, A4.4 (Appendix 5.0)

TABLE 6.4
Summary of stages involved in the selection of manager by firms ownership

Post	Stages	M'sian	US	Forms of ownership			
				F./non Asian	British	Jap.	F./Asian
<i>senior</i>	1	-	-	-	-	-	-
	2	1/2(50%)	-	-	-	-	-
	3	1/2(50%)	all(100%)	>3/4(78%)	>2/3(67%)	all(100%)	all(100%)
	4	-	-	-	-	-	-
Tot.firms		N=20	N=2	N=9	N=3	N=3	N=2
<i>middle</i>	1	-	-	-	-	-	-
	2	>1/2(58%)	1/2(50%)	-	-	-	1/2(50%)
	3	-	1/2(50%)	>4/5(89%)	>2/3(67%)	all(100%)	1/2(50%)
	4	-	-	-	-	-	-
Tot.firms		N=19	N=4	N=9	N=3	N=3	N=4
<i>junior</i>	1	-	-	-	-	-	-
	2	>1/2(63%)	all(100%)	-	-	-	3/4(75%)
	3	-	-	>4/5(82%)	1/2(50%)	4/5(80%)	-
	4	-	-	-	-	-	-
Tot.firms		N=19	N=4	N=11	N=4	N=5	N=4
<i>trainees</i>	1	-	-	-	-	-	-
	2	>1/2(56%)	all(100%)	-	1/3(33%)	-	>2/3(67%)
	3	-	-	>1/2(57%)	1/3(33%)	3/4(75%)	-
	4	-	-	-	1/3(33%)	-	-
Tot.firms		N=16	N=5	N=7	N=3	N=4	N=3

Note : Above figures represented summary of tables A3.1, A3.2, A3.3, A3.4 (Appendix 5.0 at the end of the thesis)

As shown above in Table 6.4, the local and foreign firms either used both a two or three stage selection process to select managers. In detail, the results of this survey indicated that foreign firms (foreign non Asian, British and Japanese firms) appear to prefer to use a three stages selection process to select managers at all levels. Likewise, both local and foreign firms (American and foreign Asian firms) also used a three stages selection process to select senior managers but only used a two stage selection process to select middle, junior manager and trainees.

Table 6.5 on the next page indicated that interviews, application forms, and cvs were the most common selection techniques used by family owned (family owned Chinese and family

Table 6.5 on the next page indicated that interviews, application forms, and cvs were the most common selection techniques used by family owned (family owned Chinese and family owned Indian firm) and non - family owned Malaysian firms (Bumiputra and Chinese owned firms). As one personnel manager of a family owned Chinese firm mentioned *"We used targeted selection technique to select managers. Our interview technique is based on the behaviour dimensions required for the job. The questions are structured but open ended. These techniques employed by us have been established by our top management and it is US based (US developed technique). Our assessors or interviewers needs to be trained, experienced and talented"*.

References were also commonly used by both family owned (family owned Chinese) and non family owned Malaysian firms (Bumiputra and Chinese owned firms). None of these firms indicated using psychological (cognitive) tests, handwriting analysis, biodata or astrology. Personality tests were used by 1(10%) Bumiputra owned and 1(100%) family owned Indian firms. Assessment Centres were only used by 1(12.5%) Bumiputra owned firms. It appears from this survey that there were no differences between the type of selection techniques employed between family owned and non family owned Malaysian firms.

TABLE 6.5
Types of managerial selection techniques by Malaysian firms

Selection techniques	Post							
	family owned Chinese	senior manager family owned Indian	Bumi. owned	Chinese owned	family owned Chinese	middle manager family owned Indian	Bumi. owned	Chinese owned
<i>interview</i>	4 (100)	1 (100)	10 (100)	5 (100)	4 (100)	1 (100)	9 (100)	5 (100)
<i>application form</i>	4 (100)	1 (100)	9 (90)	5 (100)	4 (100)	1 (100)	9 (100)	5 (100)
<i>cv</i>	3 (75)	1 (100)	7 (70)	4 (80)	3 (75)	1 (100)	7 (77.8)	3 (60)
<i>references</i>	4 (100)		8 (80)	5 (100)	4 (100)		8 (88.9)	5 (100)
<i>PC</i>								
<i>PP</i>		1 (100)	1 (10)			1 (100)	1 (11.1)	
<i>AC</i>								
Total firms	4	1	10	5	4	1	9	5

Selection techniques	Post							
	family owned Chinese	middle manager family owned Indian	Bumi. owned	Chinese owned	family owned Chinese	trainees family owned Indian	Bumi. owned	Chinese owned
<i>interview</i>	4 (100)	1 (100)	9 (100)	5 (100)	4 (100)	1 (100)	7 (87.5)	3 (100)
<i>application form</i>	4 (100)	1 (100)	9 (100)	5 (100)	4 (100)	1 (100)	8 (100)	3 (100)
<i>cv</i>	3 (75)	1 (100)	7 (77.8)	3 (60)	2 (50)	1 (100)	4 (50)	1 (33.3)
<i>references</i>	3 (75)		7 (77.8)	5 (100)	2 (50)		6 (75)	3 (100)
<i>PC</i>								
<i>PP</i>		1 (100)	1 (11.1)			1 (100)	1 (12.5)	
<i>AC</i>							1 (12.5)	
Total firms	4	1	9	5	4	1	8	3

*Note: Above figures represented summary of tables A5.1, A5.2, A5.3, A5.4 (Appendix 5.0)
Numbers in () are the percentages of the column total which the numbers represent*

TABLE 6.6
Breakdown of Malaysian firms and stages involved in selecting managers

Forms of ownership	Stages involved in selecting managers									
	sr.mger					middle mger				
	1	2	3	4	tot	1	2	3	4	tot
Family owned Bumi.										
Family owned Chinese		2 [50]	2 [50]		4		2 [50]	2 [50]		4
Family owned Indian			1 [100]		1			1 [100]		1
Bumiputra owned		6 [60]	4 [40]		10		7 [77.8]	2 [22.2]		9
Chinese owned		2 [40]	3 [60]		5		2 [40]	3 [60]		5
Indian owned										
Total		10 (50)	10 (50)		20		11 (57.9)	8 (42.1)		19

Forms of ownership	Stages involved in selecting managers									
	jr.mger					trainee				
	1	2	3	4	tot	1	2	3	4	tot
Family owned Bumi.										
Family owned Chinese		2 [50]	2 [50]		4		3 [75]	1 [25]		4
Family owned Indian			1 [100]		1			1 [100]		1
Bumiputra owned		7 [77.8]	2 [22.2]		9		6 [75]	2 [25]		8
Chinese owned		3 [60]	2 [40]		5	1 [33.3]		2 [66.7]		3
Indian owned										
Total		12 (63.2)	7 (36.8)		19	1 (6.3)	9 (56.3)	6 (37.5)		16

Note : Numbers in [] are the percentages of the row total which the numbers represent

Overall, as shown above in table 6.6, both family owned and non - family owned Malaysian firms used two and three stage selection processes to select managers. For example, family owned Indian firms used a three stages selection process and Bumiputra owned firms used a two stages selection process to select all levels of management. Both family owned and non - family owned Chinese firms used a two and three stages selection process depending on the

level of management that needed to be appointed. This finding seemed to suggest that there were no differences in the number of stages employed between family and non family owned Malaysian firms.

5.3. Similarities and differences in the use of selection techniques between different types of firms in the Malaysian industry

Using cross tabulations, table 6.3 allows the researcher to identify similarities and also differences in the use of selection techniques to select all levels of management by local and foreign firms (American, foreign non Asian, British, Japanese and foreign Asian firms). To summarize, irrespective of the level of management :

I. In terms of similarities :

- interviews, application forms, cv and references were used by the local and foreign firms (American, foreign non Asian, Japanese and foreign Asian firms).
- biodata, handwriting analysis and astrology were not employed by the local and foreign firm (American, foreign non Asian, British, Japanese and foreign Asian firms).

II. In terms of differences :

- psychological (cognitive) tests were only used by foreign firms [1(20%) Japanese, 1(25%) British, 1(20%) American, 1(14.3%) foreign non Asian and 1(33.3%) foreign Asian firm]

- psychological (personality) tests were used by both local [2(10%) Malaysian firms) and foreign firms [4 (44.4%) foreign non Asian, 2(66.7%) Japanese, 1(25%) British, 2(50%) foreign Asian firm] but were not employed by other foreign firms (American firms).
- assessment centres were used by both local [1(6.3%) Malaysian] and foreign firms [1(9.1%) foreign non Asian and 1(25%) British firm] but were not employed by other foreign firms (the American, Japanese and foreign Asian firm)

Any findings based on table 6.3 (section 5.2.2.) should therefore be treated with caution due to the small and uneven number of firms in each cell (categories). However, these numbers will be sufficient enough if the categories are collapsed and reclassified into 2 types of firms which is Malaysian and non Malaysian firms. (The latter consisting of American, foreign non Asian, British, Japanese and foreign Asian firms).

Using cross tabulations, when these firms were reclassified as Malaysian and non Malaysian firms, it can observed as illustrated in table 6.7, that there were also some similarities and differences in the use of the selection techniques between these firms to select all level of management.

TABLE 6.7
Types of managerial selection techniques by firms ownership (Malaysian versus Non - Malaysian)

Sel.technique	Post	Form of ownership	
		Malaysian	Non - Malaysian
<i>Intvws</i>	<i>sr.mger</i>	20(100)	19(100)
	<i>m.mger</i>	19(100)	23(100)
	<i>jr.mger</i>	19(100)	28(100)
	<i>trainees</i>	15(93.8)	22(100)
<i>A/form</i>	<i>sr.mger</i>	19(95)	18(94.7)
	<i>m.mger</i>	19(100)	22(95.7)
	<i>jr.mger</i>	19(100)	27(96.4)
	<i>trainees</i>	16(100)	22(100)
<i>Cv</i>	<i>sr.mger</i>	15(75)	19(100)
	<i>m.mger</i>	14(73.7)	22(95.7)
	<i>jr.mger</i>	14(73.7)	27(96.4)
	<i>trainees</i>	8(50)	20(90.9)
<i>Biodata</i>	<i>sr.mger</i>	-	-
	<i>m.mger</i>	-	-
	<i>jr.mger</i>	-	-
	<i>trainees</i>	-	-
<i>Ref</i>	<i>sr.mger</i>	17(85)	14(73.7)
	<i>m.mger</i>	17(89.5)	14(60.9)
	<i>jr.mger</i>	15(78.9)	14(50)
	<i>trainees</i>	11(68.8)	8(36.4)
<i>Hw</i>	<i>sr.mger</i>	-	-
	<i>m.mger</i>	-	-
	<i>jr.mger</i>	-	-
	<i>trainees</i>	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-
	<i>m.mger</i>	-	-
	<i>jr.mger</i>	-	-
	<i>trainees</i>	-	-
<i>PC</i> (Cognitive test)	<i>sr.mger</i>	-	1(5.3)
	<i>m.mger</i>	-	1(4.3)
	<i>jr.mger</i>	-	2(7.1)
	<i>trainees</i>	-	5(22.7)
<i>PP</i> (Personality test)	<i>sr.mger</i>	2(10)	7(36.8)
	<i>m.mger</i>	2(10.5)	8(34.8)
	<i>jr.mger</i>	2(10.5)	7(25)
	<i>trainees</i>	2(12.5)	5(22.7)
<i>AC</i> (Assessment Centre)	<i>sr.mger</i>	-	2(10.5)
	<i>m.mger</i>	-	2(8.7)
	<i>jr.mger</i>	-	2(7.1)
	<i>trainees</i>	1(6.3)	2(9.1)
Total firms	Post	(N)	(N)
	<i>sr.mger</i>	20	19
	<i>m.mger</i>	19	23
	<i>jr.mger</i>	19	28
	<i>trainees</i>	16	22

Note : Numbers in () are the percentages of the column total which the numbers represent

These similarities irrespective of the level of management are summarised below in figure 5.6 and they are as follows :

- interviews, application forms, cvs and references and personality tests were used by both the Malaysian and non Malaysian firms
- biodata, handwriting analysis and astrology were not employed by the Malaysian or non Malaysian firms
- assessment centres (ACs) were used by 1(6.3%) Malaysian firm and 2(7.1%) non Malaysian firms

*Figure 5.6
Similarities in the use of selection techniques between types of firms*

Malaysian	Non-Malaysian
Used interview, application form, cv, references and psychological (personality) test	Used interview, application form, cv, references and psychological (personality) test.
Do not use biodata, handwriting analysis, and astrology	Do not use biodata, handwriting analysis, and astrology
Used Assessment centre (AC) Used AC by 1 Malaysian Bumiputra firm to select trainees	Used Assessment centre (AC) Used AC by 1 Foreign Non - Asian (German)firm and 1 British firm to select all level of managers

Note: : Above summary based on Table 6.3 and 6.7

On the other hand, these differences irrespective of the level of managers are summarised in figure 5.7 on the next page and they are as follows :

- cognitive tests were only used by the non Malaysian firms.

*Figure 5.7
Differences in the use of selection techniques between types of firms*

Malaysian	Non-Malaysian
Do not used psychological (cognitive) tests	Used psychological (cognitive) tests Used by 1 Japanese firm to select all level of management Used by 1 British firm to select junior manager and trainees Used by 1 Foreign non Asian firm (Swiss) firm and 1 American firm to select trainees

Note: : Above summary based on Table 6.3 and 6.7

Although there were similarities in the use of interviews, application forms, cvs, references, psychological (personality) tests and ACs between the Malaysian and non Malaysian firm, it was discovered from the personal interviews conducted by the researcher that there were differences in the way those techniques were used.

The respondents of both Malaysian and non Malaysian firms when interviewed seemed to indicate that :

- the sequencing of selection techniques such as the references¹⁵ seemed to differ. There were statements from Malaysian respondents which indicated that they used references only after they have decided to appoint potential candidates. In this context, it was only used if the respondents have received any negative feedback during the selection (interviewing) process. However, there were also other statements from another Malaysian and non - Malaysian (Foreign non - Asian, US, British and Japanese)

¹⁵ As mentioned previously, in section 5.1.7, Malaysian tend to refer to the previous employer instead of the recent employer.

respondents which indicated that they used the references prior to appointing candidates suitable for the post. The use of the references in this manner was to cross check certain characters, backgrounds or performance of applicants from previous employers.

- the sequencing of selection techniques such as application forms, cvs and interviews seemed to differ. There were remarks from non - Malaysian (US and Foreign non - Asian) respondents which indicated that they used cvs, followed by preliminary interview, then used an application form and final interview. There were also other remarks from both Malaysian and another non - Malaysian (British, Japanese and Foreign Asian) respondents which mentioned that they used both an application form and cv followed by preliminary interview and, final interview.
- psychological (personality and cognitive) tests seemed to be employed for different purposes. There were comments from Malaysian and non - Malaysian (Foreign non - Asian and British) respondents which indicated that personality tests were used to look for personality traits which fit the job requirements. However, there were some statements from non - Malaysian (Japanese) respondents which indicated that personality tests were used for record keeping purposes and as a reference for future promotion within the firm. There were also remarks from non - Malaysian (US, Foreign non - Asian) respondents which indicated that the cognitive tests were used as a standard requirement to test the mental alertness of applicants or measure how fast applicants can comprehend a given task. On the contrary, the statement by the personnel manager of a non - Malaysian

(Japanese) respondent indicated that the cognitive test score in selecting managers carries no weight in their selection process but was only used for record keeping purposes. According to him, this form of test was only used to observe the responses or reactions of applicants undergoing this test in terms of eagerness or nervousness. The attitudes and characters of these applicants will then be assessed based on these responses or reactions.

- the profile of applicants sought by firms differed although they used the same selection techniques. There were comments from both Malaysian and non - Malaysian (US, Foreign non - Asian, British, Japanese and Foreign Asian) respondents which indicated that the application forms and cvs were used to shortlist applicants based on their qualification¹⁶ and experiences. However, one other Malaysian respondent indicated shortlisting applicants based on age. There were also other statements from non - Malaysian (Japanese) respondents which indicated that applicants were screened based on their career path such as whether they always changed from one job to another or whether there is any progress in the applicant's career track. In addition, there were some remarks from Malaysian respondents which indicated that applicants were sought based on ethnicity. Ethnic group such as Bumiputras are usually preferred in order to comply with the employment guidelines set by the Government.

¹⁶ In this context, these respondent prefer candidates who have achieved academic excellence. For example, candidates are required to achieve a higher CGPA (Cumulative Grade Point Average) of 3.0 and above or graduated with at least a 2nd Upper Class.

The above feedback from these respondents thus provide several insights which can be summarised as follows : (a) The use of references after deciding to appoint potential candidates suggested that this technique have been used informally. Thus, the use of this technique in this manner, relies on specific circumstances such as negative comments from interviewers; (b) the differences in the sequence of selection techniques used depend on how detailed employers attempt to gather information or backgrounds about applicants; (c) selection techniques such as the psychological (personality and cognitive) tests have been employed for different purposes and may carry no weight in the selection process; and (d) there is an element of bias in the selection process since the profile of candidates sought by firms differed although they used the same techniques. With the propensity towards cultural favouritism¹⁷ especially in a multi - racial society, and the existence of Government guidelines to select more Bumiputras as managers, some employers may be inclined to adopt an informal method of recruiting and selecting close relatives, friends or candidates based on ethnicity. This is because, adopting this approach is the easiest means to comply with Government guidelines. In addition, it allows them to select “whom they like”.

¹⁷ Favouritism can also be generated due to strong sense of belonging to own ethnic group or practises of nepotism as highlighted in Chapter Three of this thesis

5.3.1. Factors which influenced similarities and differences in the use of selection techniques between different types of firms in the Malaysian industry

In this section, interview data¹⁸ and survey evidences will be used to identify the factors which influence any similarities and differences between those firms.

5.3.1.1. Factors which influenced similarities in the use of selection techniques between different types of firms.

Several factors which influenced similarities in the use of selection techniques between firms were identified as follows :

(1) All of the respondents (Malaysian and non - Malaysian firms) when interviewed seemed to suggest that the belief or perception about the effectiveness of selection techniques such as the application form, cv, interview and references¹⁹ is the factor which influenced these similarities most. This perception developed based on their view of the satisfactory performance of candidates who were selected employing these techniques. Typical answers from these respondents concerning the application form, cv, interviews and references were :

"Yes, our selection techniques are accurate and reliable. We are very satisfied with the performance of our candidates especially before and after probationary period"

¹⁸ Also refer to Appendix 5.1 at the end of this thesis for the breakdown of responses in terms of firms ownership.

¹⁹ Ibid

The belief concerning the usefulness of the selection technique also influenced these similarities. All of these respondents when interviewed also indicated that they were accustomed and comfortable with these selection techniques. Thus, they also mentioned that these techniques were convenient, simple, easy to administer and relatively cheap. They suggested that techniques such as interviews, application forms, cvs and references are “*user friendly*”. These beliefs arose from their experience employing these techniques. Their common remarks were :

“Yes, we employ these selection techniques because they are very easy to use, convenient, simple and user friendly”

“Yes, we employ these techniques because they are less costly. We are also very familiar with these techniques”.

These views were also substantiated with feedback from the survey as indicated in table 6.8²⁰ on the following page. Overall, based on this survey, more than 60% of the firms indicated that they were very familiar with interviews, application forms and cvs. More than 80% of these firms also showed that they were familiar with references. It also illustrated that more than two - thirds of these firms perceived the interviews, application forms and cvs as very

²⁰ Also refer to Table A9.1 and 9.2 for summary of selection techniques by features (Malaysian versus non - Malaysian firms) in appendix 4.9 at the end of the thesis.

easy to use and less costly. Similarly, more than 80% of these firms also perceived references as easy to use and less costly.

TABLE 6.8
Summary of selection techniques by features

Selection techniques	cost	degree of familiarity	ease of use	Features acceptability to applicants	acceptability to d/makers	accuracy in predicting managerial performance
<i>open ended interview</i>	86.7% less costly	60% v.familiar	70% v.easy	98.3% acceptable	95% acceptable	48.3% predictor of $\geq 70\%$
<i>structured interview</i>	76.7% less costly	94.9% familiar	95.1% easy	95% acceptable	93.3% acceptable	48.4% predictor of $\geq 70\%$
<i>job specific interview</i>	70% less costly	91.7% familiar	89.9% easy	91.7% acceptable	93.3% acceptable	3.3% perfect predictor
<i>app.form</i>	81.6% less costly	78.3% v.familiar	78.3% v.easy	100% acceptable	100% acceptable	23.4% predictor of $\geq 70\%$
<i>cv</i>	96.6% less costly	68.3% v.familiar	68.3% v.easy	98.3% acceptable	93.3% acceptable	25% predictor of $\geq 70\%$
<i>references</i>	85% less costly	81.7% familiar	85% easy	89.9% acceptable	80% acceptable	31.6% predictor of $\geq 70\%$
<i>biodata</i>	53.3% av.cost	91.7% not familiar	56.7% difficult	73.3% acceptable	58.3% acceptable	23.3% predictor of $\geq 70\%$
<i>H/W analysis</i>	70% av.cost	96.6% not familiar	86.6% difficult	76.7% not acceptable	83.4% not acceptable	86.7% predictor of $< 50\%$
<i>astrology</i>	66.7% av.cost	98.4% not familiar	91.7% difficult	90% not acceptable	96.6% not acceptable	95% predictor of $< 50\%$
<i>PC</i>	76.7% costly	56.7% not familiar	56.6% difficult	60% not acceptable	53.3% acceptable	26.7% predictor of $\geq 70\%$
<i>PP</i>	80% costly	51.7% not familiar	53.3% difficult	53.3% not acceptable	55% acceptable	49.9% predictor of $\geq 70\%$
<i>assessment centre</i>	98.3% costly	70% not familiar	68.3% difficult	53.4% acceptable	60% not acceptable	5% perfect predictor

Note: Above figures represented summary of tables A6.1, A6.2, A6.3, A6.4 (Appendix 5.0 at the end of this thesis)

Both Malaysian and non - Malaysian firm respondents, when interviewed, seemed to convey the same belief or perception about the effectiveness of the assessment centre's (AC's) techniques. In the words of one personnel manager of a Malaysian firm, "we currently use this

technique since it has been proven to be accurate, reliable and more superior than any other selection techniques". In addition, he also mentioned that "we have tried most of the other selection techniques and through validation which is done once in 2 years, the assessment centre technique has met our company's requirements. It is also 85% accurate in predicting managerial performance".

These respondents also pointed out that their recruiters are professionally trained by consultants especially in the AC, structured interview and in psychological tests. Similarly, the personnel managers of both other "foreign non - Asian" and British firms also suggested that their AC technique is more accurate and reliable than any other selection technique. In addition, the British firm's personnel manager stated that *"our assessment centre technique has been established by our parent company in UK and our recruiters are also trained by them"*. According to both of the personnel managers of these firms (other "foreign non - Asian" and British), their AC technique has also been proven to be 90% accurate in predicting managerial performance. Thus they also made remarks like *"the assessment centre technique that we employ is useful as a development tool especially in assessing the CEP or career estimated potential of candidates, especially for the post of trainees"*

On the other hand, the factor which influenced firms to choose psychological (personality) tests based on interviews with the respondents of both Malaysian and non - Malaysian firms (as explained in section 5.1.2 of this chapter) was the belief in the need to solely assess an

applicant's personality rather than intelligence. These beliefs arose from their observations and experience that : (a) applicants who have received any formal education are easily trained; therefore, it was necessary to solely assess their personality instead of intelligence; (b) candidates with the right personality and attitude can also be easily trained and can thus perform any job effectively in any circumstances; and (c) a candidate's personality which fits the job requirement would have the potential to contribute more to their firm's progress. However, the personnel manager of a Japanese firm indicated that this technique was only useful as a reference for future promotion or job openings available in their firm.

(2) Another factor which influenced these similarities were the ideas and theories learnt by personnel managers from formal education in HRM or consultants employed by them or through courses and seminars. In general, the respondents of both Malaysian and non - Malaysian firms when interviewed gave views which indicated that a formal education in HRM/Management helps individuals to be sensitive of the selection techniques available in the West. Their remarks were :

"Yes, the formal education that we received in HRM helps us to be aware of the selection techniques used in the US, but it has no direct impact"

Yes, it helps us to be aware of the selection techniques available in the West, but these ideas and theories change after a certain period of time".

Similarly, there was one respondent from a Malaysian firm who agreed that a formal education in HRM/Management helps them to be able to adapt when implementing any of their selection techniques. His response was *“Yes, individuals can resort to the theories received or learnt during formal education. It also helps us to be adaptable when implementing these selection techniques.”* Nevertheless, there were remarks from respondents (of US, “other foreign non - Asian”, British firms) which suggested that ideas, theories learnt from courses, seminars or from consultants employed by them helped to refine the selection process of their firm. These remarks were as follows :

“No, instead we believe that ideas, or theories learnt from courses, seminars or consultants helps us to improve our selection practices by using the latest technique available”.

“The consultant that we employ, also advises us on how to use certain selection techniques. Our interactions with these consultants also have made us aware of the latest and reliable selection techniques available in the market”

The results of the survey as shown in table 6.9 on the next page also indicated that almost 100% of the personnel managers of Malaysian and non - Malaysian firms have received formal education in HRM/Management. In addition, table 7.0 on the following page also illustrates that local and foreign universities/institutions and consultants are the factors most influencing these personnel managers in their choice of the selection techniques they currently employ.

(3) One other factor which influenced these similarities, based on the result of the survey as shown in Table 7.0, are the presence of leading local and foreign firms. Moreover, the respondents of Malaysian and non - Malaysian (US, "other foreign non - Asian") firms when interviewed indicated that they used both local and foreign firms as a benchmark in establishing selection techniques in their firm. According to one of the personnel managers of a Malaysian firm *"We need to employ current techniques similar to those used by other leading firms in order to improve our firm's selection process. We want to progress and do not want to be left behind by using outdated selection techniques"*. Other common remarks from the personnel managers of both Malaysian and non Malaysian firms are *"We need to keep in pace with the most recent selection techniques used by other firms; otherwise we may be left behind and not able to select the best candidate"*.

TABLE 6.9
Background information of firms and personnel manager²¹ (Malaysian versus Non - Malaysian)

General Information	Malaysian firm	Non Malaysian firm
<i>Specialised recruitment & selection function</i>	16(76.2)	25(64.1)
<i>Centralised</i>	12(57.1)	23(59)
<i>Decentralised</i>	4(19)	2(5.1)
<i>Nationality of personnel responsible for selection -Malaysian²²</i>	21(100)	38(97.4)
<i>Education of Personel/HR Manager -Local</i>	11(52.4)	25(64.1)
<i>Education of Personel/HR Manager -Foreign</i>	10(47.6)	13(33.3)
Total firms(N)	21	39
Mean years of experiences in personnel function		
<i>Foreign</i>	1.9	2.7
<i>Local</i>	9.9	7.8
<i>Total</i>	11.8	10.5

Note : Numbers in () are the percentages of the column total which the numbers represent

²¹ For background of personnel managers by firms ownership (local Malaysian, US, Western European, British, Japanese, Foreign - Asian and Australian) also refer to Table C6.2 and (Malaysian and non - Malaysian) refer to G7.0 of Appendix 4.9 at the end of this thesis.

²² This survey indicated that only 1 Swiss firm have a non - Malaysian responsible for the selection process of their firm.

TABLE 7.0
Factors (sources) influencing selection techniques used by firms²³ (Malaysian versus Non - Malaysian)

Factors(sources)	Malaysian firm	Non Malaysian firm
<i>Other leading firm</i>	6(30)	11(34.4)
<i>Local Universities/Institution</i>	9(45)	19(59.4)
<i>Foreign Universities/Institution</i>	10(50)	10(31.3)
<i>Local consultants</i>	6(30)	8(25)
<i>Foreign consultants</i>	2(10)	3(9.4)
<i>Private institution</i>	4(20)	7(21.9)
Total firms(N)	20	32

Note : Numbers in () are the percentages of the column total which the numbers represent

(4) Another factor which influences these similarities is the background of the personnel managers (of Malaysian and non - Malaysian firms) responsible for the selection process in the firm. The survey as shown above in table 6.9 indicated that the nationality of personnel responsible for the selection process are almost 100% Malaysian. This table also indicated that the mean years experience of these managers is more than 10 years in both foreign and local firms. It is anticipated that as a result of these backgrounds, these managers will have an inclination to use the techniques universally employed by firms in Malaysian industry. This is illustrated from their responses below :

“Yes, we agree that working experiences do help us or any individual to identify the pros and cons of existing selection techniques from both local and foreign firm”

“Yes, working experiences from other firms help us to refine our company's selection techniques and practices. We are able to learn from our mistakes made in the past”

²³ Also refer to Table F6.1 of Appendix 4.9 by firms ownership (i.e. local Malaysians, US, Western European, British, Japanese, Foreign - Asian and Australian).

(5) Another factor which influences these similarities is the existence of a centralised specialised recruitment and selection function. More than 60% of Malaysian and non - Malaysian firms have these functions as indicated in Table 6.9. The comments from the respondents (of Malaysian and non - Malaysian firms) indicated that these functions help them in initiating a valid and reliable selection techniques such as the structured interview, psychological (personality) test and the AC. Due to the existence of this function, they also claimed to be professionally educated. They mentioned that *“Yes, it helps in establishing and choosing an effective selection technique. Due to the existence of a specialised recruitment and selection function, most of our recruiters are professionally trained and we are able to employ techniques such as the structured interview, ability and occupational test”*

As a result of this function, firms also have a framework for identifying suitable and effective selection techniques available in the market. According to one of the respondents (of a Malaysian firm) interviewed *“Yes, it helps in choosing effective selection techniques. As a result of this function, we also have some kind of outline in terms of suitability and effectiveness of the selection technique to be employed”*

In addition, there were also remarks which indicated that the respondents (of Malaysian and non - Malaysian firms) felt that having a centralised recruitment and selection function guarantees proper management in introducing an extensive and competent selection techniques for other department in the selection process. Their remarks were as follows :

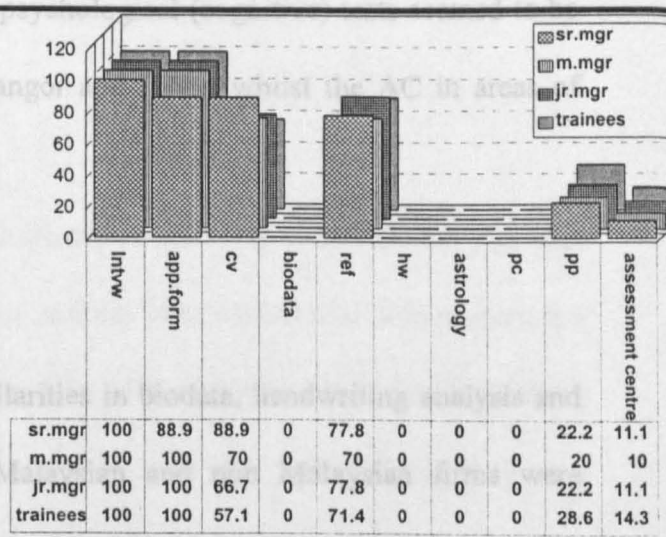
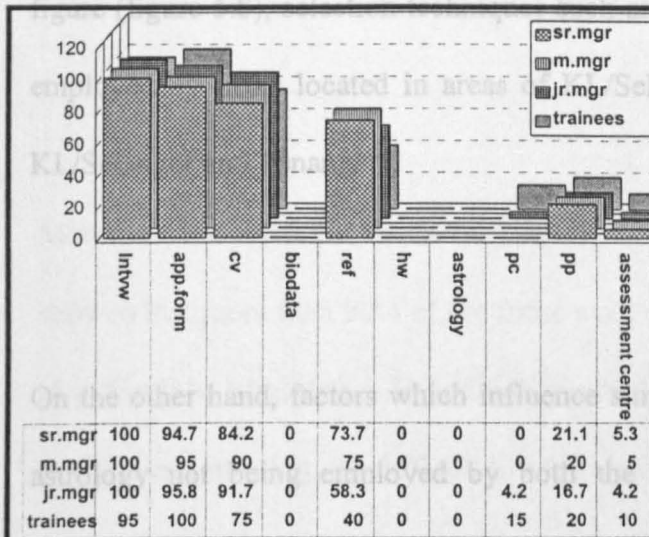
“Yes it helps in establishing and choosing a valid and more reliable selection techniques. It also helps in drawing up and establishing guidelines in recruitment and selection of employees in various categories for all other department in our firm”

“Yes, having a centralized recruitment and selection function ensures proper control in establishing a comprehensive and effective selection techniques and guidelines for other departments in selecting employees of all categories”

There was also one respondent (of a Japanese firm) who commented that the existence of a centralised specialised recruitment and selection function not only helps his department in adopting an effective technique but also an up - to - date technique. According to him *“Yes, it helps in establishing and choosing effective selection techniques. We also have an advisor who will assist our recruitment and selection function by informing us of the latest selection technique available”*

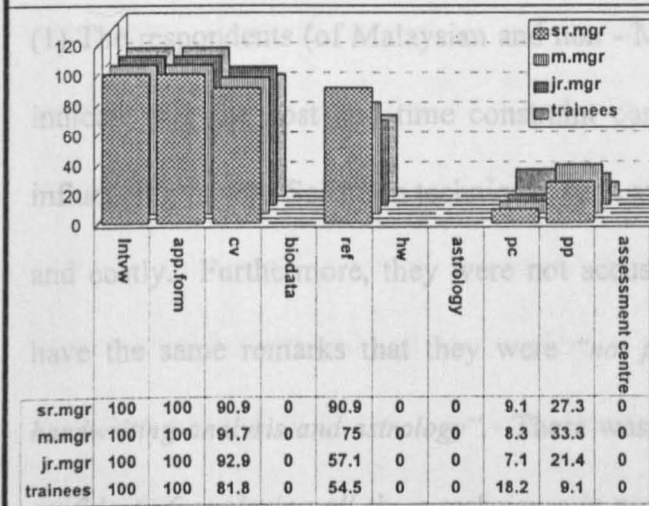
(6) Another factor which appears to influence these similarities is location. All of the firms surveyed and interviewed were located in similar areas of main industrial growth as shown in figure 5.8 on the following page. Therefore similar techniques might be expected to be employed by firms in these areas. This is because, in order to remain competitive there is a tendency for firms located within same area to emulate similar selection techniques employed by other firms such as application forms, cvs, references and psychological tests.

Nevertheless, this conclusion should be interpreted with caution since as illustrated from this **Figure 5.8**
Types of managerial selection techniques by location (%)



Sr.mgrs(N=19)/M.mgrs(N=20)/Jr.mgrs(N=20)/Trainees(N=20)
KL & Sgor

Sr.mgrs(N=9)/M.mgrs(N=10)/Jr.mgrs(N=9)/Trainees(N=7)
Penang



Sr.mgrs(N=11)/M.mgrs(N=12)/Jr.mgrs(N=14)/Trainees(N=11)
Johor

Note : Numbers of firms using selection techniques

Nevertheless, this conclusion should be interpreted with caution since as illustrated from this figure (figure 5.8), selection techniques such as psychological (cognitive) tests seemed to be employed by firms located in areas of KL/Selangor and Johor, whilst the AC in areas of KL/Selangor and Penang.

On the other hand, factors which influence similarities in biodata, handwriting analysis and astrology not being employed by both the Malaysian and non Malaysian firms were identified as follows :

(1) The respondents (of Malaysian and non - Malaysian firms) when interviewed seemed to indicate that the cost and time constraint concerning these selection techniques were an influencing factor. Selection techniques such as the biodata were considered time consuming and costly. Furthermore, they were not accustomed with this technique. In general, they have the same remarks that they were *“not familiar and not convinced with the validity of handwriting analysis and astrology”*. There was one respondent who stated that he was *“not confident of employing all these techniques in predicting the performance of applicants”*. All of these beliefs arose because they were not exposed to this technique in another firm. They also did not see the need to employ such techniques. In addition, these respondents also mentioned that they already have other, established and effective selection techniques (refer to Appendix 5.1 at the end of this thesis). These beliefs were based on their view that

applicants who have been selected employing technique such as the interviews, application forms, cvs and references had performed satisfactorily.

Moreover, the results of the overall survey as indicated in table 6.8 on the earlier page also showed that more than 90% of the firms were not familiar with biodata and 50% perceived it as difficult to administer. In addition, more than 85% of these firms perceived handwriting analysis and astrology as difficult to administer and more than 90% indicated that they were not familiar with this technique. More than 75% of the firms also believed that handwriting analysis and more than 90% of the firms perceived the astrology were not acceptable to applicants. Handwriting analysis and astrology were also perceived to be less than fifty percent accurate by more than 85% and 90% of these firms respectively. Nevertheless, as mentioned earlier in section 5.1.2. of this chapter, the respondents when interviewed do indicate employing informal selection techniques such as sifting through applicant's biographical background and handwriting to ensure that their backgrounds fits with the job specification and to judge their character based on the legibility and neatness of their handwriting.

However, there were responses which seemed to suggest that all of the above factors mentioned earlier, may not influence similarities in the use of techniques between Malaysian and non Malaysian firms. This is particularly if their selection techniques have been

established by top management. It may also be that the parent firm has given guidelines or directives on establishing certain selection techniques. Typical remarks from the personnel managers (of “other foreign non - Asian”, British, “other foreign Asian” firms) were :

“No, it does not help since the selection techniques have already existed in our company”

“No, our selection technique have been established by our parent firm. Subsidiary companies like us will be trained to administer these selection techniques”

5.3.1.2. Factors which influenced differences in the use of selection techniques between different types of firms.

Several factors which influenced differences in employing psychological (cognitive) test between the Malaysian and non - Malaysian firm were identified as follows :

(1) The personnel manager of a Japanese and an American firm when interviewed seemed to indicate that the selection practices procedures established by their parent firm was an influencing factor. According to the personnel manager of the Japanese firm *“based on guidelines established by our headquarters, we used this form of test to solely observe the responses or reactions of candidates in terms of eagerness, nervousness etc when subjected to this technique. The attitudes and characters of these applicants will be judged based on these responses or reactions. The score of this test carries no weight in the selection process but is only used for record keeping purposes”*. The personnel manager of an American firm also remarked that *“We*

currently use this technique as a standard requirement following the advise of our overseas headquarters."

The personnel manager of a British firm when interviewed also seemed to suggest that the selection practices guidelines set up by their parent firm were an influencing factor. According to him "*this form of test is part of the assessment centre exercises established by our parent firm in the UK to test the mental alertness and technical capabilities of applicants*".

(2) On the other hand, the personnel manager of a "other foreign non - Asian" firm when interviewed appeared to indicate that his perception or belief of the usefulness of the psychological (cognitive) test was an influencing factor. These perceptions came from his experience and observation that candidates who have not attained a certain minimum score in psychological (cognitive) tests will not be easily trained. As pointed out by him, "*It is necessary to use this test to assess the mental alertness of applicants. The score of this test does not carry any weight in the final selection of applicants but they are required to attain a certain, minimum score*". Furthermore, he even allowed applicants in certain circumstances, to resit for the psychological (cognitive) test. According to him, "*We sometimes allow applicants whose score is below the acceptable minimum score to resit this test for the second time if they perform well during the interview*"

The personnel managers of the Malaysian firms, when interviewed, also appeared to indicate that the perception or belief concerning the unsuitability of psychological (cognitive) test to select managers was an influencing factor. They considered this technique as inappropriate and not suitable for the selection of managers. It can be gathered from the interview that these perceptions arose from the belief that all applicants consisting of graduates can be easily trained since they have a formal education; therefore, they only need to assess a combination of their personalities and attitudes instead of their intelligence. Moreover, there were respondents who perceived this form of test as not acceptable to applicants. These perceptions surfaced from their observation while employing this technique. According to them, when attempting to employ this technique, they observed that all applicants complained and felt insulted when subjected to these forms of test. They mentioned that this was because applicants either have several years of experiences as managers and proven track records with previous employers, or were candidates who had a degree from a local or foreign university. There were other remarks which indicated that the respondents were not familiar with this technique since they had no experience of employing this technique while working in previous firms. There was also a response which indicated that they believed their current selection technique is more effective than any psychological test. One of the comments was, *"We are satisfied with the performance of our managers selected by us using techniques such as interviews"*.

Section 2

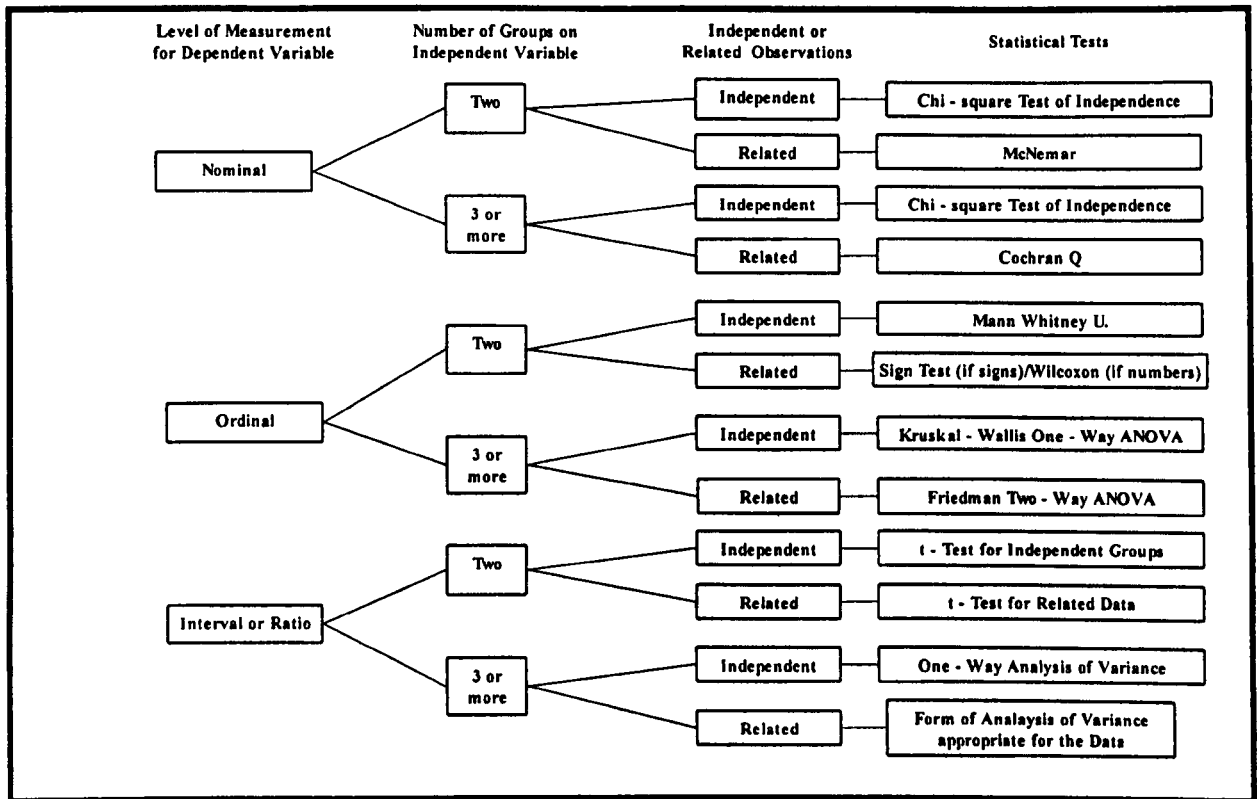
This section attempts to indicate any statistically significant differences between local (Malaysian) and foreign (Non Malaysian firm) using inferential statistics. It will also explain why there were any statistically significant differences between these firms based on the interview data. As Preece (1994) suggested :

‘‘The difference between the sample could have arisen through data instability due to sampling fluctuations or the unreliability of measures with population having the same score’ (p.15)

Therefore, to investigate whether the difference between the samples in this study could have arisen through data instability, inferential statistical test were employed. The appropriate statistical test must be selected since as shown in figure 5.9 (a), (b) and (c) in the following page, certain analytical techniques require a level of measurement such as nominal, ordinal, interval or a ratio scale. In this context, according to Sproull (1995), Kinnear and Gray (1995) and Bryman and Cramer (1992), to examine whether there are statistically significance in the differences between groups, depends on :

- the levels of measurement for the dependent variable, whether these levels are nominal, ordinal, interval or ratio
- the number of groups on independent variable, whether there are 2 or 3 groups or more independent or related data/ observations
- type of test, whether it is parametric or non parametric.

(Figure 5.9(a))
Statistical tests for significance of group differences
for one dependent and one independent variable



Source : Natalie L.Sproull, "Handbook of research methods. A guide for practitioners and students in the Social science" Scarecrow Press Inc.,pp.256

(Figure 5.9(b))
Test of differences for two variables

No. of variable	cr	Type of test	Number of comparisons groups or samples				
			Unrelated data			Related data	
			1	2	3+	2	3+
categoryal: nominal or frequency		Non parametric	Binomial Chisquare	Chisquare	Chisquare	McNemar	Cochran Q
Non categoric ordinal or ranked		Non parametric	Kolmogrov Smimov	Kolmogrov- Smimov Median Mann-Whitney U	Median Kruskal Wallis	Sign Wilcoxon	Friedman
Non categoric interval or ratio		parametric: : mean Variances	t	t F	One way ANOVA Cochrans's C Hartley's F Bartlett-Box F	t t	multivariate analysis of variance

Source : Allan Bryman and Duncan Cramer, "Quantitative data analysis for social scientists",
 Routledge Inc.,pp.117

(Figure 5.9(e))
Statistical tests for comparing averages of two or more samples of scores

Type of data	Dependence of samples	
Two samples	Independent	Related
Interval	Independent samples t-test	Paired samples t-test
Ordinal	Mann-Whitney	Wilcoxon test, sign test
Nominal	Chi square	McNemar
Three or more samples	Independent	Related
Interval	one way ANOVA	Within subjects ANOVA
Ordinal	Kruskal-Wallis k-sample	Friedman
Nominal	Chi square	Cochran's Q (dichotomous nominal data only)

Source : P.R.Kinnear and C.D.Gray, "*SPSS for windows made simple*",
 Erlbaum (UK) Taylor & Francis.,pp.75

In order to examine whether there were any statistical significance differences between firms and types of selection techniques, based on Sproull (1995), Kinnear and Gray (1995) and Bryman and Cramer (1992), a Chi-square test would be appropriate since the related data collected in this survey involved nominal data.

The Chi-square Pearson test was ruled out to indicate any significant differences between the firms (Malaysian, American, foreign non Asian, British, Japanese and foreign Asian firms) and types of selection techniques employed since the data in each cell in table 6.3 was not sufficiently large. Moreover, statistically these data did not meet criteria of (i) minimum expected frequency (of < 20%) and (ii) the number of cells with an expected frequency of

less than 5 (Foster, 1993). According to Crammer (1994, p.85), "a Fisher Exact test is thus appropriate when each variable has only two categories, number of cases is less than 40 and one of the expected frequency is less than 5".

Thus the reclassification of firms in this study into 2 categories which is Malaysian and non Malaysian firms as shown in table 6.7, is justified.

5.4 Result of statistical test for significant differences between firms and types of selection techniques using Fisher Exact test

The commonly used confidence levels are the 99% (or 1% significant level), 95% (or 5% significant level), 90% (or 10% significant level) and 68% levels (or 32% significant level) as indicated in figure 6.0 below (Sproull, 1995). The choice of significant level depends primarily on how much error a researcher is willing to tolerate and secondarily on what has become established practice. Statistically, the possibility of making two types of errors exist known as Type I error that is, rejecting the null hypothesis when it is correct and Type II error that is, accepting the null hypothesis when it is incorrect.

*Figure 6.0
Commonly used confidence levels*

% area under normal curve	No.of standard errors (z)
99%	2.58
95%	1.96
90%	1.65
68%	1.00

Source : Natalie L.Sproull, "Handbook of research methods. A guide for practitioners and students in the Social science" Scarecrow Press Inc.,pp.123

Ideally, given the consequences of being wrong via either a Type I or Type II error, a researcher would like to have a small probability of each type of error occurring. This is not possible because generally, the smaller the researcher sets a Type I error, the larger the Type II error will be. To lower the risk of Type II error, steps that can be taken will be to increase the sample size and increasing the significance level. Hence in this study, a significance level of 0.05 and 0.01 will be selected. In addition, these are the significance levels commonly selected for Social Science (Sproull, 1995).

The results of the survey using Fisher exact test at 5% significant level¹ as shown in table 7.1 on the following page revealed that there was only statistically significant differences between Malaysian and non Malaysian firms in the use of cvs to select senior, junior managers and trainees.

However, there is a trend approaching statistical significant differences (at 5% significant level) concerning :

- the use of cognitive test by the Malaysian and non Malaysian firms to select trainees
- the use of personality tests by the Malaysian and non Malaysian firms to select senior managers

¹ For detailed SPSS Output which shows significant differences, please refer to Appendix 5.2 at the end of this thesis

TABLE 7.2
Selection techniques and types of firm variables (Malaysian versus Non - Malaysian)

Selection techniques	Types of firm	No. of firms	Total no.of firms	Significance
Use of interviews to select sr. managers	Malaysian	20	20	Nil
	non Malaysian	19	19	
Use of application form select sr.managers	Malaysian	19	20	1.00
	non Malaysian	18	19	
Use of cv to select sr. managers	Malaysian	15	20	0.05**
	non Malaysian	19	19	
Use of references to select sr. managers	Malaysian	17	20	0.50
	non Malaysian	14	19	
Use of cognitive test to select sr. managers	Malaysian	0	20	0.50
	non Malaysian	1	19	
Use of personality test to select sr. managers	Malaysian	2	20	0.06*
	non Malaysian	7	19	
Use of AC to select sr. managers	Malaysian	0	20	0.23
	non Malaysian	2	19	
Use of interviews to select m. managers	Malaysian	19	19	Nil
	non Malaysian	23	23	
Use of application form to select m. managers	Malaysian	19	19	1.00
	non Malaysian	22	23	
Use of cv to select m. managers	Malaysian	14	19	0.08
	non Malaysian	22	23	
Use of references to select m. managers	Malaysian	17	19	0.08
	non Malaysian	14	23	
Use of cognitive test to select m. managers	Malaysian	0	19	1.00
	non Malaysian	1	23	
Use of personality test to select m. managers	Malaysian	2	19	0.08
	non Malaysian	8	23	
Use of AC to select m. managers	Malaysian	0	19	0.49
	non Malaysian	2	23	
Use of interviews to select jr. managers	Malaysian	19	19	Nil
	non Malaysian	28	28	
Use of application form to select jr. managers	Malaysian	19	19	1.00
	non Malaysian	27	28	
Use of cv to select jr. managers	Malaysian	14	19	0.03**
	non Malaysian	27	28	
Use of application form to select jr. managers	Malaysian	19	19	1.00
	non Malaysian	27	28	
Use of references to select jr. managers	Malaysian	15	19	0.07
	non Malaysian	14	28	
Use of cognitive test to select jr. managers	Malaysian	0	19	0.51
	non Malaysian	2	28	
Use of personality test to select jr. managers	Malaysian	2	19	0.28
	non Malaysian	7	28	
Use of AC to select jr. managers	Malaysian	0	19	0.51
	non Malaysian	2	28	

Note : ** denote significant at $p < or = 0.05$

* denote trend approaching significant differences at $p, 0.05$

TABLE 7.2 (Contd)
Selection techniques and types of firm variables (Malaysian versus Non - Malaysian)

Selection techniques	Types of firm	No. of firms	Total no.of firms	Significance
Use of interviews to select trainees	Malaysian	15	16	0.42
	non Malaysian	22	22	
Use of application form to select trainees	Malaysian	16	16	Nil
	non Malaysian	22	22	
Use of cv to select trainees	Malaysian	8	16	0.01**
	non Malaysian	20	22	
Use of references to select trainees	Malaysian	11	16	0.10
	non Malaysian	8	22	
Use of cognitive test to select trainees	Malaysian	0	16	0.06*
	non Malaysian	5	22	
Use of personality test to select trainees	Malaysian	2	16	0.68
	non Malaysian	5	22	
Use of AC to select trainees	Malaysian	1	16	1.00
	non Malaysian	2	22	

Note : ** denote significant at $p < \text{or} = 0.05$

* denote trend approaching significant differences at $p, 0.05$

Nevertheless, this trend should be interpreted with caution since it was noticeable in these two categories (refer to Table 7.2 and SPSS output, Appendix 5.1 at the end of this thesis) that there were less than 25% firms employing these techniques.

5.4.1. Explanations for statistically significant differences (at 5% significant level) between firms and types of selection techniques

- use of cvs (curriculum vitae)

One possible explanations as to why few Malaysian firms used cvs compared to non Malaysian firms is supported by a selection of remarks obtained from respondents which indicated that these firms prefer to use the application form instead of the cvs. These remarks were :

"The application form is very useful to ensure that the information needed by us are consistent since questions formulated during the interview will be based on it"

"The application form is a standardised form designed by us to get all the relevant information needed which may not be available from the cvs"

There were also some comments which mentioned that cvs *"do not have much value"* and in the cvs *"applicants are likely to inflate their achievement or omit information which may disqualify them"*.

On the other hand, the possible explanations as to why non Malaysian firms use the cvs more than Malaysian firms is conveyed by typical statements of respondents which indicated that these firms follow the common practise of their overseas parent firm. These statements were : *"It is the usual practise for us and our parent firm to use both the application form and cvs as an initial filtering mechanism during recruitment"*

However, there were also a number of different views from the respondents. For example, one of the personnel managers of a foreign non Asian firm when interviewed commented that they believed the application form *"will not have full details of job description or specification"* and the cv *"will have full details from A to Z. "* A personnel manager of other foreign non

Asian firm when interviewed believed that they can assess the applicants personality from the way they organise the information in the cv.

5.4.2. Explanations for trend approaching statistically significant differences (at 5% significant level) between firms and types of selection techniques

- use of psychological (personality) test

A possible explanation as to why very few Malaysian firms use psychological (personality) tests compared to non Malaysian firms can be gained from statements like those which suggested that these firms were sceptical of the psychological (personality) test's effectiveness or reliability. This is because the ethnic² values of the Malaysian and the West differs thus resulting in different perception of what should be the ideal (positive and negative) attributes of candidates. These statements were as follows :

"Most of these tests originate from a non Malaysian settings and may not fit with the Malaysian culture. The criteria of ideal candidate as suggested in the test is different from what we have in mind. For example, we do not like candidate to be too aggressive".

"We are not sure about the personality test effectiveness especially it has been developed overseas(in the West)"

² Refer to Appendix 5.3 (a), (b), (c), (d) at the end of this thesis for "list of ethnic values in Malaysia", "Significant Malay value orientation", "Malaysian values - How others see them" and "Values underlying Management practices in Malaysia" respectively in order to understand the above argument.

Other explanations are advocated by remarks which indicate that Malaysian firms perceived this form of test to be expensive to administer and interpret. These perceptions surfaced because the respondents had no experience employing this technique while working in previous firms. These remarks³ were as follows :

"We will not consider this test (personality) since it is time consuming and costly".

"The cost of administering and interpreting this personality test is very high"

On the other hand, the explanation as to why non - Malaysian firms used the psychological (personality) tests more than the Malaysian firms may be found from remarks of respondents which indicated that their firms follow the procedures advised by their overseas parent firm. Their common remarks were :

"We use this personality test as advised by our parent firm. It has proven to have the ability to predict personality traits that is compatible to the job"

"We follow guidelines given by our parent firm to use the personality test. We buy this test from consultants who usually provide us with some form of (administrative test) training"

³ No specific personality test was mentioned/given in responses.

- use of psychological (cognitive) test

The explanation as to why Malaysian firms do not employ psychological (cognitive) tests was offered by statements of several respondents which indicated that it is inappropriate and not suitable to select managers. For example, one personnel manager of the Malaysian (Bumiputra) firm commented that *“this form of test was employed earlier by us but we had to put it off since applicants complained that they felt humiliated and insulted when subjected to an aptitude test”*. Another statement that also supported this explanation is the belief that applicants who are usually graduates can be easily trained. As one personnel manager of another (Bumiputra) Malaysian firm put it *“We used the personality test since all of the applicants for senior post or trainees are graduates who usually will have some intelligence gained through formal education. Instead of assessing their intelligence, we felt that it is better to assess their personalities to see whether it fit with our company's culture”*. This remark (i.e. candidate sought by employers must be graduates) thus, indirectly indicates a tendency towards a Western “scientific approach” where an individual qualifications determine hireability.

Other remarks which substantiated the above explanation are the belief that this form of test was not suitable and an affront to senior managers who have experiences and were educated. These remarks were :

“We consider the use of the cognitive test for senior post to be inappropriate. Since these senior managers have a wealth of experiences and a string of professional qualifications, the use of this technique is considered as an insult to them”

"The use of this technique on senior managers is seen as an insult to them. These candidates may have a negative impressions of our company and may decide not to accept our offer".

On the other hand, an explanation as to why non Malaysian firms used the psychological (cognitive) test is expressed by several statements of respondents which indicated that these firms follow the guidance of their parent firm. As one personnel manager of an American firm remarked *"We currently used this technique as a standard requirement to test the mental alertness of applicants following the advise of our overseas headquarters"*. In addition, there were other statements which supported the above explanation. For example, according to the personnel manager of one Japanese firm *"based on guidelines established by our headquarters, we used this form of test to solely observe the responses or reactions of candidates in terms of eagerness, nervousness etc when subjected to this technique....."* The personnel manager of a British firm also mentioned that *"this form of test is part of the assessment centre exercises established by our parent firm in the UK to test the mental alertness and technical capabilities of applicants"*.

5.5 Factors influencing the choice of techniques used by local and foreign firms

The survey evidence (as shown in Table 6.3 and 6.7 on the earlier page) indicated that there was little differences in the approaches of selection techniques between foreign and locally - owned firms. Nevertheless, this should not be taken to imply that foreign influences were not crucial in the choice of selection techniques between these firms. Such influences may arise not just through the ownership of firms but through other factors such as the use of consultants who are likely to be familiar with foreign techniques, the employment of personnel managers who have either worked or studied abroad and the establishment of HRM departments with specialised recruitment and selection functions which are more likely to be aware of foreign techniques. These influences may well be felt in large locally - owned firms. In this context, it should be cautioned that there were very few small firms in the survey sample.

Table 7.2(a) on the next page indicated that techniques such the interviews and application forms were extensively used by all firms. Cvs are more inclined to be used if consultants are employed especially in selecting senior managers. This is because consultants usually advised firms to adopt Western techniques⁴ and in this case, cvs represent one of the range of techniques commonly used by firms in the West as an initial filtering mechanism to screen out applicants who did not meet a predetermined minimum level of attainment. It is difficult to comment on the use of references because of the discrepancy in the number of levels of

⁴ As extracted from the interview data

management especially in selecting middle, junior manager and trainees between firms. It is also difficult to interpret the use of assessment centre (AC), personality and cognitive tests since few firms used this technique.

Similarly 7.2(b) also demonstrated that the the interview and application forms were broadly used by all firms. Cvs are more likely to be used if personnel managers have worked abroad. This is due to the fact that it is a common practise of overseas parent firm to use this technique in order to shortlist applications during recruitment. Therefore personnel managers who have worked abroad (or worked in a Western based firms) with exposure to employing this technique are more inclined to adopt this technique. However, it appears that references are more likely to be used by firms if personnel managers have worked in local firms especially in selecting senior and middle managers. This finding is unexpected as references are commonly used in Western firms where previous employers are usually sought for as referees to verify information given by applicants. In this case, it is important to note that references are commonly employed by local firms where politicians and relatives are considered as important referees. Due to this reason, there will be a tendency for personnel managers who have worked in local firms to adopt this technique. Nevertheless, personality tests are more likely to be employed if personnel managers have worked abroad. Personality test also represent one of the common technique used overseas to assess candidates on a range of personal attributes related to successful performance. In relation to this, Western based firms often follow guidelines given by their parent firm to use this technique. This technique

however, is sparingly used by local firms since they are sceptical of its effectiveness or reliability⁵. Therefore, personnel managers who have worked abroad (or in Western based firms) with experience in using the personality test are more inclined to adopt this technique. The use of AC and cognitive test is also difficult to analyse due to the small number of firms which employed this technique.

Table 7.2(c) also shows that the interviews and application forms are widely used by all firms. There were not much differences in the use of cvs and references between all firms. Since few firms used the AC, cognitive and personality tests, it is difficult to comment on in this case.

Table 7.2(d) also indicated that the interviews and application forms are extensively used by all firms. Cvs and personality tests are more likely to be used by firms if there is HRM department with specialised recruitment and selection functions. This is because with the existence of this function⁶, most of the recruiters are professionally trained and are thus able to employ techniques such as structured interview and personality test. Furthermore more than half of firms with HRM department comprised of members of HRM professional associations suggesting that they are more likely to be familiar with sophisticated and recent Western selection techniques. It is difficult to comment concerning the use of references due to the variations between different levels of management. In the same manner, it is also difficult to

⁵ As extracted from the interview data, this is because Malaysian and Western values differ, resulting in contrasting perceptions of what should be the ideal (positive or negative) attributes of candidates.

⁶ Ibid

summarise concerning the use of personality and cognitive test as well as AC because very few firms employ these techniques.

In conclusion, the evidence from table 7.2 (a), (b), (c) and (d) on the following page is not straightforward because some techniques such as the interviews and application forms were widely used by all firms and therefore it is impossible to distinguish between firms in the use of such techniques. The numbers in the cells of some of the tables are small and there is not always a consistent patterns between different levels of managers. However, Cvs are more likely to be used if consultants are employed, personnel managers have worked abroad and if there is a HRM department with specialised recruitment and selection functions. Likewise, personality tests are more likely to be used if personnel managers have worked abroad and if there is a specialised recruitment and selection functions. Overall, concerning the use of references, it is more difficult to summarise because of the variations between different levels of management. However, it seemed more likely to be used by firms if personnel managers have worked in local firms. The use of assessment centre and cognitive tests is difficult to comment on since few firms used this technique.

TABLE 7.2 (a)
Selection techniques and Use of consultants

Selection technique		Consultants	
		Employ	Do not employ
<i>Intvws</i>	Sr.mger	21(100)	18(100)
	M.mger	10(100)	32(100)
	Jr.mger	6(100)	41(100)
	Trainees	2(100)	35(97.2)
<i>A/Forms</i>	Sr.mger	19(90.5)	18(100)
	M.mger	9(90)	32(100)
	Jr.mger	5(83.3)	41(100)
	Trainees	2(100)	36(100)
<i>Cv</i>	Sr.mger	20(95.2)	14(77.8)
	M.mger	10(100)	26(81.3)
	Jr.mger	6(100)	35(85.4)
	Trainees	2(100)	26(72.2)
<i>Biodata</i>	Sr.mger	-	-
	M.mger	-	-
	Jr.mger	-	-
	Trainees	-	-
<i>References</i>	Sr.mger	16(76.2)	15(83.3)
	M.mger	8(80)	23(71.9)
	Jr.mger	6(100)	23(56.1)
	Trainees	2(100)	17(47.2)
<i>H/W analysis</i>	Sr.mger	-	-
	M.mger	-	-
	Jr.mger	-	-
	Trainees	-	-
<i>Cog.test</i>	Sr.mger	1(4.8)	-
	M.mger	-	1(3.1)
	Jr.mger	-	2(4.9)
	Trainees	-	5(13.9)
<i>Personality test</i>	Sr.mger	6(28.6)	3(16.7)
	M.mger	3(30)	7(21.9)
	Jr.mger	1(16.7)	8(19.5)
	Trainees	1(50)	6(16.7)
<i>Assessment Centre</i>	Sr.mger	1(4.8)	1(5.6)
	M.mger	1(10)	1(3.1)
	Jr.mger	1(16.7)	1(2.4)
	Trainees	-	3(8.3)
Total Firms	Post		
	Sr.mger	21	18
	M.mger	10	32
	Jr.mger	6	41
	Trainees	2	36

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE 7.2(b)
Selection techniques and Experiences of Personnel Managers

Selection technique		Experiences		
		Foreign only	Local & Foreign	Local only
<i>Intvws</i>	Sr.mger	12(100)	14(100)	13(100)
	M.mger	16(100)	14(100)	12(100)
	Jr.mger	17(100)	18(100)	12(100)
	Trainees	14(100)	15(100)	8(88.9)
<i>A/Forms</i>	Sr.mger	11(91.7)	14(100)	12(92.3)
	M.mger	15(93.8)	14(100)	12(100)
	Jr.mger	16(94.1)	18(100)	12(100)
	Trainees	14(100)	15(100)	9(100)
<i>Cv</i>	Sr.mger	12(100)	13(92.9)	9(69.2)
	M.mger	15(93.8)	12(85.7)	9(75)
	Jr.mger	16(94.1)	16(88.9)	9(75)
	Trainees	12(85.7)	13(86.7)	3(33.3)
<i>Biodata</i>	Sr.mger	-	-	-
	M.mger	-	-	-
	Jr.mger	-	-	-
	Trainees	-	-	-
<i>References</i>	Sr.mger	9(75)	11(78.6)	11(84.6)
	M.mger	9(56.3)	11(78.6)	11(91.7)
	Jr.mger	9(52.9)	11(61.1)	9(75)
	Trainees	5(35.7)	8(53.3)	6(66.7)
<i>H/W analysis</i>	Sr.mger	-	-	-
	M.mger	-	-	-
	Jr.mger	-	-	-
	Trainees	-	-	-
<i>Cog.test</i>	Sr.mger	-	1(7.1)	-
	M.mger	-	1(7.1)	-
	Jr.mger	-	2(11.1)	-
	Trainees	2(14.3)	3(20)	-
<i>Pers. test</i>	Sr.mger	4(33.3)	5(35.7)	-
	M.mger	5(31.3)	5(35.7)	-
	Jr.mger	4(23.5)	5(27.8)	-
	Trainees	2(14.3)	5(33.3)	-
<i>AC</i>	Sr.mger	1(8.3)	1(7.1)	-
	M.mger	1(6.3)	1(7.1)	-
	Jr.mger	1(5.9)	1(5.6)	-
	Trainees	1(7.1)	1(6.7)	1(11.1)
Total Firms	Post			
	Sr.mger	12	14	13
	M.mger	16	14	12
	Jr.mger	17	18	12
	Trainees	14	15	9

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE 7.2(c)
Selection techniques and Education of Personnel Managers

Selection technique		Education	
		Overseas	Local
<i>Intvws</i>	Sr.mger	20(100)	18(100)
	M.mger	19(100)	22(100)
	Jr.mger	21(100)	25(100)
	Trainees	15(93.8)	21(100)
<i>A/Forms</i>	Sr.mger	19(95)	17(94.4)
	M.mger	19(100)	21(95.5)
	Jr.mger	21(100)	24(96.0)
	Trainees	16(100)	21(100)
<i>Cv</i>	Sr.mger	17(85)	16(88.9)
	M.mger	17(89.5)	18(81.8)
	Jr.mger	19(90.5)	21(84)
	Trainees	12(75)	15(71.4)
<i>Biodata</i>	Sr.mger	-	-
	M.mger	-	-
	Jr.mger	-	-
	Trainees	-	-
<i>References</i>	Sr.mger	15(75)	15(83.3)
	M.mger	14(73.7)	16(72.7)
	Jr.mger	14(66.7)	14(56)
	Trainees	9(56.3)	9(42.9)
<i>H/W analysis</i>	Sr.mger	-	-
	M.mger	-	-
	Jr.mger	-	-
	Trainees	-	-
<i>Cog.test</i>	Sr.mger	1(5)	-
	M.mger	1(5.3)	-
	Jr.mger	1(4.8)	1(4)
	Trainees	1(6.3)	4(19)
<i>Personality test</i>	Sr.mger	5(25)	4(22.2)
	M.mger	5(26.3)	5(22.7)
	Jr.mger	5(23.8)	4(16)
	Trainees	4(25)	3(14.3)
<i>Assessment Centre</i>	Sr.mger	-	2(11.1)
	M.mger	-	2(9.1)
	Jr.mger	-	2(8)
	Trainees	1(6.3)	2(9.5)
Total Firms	Post		
	Sr.mger	20	18
	M.mger	19	22
	Jr.mger	21	25
	Trainees	16	21

Note : Numbers in () are the percentages of the column total which the numbers represent

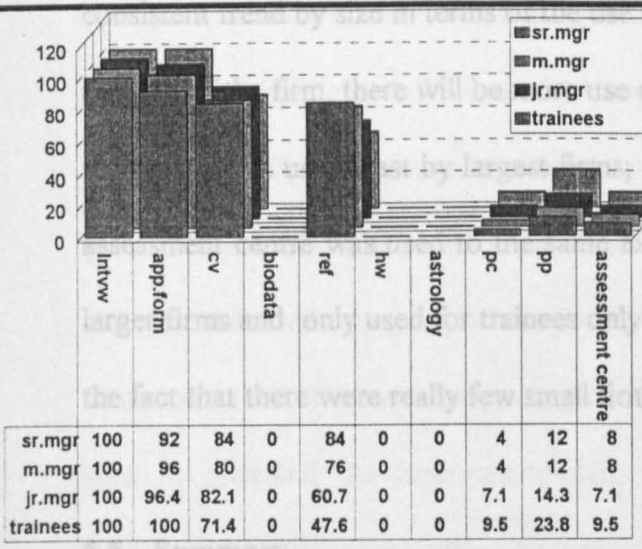
TABLE 7.2(d)
Selection techniques and HRM department (specialized recruitment & selection function)

Selection technique		HRM department	
		Sp. R & S fn.	W/O Sp. R & S fn.
<i>Intvws</i>	Sr.mger	28(100)	11(100)
	M.mger	29(100)	13(100)
	Jr.mger	32(100)	15(100)
	Trainees	24(96)	13(100)
<i>A/Forms</i>	Sr.mger	26(92.9)	11(100)
	M.mger	28(96.6)	13(100)
	Jr.mger	31(96.9)	15(100)
	Trainees	25(100)	13(100)
<i>Cv</i>	Sr.mger	26(92.9)	8(72.7)
	M.mger	25(86.2)	11(84.6)
	Jr.mger	28(87.5)	13(86.7)
	Trainees	17(68)	11(84.6)
<i>Biodata</i>	Sr.mger	-	-
	M.mger	-	-
	Jr.mger	-	-
	Trainees	-	-
<i>References</i>	Sr.mger	20(71.4)	11(100)
	M.mger	21(72.4)	10(76.9)
	Jr.mger	20(62.5)	9(60)
	Trainees	14(56)	5(38.5)
<i>H/W analysis</i>	Sr.mger	-	-
	M.mger	-	-
	Jr.mger	-	-
	Trainees	-	-
<i>Cog.test</i>	Sr.mger	1(3.6)	-
	M.mger	1(3.4)	-
	Jr.mger	2(6.3)	-
	Trainees	5(20)	-
<i>Personality test</i>	Sr.mger	8(28.6)	1(9.1)
	M.mger	9(31)	1(7.7)
	Jr.mger	8(25)	1(6.7)
	Trainees	7(28)	-
<i>Assessment Centre</i>	Sr.mger	2(7.1)	-
	M.mger	2(6.9)	-
	Jr.mger	2(6.3)	-
	Trainees	3(12)	-
Total Firms	Post		
	Sr.mger	28	11
	M.mger	29	13
	Jr.mger	32	15
	Trainees	25	13

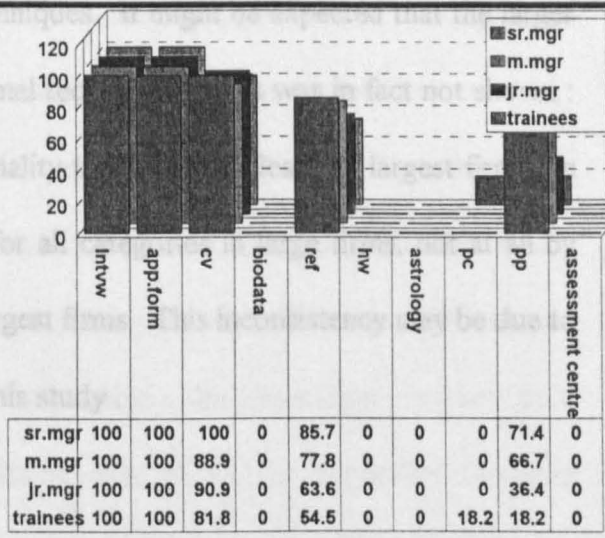
Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE 7.3

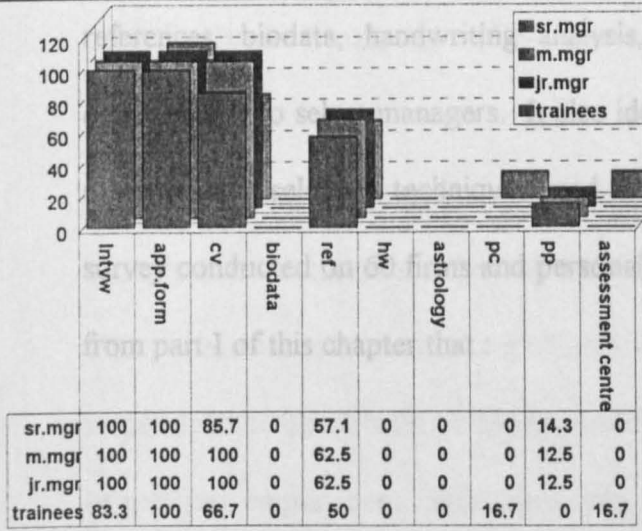
Summary of types of selection techniques used to select managers by size (%)



Sr.mgrs(N=25)/M.mgrs(N=25)/Jr.mgrs(N=28)/Trainees(N=21)
Large firms (500-1500 employees)



Sr.mgrs(N=7)/M.mgrs(N=9)/Jr.mgrs(N=11)/Trainees(N=11)
Larger firms (1501-3500 employees)



Sr.mgrs(N=8)/M.mgrs(N=8)/Jr.mgrs(N=8)/Trainees(N=6)
Largest firms (>3500 employees)

Note : Summary based on Table B 4.0, B 4.1, B 4.2, B 4.3

The size of firm⁷ did not seem to be a factor in the choice of techniques used by both local and foreign firms in this study. As shown in Table 7.3 on the previous page, there were no consistent trend by size in terms of the use of techniques. It might be expected that the larger the size of the firm, there will be more use of formal techniques. This was in fact not shown : references was used least by largest firms; personality test was used least by largest firm; the assessment centre was used to the same extent for all categories in large firms, not at all by larger firms and only used for trainees only by largest firms. This inconsistency may be due to the fact that there were really few small firms in this study .

5.5 Summary

This chapter has been divided into two parts. Part I established whether or not firms in this study used selection techniques such as application forms, cvs (curriculum vitae), interviews, references, biodata, handwriting analysis, astrology, psychological tests, and assessment centres (AC) to select managers. It also identified the number of stages involved and the type of managerial selection techniques used at each stage in the selection process. Based on the survey conducted on 60 firms and personal interviews with 32 managers, it can be concluded from part I of this chapter that :

A greater proportion of the firms in this study used selection techniques (formal and or informal) to appoint managers. It was common for the firms in this study to employ

⁷ This refer to size of firms i.e. large (500 - 1500), larger (1501-3500) and largest (.3500)

interviews, application forms, cvs and references to select all level of management. It was also suggested from the interview data that all of these selection techniques were employed due to their perceived usefulness. For example, the interview was employed because, in congruence with Lewis (1985) and Anderson's views, it provided an opportunity for firms to 'sell' themselves. This technique was also employed because it allowed respondents to assess several observable, interpersonal dimensions of behaviour as cited by Herriot (1989). It was also useful for informing applicants about the nature of the job, which is similar to Arvey and Campion's (1982) views. Supporting Ostell's (1989) analysis, the application form was used since it provided the respondents with comparable data of all the applicants therefore simplifying the decision making process. It was also useful to shortlist/screen candidates. This finding thus substantiates Molander and Winterton's (1994) and Anderson's (1993) views that this technique is useful in reducing the number of applicants for a manageable short list. Similar to Armstrong's (1991) views, this technique was also used by respondents to provide a basis for the interview and in setting up personnel records. References were used since they allowed respondents to cross check certain information regarding an applicants' backgrounds or characteristics and their past performances with recent and previous firms. Thus, these reasons concur with Cascio's (1992) suggestion that this technique enabled respondents to check information furnished by the applicant on factual issues such as the dates of previous employment , attendance and whether they really have the experience which they claim. Psychological (cognitive) tests were employed since they allowed respondents to assess applicants' intellectual ability specific to a trainee's post which is similar to Bevan and Fryatt's (1988) views. On the other hand, concurring with Koontz and Wehrich's (1988)

views and Bevan and Fryatt's (1988) suggestions, psychological (personality) tests were used since they provided the respondents with information about the personal characteristics of applicants in order to assess them against a number of job related attributes thought to be related to successful performance. The interview data also shows that the AC was used by respondents since this technique allowed them to accurately predict the subsequent performance of candidates. Thus, this substantiated Torrington and Hall's (1994) views that the performance of applicants in an AC generally correlates more highly with their eventual job performance. This finding also appears to support this technique's validity studies by Schmitt et al. (1984), Hunter and Hunter (1984), Gaugher et al. (1987), Hunter and Hirsch (1987), Smith and Robertson's (1993) which indicated it to be high and positive.

With the exception of selection techniques such as the biodata or graphology, the firms in this study used similar techniques as reported in the West (Shackleton and Newell, 1991; Vaughan and McClean, 1989) such as interviews, application form/cv, references, psychological (personality and cognitive) test and AC. Almost half of the firms in this study used a 3 stage selection process to select senior, middle and junior managers, and a 2 stage selection process to select trainees. Those findings do not concur with studies in the West (Bastos, 1990) in one respect in that a majority of the trainee selection processes in the UK involve 3 stages. However, it is similar in another aspect which indicated that the majority of firms in the West used a 3 stage selection process to select all managers. This study also pointed out that, for all levels of management, application forms and cv were mostly used in the first stage of the

selection process; interviews were mostly used in the second stage and references were mostly used either in the first or third stage. This finding is similar to studies conducted in the West (Bastos, 1990) which indicated that application forms and interviews were mostly used in the first and second stage, and references in the third stage of the managerial selection process.

The open ended interview was the most often type of interview employed by firms in this survey, followed by job specific and structured interviews, to select all senior, middle and junior managers. Likewise, the most frequent interviews employed to select trainees were the open ended interview, followed by both job specific or structured interviews. This finding does not concur with some studies in the West. For example, the surveys by Bastos (1990) and Taylor et al.'s (1993) found that a majority of firms in the UK and New Zealand respectively employ structured and job specific interviews to select managers. It nevertheless was similar with Vaughan and McClean's (1989) survey which indicated that there was a strong preference among firms in Australia for unstructured or minimally structured interviews. This study also indicates that for the selection of senior, middle and junior managers, almost 90% of firms prefer to use several interviews. For the selection of trainees, firms always used either one or several interviews. This finding is similar to practices reported in the West (Robertson and Makin, 1986) which illustrated that firms in UK used more than one interview to select managers. More than 60% of firms in this study also showed that they prefer to employ two or three interviewers, followed by the panel interview and one - to - one interview. Thus, this survey is consistent with findings reported in the West (Robertson and

Makin, 1986; Taylor et al., 1993) which indicated that firms in UK and New Zealand prefer to use several interviews and employ two or three interviewers.

Except for the participation of the managing director/general manager (MD/GM) as interviewers, this finding is similar to practices found in the West (Robertson and Makin, 1986; Shackleton and Newell, 1991) which indicated that personnel staff and line managers are more likely to be included as interviewers. This study also shows that there was a limited use of external and internal consultants as interviewers for the selection of managers at all levels. It was also found that a majority of respondents (more than 97%) had some prior experience of interviewing but that a lesser proportion (60%) had acquired a professional qualification. When respondents were interviewed, all of those concerned indicated that they had attended a short course related to 'effective interviewing techniques'. This finding, however, contrast with Gill's survey which indicated that individuals involved in interviewing were trained in specific courses run by NIIP (National Institute of Industrial Psychology), IPM (Institute Of Personnel Managers) and Saville and Holdsworth. It appears that employers in Malaysia prefer to train their staff through short courses rather than acquiring a recognised professional qualification.

In this study, all of the firms which used a psychological (personality and cognitive) test indicated that the test originate from the West and less than 50% of these firms indicated that these test require modification. This finding appears to support Toplis et al.(1988) views that

psychological tests developed in the West (in the US or other countries) require adaptation to be employed in another although in this study very few firms appear to do so.

The majority of the firms in this study requested candidates for all managerial posts, to give the name of 2 referees, with most of the references taken up before the job offer. This finding is similar in one respect to practices reported in the West (Kingston, 1971) which indicated that the majority of the firms requested 2 or more referees. However, unlike the practice in Malaysian industry, the majority of these firms (in the West) indicated that references were taken up after acceptance of a job offer. More than half of the firms in the survey also reported that candidates were required to undergo a pre - entry medical test by their company doctor. This finding thus concurs with the findings in the West (Kingston, 1971; Gill, 1980; Marsden, 1994) which indicated that a pre - entry physical or medical examination is part of the managerial selection process.

Part II of this chapter was divided into two sections. Section 1 identified the types of selection techniques and the number of stages involved in terms of a firm's ownership. This section also identified the differences and similarities in the use of selection techniques between these firms by using descriptive statistics. Factors which influence these similarities and differences were identified, based on analysis from the survey questionnaires and information extracted from the personal interviews. One of the findings of this study concur

with several studies (Bevan and Fryatt, 1988; Bastos, 1990; Taylor et al., 1993) which suggests that the perceived usefulness of the selection technique plays a crucial role in influencing a firm's choice of a particular selection technique. Another findings such as the presence of a leading local or foreign firm (used as a benchmark to establish selection techniques) also support the views of Putti (1987) and Lawler et al. (1995) who suggested that firms may pursue or emulate new HRM practices in order to compete successfully at a global level. One other factor identified were the backgrounds of personnel managers responsible for selection processes in the firm. These were as follows : (a) they were almost 100% Malaysian with an average of more than 10 years experience in both local and foreign firms and thus familiar with the techniques used by these firms; (b) the ideas and theories acquired by them through formal education in HRM/Management, courses and seminars, or through consultants employed. These backgrounds also helped them to be aware of the selection techniques used by advanced countries in the West. These findings thus substantiate Westwood's (1991) views that managers who have received some formal education will almost certainly have been exposed to Western materials, theories and practices. Another factor identified was the existence of specialised recruitment and selection functions which are centralised. These findings also support Cohen and Pfeffer (1986), Fisher and Shaw (1992) and Shaw et al.'s (1993) studies which indicated that the existence of a specialized HR department may result in firms establishing a more extensive, elaborate and sophisticated range of selection techniques. Nevertheless, there were two major factors which seemed to suggest that all of the above factors may not be an influencing factor in contributing to these similarities. This is particularly true if either selection techniques have been established by

top management, or the parent firm has given guidelines or directives on establishing certain selection techniques.

One of the factors which influence the differences were identified as the perceptions or beliefs by managers concerning selection techniques such as psychological (cognitive) tests. These findings thus supports the views of Toplis et al. (1988) and Torrington and Hall (1995), who found that most firms do not employ psychological tests due to the the belief in its effect on applicants who will object to being tested particularly if they have qualifications or because they felt insulted. Thus this study shows that the perception or belief in the usefulness of selection techniques by personnel managers can result in both differences and similarities of managerial selection techniques between the Malaysian and non Malaysian firms. All of these perceptons appear to developed from their experiences, exposure and observations employing specific techniques.

Section 2 indicated statistically significant differences between local (Malaysian) and foreign (non Malaysian) firms using inferential statistics. This section has explained any statistically significant differences between these firms.

Overall, the survey and interview data from this study have also suggested that influences in

the choice of selection techniques between firms are due to factors which arose such as the use of consultants who are likely to be familiar with Western techniques, the employment of personnel managers who have worked or educated abroad, and the existence of HRM departments (with specialised recruitment and selection function) which are more likely to be aware with Western techniques. In addition, the presence of firms believed to be successful such as the MNCs, were also an influencing factor for firms to more likely use Western techniques.

The key findings and implication of this study will be discussed in the final chapter (Chapter 6).

Chapter 6

OVERVIEW, CONCLUSIONS AND IMPLICATIONS OF THE STUDY

6.0 Introduction

This chapter presents an overview of this thesis. It then restates the hypotheses of the study and compares as well as discusses it with the evidence obtained from the fieldwork. Key findings and implication of the study will then be presented and recommendations for future research will also be highlighted in the final section.

6.1 Overview of the study

In order to meet the objectives of this study : 1) a review of the available literature on techniques to select managers was carried out and used as a basis for comparison with the techniques adopted in Malaysia 2) Key factors which influence the choice of selection techniques employed generally by firms were also highlighted 3) The background of Malaysia which may have an effect on the choice of the techniques employed by firms was also considered and 4) both these key factors and the Malaysian background were then examined to assess whether they influenced any similarities or differences between different types of firms in the use of managerial selection techniques in Malaysia.

After a review of the appropriate literature, the specific techniques used to select managers and the number of stages employed by some firms in the West (particularly in UK, US, Australia, New Zealand and France) were identified. These techniques were the application form, cvs (curriculum vitae) or resume, biodata, interviews (structured and unstructured),

references, psychological (personality and cognitive) tests, graphology, astrology, and the assessment centre (AC). This literature review also indicated that (a) some firms may require applicants to undergo a physical or medical examination as part of the selection process and (b) the managerial selection process identified in the West, particularly in the UK, usually involves 2 or 3 stages. The research evidence for each of these selection techniques was examined to demonstrate its characteristics and usefulness; it also shows the extent to which they have been employed in the West. A study of each of these technique's validity was described since validity is a crucial issue in the selection processes. A review of the available literature also suggested that the key factors influencing the choice of selection techniques employed generally by firms were (i) culture; (ii) knowledge of research literature and the predictive validities of the selection techniques acquired by the personnel manager or managers; (iii) presence of MNCs and finally (iv) existence of a specialist HRM department.

Several hypotheses emerged in this study after considering the literature review in Chapter Two and the background of Malaysia (Chapter Three) which may have had an effect on the choice of technique employed by firms in this country.

Mail surveys and personal interviews was then conducted and key findings related to the objectives of this study were reached.

6.2 Key findings of the study

On the basis of the available literature presented in Chapter Two, and taking into account the background of Malaysia in Chapter Three, a number of hypotheses¹ have been suggested :

(i) Local firms are likely to use selection techniques developed in the West if : (a) personnel managers have been educated in the West; (b) personnel managers have been employed previously by Western - based firms; (c) consultants have been used to provide advise on recruitment and selection and (d) the firm has a large HRM department. Local firms that do not share these characteristics are less likely to use selection techniques developed in the West or are likely to modify them significantly.

(ii) UK or US Multinational firms operating in Malaysia are likely to use selection techniques developed in the West despite the fact that they are operating in a different culture.

(iii) Japanese Multinational firms are likely to modify their selection techniques to take account of the Malaysian culture.

(iv) Western European² Multinational firms tend to be more polycentric and therefore are more likely to adapt their selection techniques to to take account of the Malaysian culture.

¹ This has been discussed in section 3.1.8 of Chapter 3

² Western European firms in this study consisted of Anglo - Dutch, German, Swiss, Italian/France and Dutch firms.

In line with the above hypotheses, it was found in this study that the following firms employed Western techniques such as the application forms/cvs, interviews (structured and unstructured), references, psychological (cognitive and personality) tests, and assessment centres (ACs). These are (i) local firms where managers have been educated or employed in the West³; (ii) firms where there is a large HRM department⁴; (iii) local firms which used consultants⁵ and (iv) UK or US⁶ MNCs. The biodata technique was not used at all by any of these firms. The interview data revealed that the guidelines established by the parent firm influenced the use of specific techniques such as psychological (cognitive) tests and ACs by US and British MNCs respectively. It also indicated that managers who have been educated in the West are aware of Western techniques and that managers who were employed in a Western - based firm were able to identify the pros and cons of Western techniques thus influencing them to employ these techniques. Similarly, a large HRM department which has a centralised specialised recruitment and selection function was also found to influence the firm in using Western techniques. According to the interview data, this is because its function allows a firm to : (a) establish a valid and reliable selection techniques such as the structured interview, psychological (personality) test and the AC; (b) have a framework for identifying suitable and effective selection techniques; and (c) ensure proper control in establishing comprehensive and effective selection techniques for other departments involved in the selection process. In addition, the survey illustrated that more than 60% of the firms

³ See table E6.3, E6.5, E6.7 of appendix 4.9 at the end of the thesis.

⁴ See table E6.8 of appendix 4.9 at the end of the thesis.

⁵ See table E6.2 of appendix 4.9 at the end of the thesis.

⁶ Refer to Table 6.3 of Chapter 5 or Table E6.1 of Appendix 4.9 at the end of the thesis for used of selection techniques by firms ownership.

HRM department (which have a specialized recruitment and selection function) are members of an HRM professional association⁷, suggesting that they are more likely to be familiar with sophisticated and recent selection techniques and practices. The interview data also revealed that the consultants employed by local firms advised them to adopt Western techniques.

However, contrary to the researcher's hypotheses, local firms where managers had not been educated or employed in the West⁸ also used many of the Western techniques such as application forms, cvs, references, interviews (structured and unstructured), psychological (personality) and ACs. Nevertheless, they did not use psychological (cognitive) tests and biodata. The feedback received from respondents⁹ revealed that the formal education which they had received locally in HRM/Management helped them to be aware of Western techniques thus influencing them to employ these techniques. This awareness is more likely to be because a majority of management course texts in the local institutions are of Western origin and curriculum are also based on Western models¹⁰. Furthermore, as extracted from the interview data, the additional ideas and theories learnt by the respondents from courses or seminars (local and/or overseas) not only enabled them to be knowledgeable of recent Western techniques but allowed them to improve and enhance the selection process of their firm. Although these managers were not educated or employed in the West, the interview

⁷ See table C6.3 of Appendix 4.9 at the end of the thesis.

⁸ See table E6.4 and E6.6 of Appendix 4.9 at the end of the thesis.

⁹ This refer to personnel or other managers responsible for the selection process.

¹⁰ This suggestion stems from the fact that all of the respondents had received a formal education at a local institutions in HRM/Management. Furthermore, the Malaysian education system are modelled on the education systems of economically and technologically advanced Western countries (refet to section 3.1.5 of Chapter 3).

data also revealed that the presence of leading foreign firms led them to employ Western techniques. This is because the respondents (of local firm) mentioned that leading foreign (US,UK) firms were used as a benchmark for establishing their firms' selection techniques and practices.

The respondents (of local firms) experience in using psychological (cognitive) tests in other firms also influenced them to regard this technique as inappropriate and not suitable to select managers. Thus they made remarks which indicated that applicants felt humiliated and insulted when subjected to this test. The preference shown for employing psychological (personality) tests instead of the psychological (cognitive) tests was as a result of their belief that applicants who are usually graduates can be easily trained; hence, it is only necessary to solely assess their personality rather than intelligence. They also firmly believed from their experience that personality is a more important attribute than intelligence¹¹. The interview data also indicated that psychological (personality) tests has been proven to be effective in assessing whether a candidate's personality fits the job or organisational culture.

Although this study showed that local Malaysian firms used psychological (personality) tests, they however used them sparingly compared to foreign firms. As extracted from the interview

¹¹ As explained in Chapter 5, this is because from their experience, they believed that candidate with the right personality and attribute can be easily trained and performed any job effectively in any circumstances and that any candidate's personality which fit the job requirement will have the potential to contribute more to their company's progress.

data, the respondents were sceptical of this test effectiveness or reliability. They also suggested that that this is mainly because the Malaysian and Western values differ, resulting in contrasting perceptions of what should be the ideal (positive or negative) attributes of candidates. As an example, the Malaysians dislike aggressive behaviour and are non - confrontational, open and expressive in conveying feelings and ideas to others. Thus, being direct and aggressive can be perceived as ill - mannered and a bad reflection of an individual's upbringing. However, not being frank or aggressive may be misinterpreted as a sign of weakness or a lack of confidence to a Westerner¹². This finding thus suggests some cultural effect on the use of techniques particularly the psychological (personality) tests. Similarly, local firms were found to use cvs less than foreign firms. A selection of remarks from respondents interviewed suggested that they prefer to employ application forms instead of the cvs because it is of a standardised design and this ensures the availability of all relevant information concerning an applicant's background. On the other hand, respondents suggested that foreign firms used cvs because this is the practise of their overseas parent firm.

In this study, the Japanese firms were found to employ techniques such as application forms, cvs, interviews (structured and unstructured), references, and psychological (cognitive and personality) tests. Techniques such as ACs and biodata were not employed by them¹³. This is contrary to the researcher's hypotheses. One explanation for this unexpected finding may be

¹² Refer to Appendix 5.3 (c) on "Malaysian values - How others see them" at the end of the thesis.

¹³ Refer to Table 6.3 of Chapter 5 or Table E6.1 of Appendix 4.9 at the end of the thesis for used of selection techniques by firms ownership

that the parent firm exercises more influence than was thought would be the case. Thus, feedback received from the respondent interviewed from one Japanese firm suggested that specific techniques such as psychological (personality and cognitive) tests were used due to the influence of guidelines established by the parent firm¹⁴. Another explanation could be that many of the managers of Japanese firms operating in Malaysia had experience of working for Western firms as well. Thus, it was found from the survey that out of 13 respondents (Japanese firms), 61.5% had experiences working for a foreign firm whilst 38.5% of them had experiences of working in both local and foreign firms¹⁵. These figures suggest that their working experiences in a Western - based MNCs had exposed them to techniques used by these firms.

Western European MNCs were also found to use Western techniques such as the application form, cvs, references, psychological (personality and cognitive) tests and ACs. Techniques such as biodata were not employed by them¹⁶. However, as anticipated, there were some indications that the standard approach of the parent company was occasionally modified to meet local conditions. For example, the interview data indicated that an Anglo - Dutch firm used psychological (personality) tests following the practices of their parent company. On the other hand, according to personnel managers of German firms, their subsidiaries are allowed

¹⁴ As extracted from the interview data; also refer to section 5.3.2. of Chapter 5.

¹⁵ Refer to Table C6.2, E6.3, and E6.7 of Appendix 4.9 at the end of the thesis.

¹⁶ Refer to Table E6.1 of Appendix 4.9 at the end of the thesis. This study indicated that the psychological (cognitive) tests were used by Swiss firm, psychological (personality) tests by German, Swiss, Italian/France and Anglo - Dutch whilst ACs were used by German firm.

to set up, develop and improve their own selection techniques and practices. Their parent firm will then review and comment. It also seems that these firms (German) used both leading local and foreign firms as a benchmark to set up and develop their own techniques¹⁷. However, the Swiss firm looked at in this research did not follow that pattern. It relied much more on straightforward Western techniques. This appears to be because the firm relied heavily on a non - Malaysian¹⁸ (as personnel manager) to be responsible for the selection process of their firm.

The above discussion has concentrated on whether or not different firms and different managers use certain selection techniques. It is also important to look at how the techniques were used. In this study, several techniques were found to be employed in a different way and for different purposes :

For example, while all respondents of the questionnaire responses suggested that they had not used biodata, many suggested from the interview data that they sifted through the applicants biographical data and handwriting (obtained from the application form and cvs) to filter out unsuitable candidates based on their backgrounds and handwriting legibility and neatness.

¹⁷ See table F6.2 of Appendix 4.9 at the end of the thesis.

¹⁸ See table 6.9 of Chapter 5, footnote number 21.

In addition, references, which are not an original part of the selection process set by some firms, are used if there is any ambiguity or negative feedback concerning candidates obtained during the selection (interviewing) process. The researcher also found significant difference in Malaysian referrals whereby there was a tendency to contact a previous employer(s) instead of the most recent/present employer. According to the respondents, this is because a recent employer will usually give a good reference only if they are dissatisfied with the employee and wish to place them elsewhere. There were also respondents of Malaysian firms who believed that politicians are important referees especially for a very senior post¹⁹. Similarly, feedback from respondents of Malaysian and non - Malaysian firms (US, other "foreign - non Asian") also suggested that relatives employed in the firm can be important referees²⁰. This implies that both the relatives employed in the firm and politicians have an influential role as referees therefore suggesting another cultural effect²¹ in the selection practices of firms in Malaysia.

Other techniques such as psychological (personality and cognitive) tests and cvs seemed to be employed for different purposes²². For example, the psychological (personality) tests were used by other "foreign non - Asian" and British firms to look for personality traits which fit the job requirement. Conversely, this test was used by the Japanese firms for record keeping purposes and as a reference for future promotion within their firm. On the other hand,

¹⁹ See Tabulation of interview responses in terms of firms ownership in Appendix 5.0 at the end of the thesis.

²⁰ Ibid.

²¹ Refer to Appendix 5.3 (c) and (d) at the end of this thesis on "Malaysian values - How others see them" and "Values underlying Management practices in Malaysia" respectively.

²² As extracted from the interview data.

psychological (cognitive) tests were used by the American, “other foreign non - Asian” and British firms as a standard requirement to test the mental alertness or IQ of applicants while the Japanese firm used it to observe the responses or reactions of applicants in terms of their eagerness or nervousness. In this latter case, the test score carried no weight in the selection process but was used for record keeping purposes. Cvs were generally used by both Malaysian and non - Malaysian firms (US, other “foreign non - Asian”, British, Japanese, other “foreign - Asian) to : (a) shortlist/screen candidates based on their background such as qualifications, experience, progress in career track or whether they always changed from one job to another; and (b) formulate general and specific question when interviewing candidate. However, it was also used by the US and other “foreign non - Asian” firms in order to assess a candidate’s personality based on how they organised their detailed background information. The profile of ideal applicants sought by firms also differed. From the interview data, some respondents shortlisted applicants based on their qualifications²³ and experience, whilst some did so based on age. There were also applicants who were screened by looking at their career path such as, whether they always changed from one job to another or whether there were any progress in the applicants’ career track. In some cases, applicants were sought on the basis of their ethnicity. Ethnic groups such as Bumiputras are usually preferred in order to comply with the employment guidelines set by the Government. These guidelines thus will encourage nepotism since it is more likely to justify a “Bumiputra” personnel manager in selecting a “Bumiputra” candidate instead of a Chinese or Indian candidate for an important post as a

²³ The respondent prefer above average candidates with either a higher CGPA (Cumulative Grade Point Average) of 3.0 and above or graduated with at least a 2nd Upper Class.

senior manager.

Another key findings of this study is that the Japanese firms sometimes used an informal interviewing technique to appoint candidates as an assistant manager through the internal promotion process. These candidates were requested to “*see and get to know*” their Managing Director. It was also found in this study that the duration for recent graduates to be internally promoted is likely to vary between different Japanese firms. It also appears that that Japanese firms in Malaysia operate on a concept similar to that of ‘*promotion by seniority*’ that is used in Japan.

6.3 Conclusions, implications of the study and suggestions for further research

One of the key themes in the literature on International HRM as highlighted in Chapter 2 has been the extent to which ideas and practices are used in different countries and the degree to which they vary due to the necessity of taking into account the environment in which HRM is practised in order to successfully implement these ideas and practices. As one might expect, there is no simple conclusion to the debate of either holding to the notion that ideas spread between countries or that the environment in which HRM is practised has to be adapted. It is however, a question of examining the strength between these two competing pressures and their interaction.

At one level, this study appears to give particular emphasis to the spread of ideas and practices. Although there were differences between the approaches used by firms to select managers, there were more noticeable similarities. For example, it was surprising that many firms seemed to adopt a similar range of selection techniques such as application forms, cvs, interviews (structured and unstructured), references, psychological tests and assessment centres (ACs). Even local Malaysian (family and non - family owned) firms also appeared to employ these techniques. There is some evidence in this study which explain why this might be the case. It appears that majority of the firms, whether Malaysian or non - Malaysian owned, share similar characteristics which might influence the approach to selection techniques. In particular, most firms which use consultants or employ personnel managers that have worked or studied abroad and firms which have a HRM department (with specialised recruitment and selection function) will be more likely to be aware of Western techniques and thus employ such techniques. Furthermore, to some extent, it may be that Malaysian and non - Malaysian firms try to emulate the approach of what they see as successful firms operating in the country, particularly the Multinationals (MNCs). It does seemed that HRM ideas spread, which is supportive of the convergence theory. To some extent, this finding is surprising because there is evidence that selection by Malaysian firms is not simply based on formal techniques of appointing qualified candidate for the job. Comprehensive evidence on the result of the selection process (i.e. who has been appointed as managers) has not been revealed. However, reference has been made to the extent to which race has been used as a criteria in selection because of the employment guidelines set by the government. Similarly there is anecdotal evidence to suggest that some jobs are awarded on the basis of race and

family or friendship connections. Based on observation, the management and clerical post of most family - owned Chinese firms appears to be predominantly filled by Chinese. Similarly for most local Bumiputras firms, majority of these posts are held by Bumiputras or Malays.

There are a number of possible explanations for such outcomes despite the survey finding of extensive and common use of Western style “scientific” selection techniques. One is that there was an under representation of small firms in the survey. As indicated in Chapter 4 and 5, many more small firms compared to large firms failed to respond in the survey. It might be that small firms would be less likely to have the resources and background that would lead them to use Western selection techniques. These firms are also more likely to use informal techniques that give more weight to items like race, family and friendship.

Another possibility is that although the same selection techniques are used by firms in Malaysia as in the West, those selection techniques might be used in a different way. This echoes Lawler et.al’s (1995) research of Chinese family owned firms, which indicated that although referees were used, relatives employed in the firm and politicians were allowed to be influential as referees in determining selection. In this research it was found that candidates in some firms were sought based on ethnicity (especially Bumiputras) to comply with Government employment guidelines thus encouraging nepotism whereby a ‘Bumiputra’ personnel manager is justified to select a ‘Bumiputra’ candidate for key managerial post.

Techniques such as the personality test and Assessment Centre (particularly the Case study method) was also modified according to the local setting.

There is a possibility that respondents were not disclosing in detail how techniques were actually used since this information were considered confidential. It may also be the case that techniques such as the interview were employed in an informal way to appoint family members, relatives or friends. In the same context, other techniques such as the psychological tests may be used but the score on these tests may not carry any weight to select qualified candidates.

The differences in the way that selection techniques were used was not revealed as the result of the mail survey since this form of survey concentrated much more on the types of techniques employed. These differences however, were uncovered as the result of the follow - up interviews. In part, this may reflect an error in the development of the mail questionnaire for not focussing on the way techniques are used (rather than whether they are used). Nevertheless, one needs to accept the fact that in practice, it will always be more difficult to find out how techniques are used from a mail survey than from personal interviews. Thus, the interviews are employed for probing responses which is likely to be the key to discovering informal techniques and practices used to select managers.

It would be an error then to conclude that this study has supported the notion that management techniques spread, despite the different cultural contexts in which they operate. While the spread of techniques and ideas is supported by the evidence in this thesis, it has also been suggested that differences in the way in which these techniques are used cannot be excluded. In fact some, although not conclusive evidence has been presented to support that view.

The most fruitful research in future will be to examine this issue more directly. In the particular case of the data looked at in this thesis, it will be to seek to explain the way that selection techniques are actually used not only in large firms but small sized firms. This might imply the use of different approaches and designs in conducting research such as employing a Case study methodology. This approach is likely to reveal more about the complexity of the interaction between the spread of ideas and the importance of culture.

In sum, the findings of this study will contribute to the existing knowledge in the literature of International HRM in general, and in the literature of managerial selection techniques and practices of developing countries, in particular. Although a few studies have attempted to illustrate the recruitment selection practices of different types of firms operating in developing countries, such as in Thailand and in Hong Kong, there was a specific gap in the empirical knowledge of techniques and practices used to select managers in other developing countries

particularly in Peninsular Malaysia. The findings of this study, thus have contributed, at least to some extent, to fill this knowledge gap.

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APPENDICES

Summary of Managerial selection studies in the West

Study	Purpose
<p>(United Kingdom) Kingston (1971)</p> <p>Gill (1980)</p> <p>Robertson and Makin (1986)</p> <p>Bevan and Fryatt (1988)</p> <p>Bastos (1990)</p> <p>Shackleton and Newell (1991)</p>	<p>Study reports on the management practices in recruiting senior personnel. It is about the selection and recruitment of executive directors, senior and middle managers and sopecialist staff</p> <p>Study examines executive recruitment and selection practices. It examine aspect such as : who is involved in various stages of recruitment and selection, sources of recruitment, extent of their use, attitudes towards different sources and average time taken to fill vacancy. Looks at what typical job advertisement contains, the interview, use of different selection methods, attitudes towards them, qualities looked for in assessing candidates and direct costs of recruitment</p> <p>Study on techniques used for managerial selection</p> <p>Study investigates the pattern of recruitment and selection practices in managerial and non managerial occupations</p> <p>Study reports on the usage of managerial selection techniques in firms with different backgrounds and sizes</p> <p>Study compares the methods used to select managers in UK and France. It also compares the changes over time in the use of management selection methods in UK by Robertson and Makin (1986) in 1984.</p>
<p>(USA) Marsden (1994)</p>	<p>Study of methods used by employers to screen and select new employees for both managerial/administrative and non managerial occupations</p>
<p>(Australia) Patrickson and Haydon (1988)</p> <p>Vaughan and Mclean (1989)</p>	<p>Study reports the selection practices for managerial staff including first line supervisors in South Australia and addresses several questions : (I) whether the number of selection procedures used within a firm increases with the level of management vacancy (ii) whether there is greater reliance on more professional procedures for more senior vacancies either administered internally or through external consultants (iii) whether there are major differences between selection practices of large and small organisation.</p> <p>Study reports on a survey of management selection practices among Australian business firms and discusses the conclusions that can be drawn from it about the quality of Australian business management</p>

Summary of Managerial selection studies in the West (contd)

Study	Purpose
(New Zealand) Harris, N.T. (1989)	Study of the perceived validity and reported use of management selection methods in New Zealand organisations
Taylor et.al (1993)	Study reports on the selection methods used by New Zealand personnel consulting firms in management and non management positions and explains why practitioners used a particular method

Perceptions or beliefs concerning selection techniques

Selection techniques	Perceptions or beliefs
Application form/cv	<ul style="list-style-type: none"> • Ability to filter out unsuitable candidate (Bevan and Fryatt, 1988) • Speed and ease of use (Bevan and Fryatt, 1988; Bastos, 1990) • 'Tradition' - employed only as a basis for compiling personnel records (Bevan and Fryatt, 1988) • Predict subsequent performance (Bevan and Fryatt, 1988; Bastos, 1990) • Less costly and highly acceptable to applicants (Bastos, 1990)
Interview	<ul style="list-style-type: none"> • Ability to filter out unsuitable candidate (Bevan and Fryatt, 1988) • Usefulness in ensuring work group compatibility (Bevan and Fryatt, 1988) • Predict subsequent performance (Bevan and Fryatt, 1988; Bastos, 1990) • 'Tradition' - employed usually as part of the selection process (Bevan and Fryatt, 1988) • Necessary part of the hiring process (Dakin and Armstrong, 1989) • Less costly (Bevan and Fryatt, 1988; Bastos, 1990) • Objective and unbiased (Bevan and Fryatt, 1988) • Very easy to use and highly acceptable to applicant (Bastos, 1990)
References	<ul style="list-style-type: none"> • Ability to filter out unsuitable candidate (Bevan and Fryatt, 1988) • Predict subsequent performance (Bevan and Fryatt, 1988; Bastos, 1990) • Objective and unbiased (Bevan and Fryatt, 1988) • Very easy to use and less costly (Bastos, 1990)
Psychological (cognitive)	<ul style="list-style-type: none"> • Objective and unbiased (Bevan and Fryatt, 1988) • Predict subsequent performance (Bevan and Fryatt, 1988; Bastos, 1990) • Useful as a filtering mechanism (Bevan and Fryatt, 1988) • Moderately easy to use and acceptable to applicants (Bastos, 1990) • Not relevant to the industry, organisation or post (Taylor et.al, 1993) • Expensive (Bevan and Fryatt, 1988; Toplis et.al, 1988; Bastos, 1990; Taylor et.al, 1993) • Developing this technique is not a priority (Taylor et.al, 1993) • Have limited resources or personnel to employ this technique (Taylor et.al, 1993) • It is not readily available (Taylor et.al, 1993) • Difficulty in administering and interpreting (Bevan and Fryatt, 1988) • Not acceptable to applicant (Toplis et.al, 1988)

Perceptions or beliefs concerning selection techniques (contd)

Selection techniques	Perceptions or beliefs
Psychological (personality)	<ul style="list-style-type: none"> • Ability to predict work group compatibility and to filter out unsuitable candidates (Bevan and Fryatt, 1988) • Ability to measure a particular trait/aptitude/ability and that these trait/aptitude/ability measured is related to job success (Taylor et.al, 1993) • Can provide additional unique information not obtainable through other selection techniques (Taylor et.al, 1993) • Ability to improve the validity of selection system (Taylor et.al, 1993) • Moderately easy to use, acceptable to applicants and moderately high in predicting subsequent performance (Bastos, 1990) • Personality is a critical feature for carrying out many jobs well especially in managerial position (Smith and George, 1992) • Have limited resources or qualified personnel to employ this technique (Taylor et.al, 1993) • Expensive (Toplis et.al, 1988; Taylor et.al, 1993; Bastos, 1990) • Other selection techniques can also provide the same information (Taylor et.al, 1993) • Difficulty in administering and interpreting (Bevan and Fryatt, 1988) • Not acceptable to applicant (Toplis et.al, 1988)
Assessment Centre	<ul style="list-style-type: none"> • Moderately easy to use, moderately acceptable to applicant and very high accuracy in predicting subsequent performance (Bastos, 1990) • Expensive (Taylor et.al, 1993; Bastos, 1990) • Have limited resources or qualified personnel to implement this technique (Taylor et.al, 1993) • Not relevant to industry, organisation or post and it is not readily available to the firm (Taylor et.al, 1993) • Developing this technique is not a priority (Taylor et.al, 1993)
Biodata	<ul style="list-style-type: none"> • Difficult to administer (Bastos, 1990) • Moderately low acceptability to applicant (Bastos, 1990) • Moderately low accuracy in predicting subsequent performance (Bastos, 1990)

Perceptions or beliefs concerning selection techniques (contd)

Selection techniques	Perceptions or beliefs
Graphology	<ul style="list-style-type: none">• Difficult to use (Bastos, 1990)• Low acceptability to applicant (Bastos, 1990)• Low accuracy in predicting subsequent performance (Bastos, 1990)
Astrology	<ul style="list-style-type: none">• Difficult to use (Bastos, 1990)• Low acceptability to applicant (Bastos, 1990)• Low accuracy in predicting subsequent performance (Bastos, 1990)

Hofstede's country clusters and their cultural characteristics

<p>1. More developed Latin (High power distance, high uncertainty avoidance, high individualism, medium masculinity)</p>	<p>2. Less developed Latin (High power distance, high uncertainty avoidance, low individualism, whole range of masculinity)</p>
<p>Belgium France Argentina Brazil Spain</p>	<p>Columbia Mexico Venezuela Chile Peru Portugal Yugoslavia</p>
<p>3. More developed Asian (Medium power distance, high uncertainty avoidance, medium individualism, high masculinity)</p>	<p>4. Less developed Asian (High power distance, low uncertainty avoidance, low individualism, medium masculinity)</p>
<p>Japan</p>	<p>Pakistan Taiwan Thailand Hong Kong India Phillipines Singapore</p>
<p>5. Near Eastern (High power distance, high uncertainty avoidance, low individualism, medium masculinity)</p>	<p>6 Germanic (Lower power distance, high uncertainty avoidance, medium individualism, high masculinity)</p>
<p>Greece Iran turkey</p>	<p>Austria Israel Germany South Africa Italy</p>
<p>7 Anglo (Low power distance, low to medium uncertainty avoidance, high individualism, high masculinity)</p>	<p>8. Nordic (Low power distance, low to medium uncertainty avoidance, medium individualism, low masculinity)</p>
<p>Australia Canada UK Ireland New Zealand USA</p>	<p>Denmark Finland Netherlands Norway Sweden</p>

Source : G. Hofstede (1980) *Culture's consequences : International Differences in Work Related Values* Sage, p. 336

Placement of Pacific Rim Countries on Hofstede's Four Dimensions

<p><u>Low</u> New Zealand Australia</p>	<p>POWER DISTANCE <u>Medium</u> Japan Taiwan Korea</p>	<p><u>High</u> Thailand Hong Kong Singapore Indonesia Phillipines Malaysia</p>
<p><u>Strong</u> Korea Japan</p>	<p>UNCERTAINTY AVOIDANCE <u>Medium</u> Thailand Taiwan Australia New Zealand Indonesia Phillipines</p>	<p><u>Weak</u> Singapore Hong Kong Malaysia</p>
<p><u>High</u> Australia New Zealand</p>	<p>INDIVIDUALISM (Vs.COLLECTIVISM) <u>Medium</u> Japan</p>	<p><u>Low</u> Phillipines Malaysia Hong Kong Singapore Thailand Korea Taiwan Indonesia</p>
<p><u>High</u> Japan Phillipines Australia New Zealand</p>	<p>MASCULINITY (Vs. FEMINITY) <u>Medium</u> Hiong Kong Singapore Indonesia Taiwan Malaysia</p>	<p><u>Low</u> Thailand Korea</p>

Source : R. Moore and S. T. Ishak "The influence of culture on Recruitment and Training". *Research in Personnel and Human Resources Managemnt* Wiley, p.282

Sample Letter For Access And Cooperation In Survey

**TEXT BOUND
INTO
THE SPINE**



UNIVERSITI TEKNOLOGI MALAYSIA
 KARUNG BERKUNCHI 791
 80990 SKUDAI JOHOR BAHRU
 JOHOR DARUL TA'ZIM
 TEL : 07 - 5576160/1/2/3
 FAX : 07 - 5566911
 KAWAT : UNITEKMA
 TELEX : MA 60205

FAKULTI PENGURUSAN DAN PEMBANGUNAN SUMBER MANUSIA

Dear Sir/ Madam,

REQUEST FOR ACCESS AND CO - OPERATION TO CONDUCT SURVEY

I am a PhD student at the Department of Management & Organisation, University of Stirling, Scotland. I will be conducting a survey on managerial selection practices of organisations in Malaysia. This survey requires information from key manager/personnel responsible for the selection process in your organisation. It is hope that this survey will not only expand the knowledge of the subject under study, but also contribute to the improvement of managerial selection process in the Malaysian industry.

I am writing to request for your assistance in allowing me to conduct this survey with your organisation. The questionnaire used in this survey has been designed to take about 20 - 25 minutes of your time. I will like to ensure you that the information gathered is strictly for academic research. It will be treated confidentially and presented only in aggregate statistical forms. The analysis of data will not reveal any organisation's name. Instead, a serial number will be used as reference. This research will also benefit your organisation since all respondents will obtain a copy of the final results of the survey.

For your information, I will be in Malaysia from February 1996 to May 1996 to conduct this survey and will make a phone call to your personnel manager within this period.

I look forward for your earliest approval and co-operation in this survey.

Thank you.

Yours sincerely,

Hishamuddin Md. Som

Mr. Hishamuddin Md. Som

Sample Cover Fax

**UNIVERSITI TEKNOLOGI MALAYSIA
KARUNG BERKUNCHI 791
80990 JOHOR BAHRU
NEGERI JOHOR DARUL TA'ZIM**

TELEFON : 07 - 5576160 KAWAT : UNITEKMA TELEX : MA 60205 TELEFAX : 07 - 5566911

**FAKULTI PENGURUSAN DAN PEMBANGUNAN SUMBER MANUSIA
BORANG TELEFAKS**

**TO : TEXAS INSTRUMENTS(M) SDN BHD
1 LORONG ENGGANG 33 AMPANG
ULU KLANG FREE TRADE ZONE
54200 KUALA LUMPUR
SELANGOR
(ATTENTION : PERSONNEL MANAGER, PUAN ZAWIYAH)**

**APPOINTMENT : PERSONAL INTERVIEW (TENTATIVE)
APRIL 12, (10.00 A.M..)**

FAX NO : 03-4515767

**FROM : MR.HISHAMUDDIN MD.SOM
PENSYARAH, JABATAN PENGURUSAN
FPPSM, UTM SKUDAI
JOHOR**

FAX NO: 07-5566911

**NO.OF PAGES : 3
(Including the front page)**

Sample Cover Letter



UNIVERSITI TEKNOLOGI MALAYSIA
KARUNG BERKUNCHI 791
80990 SKUDAI JOHOR BAHRU
JOHOR DARUL TA'ZIM
TEL : 07 - 5576160/1/2/3
FAX : 07 - 5566911
KAWAT : UNITEKMA
TELEX : MA 60205

FAKULTI PENGURUSAN DAN PEMBANGUNAN SUMBER MANUSIA

Dear Sir/ Madam,

I am a PhD student at the Department of Management & Organisation, University of Stirling, Scotland. Currently I am conducting a survey on managerial selection practices of organisations in Malaysia. This survey requires information from key manager/personnel responsible for the selection process in your organisation. It is hope that this survey will not only expand the knowledge of the subject under study, but also contribute to the improvement of managerial selection process in the Malaysian industry.

I will be very grateful if you can help me by responding to all the questions in the attached questionnaire. It has been designed to take about 20 - 25 minutes of your time. I will like to ensure you that the information gathered is strictly for academic research. It will be treated confidentially and presented only in aggregate statistical forms. The analysis of data will not reveal any organisation's name. Instead, a serial number will be used as reference. This research will also benefit your organisation since all respondents will obtain a copy of the final results of the survey.

Please return the completed questionnaire within two weeks by using the self - addressed envelope provided.

I look forward to your earliest response and deeply appreciate your co - operation in this survey.

Thank you for your time.

Yours sincerely,

Hishamuddin Md. Som

Mr. Hishamuddin Md. Som

Sample Letter From Supervisor



**UNIVERSITY
OF
STIRLING**

STIRLING FK9 4LA SCOTLAND
TELEPHONE 01786 473171
FACSIMILE 01786 463000

Professor M P Jackson
DEPUTY PRINCIPAL
Telephone 01786 467013

15 January 1996

TO WHOM IT MAY CONCERN

Dear Sir,

Mr Hishamuddin Md. Som is a PhD student at the University of Stirling undertaking research on managerial selection techniques and practices. His work should be of particular benefit in furthering knowledge of the way such techniques are used in Malaysia, although it should also have more general applicability.

I would be most grateful if you could offer Mr Hishamuddin Md. Som assistance with his work. I can assure you that the material he collects will be treated in confidence. It would only be reported in aggregate statistical form.

Yours faithfully,

A handwritten signature in black ink, appearing to read 'M P Jackson', with a long horizontal stroke extending to the right.

Professor M P Jackson
Deputy Principal

Sample Survey Questionnaire

SURVEY QUESTIONNAIRES

INFORMATION GIVEN IN THIS QUESTIONNAIRE WILL BE TREATED CONFIDENTIALLY AND PRESENTED ONLY IN AGGREGATE STATISTICAL FORMS.

ALL RESPONDENTS WILL OBTAIN A COPY OF THE FINAL RESULTS OF THIS SURVEY. PLEASE RETURN THIS QUESTIONNAIRE WITHIN TWO WEEKS BY USING THE SELF - ADDRESSED ENVELOPE PROVIDED.

MANAGEMENT SELECTION STUDY

MANAGEMENT SELECTION QUESTIONNAIRE

BACKGROUND OF COMPANY

SERIAL NO : _____

A. Please tick the appropriate box that best represents your organisation

I. Nationality of parent company :

1.Malaysian	
2.American	
3.Anglo - Dutch	
4.British	
5.German	
6.Japanese	
7.Taiwanese	
8.Other (please state) _____	

II. If the nationality of your parent company is **Malaysian**, please tick the box that best represents the forms of ownership of your parent company.

1.Family - owned Bumiputra	
2.Family - owned Chinese	
3.Family - owned Indian	
4.Bumiputra owned	
5.Chinese owned	
6.Indian owned	
7.Other (please state) _____	

Appendix 4.5

B. Please tick the appropriate box that best represents your organisation

I. Types of sectors/organisation:

<u>SERVICES</u>	
1. Commercial Banks	
2. Merchant Banks	
3. Finance Companies	
4. Other (please state) _____	

<u>MANUFACTURING</u>	
5. Basic metal industries	
6. Beverage	
7. Chemicals	
8. Electrical & Electronics	
9. Fabricated Metal Industries	
10. Food	
11. Machinery & Equipment	
12. Non - metallic mineral products	
13. Paper	
14. Petroleum & Coal	
15. Plastic	
16. Rubber	
17. Textile	
18. Tobacco	
19. Wood	
20. Other (please state) _____	

Appendix 4.5

C. Please fill in the blanks based on your estimates and where appropriate tick the bracket that best represents your organisation.

I. Location : () Kuala Lumpur and Selangor () Johor () Penang

II. No. of years operating in Malaysia : _____ years _____ months

III. No. of employees (only full - time and permanent) of the organisation as a whole in Malaysia : _____

IV. Do any trade unions or staff associations organised in your firm in Malaysia?
() Yes () No

If yes, please indicate the no. of employees (only full - time and permanent) in different occupational groups in Malaysia who are members of a trade union or staff association :

_____ (manual) _____ (clerical) _____ (supervisory/managerial)

If yes, have the selection techniques chosen by your firm to select managers been influenced by the presence of these trade unions or staff associations?

() Yes () No

If yes, do you recognise these trade unions or staff associations for bargaining purposes?

() Yes () No

V. Is there a specialized recruitment and selection function in your personnel department?
() Yes () No

If yes, please indicate the number of staff employed in this function: _____

If yes, this function is: () centralized () decentralized

If yes, please indicate the no. of staff in this function who are members of any one of the HRM professional associations: _____

VI. Have the selection techniques chosen by your firm to select managers been influenced by those used by other leading firms? () Yes () No

If yes, which kind of organisation? () Local () Foreign () Both, Local and Foreign

GENERAL INFORMATION

D. Please fill in the blanks, and where appropriate tick the box that pertains to you as the key manager/personnel responsible for selection process in your organisation.

I. Position/Dept : _____

II. Nationality :

1. Malaysian		2. American		3. British	
4. German		5. Anglo - Dutch		6. Japanese	
7. Taiwanese		8. Other (please state) _____			

III. If your nationality is **Malaysian**, please indicate your ethnic group:

1. Bumiputra		2. Chinese		3. Indian	
4. Other (please state) _____					

IV. Your highest level of formal education :

<u>LOCAL</u> 1. Diploma or equivalent		<u>OVERSEAS</u> 6. Diploma or equivalent	
2. Bachelor's degree or equivalent		7. Bachelor's degree or equivalent	
3. Master's degree or equivalent		8. Master's degree or equivalent	
4. PhD		9. PhD	
5. Other (please specify) _____		10. Other (please specify) _____	

V. No. of years experience in a personnel function :

1. Present firm : _____ years _____ months

2. Other local firms : _____ years _____ months

3. Other foreign - owned firms : _____ years _____ months

SELECTION METHODS

DEFINITIONS :

In this survey, methods of selecting managers in Malaysian industry are being investigated. For the sake of uniformity, four levels of management have been broadly defined. Although these definitions may not entirely coincide with your own as regards to selection, answering within the framework of these four groups would be appreciated :

Senior Managers - This is the decision making level which includes Managing Directors, General Managers & Executive Directors. This level is responsible for a major function and reports to a member of the board.

Middle Managers - This is the decision making level which includes Deputies & Assistants to Senior Managers.

Junior Managers - This is the execution & implementation level which includes Heads of Department & Sections. Managers at this level can either report directly to the Senior or Middle Manager.

Trainees - This level includes staff receiving management training. During the process, they may hold managerial/supervisory posts in order to gain experience. Managers at this level normally report to Junior Managers.

E. Please complete the table as accurately as possible based on your estimates.

Position	No. of managers employed in 1995	Total no.of managerial vacancies in 1995	Total no. of applications for all managerial post filled in 1995	Total no. of managers recruited in 1995
Senior				
Middle				
Junior				
Trainee				

Appendix 4.5

SELECTION METHODS (Example)

Please fill in the next table with the selection method codes e.g if you select trainees using application forms & references in the first stage, and interviews on the second stage, **A & R** should go on line 1 and **I** on line 2. If you evaluated 100 candidates & accepted 40 to the second stage, and from this 40 selected a final 10, this would result in a table as shown below.

POST OF TRAINEE

Stages of selection	Normal selection methods in order of use (may be more than one at each stage)	Average no. evaluated at this stage per year	Average no. Progressed/accepted to next stage per year
1	A,R	100	40
2	I	40	10
3			

SELECTION METHOD CODES (Codes as shown in bold letters to be used in Table to indicate the selection methods normally employed by your firm)

I Interview

A Application Forms

CV Curriculum Vitae

B Biodata (i.e. extensive structured biodata questionnaire)

Biodata- Information pertaining to applicant's personal history is given a mathematical weight to produce a 'score'

R References

H Handwriting analysis

AS Astrology (Astrology - involves linking the sign of an individual's zodiac and that individual's character, development, profession, marriage and general life history)

PC Psychological Tests (Cognitive - Aptitude, Mental Ability)

PP Psychological Tests (Personality)

AC Assessment Centre (Assessment Centre - is a selection procedure involving: (i) variety of assessment techniques such as psychological tests, work simulations situations and interviews, etc (ii) several assessors/observers involved (iii) assessment made on a number of dimensions (iv) several candidates)

SELECTION METHODS (continued)

F. Please tick the bracket that best represents the position in your organisation. Also please fill in the table based on your estimates using the selection method codes given :

I. Does your firm use external specialists /consultants to select **senior managers**?

- () Yes, use external specialists/consultants to select **all** senior managers
- () Yes, use external specialists/consultants to select **some** senior managers
- () No

II. If yes, who generally makes the decision to use external specialists/consultants?

- () Managing Director () Director () Head of personnel () Other, please state _____
- () Not applicable (do not use them)

III. Does your firm use any of the techniques listed in the selection method codes below to select **senior managers**? () Yes () No

If yes, please fill in the table based on your estimates with the selection method codes given :

TABLE 1 : POST OF SENIOR MANAGER

Average of the last 5 years

*Stages of Selection	Normal selection methods in order of use (may be more than one at each stage)	Average no. evaluated at this stage per year	Average no. progressed/accepted to next stage per year
1			
2			
3			
4			
5			

* Please add more stages if necessary

SELECTION METHOD CODES (Codes as shown in bold letters to be used in Table 1 to indicate the selection methods normally employed by your firm in the selection of senior manager)

I Interview

A Application Forms

CV Curriculum Vitae

B Biodata (i.e. extensive structured biodata questionnaire)
Biodata- Information pertaining to applicant's personal history is given a mathematical weight to produce a 'score'

R References

H Handwriting analysis

AS Astrology (Astrology - involves linking the sign of an individual's zodiac and that individual's character, development, profession, marriage and general life history)

PC Psychological Tests (Cognitive - Aptitude, Mental Ability)

PP Psychological Tests (Personality)

AC Assessment Centre (Assessment Centre - is a selection procedure involving: (i) variety of assessment techniques such as psychological tests, work simulations situations and interviews, etc (ii) several assessors/observers involved (iii) assessment made on a number of dimensions (iv) several candidates)

SELECTION METHODS (continued)

Appendix 4.5

I. Does your firm use external specialists /consultants to select **middle managers**?

- () Yes, use external specialists/consultants to select **all** middle managers
- () Yes, use external specialists/consultants to select **some** middle managers
- () No

II. If yes, who generally makes the decision to use external specialists/consultants?

- () Managing Director () Director () Head of personnel () Other, please state _____
- () Not applicable (do not use them)

III. Does your firm use any of the techniques listed in the selection method codes below to select **middle managers**? () Yes () No

If yes, please fill in the table based on your estimates with the selection method codes given :

TABLE 2 : POST OF MIDDLE MANAGER

Average of the last 5 years

*Stages of Selection	Normal selection methods in order of use (may be more than one at each stage)	Average no. evaluated at this stage per year	Average no. progressed/accepted to next stage per year
1			
2			
3			
4			
5			

* Please add more stages if necessary

SELECTION METHOD CODES (Codes as shown in bold letters to be used in Table 2 to indicate the selection methods normally employed by your firm in the selection of middle manager)

I Interview

A Application Forms

CV Curriculum Vitae

B Biodata (i.e. extensive structured biodata questionnaire)

Biodata- Information pertaining to applicant's personal history is given a mathematical weight to produce a 'score'

R References

H Handwriting analysis

AS Astrology (Astrology - involves linking the sign of an individual's zodiac and that individual's character, development, profession, marriage and general life history)

PC Psychological Tests (Cognitive - Aptitude, Mental Ability)

PP Psychological Tests (Personality)

AC Assessment Centre (Assessment Centre - is a selection procedure involving: (i) variety of assessment techniques such as psychological tests, work simulations situations and interviews, etc (ii) several assessors/observers involved (iii) assessment made on a number of dimensions (iv) several candidates)

Appendix 4.5

SELECTION METHODS (continued)

I. Does your firm use external specialists /consultants to select **junior managers**?

- () Yes, use external specialists/consultants to select **all** junior managers
 () Yes, use external specialists/consultants to select **some** junior managers
 () No

II. If yes, who generally makes the decision to use external specialists/consultants?

- () Managing Director () Director () Head of personnel () Other, please state _____
 () Not applicable (do not use them)

III. Does your firm use any of the techniques listed in the selection method codes below to select **junior managers**? () Yes () No

If yes, please fill in the table based on your estimates with the selection method codes given :

TABLE 3 : POST OF JUNIOR MANAGER

Average of the last 5 years

*Stages of Selection	Normal selection methods in order of use (may be more than one at each stage)	Average no. evaluated at this stage per year	Average no. progressed/accepted to next stage per year
1			
2			
3			
4			
5			

* Please add more stages if necessary

SELECTION METHOD CODES (Codes as shown in bold letters to be used in Table 3 to indicate the selection methods normally employed by your firm in the selection of junior manager)

I Interview

A Application Forms

CV Curriculum Vitae

B Biodata (i.e. extensive structured biodata questionnaire)

Biodata- Information pertaining to applicant's personal history is given a mathematical weight to produce a 'score'

R References

H Handwriting analysis

AS Astrology (Astrology - involves linking the sign of an individual's zodiac and that individual's character, development, profession, marriage and general life history)

PC Psychological Tests (Cognitive - Aptitude, Mental Ability)

PP Psychological Tests (Personality)

AC Assessment Centre (Assessment Centre - is a selection procedure involving: (i) variety of assessment techniques such as psychological tests, work simulations situations and interviews, etc (ii) several assessors/observers involved (iii) assessment made on a number of dimensions (iv) several candidates)

SELECTION METHODS (continued)

I. Does your firm use external specialists /consultants to select trainees?

- () Yes, use external specialists/consultants to select all trainees
- () Yes, use external specialists/consultants to select some trainees
- () No

II. If yes, who generally makes the decision to use external specialists/consultants?

- () Managing Director () Director () Head of personnel () Other, please state _____
- () Not applicable (do not use them)

III. Does your firm use any of the techniques listed in the selection method codes below to select trainees? () Yes () No

If yes, please fill in the table based on your estimates with the selection method codes given :

TABLE 4 : POST OF TRAINEE

Average of the last 5 years

*Stages of Selection	Normal selection methods in order of use (may be more than one at each stage)	Average no. evaluated at this stage per year	Average no. progressed/accepted to next stage per year
1			
2			
3			
4			
5			

* Please add more stages if necessary

SELECTION METHOD CODES (Codes as shown in bold letters to be used in Table 4 to indicate the selection methods normally employed by your firm in the selection of trainee)

I Interview

A Application Forms

CV Curriculum Vitae

B Biodata (i.e. extensive structured biodata questionnaire)
Biodata- Information pertaining to applicant's personal history is given a mathematical weight to produce a 'score'

R References

H Handwriting analysis

AS Astrology (Astrology - involves linking the sign of an individual's zodiac and that individual's character, development, profession, marriage and general life history)

PC Psychological Tests (Cognitive - Aptitude, Mental Ability)

PP Psychological Tests (Personality)

AC Assessment Centre (Assessment Centre - is a selection procedure involving: (i) variety of assessment techniques such as psychological tests, work simulations situations and interviews, etc (ii) several assessors/observers involved (iii) assessment made on a number of dimensions (iv) several candidates

INTERVIEWS (If used in selection)

G. Please tick the box that best represents your organisation.

I. Who is involved in interviewing managers?

Type of interviewer	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
1. Personnel Department				
2. Line Managers				
3. External specialists /consultants				
4. Internal specialist /consultants				
5. Other (please state) _____				

II. What forms of training have the interviewers received?

Forms of training for interviewers	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
1. Experience only				
2. Recognised professional qualifications				
3. None				
4. Other (please state)				

INTERVIEWS (continued)

H. Please fill in the table below using the codes given :

CODES

1 - never

2 - less than half of the applicants

3 - approximately half of the applicants

4 - more than half of the applicants

5 - always

TABLE 1

I. How often does your firm use these types of interview in selecting managers?

Type of interviews used	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
Open - ended *				
Structured **				
Job specific ***				

* predominantly open-ended discussion varying from candidate to candidate

** general standard format covering personal qualities & experience (e.g. Rodgers Seven Point Plan)

*** Format involving tailored questions drawn from detailed job analysis (e.g. Situational Interview)

TABLE 2

II. How often does your firm use these types of interview in selecting managers?

Number of interviews	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
One interview				
Several interviews				

INTERVIEWS (continued)

I. Please fill in the table below using the codes given.

CODES

- 1 - never
- 2 - less than half of the applicants
- 3 - approximately half of the applicants
- 4 - more than half of the applicants
- 5 - always

TABLE 3

III. How often does your firm use these types of interview in selecting managers?

Interview structure	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
One to one				
Two or three interviewers				
Panel interview				

TABLE 4

IV. How often does your firm involve these types of interviewers in selecting managers?

Type of interviewer	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
Personnel Department				
Line Managers				
External specialists /consultants				
Internal specialists /consultants				
Other (please state) _____				

SELECTION TECHNIQUES

J. Please fill in the table below using the codes given.

CODES

1 - never

2 - less than half of the applicants

3 - approximately half of the applicants

4 - more than half of the applicants

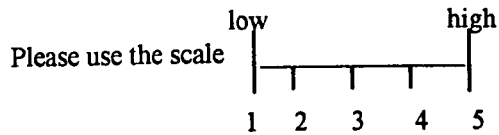
5 - always

I. How often does your firm use these selection techniques in selecting managers?

Selection techniques	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
Interviews				
Application forms				
Curriculum Vitae				
References				
Biodata				
Handwriting analysis				
Astrology				
Psychological tests (cognitive)				
Psychological tests (personality)				
Assessment Centre				

SELECTION TECHNIQUES (continued)

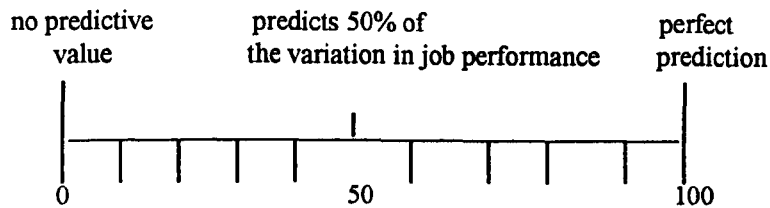
K. Please score all selection techniques (whether or not they are used by your firm) in relation to the features given below using a scale from 1(low) to 5 (high).



Selection techniques	Features					
	Cost	Degree of familiarity with the method	Ease of Use	Acceptability to applicants	Acceptability to decision makers	Other (please specify)
Open ended interview						
Structured interview						
Job specific interview						
Application forms						
Curriculum Vitae						
References						
Biodata						
Handwriting analysis						
Astrology						
Psychological tests (cognitive)						
Psychological tests (personality)						
Assessment Centre						

SELECTION TECHNIQUES (continued)

L. Please score all selection techniques (whether or not they are used by your firm) in relation to its accuracy in predicting managerial performance by using a scale from 0% (no predictive value) to 100% (perfect prediction)



Selection techniques	Features
	Accuracy in predicting managerial job performance
Open ended Interview	
Structured Interview	
Job specific Interview	
Application Forms	
Curriculum Vitae	
References	
Biodata	
Handwriting analysis	
Astrology	
Psychological tests (cognitive)	
Psychological tests (personality)	
Assessment Centre	

II. Please tick the bracket (as many as appropriate) that best represents your organisation

Has any of the following influence the selection techniques that your firm chose?

- () Local universities/institutions () Foreign universities/institutions () Local consultant firms
 () Foreign consultant firms () Private institutions () Other, please state _____

SUPPLEMENTARY(PSYCHOLOGICAL TESTS)

M. Please tick the bracket/box that best represents your organisation
COGNITIVE TESTS (Aptitude, Mental ability) :

I. Does your firm use psychological tests (cognitive) in selecting managers? () Yes () No

If yes, who assesses and interprets these psychological tests (cognitive)?

Assessors	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
1.Head of Personnel				
2.Other member of personnel dept.				
3.Departmental management				
4.In - house psychologist				
5.External psychologist				
6. Other (please state) _____				

II. If yes, what forms of training have assessors received?

Forms of Training for assessors	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
1.Experience only				
2.Recognised professional qualifications				
3.None				
4.Other (please state) _____				

III. If yes, do the psychological tests (cognitive) originate from the West? ()Yes () No

IV. If yes, do the psychological tests (cognitive) require modification to be used in Malaysia?
 () Yes () No

PSYCHOLOGICAL TESTS (continued)

N. Please tick the bracket/box that best represents your organisation

PERSONALITY TESTS :

I. Does your firm use psychological tests (personality) in selecting managers?

() Yes () No

If yes, who assesses and interprets these psychological tests (personality)?

Assessors	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
1.Head of Personnel				
2.Other member of personnel dept.				
3.Departmental management				
4.In - house psychologist				
5.External psychologist				
6. Other (please state) _____				

II. If yes, what forms of training have assessors received?

Forms of Training for assessors	Type of post under consideration			
	senior manager	middle manager	junior manager	trainee
1.Experience only				
2.Recognised professional qualifications				
3.None				
4.Other (please state) _____				

III. If yes, do the psychological tests (personality) originate from the West? ()Yes () No

IV. If yes, do the psychological tests (personality) require modification to be used in Malaysia?

() Yes () No

SUPPLEMENTARY(REFEREES AND MEDICAL TESTS)

**O. Please tick the bracket/box that best represents your organisation
POST OF SENIOR MANAGER**

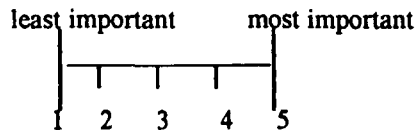
I. Are candidates requested to give the names of referees?

() Yes () No () No, but contact made with previous employer

II. If yes, how many? () 1 Referee () 2 Referees () 3 Referees () 4 or more referees

III. If yes, how important are the following categories of referees to you in the selection of senior managers ?

(please give a rating using the scale below)



1.Previous employer(s)	
2.Politicians/Well known figures	
3.Relatives employed in the organisation	
4.Other (please state) _____	

IV. If yes, when are these references taken up?

1.Before offer		3.Not taken up	
2.After acceptance of offer		4.Other (please state) _____	

V. Are candidates required to have a pre - entry medical test?

() No () Yes, by company doctor () Yes, by own doctor () Other, please state

SUPPLEMENTARY(REFEREES AND MEDICAL TESTS)

**P. Please tick the bracket/box that best represents your organisation
POST OF MIDDLE MANAGER**

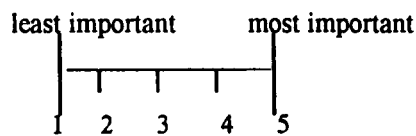
I. Are candidates requested to give the names of referees?

() Yes () No () No, but contact made with previous employer

II. If yes, how many? () 1 Referee () 2 Referees () 3 Referees () 4 or more referees

III. If yes, how important are the following categories of referees to you in the selection of middle managers?

(please give a rating using the scale below)



1.Previous employer(s)	
2.Politicians/Well known figures	
3.Relatives employed in the organisation	
4.Other (please state) _____	

IV. If yes, when are these references taken up?

1.Before offer		3.Not taken up	
2.After acceptance of offer		4.Other (please state) _____	

V. Are candidates required to have a pre - entry medical test?

() No () Yes, by company doctor () Yes, by own doctor () Other, please state

SUPPLEMENTARY(REFEREES AND MEDICAL TESTS)

**Q. Please tick the bracket/box that best represents your organisation
POST OF JUNIOR MANAGER**

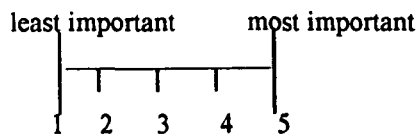
I. Are candidates requested to give the names of referees?

() Yes () No () No, but contact made with previous employer

II. If yes, how many? () 1 Referee () 2 Referees () 3 Referees () 4 or more referees

III. If yes, how important are the following categories of referees to you in the selection of junior managers?

(please give a rating using the scale below)



1.Previous employer(s)	
2.Politicians/Well known figures	
3.Relatives employed in the organisation	
4.Other (please state) _____	

IV. If yes, when are these references taken up?

1.Before offer		3.Not taken up	
2.After acceptance of offer		4.Other (please state) _____	

V. Are candidates required to have a pre - entry medical test?

() No () Yes, by company doctor () Yes, by own doctor () Other, please state

SUPPLEMENTARY(REFEREES AND MEDICAL TESTS)

R. Please tick the bracket/box that best represents your organisation
POST OF TRAINEE

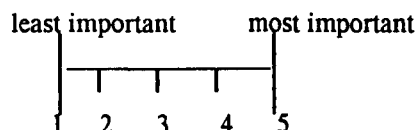
I. Are candidates requested to give the names of referees?

() Yes () No () No, but contact made with previous employer

II. If yes, how many? () 1 Referee () 2 Referees () 3 Referees () 4 or more referees

III. If yes, how important are the following categories of referees to you in the selection of trainees ?

(please give a rating using the scale below)



1.Previous employer(s)	
2.Politicians/Well known figures	
3.Relatives employed in the organisation	
4.Other (please state) _____	

IV. If yes, when are these references taken up?

1.Before offer		3.Not taken up	
2.After acceptance of offer		4.Other (please state) _____	

V. Are candidates required to have a pre - entry medical test?

() No () Yes, by company doctor () Yes, by own doctor () Other, please state

THANK YOU FOR YOUR TIME.

Sample Letter Of Reminder 1



UNIVERSITI TEKNOLOGI MALAYSIA
 KARUNG BERKUNCHI 791
 80990 SKUDAI JOHOR BAHRU
 JOHOR DARUL TA'ZIM
 TEL : 07 - 5576160/1/2/3 FAX : 07 - 5566911
 KAWAT : UNITEKMA TELEX : MA 60205

Dear Sir/ Madam,

MANAGERIAL SELECTION SURVEY

I am a PhD student at the Department of Management & Organisation, University of Stirling, Scotland. Between March to April 1996, I have sent a questionnaire for my survey on managerial selection practices of your organisation. To date, I have not received any response from your organisation.

Since this data for my survey is of paramount importance for me to complete my PhD, I earnestly hope that you will try your best to complete this questionnaire and send it to the self - addressed envelope attached with the questionnaire sent earlier to your organisation. The time spent in completing the questionnaire will also benefit your organisation since all respondents will obtain a copy of the final results of the survey.

I look forward to your earliest response and deeply appreciate your understanding and co-operation in this survey.

Thank you for your time.

Yours sincerely,

Hishamuddin Md. Som

Mr. Hishamuddin Md. Som

Management Dept. FPPSM
 Universiti Teknologi Malaysia
 80990 Skudai
 Johor Malaysia
 Tel : 07 - 5576160/1/2/3
 Fax : 07 - 5566911

Dept. of Management & Organization
 The School of Management
 University of Stirling
 Stirling FK9 4LA, Scotland
 Tel : 01786 - 467325
 Fax : 01786 - 467329

Sample Letter Of Reminder 2



UNIVERSITI TEKNOLOGI MALAYSIA
KARUNG BERKUNCHI 791
80990 SKUDAI JOHOR BAHRU
JOHOR DARUL TA'ZIM
TEL : 07 - 5576160/1/2/3 FAX : 07 - 5566911
KAWAT : UNITEKMA TELEX : MA 60205

Dear Sir/ Madam,

MANAGEMENT SELECTION STUDY

Between March to April 1996, I requested your assistance to complete my questionnaire titled "Management Selection Study". This questionnaire is for my PhD survey on managerial selection practices of large organisations in Malaysia. This survey only requires 'non - confidential' information from key manager or personnel responsible for the selection process in your organisation.

The purpose of writing to you for the second time is to kindly request you to forward the completed questionnaire by using the self - addressed envelope attached earlier with this questionnaire.

I understand that completing the questionnaire will take a little time, but I am sure that you will consider it time well spent since in return all respondents will obtain a copy of the final results of the survey. In addition, without this data I will not be able to successfully complete my PhD.

I look forward to your earliest response and would like to express my deepest gratitude for giving me some of your available time.

Thank you.

Yours sincerely,

Hishamuddin Md. Som

Mr. Hishamuddin Md. Som
Lecturer

Management Dept. FPPSM
Universiti Teknologi Malaysia
80990 Skudai
Johor Malaysia
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Dept. of Management & Organization
The School of Management
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Stirling FK9 4LA, Scotland
Tel : 01786 - 467325
Fax : 01786 - 467329

Sample Personal Interview Questionnaire

UNIVERSITI TEKNOLOGI MALAYSIA

“ MANAGEMENT SELECTION STUDY IN THE MALAYSIAN INDUSTRIES ”

THE PERSONAL INTERVIEW PLAN

The Interview Plan is a follow - up to the Management Selection Questionnaire which collected information on managerial selection practices in the Malaysian Industries.

-0-

SECTION A

- (1) Serial Number : _____
- (2) Sector : _____
- (3) Date of Interview : _____
- (4) Title of Manager Interviewed : _____

PERSONAL INTERVIEW

List Of Questions

QN. Why did your firm chose the selection techniques (currently used) to select managers?

QN. Do you consider these factors below to have influenced the selection techniques chosen by your firm to select managers?

- location of your firm (why, why not?)
- no. of applicants (why, why not?)
- trade unions or staff associations organise in your firm (why, why not?)
- specialized recruitment and selection function in your personnel department (why, why not?)
- centralized recruitment and selection function (perhaps at certain stage in the personnel department) (why, why not?)
- decentralized recruitment and selection function in the personnel department. (why, why not?)
- presence of leading firms in your area and if yes, wich firm - foreign, local or both? (why, why not?)
- working experience in other firms such as the key manager/personnel responsible for managerial selection process in your firm. (why, why not?)
- ideas, theories learnt during formal education. in HRM/Management (why, why not?)
- selection techniques or practices of parent company of your firm. (why, why not?)
- features of selection techniques and which selection techniques?(why, why not?)

Appendix 4.8

QN.Which selection techniques that originate from the west require modification to be used in Malaysia by your firm? (why, why not?)

QN.Are politicians/well known figures or relatives employed in your firm considered to be the most important referees in the selection of managers? (why, why not?)

QN.Has your firm considered using external specialists/consultants to select managers? (why, why not?)

QN.Has your firm considered the effectiveness of selection techniques currently used to select managers?(i.e.whether your firm have validated these selection techniques and whether your firm will consider validating these selection techniques in future) (why, why not?)

QN.Has your firm considered using a more reliable and valid selection techniques such as the biodata, psychological test and assessment centre? (why, why not?)

QN.Are there any plans for your firm to change the selection techniques currently used to select managers? (why, why not ?).What influence your firm to make plan for these changes?

Tables

TABLE A 1.1
Firms using selection techniques at each stage in selecting senior managers

Selection techniques	Stages			
	One	Two	Three	Four
Interview	2 (5.1)	34 (87.2)	20 (51.3)	1 (2.6)
Application Form	33 (84.6)	4 (10.3)		
CV	32 (82.1)	2 (5.1)		
Biodata				
Reference	13 (33.3)	7 (17.9)	12 (30.8)	
Cognitive test		1 (2.6)		
Personality test		5 (12.8)	4 (10.3)	
Assessment Centre			2 (5.1)	
Total firms using selection techniques	39	39	39	39

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE A 1.2
Firms using selection techniques at each stage in selecting middle managers

Selection techniques	Stages			
	One	Two	Three	Four
Interview	2 (4.8)	40 (95.2)	16 (38.1)	
Application Form	38 (90.5)	3 (7.1)		
CV	34 (81)	2 (4.8)		
Biodata				
Reference	12 (28.6)	6 (14.3)	12 (28.6)	
Cognitive test		1 (2.4)		
Personality test		6 (14.3)	4 (9.5)	
Assessment Centre		0 (0)	2 (4.8)	
Total firms using selection techniques	42	42	42	42

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE A 1.3
Firms using selection techniques at each stage in selecting junior managers

Selection techniques	Stages			
	One	Two	Three	Four
Interview	3 (6.4)	45 (95.7)	15 (31.9)	1 (2.1)
Application Form	43 (91.5)	3 (6.4)	0 (0)	0 (0)
CV	39 (83)	2 (4.3)	0 (0)	0 (0)
Biodata				
Reference	12 (25.5)	7 (14.9)	9 (19.1)	0 (0)
Cognitive test	0 (0)	1 (2.1)	1 (2.1)	0 (0)
Personality test	0 (0)	4 (8.5)	4 (8.5)	1 (2.1)
Assessment Centre	0 (0)	0 (0)	2 (4.3)	0 (0)
Total firms using selection techniques	47	47	47	47

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE A 1.4
Firms using selection techniques at each stage in selecting trainees

Selection techniques	Stages			
	One	Two	Three	Four
Interview	2 (5.3)	36 (94.7)	10 (26.3)	2 (5.3)
Application Form	36 (94.7)	2 (5.3)	0 (0)	0 (0)
CV	28 (73.7)	1 (2.6)	0 (0)	0 (0)
Biodata				
Reference	10 (26.3)	4 (10.5)	5 (13.2)	0 (0)
Cognitive test	1 (2.6)	3 (7.9)	1 (2.6)	0 (0)
Personality test	0 (0)	3 (7.9)	3 (7.9)	1 (2.6)
Assessment Centre	0 (0)	1 (2.6)	2 (5.3)	0 (0)
Total firms using selection techniques	38	38	38	38

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE A 2.1
Frequency and use of the interview method in the selection of senior managers

Types of interviews used	Never	< Half	Approx. Half	>Half	Always	Total firms
Open ended	3 [7.7]	2 [5.1]	1 [2.6]	2 [5.1]	31 [79.5]	39
Structured	14 [35.9]	4 [10.3]	0 [0]	8 [20.5]	13 [33.3]	39
Job specific	12 [30.8]	5 [12.8]	2 [5.1]	2 [5.1]	18 [46.2]	39
Number of interviews						
One interview	30 [76.9]	2 [5.1]	0 [0]	2 [5.1]	5 [12.8]	39
Several interviews	4 [10.3]	3 [7.7]	2 [5.1]	4 [10.3]	26 [66.7]	39
Interview structure						
One to one	24 [61.5]	3 [7.7]	0 [0]	4 [10.3]	8 [20.5]	39
Two or three interviewers	15 [38.5]	4 [10.3]	1 [2.6]	2 [5.1]	17 [43.6]	39
Panel interview	21 [53.8]	2 [5.1]	1 [2.6]	1 [2.6]	14 [35.9]	39
Type of interviewer						
Personnel Dept	4 [10.3]	3 [7.7]	0 [0]	3 [7.7]	29 [74.4]	39
Line Managers	21 [53.8]	5 [12.8]	0 [0]	3 [7.7]	10 [25.6]	39
Ext.sp./consultnt	24 [61.5]	7 [17.9]	1 [2.6]	1 [2.6]	6 [15.5]	39
Int. sp /consultants	35 [89.7]	1 [2.6]	0 [0]	0 [0]	3 [7.7]	39
MD/GM	18 [46.2]	0 [0]	0 [0]	0 [0]	21 [53.8]	39
Peers/colleagues	38 [97.4]	0 [0]	0 [0]	0 [0]	1 [2.6]	39

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A. 2.2
Frequency and use of the interview method in the selection of middle managers

Types of interviews used	Never	< Half	Approx. Half	>Half	Always	Total firms
Open ended	17 [16.7]	3 [7.1]	0 [0]	4 [9.5]	28 [66.7]	42
Structured	13 [31]	2 [4.8]	1 [2.4]	12 [28.6]	14 [33.3]	42
Job specific	10 [23.8]	4 [9.5]	2 [4.8]	3 [7.1]	23 [54.8]	42
Number of interviews						
One interview	29 [69]	3 [7.1]	2 [4.8]	2 [4.8]	6 [14.3]	42
Several interviews	6 [14.3]	2 [4.8]	4 [9.5]	3 [7.1]	27 [64.3]	42
Interview structure						
One to one	29 [69]	4 [9.5]	1 [2.4]	4 [9.5]	4 [9.5]	42
Two or three interviewers	7 [16.7]	4 [9.5]	2 [4.8]	5 [11.9]	24 [57.1]	42
Panel interview	26 [61.9]	2 [4.8]	1 [2.4]	2 [4.8]	11 [26.2]	42
Type of interviewer						
Personnel Dept	5 [11.9]	3 [7.1]	0 [0]	4 [9.5]	30 [71.4]	42
Line Managers	7 [16.7]	3 [7.1]	2 [4.8]	4 [9.5]	26 [61.9]	42
Ext.sp./consultnt	32 [76.2]	7 [16.7]	1 [2.4]	0 [0]	2 [4.8]	42
Int. sp/consultants	39 [92.9]	1 [2.4]	1 [2.4]	0 [0]	1 [2.4]	42
MD/GM	29 [69]	0 [0]	0 [0]	1 [2.4]	12 [28.6]	42
Peers/colleagues	41 [97.6]	0 [0]	0 [0]	0 [0]	1 [2.4]	42

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 2.3
Frequency and use of the interview method in the selection of junior managers

Types of interviews used	Never	< Half	Approx. Half	>Half	Always	Total
Open ended	8 [17]	4 [8.5]	1 [2.1]	3 [6.4]	31 [66]	47
Structured	12 [25.5]	1 [2.1]	4 [8.5]	10 [21.3]	20 [42.6]	47
Job specific	15 [31.9]	2 [4.3]	5 [10.6]	3 [6.4]	22 [46.8]	47
Number of interviews						
One interview	24 [51.1]	1 [2.1]	3 [6.4]	3 [6.4]	16 [34]	47
Several interviews	18 [47]	0 [0]	1 [2.6]	3 [7.9]	16 [42.1]	47
Interview structure						
One to one	28 [59.6]	6 [12.8]	2 [4.3]	3 [6.4]	8 [17]	47
Two or three interviewers	9 [19.1]	5 [10.6]	3 [6.4]	5 [10.6]	25 [53.2]	47
Panel interview	31 [66]	1 [2.1]	3 [6.4]	2 [4.3]	10 [21.3]	47
Type of interviewer						
Personnel Dept	3 [6.4]	0 [0]	2 [4.3]	2 [4.3]	40 [85.1]	47
Line Managers	6 [12.8]	1 [2.1]	2 [4.3]	5 [10.6]	33 [70.2]	47
Ext.sp./consultants	41 [87.2]	4 [8.5]	0 [0]	1 [2.1]	1 [2.1]	47
Int.sp/consultants	46 [97.9]	1 [2.1]	0 [0]	0 [0]	0 [0]	47
MD/GM	40 [85.1]	1 [2.1]	0 [0]	1 [2.1]	5 [10.6]	47
Peers/colleagues	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	47

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 2.4
Frequency and use of the interview method in the selection of trainees

Types of interviews used	Never	< Half	Approx. Half	>Half	Always	Total firms
Open ended	9 [23.7]	3 [7.9]	0 [0]	2 [5.3]	24 [63.2]	38
Structured	11 [28.9]	1 [2.6]	2 [5.3]	8 [21.1]	16 [42.1]	38
Job specific	13 [34.2]	2 [5.3]	4 [10.5]	3 [7.9]	16 [42.1]	38
Number of interviews						
One interview	18 [47.4]	1 [2.6]	0 [0]	3 [7.9]	16 [42.1]	38
Several interviews	18 [47.4]	0 [0]	1 [2.6]	3 [7.9]	16 [42.1]	38
Interview structure						
One to one	19 [50]	5 [13.2]	4 [10.5]	3 [7.9]	7 [18.4]	38
Two or three interviewers	12 [31.6]	5 [13.2]	2 [5.3]	4 [10.5]	15 [39.5]	38
Panel interview	25 [65.8]	3 [7.9]	0 [0]	2 [5.3]	8 [21.1]	38
Type of interviewer						
Personnel Dept	2 [5.3]	1 [2.6]	0 [0]	1 [2.6]	34 [89.5]	38
Line Managers	8 [21.1]	0 [0]	2 [5.3]	3 [7.9]	25 [65.8]	38
Ext.sp./consultants	35 [92.1]	2 [5.3]	0 [0]	0 [0]	0 [0]	38
Int. sp/consultants	37 [97.4]	1 [2.6]	0 [0]	0 [0]	0 [0]	38
MD/GM	34 [89.5]	2 [5.3]	0 [0]	0 [0]	2 [5.3]	38
Peers/colleagues	0 [0]	0 [0]	0 [0]	0 [0]	0 [0]	38

Note : Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 3.1
Breakdown of firms ownership and use of selection techniques
/stages involved in selecting senior managers

Forms of ownership	Selection techniques/no.stages involved in selecting senior managers					Total firms
	Used		Two Stages	Three stages	Four stages	
	Yes	No				
Malaysian	20 [95.2] (33.3)	1 [4.8] (1.7)	10 [50] (25.6)	10 [50] (25.6)		21 (35)
American	2 [33.3] (3.3)	4 [66.7] (6.7)		2 [100] (5.1)		6 (10)
Other foreign non Asian	9 [81.8] (15)	2 [18.2] (3.3)	1 [11.1] (2.6)	7 [77.8] (17.9)	1 [11.1] (2.6)	11 (18.3)
British	3 [75] (5)	1 [25] (1.7)	1 [33.3] (2.6)	2 [66.7] (5.1)		4 (6.7)
Japanese	3 [23.1] (5)	10 [76.9] (16.7)		3 [100] (7.7)		13 (21.7)
Other foreign Asian	2 [40] (3.3)	3 [60] (5)		2 [100] (5.1)		5 (8.3)
Total firms	39 (65)	21 (35)	12 (30.8)	26 (66.7)	1 (2.6)	60 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 3.2
Breakdown of firms ownership and use of selection techniques
/stages involved in selecting middle managers

Forms of ownership	Selection techniques/no. stages involved in selecting middle managers					
	Used		Two Stages	Three stages	Four stages	Total firms using the selection tech.
	Yes	No				
Malaysian	19 [90.5] (31.7)	2 [9.5] (3.3)	11 [57.9] (26.2)	8 [42.1] (19)		21 (35)
American	4 [66.7] (6.7)	2 [33.3] (3.3)	2 [50] (4.8)	2 [50] (4.8)		6 (10)
Other foreign non Asian	9 [81.8] (15)	2 [18.2] (3.3)	1 [11.1] (2.4)	8 [88.9] (19)		11 (18.3)
British	3 [75] (5)	1 [25] (1.7)	1 [33.3] (2.4)	2 [66.7]		4 (6.7)
Japanese	3 [23.1] (5)	10 [76.9] (16.7)		3 [100] (7.1)		13 (21.7)
Other foreign Asian	4 [80] (6.7)	1 [20] (1.7)	2 [50] (4.8)	2 [50] (4.8)		5 (8.3)
Total firms	42 (70)	18 (30)	17 (40.5)	25 (59.5)		60 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 3.3
Breakdown of firms ownership and use of selection techniques
/stages involved in selecting junior managers

Forms of ownership	Selection techniques/no. stages involved in selecting junior managers					Total firms using the selection tech.
	Used		Two Stages	Three stages	Four stages	
	Yes	No				
Malaysian	19 [90.5] (31.7)	2 [9.5] (3.3)	12 [63.2] (25.5)	7 [36.8] (14.9)		21 (35)
American	4 [66.7] (6.7)	2 [33.3] (3.3)	4 [100] (8.5)			6 (10)
Other foreign non Asian	11 [100] (18.3)		2 [18.2] (4.3)	9 [81.8] (19.1)		11 (18.3)
British	4 [100] (6.7)		1 [25] (2.1)	2 [50] (4.3)	1 [25] (2.1)	4 (6.7)
Japanese	5 [38.5] (8.3)	8 [61.5] (13.3)	1 [20] (2.1)	4 [80] (8.5)		13 (21.7)
Other foreign Asian	4 [80] (6.7)	1 [20] (1.7)	3 [75] (6.4)	1 [25] (2.1)		5 (8.3)
Total firms	47 (78.3)	13 (21.7)	23 (48.9)	23 (48.9)	1 (2.1)	60 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 3.4
Breakdown of firms ownership and use of selection techniques
/stages involved in selecting trainees

Forms of ownership	Selection techniques Used		No. stages involved in selecting trainees				Total Firms
	Yes	No	One	Two	Three	Four	
Malaysian	16 [76.2] (26.7)	5 [23.8] (8.3)	1 [6.3] (2.6)	9 [56.3] (23.7)	6 [37.5] (15.8)		21 (35)
American	5 [83.3] (8.3)	1 [16.7] (1.7)		5 [100] (13.2)			6 (10)
Other foreign non Asian	7 [63.6] (11.7)	4 [36.4] (6.7)		2 [28.6] (5.3)	4 [57.1] (10.5)	1 [14.3] (2.6)	11 (18.3)
British	3 [75] (5)	1 [25] (1.7)		1 [33.3] (2.6)	1 [33.3] (2.6)	1 [33.3] (2.6)	4 (6.7)
Japanese	4 [30.8] (6.7)	9 [69.2] (15)		1 [25] (2.6)	3 [75] (7.9)		13 (21.7)
Other foreign Asian	3 [60] (5)	2 [40] (3.3)		2 [66.7] (5.3)	1 [33.3] (2.6)		5 (8.3)
Total firms	38 (63.3)	22 (36.7)	1 (2.6)	20 (52.6)	15 (39.5)	2 (5.3)	60 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 4.1
Breakdown of firms ownership and selection techniques used to select senior managers

Forms of ownership	Total firms using sel/tech	Selection of senior managers										
		Intw	APF	CV	Selection techniques							
					Bdta	Ref	HW	AS	PC	PP	AC	
Malaysian	20 (51.3)	20 [100] (51.3)	19 [95] (48.7)	15 [75] (38.5)		17 [85] (43.6)					2 [10] (5.1)	
American	2 (5.1)	2 [100] (5.1)	2 [100] (5.1)	2 [100] (5.1)		2 [100] (5.1)						
Other foreign non Asian	9 (23.1)	9 [100] (23.1)	9 [100] (23.1)	9 [100] (23.1)		7 [77.8] (17.9)					4 [44.4] (10.3)	1 [11.1] (2.6)
British	3 (7.7)	3 [100] (7.7)	2 [66.7] (5.1)	3 [100] (7.7)		2 [66.7] (5.1)						1 [33.3] (2.6)
Japanese	3 (7.7)	3 [100] (7.7)	3 [100] (7.7)	3 [100] (7.7)		2 [66.7] (5.1)			1 [33.3] (2.6)		2 [66.7] (5.1)	
Other foreign Asian	2 (5.1)	2 [100] (5.1)	2 [100] (5.1)	2 [100] (5.1)		1 [50] (2.6)					1 [50] (2.6)	
Total firms	39 (100)	39 (100)	37 (94.9)	34 (87.2)	0 (0)	31 (79.5)	0 (0)	0 (0)	1 (2.6)	9 (23.1)	2 (5.1)	

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 4.2
Breakdown of firms ownership and selection techniques used to select middle managers

Forms of ownership	Total firms using sel/tech	Selection of middle managers										
		Intw	APF	CV	Selection techniques							
					Bdta	Ref	HW	AS	PC	PP	AC	
Malaysian	19 (45.2)	19 [100] (45.2)	19 [100] (45.2)	14 [73.7] (33.3)		17 [89.5] (40.5)					2 [10.5] (4.8)	
American	4 (9.5)	4 [100] (9.5)	4 [100] (9.5)	4 [100] (9.5)		2 [50] (4.8)						
Other foreign non Asian	9 (21.4)	9 [100] (21.4)	9 [100] (21.4)	9 [100] (21.4)		6 [66.7] (14.3)					4 [44.4] (9.5)	1 [11.1] (2.4)
British	3 (7.1)	3 [100] (7.1)	2 [66.7] (4.8)	3 [100] (7.1)		2 [66.7] (4.8)						1 [33.3] (2.4)
Japanese	3 (7.1)	3 [100] (7.1)	3 [100] (7.1)	3 [100] (7.1)		2 [66.7] (4.8)			1 [33.3] (2.4)		2 [66.7] (4.8)	
Other foreign Asian	4 (9.5)	4 [100] (9.5)	4 [100] (9.5)	3 [75] (7.1)		2 [50] (4.8)					2 [50] (4.8)	
Total firms	42 (100)	42 (100)	41 (97.6)	36 (85.7)	0 (0)	31 (73.8)	0 (0)	0 (0)	1 (2.4)	10 (23.8)	2 (4.8)	

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 4.3
Breakdown of firms ownership and selection techniques used to select junior managers

Forms of ownership	Total firms using sel/tech	Selection of junior managers										
		Intw	APF	CV	Selection techniques							
					Bdta	Ref	HW	AS	PC	PP	AC	
Malaysian	19 (40.4)	19 [100] (40.4)	19 [100] (40.4)	14 [73.7] (29.8)		15 [78.9] (31.9)					2 [10.5] (4.3)	
American	4 (8.5)	4 [100] (8.5)	4 [100] (8.5)	4 [100] (8.5)		3 [75] (6.4)						
Other foreign non Asian	11 (23.4)	11 [100] (23.4)	11 [100] (23.4)	11 [100] (23.4)		5 [45.5] (10.6)					3 [27.3] (6.4)	1 [9.1] (2.1)
British	4 (8.5)	4 [100] (8.5)	3 [75] (6.4)	4 [100] (8.5)		2 [50] (4.3)			1 [25] (2.1)		1 [25] (2.1)	1 [25] (2.1)
Japanese	5 (10.6)	5 [100] (10.6)	5 [100] (10.6)	5 [100] (10.6)		2 [40] (4.3)			1 [20] (2.1)		2 [40] (4.3)	
Other foreign Asian	4 (8.5)	4 [100] (8.5)	4 [100] (8.5)	3 [75] (6.4)		2 [50] (4.3)					1 [25] (2.1)	
Total firms	47 (100)	47 (100)	46 (97.9)	41 (87.2)	0 (0)	29 (61.7)	0 (0)	0 (0)	2 (4.3)		9 (19.1)	2 (4.3)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 4.4
Breakdown of firms ownership and selection techniques used to select trainees

Forms of ownership	Total firms using sel/tech	Selection of trainees									
		Intw	APF	CV	Selection techniques						AC
					Bdta	Ref	HW	AS	PC	PP	
Malaysian	16 (42.1)	15 [93.8] (39.5)	16 [100] (42.1)	8 [50] (21.1)	11 [68.8] (28.9)					2 [12.5] (5.3)	1 [6.3] (2.6)
American	5 (13.2)	5 [100] (13.2)	5 [100] (13.2)	4 [80] (10.5)	2 [40] (5.3)				1 [20] (2.6)		
Other foreign non Asian	7 (18.4)	7 [100] (18.4)	7 [100] (18.4)	7 [100] (18.4)	2 [28.6] (5.3)				1 [14.3] (2.6)	2 [28.6] (5.3)	1 [14.3] (2.6)
British	3 (7.9)	3 [100] (7.9)	3 [100] (7.9)	3 [100] (7.9)					1 [33.3] (2.6)	1 [33.3] (2.6)	1 [33.3] (2.6)
Japanese	4 (10.5)	4 [100] (10.5)	4 [100] (10.5)	4 [100] (10.5)	2 [50] (5.3)				1 [25] (2.6)	2 [50] (5.3)	
Other foreign Asian	3 (7.9)	3 [100] (7.9)	3 [100] (7.9)	2 [66.7] (5.3)	2 [66.7] (5.3)				1 [33.3] (2.6)		
Total firms	38 (100)	37 (97.4)	38 (100)	28 (73.7)	0 (0)	19 (50)	0 (0)	0 (0)	5 (13.2)	7 (18.4)	3 (7.9)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 5.1
Breakdown of Malaysian firms and selection techniques used in selecting senior managers

Forms of ownership	Total firms using sel/tech	Selection of senior managers									
		Intw	APF	CV	Bdta	Ref	HW	AS	PC	PP	AC
Family owned Bumi.											
Family owned Chinese	4 (20)	4 [100] (20)	4 [100] (20)	3 [75] (15)		4 [100] (20)					
Family owned Indian	1 (5)	1 [100] (5)	1 [100] (5)	1 [100] (5)						1 [100] (5)	
Bumiputra owned	10 (50)	10 [100] (50)	9 [90] (45)	7 [70] (35)		8 [80] (40)				1 [10] (5)	
Chinese owned	5 (25)	5 [100] (25)	5 [100] (25)	4 [80] (20)		5 [100] (25)					
Indian owned											
Total	20 (100)	20 (100)	19 (95)	15 (75)	0 (0)	17 (85)	0 (0)	0 (0)	0 (0)	2 (10)	0 (0)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 5.2
Breakdown of Malaysian firms and selection techniques used in selecting middle managers

Forms of ownership	Total firms using sel/tech	Selection of middle managers									
		Intw	APF	CV	Selection techniques						
					Bdta	Ref	HW	AS	PC	PP	AC
Family owned Bumi.											
Family owned Chinese	4 (21.1)	4 [100] (21.1)	4 [100] (21.1)	3 [75] (15.8)		4 [100] (21.1)					
Family owned Indian	1 (5.3)	1 [100] (5.3)	1 [100] (5.3)	1 [100] (5.3)						1 [100] (5.3)	
Bumiputra owned	9 (47.4)	9 [100] (47.4)	9 [100] (47.4)	7 [77.8] (36.8)		8 [88.9] (42.1)				1 [11.1] (5.3)	
Chinese owned	5 (26.3)	5 [100] (26.3)	5 [100] (26.3)	3 [60] (15.8)		5 [100] (26.3)					
Indian owned											
Total	19 (100)	19 (100)	19 (100)	14 (73.7)	0 (0)	17 (89.5)	0 (0)	0 (0)	0 (0)	2 (10.5)	0 (0)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 5.3
Breakdown of Malaysian firms and selection techniques used in selecting junior managers

Forms of ownership	Total firms using sel/tech	Selection of junior managers									
		Intw	APF	CV	Selection techniques			PC	PP	AC	
					Bdta	Ref	HW	AS			
Family owned Bumi.											
Family owned Chinese	4 (21.1)	4 [100] (21.1)	4 [100] (21.1)	3 [75] (15.8)		3 [75] (15.8)					
Family owned Indian	1 (5.3)	1 [100] (5.3)	1 [100] (5.3)	1 [100] (5.3)						1 [100] (5.3)	
Bumiputra owned	9 (47.4)	9 [100] (47.4)	9 [100] (47.4)	7 [77.8] (36.8)		7 [77.8] (36.8)				1 [11.1] (5.3)	
Chinese owned	5 (26.3)	5 [100] (26.3)	5 [100] (26.3)	3 [60] (15.8)		5 [100] (26.3)					
Indian owned											
Total	19 (100)	19 (100)	19 (100)	14 (73.7)	0 (0)	15 (78.9)	0 (0)	0 (0)	0 (0)	2 (10.5)	0 (0)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 5.4
Breakdown of Malaysian firms and selection techniques used in selecting trainees

Forms of ownership	Total firms using sel/tech	Selection of trainees									
		Intw	APF	CV	Selection techniques			PC	PP	AC	
					Bdta	Ref	HW	AS			
Family owned Bumi.											
Family owned Chinese	4 (25)	4 [100] (25)	4 [100] (25)	2 [50] (12.5)		2 [50] (12.5)					
Family owned Indian	1 (6.3)	1 [100] (6.3)	1 [100] (6.3)	1 [100] (6.3)						1 [100] (6.3)	
Bumiputra owned	8 (50)	7 [87.5] (43.8)	8 [100] (50)	4 [50] (25)		6 [75] (37.5)				1 [12.5] (6.3)	1 [12.5] (6.3)
Chinese owned	3 (18.8)	3 [100] (18.8)	3 [100] (18.8)	1 [33.3] (6.3)		3 [100] (18.8)					
Indian owned											
Total	16 (100)	15 (93.8)	16 (100)	8 (50)	0 (0)	11 (68.8)	0 (0)	0 (0)	0 (0)	12 (12.5)	1 (6.3)

Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent

TABLE A 6.1
Selection techniques by features (Cost) : all firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview	24 [40]	28 [46.7]	4 [6.7]	3 [5]	1 [1.7]	60
Structured interview	22 [36.7]	24 [40]	11 [18.3]	3 [5]		60
Job specific interview	22 [36.7]	20 [33.3]	13 [21.7]	2 [3.3]	3 [5]	60
Application forms	26 [43.3]	23 [38.3]	7 [11.7]	3 [5]	1 [1.7]	60
Curriculum Vitae	29 [48.3]	29 [48.3]	2 [3.3]			60
References	24 [40]	27 [45]	9 [15]			60
Biodata	3 [5]	2 [3.3]	32 [53.3]	21 [35]	2 [3.3]	60
Handwriting analysis	3 [5]	2 [3.3]	42 [70]	11 [18.3]	2 [3.3]	60
Astrology	3 [5]	2 [3.3]	40 [66.7]	9 [15]	6 [10]	60
Cognitive test		1 [1.7]	13 [21.7]	40 [66.7]	6 [10]	60
Personality test		1 [1.7]	11 [18.3]	41 [68.3]	7 [11.7]	60
Assessment centre			1 [1.7]	29 [48.3]	30 [50]	60

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 6.2
Selection techniques by features (degree of familiarity) : all firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview			3 [5]	21 [35]	36 [60]	60
Structured interview	2 [3.3]	1 [1.7]	11 [18.3]	20 [33.3]	26 [43.3]	60
Job specific interview	3 [5]	2 [3.3]	11 [18.3]	19 [31.7]	25 [41.7]	60
Application forms			2 [3.3]	11 [18.3]	47 [78.3]	60
Curriculum Vitae		2 [3.3]	4 [6.7]	13 [21.7]	41 [68.3]	60
References	2 [3.3]	9 [15]	9 [15]	15 [25]	25 [41.7]	60
Biodata	27 [45]	28 [46.7]	4 [6.7]		1 [1.7]	60
Handwriting analysis	47 [78.3]	11 [18.3]	1 [1.7]	1 [1.7]		60
Astrology	55 [91.7]	4 [6.7]			1 [1.7]	60
Cognitive test	30 [50]	4 [6.7]	15 [25]	7 [11.7]	4 [6.7]	60
Personality test	28 [46.7]	3 [5]	13 [21.7]	10 [16.7]	6 [10]	60
Assessment centre	34 [56.7]	8 [13.3]	12 [20]	1 [1.7]	5 [8.3]	60

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 6.3
Selection techniques by features (ease of use) : all firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview		2 [3.3]	2 [3.3]	14 [23.3]	42 [70]	60
Structured interview	2 [3.3]	1 [1.7]	7 [11.7]	25 [41.7]	25 [41.7]	60
Job specific interview	2 [3.3]	4 [6.7]	8 [13.3]	20 [33.3]	26 [43.3]	60
Application forms		1 [1.7]	2 [3.3]	10 [16.7]	47 [78.3]	60
Curriculum Vitae		2 [3.3]	5 [8.3]	12 [20]	41 [68.3]	60
References	1 [1.7]	8 [13.3]	12 [20]	14 [23.3]	25 [41.7]	60
Biodata	12 [20]	22 [36.7]	11 [18.3]	5 [8.3]	10 [6.7]	60
Handwriting analysis	35 [58.3]	17 [28.3]	4 [6.7]	3 [5]	1 [1.7]	60
Astrology	40 [66.7]	15 [25]	3 [5]		2 [3.3]	60
Cognitive test	23 [38.3]	11 [18.3]	17 [28.3]	5 [8.3]	4 [6.7]	60
Personality test	20 [33.3]	12 [20]	17 [28.3]	6 [10]	5 [8.3]	60
Assessment centre	27 [45]	14 [23.3]	8 [13.3]	6 [10]	5 [8.3]	60

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 6.4
Selection techniques by features (acceptability to applicants) : all firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview	1 [1.7]		5 [8.3]	20 [33.3]	34 [56.7]	60
Structured interview	1 [1.7]	2 [3.3]	10 [16.7]	21 [35]	26 [43.3]	60
Job specific interview	1 [1.7]		10 [16.7]	19 [31.7]	30 [50]	60
Application forms			6 [10]	11 [18.3]	43 [71.7]	60
Curriculum Vitae		1 [1.7]	5 [8.3]	15 [25]	39 [65]	60
References	1 [1.7]	5 [8.3]	17 [28.3]	14 [23.3]	23 [38.3]	60
Biodata	5 [8.3]	11 [18.3]	13 [21.7]	14 [23.3]	17 [28.3]	60
Handwriting analysis	31 [51.7]	15 [25]	13 [21.7]	1 [1.7]		60
Astrology	42 [70]	12 [20]	5 [8.3]		1 [1.7]	60
Cognitive test	22 [36.7]	14 [23.3]	14 [23.3]	6 [10]	4 [6.7]	60
Personality test	21 [35]	11 [18.3]	14 [23.3]	9 [15]	5 [8.3]	60
Assessment centre	20 [33.3]	8 [13.3]	22 [36.7]	7 [11.7]	3 [5]	60

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 6.5
Selection techniques by features (acceptability to decision makers) : all firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview	1 [1.7]	2 [3.3]	4 [6.7]	17 [28.3]	36 [60]	60
Structured interview	1 [1.7]	3 [5]	5 [8.3]	15 [25]	36 [60]	60
Job specific interview	1 [1.7]	3 [5]	6 [10]	15 [25]	35 [58.3]	60
Application forms			7 [11.7]	8 [13.3]	45 [75]	60
Curriculum Vitae	1 [1.7]	3 [5]	6 [10]	8 [13.3]	42 [70]	60
References	2 [3.3]	10 [16.7]	10 [16.7]	14 [23.3]	24 [40]	60
Biodata	13 [21.7]	12 [20]	14 [23.3]	5 [8.3]	16 [26.7]	60
Handwriting analysis	37 [61.7]	13 [21.7]	8 [13.3]	1 [1.7]	1 [1.7]	60
Astrology	50 [83.3]	8 [13.3]	1 [1.7]		1 [1.7]	60
Cognitive test	26 [43.3]	2 [3.3]	11 [18.3]	11 [18.3]	10 [16.7]	60
Personality test	23 [38.3]	4 [6.7]	11 [18.3]	7 [11.7]	15 [25]	60
Assessment centre	30 [50]	6 [10]	5 [8.3]	7 [11.7]	12 [20]	60

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 6.6
Selection techniques by features (Accuracy in predicting managerial job performance) : all firms

Selection techniques	Features										
	No predictn 0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	Perfect predictn 100 %
Open ended interview				5	3.3	28.3	15	25	18.3	3.3	1.7
Structured interview			3.3	1.7	1.7	20	25	21.7	20	5	1.7
Job specific interview				1.7	1.7	11.7	16.7	28.3	28.3	8.3	3.3
Application forms		1.7	6.7	13.3	8.3	35	11.7	6.7	10	5	1.7
Curriculum Vitae		1.7	3.3	8.3	8.3	38.3	15	5	15	5	
References	1.7	5	8.3	11.7	6.7	21.7	13.3	18.3	8.3	3.3	1.7
Biodata		1.7	5	8.3	13.3	35	13.3	13.3	8.3	1.7	
H/W analysis	23.3	36.7	11.7	10	5	10		3.3			
Astrology	40	35	8.3	5	6.7	5					
Cognitive test	6.7	3.3	8.3	5	3.3	25	21.7	16.7	8.3	1.7	
Personality test	6.7	3.3	6.7	3.3	5	25	18.3	23.3	8.3		
Assessment centre	6.7	1.7	5	1.7	3.3	23.3	13.3	21.7	11.7	6.7	5

TABLE A 7.1
Selection techniques by features (cost) : Malaysian firms

Selection techniques	Features				total firms	
	low	medium low	medium medium	medium high		
Open ended interview	9 [42.9]	10 [47.6]	1 [4.8]	1 [4.8]	21	
Structured interview	7 [33.3]	11 [52.4]	3 [14.3]		21	
Job specific interview	8 [38.1]	7 [33.3]	6 [28.6]		21	
Application forms	10 [47.6]	8 [38.1]	2 [9.5]	1 [4.8]	21	
Curriculum Vitae	11 [52.4]	9 [42.9]	1 [4.8]		21	
References	8 [38.1]	9 [42.9]	4 [19]		21	
Biodata		1 [4.8]	14 [66.7]	6 [28.6]	21	
Handwriting analysis		1 [4.8]	18 [85.7]	2 [9.5]	21	
Astrology	1 [4.8]	2 [9.5]	16 [76.2]	1 [4.8]	1 [4.8]	21
Cognitive test		1 [4.8]	6 [28.6]	14 [66.7]		21
Personality test		1 [4.8]	6 [28.6]	14 [66.7]		21
Assessment centre				10 [47.6]	11 [52.4]	21

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 7.2
Selection techniques by features (degree of familiarity) : Malaysian firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview				8 [38.1]	13 [61.9]	21
Structured interview			6 [28.6]	7 [33.3]	8 [38.1]	21
Job specific interview	1 [4.8]	1 [4.8]	2 [9.5]	8 [38.1]	9 [42.9]	21
Application forms				5 [23.8]	16 [76.2]	21
Curriculum Vitae		1 [4.8]	1 [4.8]	6 [28.6]	13 [61.9]	21
References		1 [4.8]	3 [14.3]	7 [33.3]	10 [47.6]	21
Biodata	9 [42.9]	9 [42.9]	2 [9.5]	1 [4.8]		21
Handwriting analysis	17 [81]	3 [14.3]	1 [4.8]			21
Astrology	21 [100]					21
Cognitive test	9 [42.9]	3 [14.3]	7 [33.3]	2 [9.5]		21
Personality test	8 [38.1]	2 [9.5]	7 [33.3]	4 [19]		21
Assessment centre	12 [57.1]	1 [4.8]	7 [33.3]	1 [4.8]		21

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 7.3
Selection techniques by features (ease of use) : Malaysian firms

Selection techniques	Features				total firms	
	low	medium low	medium	medium high		
Open ended interview			1 [4.8]	7 [33.3]	13 [61.9]	21
Structured interview		1 [4.8]	3 [14.3]	13 [61.9]	4 [19]	21
Job specific interview		3 [14.3]	2 [9.5]	10 [47.6]	6 [28.6]	21
Application forms			1 [4.8]	3 [14.3]	17 [81]	21
Curriculum Vitae			1 [4.8]	6 [28.6]	14 [66.7]	21
References		1 [4.8]	4 [19]	8 [38.1]	8 [38.1]	21
Biodata	2 [9.5]	6 [28.6]	4 [19]	4 [19]	5 [23.8]	21
Handwriting analysis	9 [42.9]	8 [38.1]	1 [4.8]	2 [9.5]	1 [4.8]	21
Astrology	11 [52.4]	8 [38.1]	2 [9.5]			21
Cognitive test	6 [28.6]	5 [23.8]	9 [42.9]	1 [4.8]		21
Personality test	5 [23.8]	5 [23.8]	10 [47.6]	1 [4.8]		21
Assessment centre	8 [38.1]	7 [33.3]	3 [14.3]	2 [9.5]	1 [4.8]	21

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 7.4
Selection techniques by features (acceptability to applicants) : Malaysian firms

Selection techniques	Features				total firms	
	low	medium low	medium	medium high		
Open ended interview			1 [4.8]	8 [38.1]	12 [57.1]	21
Structured interview		1 [4.8]	4 [19]	7 [33.3]	9 [42.9]	21
Job specific interview			5 [23.8]	8 [38.1]	8 [38.1]	21
Application forms			4 [19]	4 [19]	13 [61.9]	21
Curriculum Vitae			2 [9.5]	5 [23.8]	14 [66.7]	21
References		2 [9.5]	8 [38.1]	5 [23.8]	6 [28.6]	21
Biodata		5 [23.8]	4 [19]	6 [28.6]	6 [28.6]	21
Handwriting analysis	9 [42.9]	7 [33.3]	4 [19]	1 [4.8]		21
Astrology	15 [71.4]	5 [23.8]	1 [4.8]			21
Cognitive test	6 [28.6]	7 [33.3]	4 [19]	3 [14.3]	1 [4.8]	21
Personality test	6 [28.6]	5 [23.8]	5 [23.8]	4 [19]	1 [4.8]	21
Assessment centre	6 [28.6]	3 [14.3]	8 [38.1]	4 [19]		21

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 7.5
Selection techniques by features (acceptability to decision makers) : Malaysian firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview			1 [4.8]	9 [42.9]	11 [52.4]	21
Structured interview		1 [4.8]	3 [14.3]	5 [23.8]	12 [57.1]	21
Job specific interview		1 [4.8]	2 [9.5]	7 [33.3]	11 [52.4]	21
Application forms			5 [23.8]	3 [14.3]	13 [61.9]	21
Curriculum Vitae	1 [4.8]	1 [4.8]	2 [9.5]	3 [14.3]	14 [66.7]	21
References	1 [4.8]	2 [9.5]	3 [14.3]	7 [33.3]	8 [38.1]	21
Biodata	4 [19]	3 [14.3]	4 [19]	2 [9.5]	8 [38.1]	21
Handwriting analysis	14 [66.7]	4 [19]	2 [9.5]		1 [4.8]	21
Astrology	18 [85.7]	3 [14.3]				21
Cognitive test	9 [42.9]	1 [4.8]	4 [19]	4 [19]	3 [14.3]	21
Personality test	8 [38.1]	1 [4.8]	4 [19]	3 [14.3]	5 [23.8]	21
Assessment centre	11 [52.4]	1 [4.8]	4 [19]		5 [23.8]	21

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 7.6
Selection techniques by features (Accuracy in predicting managerial job performance) : Malaysian firms

Selection techniques	Features										
	No predictn 0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	Perfect predictn 100 %
Open ended interview				4.8	9.5	28.6	9.5	23.8	14.3	4.8	4.8
Structured interview			4.8	4.8		28.6	19	14.3	19	4.8	4.8
Job specific interview				4.8	4.8	14.3	14.3	14.3	38.1	4.8	4.8
Application forms			14.3	28.6	9.5	14.3	9.5	4.8	14.3	4.8	
Curriculum Vitae			4.8	19	9.5	28.6	4.8	4.8	23.8	4.8	
References	4.8	9.5	14.3	19		14.3	4.8	23.8	9.5		
Biodata			4.8	19	4.8	38.1	4.8	19	9.5		
H/W analysis	19	47.6	14.3	9.5	4.8	4.8					
Astrology	38.1	42.9	4.8		9.5	4.8					
Cognitive test	9.5	4.8	9.5	4.8	4.8	14.3	28.6	19	4.8		
Personality test	9.5	4.8	4.8	4.8	4.8	19	33.3	19			
Assessment centre	9.5	4.8	4.8	4.8		19	14.3	14.3	14.3	9.5	4.8

TABLE A 8.1
Selection techniques by features (cost) : non - Malaysian firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview	15 [38.5]	18 [46.2]	3 [7.7]	2 [5.1]	1 [2.6]	39
Structured interview	15 [38.5]	13 [33.3]	8 [20.5]	3 [7.7]		39
Job specific interview	14 [35.9]	13 [33.3]	7 [17.9]	2 [5.1]	3 [7.7]	39
Application forms	16 [41]	15 [38.5]	5 [12.8]	2 [5.1]	1 [2.6]	39
Curriculum Vitae	18 [46.2]	20 [51.3]	1 [2.6]			39
References	16 [41]	18 [46.2]	5 [12.8]			39
Biodata	3 [7.7]	1 [2.6]	18 [46.2]	15 [38.5]	2 [5.1]	39
Handwriting analysis	3 [7.7]	1 [2.6]	24 [61.5]	9 [23.1]	2 [5.1]	39
Astrology	2 [5.1]		24 [61.5]	8 [20.5]	5 [12.8]	39
Cognitive test			7 [17.9]	26 [66.7]	6 [15.4]	39
Personality test			5 [12.8]	27 [69.2]	7 [17.9]	39
Assessment centre			1 [2.6]	19 [48.7]	19 [48.7]	39

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 8.2
Selection techniques by features (degree of familiarity) : non - Malaysian firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview			3 [7.7]	13 [33.3]	23 [59]	39
Structured interview	2 [5.1]	1 [2.6]	5 [12.8]	13 [33.3]	18 [46.2]	39
Job specific interview	2 [5.1]	1 [2.6]	9 [23.1]	11 [28.2]	16 [41]	39
Application forms			2 [5.1]	6 [15.4]	31 [79.5]	39
Curriculum Vitae		1 [2.6]	3 [7.7]	7 [17.9]	28 [71.8]	39
References	2 [5.1]	8 [20.5]	6 [15.4]	8 [20.5]	15 [38.5]	39
Biodata	18 [46.2]	19 [48.7]	2 [5.1]			39
Handwriting analysis	30 [76.9]	8 [20.5]	1 [2.6]			39
Astrology	34 [87.2]	5 [12.9]				39
Cognitive test	21 [53.8]	1 [2.6]	8 [20.5]	5 [12.8]	4 [10.3]	39
Personality test	20 [51.3]	1 [2.6]	6 [15.4]	6 [15.4]	6 [15.4]	39
Assessment centre	22 [56.4]	7 [17.9]	5 [12.8]		5 [12.8]	39

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 8.3
Selection techniques by features (ease of use) : non - Malaysian firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview		2 [5.1]	1 [2.6]	7 [17.9]	29 [74.4]	39
Structured interview	2 [5.1]		4 [10.3]	12 [30.8]	21 [53.8]	39
Job specific interview	2 [5.1]	1 [2.6]	6 [15.4]	10 [25.6]	20 [51.3]	39
Application forms		1 [2.6]	1 [2.6]	7 [17.9]	30 [76.9]	39
Curriculum Vitae		2 [5.1]	4 [10.3]	6 [15.4]	27 [69.2]	39
References	1 [2.6]	7 [17.9]	8 [20.5]	6 [15.4]	17 [43.6]	39
Biodata	10 [25.6]	16 [41]	7 [17.9]	1 [2.6]	5 [12.8]	39
Handwriting analysis	26 [66.7]	9 [23.1]	3 [7.7]	1 [2.6]		39
Astrology	29 [74.4]	7 [17.9]	1 [2.6]		2 [5.1]	39
Cognitive test	17 [43.6]	6 [15.4]	8 [20.5]	4 [10.3]	4 [10.3]	39
Personality test	15 [38.5]	7 [17.9]	7 [17.9]	5 [12.8]	5 [12.8]	39
Assessment centre	19 [48.7]	7 [17.9]	5 [12.8]	4 [10.3]	4 [10.3]	39

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 8.4
Selection techniques by features (Acceptability to applicants) : non - Malaysian firms

Selection techniques	Features					total firms
	low	medium low	medium	medium high	high	
Open ended interview	1 [2.6]		4 [10.3]	12 [30.8]	22 [56.4]	39
Structured interview	1 [2.6]	1 [2.6]	6 [15.4]	14 [35.9]	17 [43.6]	39
Job specific interview	1 [2.6]		5 [12.8]	11 [28.2]	22 [56.4]	39
Application forms			2 [5.1]	7 [17.9]	30 [76.9]	39
Curriculum Vitae		1 [2.6]	3 [7.7]	10 [25.6]	25 [64.1]	39
References	1 [2.6]	3 [7.7]	9 [23.1]	9 [23.1]	17 [43.6]	39
Biodata	5 [12.8]	6 [15.4]	9 [23.1]	8 [20.5]	11 [28.2]	39
Handwriting analysis	22 [56.4]	8 [20.5]	9 [23.1]			39
Astrology	27 [69.2]	7 [17.9]	4 [10.3]		1 [2.6]	39
Cognitive test	16 [41]	7 [17.9]	10 [25.6]	3 [7.7]	3 [7.7]	39
Personality test	15 [38.5]	6 [15.4]	9 [23.1]	5 [12.8]	4 [10.3]	39
Assessment centre	14 [35.9]	5 [12.8]	14 [35.9]	3 [7.7]	3 [7.7]	39

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 8.5
Selection techniques by features (acceptability to decision makers) : non - Malaysian firms

Selection techniques	Features				total firms	
	low	medium low	medium	medium high		
Open ended interview	1 [2.6]	2 [5.1]	3 [7.7]	8 [20.5]	25 [64.1]	39
Structured interview	1 [2.6]	2 [5.1]	2 [5.1]	10 [25.6]	24 [61.5]	39
Job specific interview	1 [2.6]	2 [5.1]	4 [10.3]	8 [20.5]	24 [61.5]	39
Application forms			2 [5.1]	5 [12.8]	32 [82.1]	39
Curriculum Vitae		2 [5.1]	4 [10.3]	5 [12.8]	28 [71.8]	39
References	1 [2.6]	8 [20.5]	7 [17.9]	7 [17.9]	16 [41]	39
Biodata	9 [23.1]	9 [23.1]	10 [25.6]	3 [7.7]	8 [20.5]	39
Handwriting analysis	23 [59]	9 [23.1]	6 [15.4]	1 [2.6]		39
Astrology	32 [82.1]	5 [12.8]	1 [2.6]		1 [2.6]	39
Cognitive test	17 [43.6]	1 [2.6]	7 [17.9]	7 [17.9]	7 [17.9]	39
Personality test	15 [38.5]	3 [7.7]	7 [17.9]	4 [10.3]	10 [25.6]	39
Assessment centre	19 [48.7]	6 [15.4]	4 [10.3]	3 [7.7]	7 [17.9]	39

Note : Numbers in [] are the percentages of the row total which the numbers represent

TABLE A 8.6
Selection techniques by features (Accuracy in predicting managerial job performance) : non - Malaysian firms

Selection techniques	Features										
	No predictn 0 %	10 %	20 %	30 %	40 %	50 %	60 %	70 %	80 %	90 %	Perfect predictn 100 %
Open ended interview				5.1		28.2	17.9	25.6	20.5	2.6	
Structured interview			2.6		2.6	15.4	28.2	25.6	20.5	5.1	
Job specific interview						10.3	17.9	35.9	23.1	10.3	2.6
Application forms		2.6	2.6	5.1	7.7	46.2	12.8	7.7	7.7	5.1	2.6
Curriculum Vitae		2.6	2.6	2.6	7.7	43.6	20.5	5.1	10.3	5.1	
References		2.6	5.1	7.7	10.3	25.6	17.9	15.4	7.7	5.1	2.6
Biodata		2.6	5.1	2.6	17.9	33.3	17.9	10.3	7.7	2.6	
H/W analysis	25.6	30.8	10.3	10.3	5.1	12.8	5.1				
Astrology	41	30.8	10.3	7.7	5.1	5.1					
Cognitive test	5.1	2.6	7.7	5.1	2.6	30.8	17.9	15.4	10.3	2.6	
Personality test	5.1	2.6	7.7	2.6	5.1	28.2	10.3	25.6	12.8		
Assessment centre	5.1		5.1		5.1	25.6	12.8	25.6	10.3	5.1	5.1

TABLE A 9.1
Summary of selection techniques by features : Malaysian firms

Selection techniques	cost	degree of familiarity	ease of use	Features		accuracy in predicting managerial performance
				acceptability to applicants	acceptability to d/makers	
<i>open ended interview</i>	90.5% less costly	61.9% v.familiar	61.9% v.easy	100% acceptable	100% acceptable	47.7% predictor of \geq 70%
<i>structured interview</i>	85.7% less costly	100% familiar	95.2% easy	95.2% acceptable	95.2% acceptable	42.9% predictor of \geq 70%
<i>job specific interview</i>	71.4% less costly	90.5% familiar	85.7% easy	100% acceptable	95.2% acceptable	62% predictor of \geq 70%
<i>app.form</i>	47.6% low cost	100% familiar	81% v.easy	100% acceptable	100% acceptable	23.9% predictor of \geq 70%
<i>cv</i>	85.7% less costly	90.5% familiar	66.7% v.easy	100% acceptable	90.5% acceptable	33.4% predictor of \geq 70%
<i>references</i>	81% less costly	80.9% familiar	95.2% easy	90.5% acceptable	85.7% acceptable	33.3% predictor of \geq 70%
<i>biodata</i>	66.7% av.cost	85.8% not familiar	61.8% easy	76.2% acceptable	66.6% acceptable	28.5% predictor of \geq 70%
<i>H/W analysis</i>	85.7% av.cost	95.3% not familiar	81% difficult	76.2% not acceptable	85.7% not acceptable	95.2% predictor of <50%
<i>astrology</i>	76.2% av.cost	100% not familiar	90.5% difficult	95.2% not acceptable	100% not acceptable	95.2% predictor of <50%
<i>PC</i>	66.7% costly	57.2% not familiar	52.4% difficult	61.9% not acceptable	52.3% acceptable	23.8% predictor of \geq 70%
<i>PP</i>	66.7% costly	52.3% familiar	47.6% difficult	47.6% acceptable	57.1% acceptable	19% predictor of \geq 70%
<i>assessment centre</i>	100% costly	61.9% not familiar	71.4% difficult	57.1% acceptable	57.2% acceptable	4.8% perfect predictor or 42.9% predictor of \geq 70%

Note: Above figures represented summary of tables A7.1, 7.2, 7.3, 7.4, 7.5, 7.6

TABLE A 9.2
Summary of selection techniques by features : non - Malaysian firms

Selection techniques	Features					
	cost	degree of familiarity	ease of use	acceptability to applicants	acceptability to d/makers	accuracy in predicting managerial performance
<i>open ended interview</i>	92.4% less costly	59% v.familiar	74.4% v.easy	97.4% acceptable	92.3% acceptable	48.7% predictor of \geq 70%
<i>structured interview</i>	92.3% less costly	92.3% familiar	94.9% easy	94.8% acceptable	92.3% acceptable	51.2% predictor of \geq 70%
<i>job specific interview</i>	87.2% less costly	92.3% familiar	92.3% easy	97.4% acceptable	92.3% acceptable	71.9% predictor of \geq 70%
<i>app.form</i>	92.3% less costly	100% familiar	76.9% v.easy	100% acceptable	100% acceptable	23.1% predictor of \geq 70%
<i>cv</i>	100% less costly	97.4% familiar	69.2% v.easy	97.4% acceptable	94.9% acceptable	20.5% predictor of \geq 70%
<i>references</i>	100% less costly	74.4% familiar	79.5% easy	89.7% acceptable	76.9% acceptable	30.8% predictor of \geq 70%
<i>biodata</i>	43.6% costly	94.9% not familiar	33.3% easy	71.8% acceptable	53.8% acceptable	20.6% predictor of \geq 70%
<i>H/W analysis</i>	71.85 less costly	97.4% not familiar	89.8% difficult	76.9% not acceptable	82.1% not acceptable	82.1% predictor of <50%
<i>astrology</i>	66.6% less costly	100% not familiar	97.4% difficult	87.1% not acceptable	94.9% not acceptable	94.9% predictor of <50%
<i>PC</i>	82.1% costly	43.6% familiar	59% difficult	58.9% not acceptable	53.8% acceptable	28.3% predictor of \geq 70%
<i>PP</i>	87.1% costly	53.9% not familiar	56.4% difficult	46.1% acceptable	53.8% acceptable	38.4% predictor of \geq 70%
<i>assessment centre</i>	97.4% costly	74.3% not familiar	66.6% difficult	51.3% acceptable	35.9% acceptable	5.1% perfect predictor or 46.1% predictor of \geq 70%

Note: Above figures represented summary of tables A8.1, 8.2, 8.3, 8.4, 8.5, 8.6

TABLE B 1.1
Breakdown of size of firm and existence of specialized recruitment and selection function

Size of firm	Existence of specialized recruitment & selection function		
	Yes	No	Total
Large(500-1500)	20 [62.5] (33.3)	12 [37.5] (20)	32 (53.3)
Larger(1501-3500)	12 [66.7] (20)	6 [33.3] (10)	18 (30)
Largest(>3500)	9 [90] (15)	1 [10] (1.7)	10 (16.7)
Total	41 (68.3)	19 (31.7)	60 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 1.2
Breakdown of size of firm and types of specialized recruitment and selection function

Size of firm	Types of specialized recruitment & selection function		
	Centralized	Decentralized	Total
Large(500-1500)	18 [90] (43.9)	2 [10] (4.9)	20 (48.8)
Larger(1501-3500)	11 [91.7] (26.8)	1 [8.3] (2.4)	12 (29.3)
Largest(>3500)	6 [66.7] (14.6)	3 [33.3] (7.3)	9 (22)
Total	35 (85.4)	6 (14.6)	41 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 1.3
Break down of size of firm
and the no.of staff in specialized recruitment and selection function

No.of staff in specialized recruitment & selection function				
Size of firm	Mean	Min	Max	Total firms
Large(500-1500)	3.6	2.0	6.0	20
Larger(1501-3500)	4.5	2.0	12.0	12
Largest(>3500)	24.8	3	180	9

TABLE B 2.1
Breakdown of size of firm and use of external consultant to select senior managers

Use external consultants to select senior managers				
Size of firm	Yes, to select all	Yes, to select some	No	Total
Large(500-1500)	1 [3.1] (1.7)	11 [34.4] (18.3)	20 [62.5] (33.3)	32 (53.3)
Larger(1501-3500)		3 [16.7] (5)	15 [83.3] (25)	18 (30)
Largest(>3500)	1 [10] (1.7)	6 [60] (10)	3 [30] (5)	10 (16.7)
Total	2 (3.3)	20 (33.3)	38 (63.3)	60 (100)

*Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent*

TABLE B 2.2
Breakdown of size of firm and use of external consultant to select middle managers

Size of firm	Use external consultants to select middle managers			Total
	Yes, to select all	Yes, to select some	No	
Large(500-1500)	1 [3.1] (1.7)	4 [12.5] (6.7)	27 [84.4] (45)	32 (53.3)
Larger(1501-3500)		2 [11.1] (3.3)	16 [88.9] (26.7)	18 (30)
Largest(>3500)		4 [40] (6.7)	6 [60] (10)	10 (16.7)
Total	1 (1.7)	10 (16.7)	49 (81.7)	60 (100)

*Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent*

TABLE B 2.3
Breakdown of size of firm and use of external consultant to select junior managers

Size of firm	Use external consultants to select junior managers			Total
	Yes, to select all	Yes, to select some	No	
Large(500-1500)		3 [9.4] (5)	29 [90.6] (48.3)	32 (53.3)
Larger(1501-3500)		1 [5.6] (1.7)	17 [94.4] (28.3)	18 (30)
Largest(>3500)		2 [20] (3.3)	8 [80] (13.3)	10 (16.7)
Total		6 (10)	54 (90)	60 (100)

*Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent*

TABLE B 2.4
Breakdown of size of firm and use of external consultant to select trainees

Size of firm	Use external consultants to select trainees			Total
	Yes, to select all	Yes, to select some	No	
Large(500-1500)			32 [100] (53.3)	32 (53.3)
Larger(1501-3500)		1 [5.6] (1.7)	17 [94.4] (28.3)	18 (30)
Largest(>3500)		1 [10] (1.7)	9 [90] (15)	10 (16.7)
Total		2 (3.3)	58 (96.7)	60 (100)

*Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent*

TABLE B 3.1
**Breakdown of size of firm and use of selection techniques
/no.stages involved to select senior managers**

Size of firm	Use selection techniques and stages involved to select senior managers					Total firms
	Used		Two Stages	Three stages	Four stages	
	Yes	No				
Large(500-1500)	25 [78.1] (41.7)	7 [21.9] (11.7)	7 [28] (17.9)	17 [68] (43.6)	1 [4.0] (2.6)	32 (53.3)
Larger(1501-3500)	7 [38.9] (11.7)	11 [61.1] (18.3)	2 [28.6] (5.1)	5 [71.4] (12.8)		18 (30)
Largest(>3500)	7 [70] (11.7)	3 [30] (5)	3 [42.9] (7.7)	4 [57.1] (10.3)		10 (16.7)
Total firms	39 (65)	21 (35)	12 (30.8)	26 (66.7)	1 (2.6)	60 (100)

*Note : Numbers in [] are the percentages of the row total which the numbers represent
Numbers in () are the percentages of the overall total which the numbers represent*

TABLE B 3.2
Breakdown of size of firm and use of selection techniques
/no.stages involved to select middle managers

Use selection techniques and stages involved to select middle managers						
Size of firm	Yes	No	Two	Three	Four	Total
Large(500-1500)	25 [78.1] (41.7)	7 [21.9] (11.7)	8 [32] (19)	17 [68] (40.5)		32 (53.3)
Larger(1501-3500)	9 [50] (15)	9 [50] (15)	5 [55.6] (11.9)	4 [44] (9.5)		18 (30)
Largest(>3500)	8 [80] (13.3)	2 [20] (3.3)	4 [50] (9.5)	4 [50] (9.5)		10 (16.7)
Total	42 (70)	18 (30)	17 (40.5)	25 (59.5)	0 (0)	42 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 3.3
Breakdown of size of firm and use of selection techniques
/no.stages involved to select junior managers

Use selection techniques and stages involved to select junior managers						
Size of firm	Yes	No	Two	Three	Four	Total
Large(500-1500)	28 [87.5] (46.7)	4 [12.5] (6.7)	12 [42.9] (25.5)	15 [53.6] (31.9)	1 [3.6] (2.1)	28 (59.6)
Larger(1501-3500)	11 [61.1] (18.3)	7 [38.9] (11.7)	7 [63.6] (14.9)	4 [36.4] (8.5)		11 (23.4)
Largest(>3500)	8 [80] (13.3)	2 [20] (3.3)	4 [50] (8.5)	4 [50] (8.5)		8 (17)
Total	47 (78.3)	13 (21.7)	23 (48.9)	23 (48.9)	1 (2.1)	47 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 3.4
Breakdown of size of firm and use of selection techniques
/no.stages involved to select trainees

Used selection techniques and stages involved to select trainees							
Size of firm	Yes	No	One	Two	Three	Four	Total firms
Large(500-1500)	21 [65.6] (35)	11 [34.4] (18.3)	1 [4.8] (2.6)	8 [38.1] (21.1)	10 [47.6] (26.3)	2 [9.5] (5.3)	21 (55.3)
Larger(1501-3500)	11 [61.1] (18.3)	7 [38.9] (11.7)		7 [63.6] (18.4)	4 [36.4] (10.5)		11 (28.9)
Largest(>3500)	6 [60] (10)	4 [40] (10)		5 [83.3] (13.2)	1 [16.7] (2.6)		6 (15.8)
Total	38 (63.3)	22 (36.7)	1 (2.6)	20 (52.6)	15 (39.5)	2 (5.3)	38 (100)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 4.1
Breakdown of size of firm and selection techniques used to select senior managers

Size of firm	Selection of senior managers										
	Total	Intvw	APF	CV	Selection techniques					PP	AC
					Bdta	Ref	HW	AS	PC		
Large (500-1500)	25 (64.1)	25 [100] (64.1)	23 [92] (59)	21 [84] (53.8)		21 [84] (53.8)			1 [4] (2.6)	3 [12] (7.7)	2 [8] (5.1)
Larger (1501-3500)	7 (17.9)	7 [100] (17.9)	7 [100] (17.9)	7 [100] (17.9)		6 [85.7] (15.4)				5 [71.4] (12.8)	
Largest (>3500)	7 (17.9)	7 [100] (17.9)	7 [100] (17.9)	6 [85.7] (15.4)		4 [57.1] (10.3)				1 [14.3] (2.6)	
Total	39 (100)	39 (100)	37 (94.9)	34 (87.2)		31 (79.5)			1 (2.6)	9 (23.1)	2 (5.1)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 4.2
Breakdown of size of firm and selection techniques used to select middle managers

Size of firm	Selection of middle managers											
	Total	Intvw	APF	CV	Selection techniques							
					Bdta	Ref	HW	AS	PC	PP	AC	
Large (500-1500)	25 (59.5)	25 [100] (59.5)	24 [96] (57.1)	20 [80] (47.6)		19 [76] (45.2)				1 [4] (2.4)	3 [12] (7.1)	2 [8] (4.8)
Larger (1501-3500)	9 (21.4)	9 [100] (21.4)	9 [100] (21.4)	8 [88.9] (19)		7 [77.8] (16.7)					6 [66.7] (14.3)	
Largest (>3500)	8 (19)	8 [100] (19)	8 [100] (19)	8 [100] (19)		5 [62.5] (11.9)					1 [12.5] (2.4)	
Total	42 (100)	42 (100)	41 (97.6)	36 (85.7)	0 (0)	31 (73.8)	0 (0)	0 (0)	0 (0)	1 (2.4)	10 (23.8)	2 (4.8)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 4.3
Breakdown of size of firm and selection techniques used to select junior managers

Size of firm	Selection of junior managers											
	Total	Intvw	APF	CV	Selection techniques							
					Bdta	Ref	HW	AS	PC	PP	AC	
Large (500-1500)	28 (59.6)	28 [100] (59.6)	27 [96.4] (57.4)	23 [82.1] (48.9)		17 [60.7] (36.2)				2 [7.1] (4.3)	4 [14.3] (8.5)	2 [7.1] (4.3)
Larger (1501-3500)	11 (23.4)	11 [100] (23.4)	11 [100] (23.4)	10 [90.9] (21.3)		7 [63.6] (14.9)					4 [36.4] (8.5)	
Largest (>3500)	8 (17)	8 [100] (17)	8 [100] (17)	8 [100] (17)		5 [62.5] (10.6)					1 [12.5] (2.1)	
Total	47 (100)	47 (100)	46 (97.9)	41 (87.2)	0 (0)	29 (61.7)	0 (0)	0 (0)	0 (0)	2 (4.3)	9 (19.1)	2 (4.3)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE B 4.4
Breakdown of size of firm and selection techniques used to select trainees

Size of firm	Selection of trainees										
	Total	Intvw	APF	CV	Selection techniques						
					Bdta	Ref	HW	AS	PC	PP	AC
Large (500-1500)	21 (55.3)	21 [100] (55.3)	21 [100] (5.3)	15 [71.4] (39.5)		10 [47.6] (26.3)			2 [9.5] (5.3)	5 [23.8] (13.2)	2 [9.5] (5.3)
Larger (1501-3500)	11 (28.9)	11 [100] (28.9)	11 [100] (28.9)	9 [81.8] (23.7)		6 [54.5] (15.8)			2 [18.2] (5.3)	2 [18.2] (5.3)	
Largest (>3500)	6 (15.8)	5 [83.3] (13.2)	6 [100] (15.8)	4 [66.7] (10.5)		3 [50] (7.9)			1 [16.7] (2.6)		1 [16.7] (2.6)
Total	38 (100)	37 (97.4)	38 (100)	28 (73.7)	0 (0)	19 (50)	0 (0)	0 (0)	5 (13.2)	7 (18.4)	3 (7.9)

Note : Numbers in [] are the percentages of the row total which the numbers represent
 Numbers in () are the percentages of the overall total which the numbers represent

TABLE C 6.1
Use of Consultants by Types of firms

Types of firms	Post of Manager				N
	Sr. Manager	M. Manager	Jr. Manager	Trainees	
Local Malaysian	11(52.4)	5(23.8)	1(4.8)	1(4.8)	21
US	2(33.3)	2(33.3)	2(33.3)	1(16.7)	6
W. European	6(60)	2(20)	1(10)		10
British	2(50)	2(50)	2(50)		4
Japaneses	1(7.7)				13
Foreign - Asian					5
Australian					1

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE C 6.2
Backgrounds of Personnel Managers by Types of Firms

Types of firms	Experiences (Types of firms)				Formal education received		
	Both local and foreign	Local	Foreign	N	Local	Ov'seas	N
Local Malaysian	7(33.3)	13(61.9)	1(4.8)	21	11(52.4)	10(47.6)	21
US	1(16.7)		5(83.3)	6	3(60)	2(40)	5
W. European	4(40)		6(60)	10	6(60)	4(40)	10
British	2(50)	1(25)	1(25)	4	2(50)	2(50)	4
Japaneses	5(38.5)		8(61.5)	13	9(69.2)	4(30.8)	13
Foreign - Asian			5(100)	5	5(100)		5
Australian	1(100)			1		1(100)	1

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE C 6.3
HRM department by Types of Firms

Types of firms (N)	HRM department			HRM Professional Associations
	Specialized recruitment and selection function	Centralized	Decentralized	
Local Malaysian (21)	16[76.2]	12[75]	4[25]	13[81.3]
US (6)	3[50]	3[100]		2[66.7]
W. European (10)	8[80]	7[87.5]	1[12.5]	5[62.5]
British (4)	3[75]	3[100]		3[100]
Japanese (13)	8[61.5]	7[87.5]	1[12.5]	6[75]
Foreign - Asian (5)	3[60]	3[100]		2[66.7]
Australian (1)				

Note : Numbers in [] are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.1
Use of Open ended Interviews by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	20(100)	20	16(84.2)	19	15(78.9)	19	11(68.8)	16
US	1(50)	2	3(75)	4	4(100)	4	4(80)	5
W.European	6(75)	8	6(75)	8	8(80)	10	5(83.3)	6
British	3(100)	3	3(100)	3	4(100)	4	3(100)	3
Japanese	3(100)	3	2(66.7)	3	3(60)	5	2(50)	4
Foreign - Asian	2(100)	2	4(100)	4	4(100)	4	3(100)	3
Australian	1(100)	1	1(100)	1	1(100)	1	1(100)	1

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.2
Use of Structured Interviews by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	11(55)	20	13(68.4)	19	15(78.9)	19	12(75)	16
US	1(50)	2	1(25)	4	1(25)	4	3(60)	5
W.European	7(87.5)	8	7(87.5)	8	9(90)	10	5(83.3)	6
British	1(33.3)	3	1(33.3)	3	2(50)	4	2(66.7)	3
Japanese	2(66.7)	3	3(100)	3	4(80)	5	3(75)	4
Foreign - Asian	2(100)	2	3(75)	4	3(75)	4	1(33.3)	3
Australian	1(100)	1	1(100)	1	1(100)	1	1(100)	1

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.3
Use of Job Specific Interviews by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	11(55)	20	13(68.4)	19	11(57.9)	19	11(68.8)	16
US	2(100)	2	3(75)	4	1(25)	4	1(20)	5
W.European	8(100)	8	8(100)	8	10(100)	10	5(83.3)	6
British	2(66.7)	3	2(66.7)	3	3(75)	4	1(33.3)	3
Japanese	1(33.3)	3	1(33.3)	3	2(40)	5	3(75)	4
Foreign - Asian	2(100)	2	4(100)	4	4(100)	4	3(100)	3
Australian	1(100)	1	1(100)	1	1(100)	1	1(100)	1

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.4
Use of One Interview by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	8(40)	20	10(52.6)	19	13(68.4)	19	11(68.8)	16
US					3(75)	4	4(80)	5
W.Europeon			1(12.5)	8	4(40)	10	1(16.7)	6
British					1(25)	4		
Japanese							1(25)	4
Foreign - Asian			1(25)	4	1(25)	4	2(66.7)	3
Australian	1(100)	1	1(100)	1	1(100)	1	1(100)	1

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.5
Use of Several Interview by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	16(80)	20	15(78.9)	19	13(68.4)	19	7(43.8)	16
US	2(100)	2	4(100)	4	2(50)	4	1(20)	5
W.Europeon	8(100)	8	8(100)	8	6(60)	10	5(83.3)	6
British	3(100)	3	3(100)	3	3(75)	4	3(100)	3
Japanese	3(100)	3	3(100)	3	5(100)	5	3(75)	4
Foreign - Asian	2(100)	2	3(75)	4	3(75)	4	1(33.3)	3
Australian	1(100)	1						

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.6
Use of One to one Interview by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	8(40)	20	5(26.3)	19	7(36.8)	19	7(43.8)	16
US	1(50)	2	1(25)	4	3(75)	4	5(100)	5
W.European	3(37.5)	8	3(37.5)	8	3(30)	10	1(16.7)	6
British	1(33.3)	3	1(33.3)	3	2(50)	4	1(33.3)	3
Japanese					1(20)	5	2(50)	4
Foreign - Asian	1(50)	2	2(50)	4	2(50)	4	2(66.7)	3
Australian	1(100)	1	1(100)	1	1(100)	1	1(100)	1

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.7
Use of Two/Three Interview by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	11(55)	20	15(78.9)	19	15(78.9)	19	11(68.8)	16
US	1(50)	2	1(25)	4	1(25)	4	1(20)	5
W.European	6(75)	8	8(100)	8	10(100)	10	6(100)	6
British	2(66.7)	3	3(100)	3	3(75)	4	3(100)	3
Japanese	2(66.7)	3	3(100)	3	5(100)	5	3(75)	4
Foreign - Asian	1(50)	2	4(100)	4	4(100)	4	2(66.7)	3
Australian	1(100)	1	1(100)	1				

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE D 6.8
Use of Panel Interviews by Types of Firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Local Malaysian	9(45)	20	8(42.1)	19	9(47.4)	19	7(43.8)	16
US	1(50)	2	3(75)	4	1(25)	4		
W.European	4(50)	8	2(25)	8	3(30)	10	2(33.3)	6
British								
Japanese	2(66.7)	3	1(33.3)	3	2(40)	5	3(75)	4
Foreign - Asian	2(100)	2	2(50)	4	1(25)	4	1(33.3)	3
Australian								

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE E 6.1
Managerial selection techniques by firms ownership

Sel. tech	Post	Forms of ownership						
		M'sian	US	W.Europe	British	Japanese	Frgn.Asian	Australian
<i>Intws</i>	<i>sr.mger</i>	20 (100)	2(100)	8(100)	3(100)	3(100)	2(100)	1(100)
	<i>m.mger</i>	19(100)	4(100)	8(100)	3(100)	3(100)	4(100)	1(100)
	<i>jr.mger</i>	19(100)	4(100)	10(100)	4(100)	5(100)	4(100)	1(100)
	<i>trainees</i>	15(93.8)	5(100)	6(100)	3(100)	4(100)	3(100)	1(100)
<i>A/form</i>	<i>sr.mger</i>	19(95)	2(100)	8(100)	2(66.7)	3(100)	2(100)	1(100)
	<i>m.mger</i>	19(100)	4(100)	8(100)	2(66.7)	3(100)	4(100)	1(100)
	<i>jr.mger</i>	19(100)	4(100)	10(100)	3(75)	5(100)	4(100)	1(100)
	<i>trainees</i>	16(100)	5(100)	6(100)	3(100)	4(100)	3(100)	1(100)
<i>cv</i>	<i>sr.mger</i>	15(75)	2(100)	8(100)	3(100)	3(100)	2(100)	1(100)
	<i>m.mger</i>	14(73.7)	4(100)	8(100)	3(100)	3(100)	3(75)	1(100)
	<i>jr.mger</i>	14(73.7)	4(100)	10(100)	4(100)	5(100)	3(75)	1(100)
	<i>trainees</i>	8(50)	4(80)	6(100)	3(100)	4(100)	2(66.7)	1(100)
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	17(85)	2(100)	6(75)	2(66.7)	2(66.7)	1(50)	1(100)
	<i>m.mger</i>	17(89.5)	2(50)	5(62.5)	2(66.7)	2(66.7)	2(50)	1(100)
	<i>jr.mger</i>	15(78.9)	3(75)	4(40)	2(50)	2(40)	2(50)	1(100)
	<i>trainees</i>	11(68.8)	2(40)	2(33.3)	-	2(50)	2(66.7)	-
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-	-	-
<i>PC</i> (<i>Cog.test</i>)	<i>sr.mger</i>	-	-	-	-	1(33.3)	-	-
	<i>m.mger</i>	-	-	-	-	1(33.3)	-	-
	<i>jr.mger</i>	-	-	-	1(25)	1(20)	-	-
	<i>trainees</i>	-	1(20)	1(16.7)	1(33.3)	1(25)	1(33.3)	-
<i>PP</i> (<i>Pers.test</i>)	<i>sr.mger</i>	2(10)	-	3(37.5)	-	2(66.7)	1(50)	1(100)
	<i>m.mger</i>	2(10.5)	-	3(37.5)	-	2(66.7)	2(50)	1(100)
	<i>jr.mger</i>	2(10.5)	-	2(20)	1(25)	2(40)	1(25)	1(100)
	<i>trainees</i>	2(12.5)	-	2(33.3)	1(33.3)	2(50)	-	-
<i>AC</i> (<i>assessmt</i> <i>centre</i>)	<i>sr.mger</i>	-	-	1(12.5)	1(33.3)	-	-	-
	<i>m.mger</i>	-	-	1(12.5)	1(33.3)	-	-	-
	<i>jr.mger</i>	-	-	1(10)	1(25)	-	-	-
	<i>trainees</i>	1(6.3)	-	1(16.7)	1(33.3)	-	-	-
Total firms	Post	(N)	(N)	(N)	(N)	(N)	(N)	(N)
	<i>sr.mger</i>	20	2	8	3	3	2	1
	<i>m.mger</i>	19	4	8	3	3	4	1
	<i>jr.mger</i>	19	4	10	4	5	4	1
	<i>trainees</i>	16	5	6	3	4	3	1

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.2
Selection techniques and use of consultants by firms ownership

Sel.tech	Post	Forms of ownership				
		M'sian	US	W.Europe	British	Japanese
<i>Intws</i>	<i>sr.mger</i>	11(100)	1(50)	6(100)	2(100)	1(100)
	<i>m.mger</i>	5(100)	1(50)	2(100)	2(100)	-
	<i>jr.mger</i>	1(100)	2(100)	1(100)	2(100)	-
	<i>trainees</i>	1(100)	1(100)	-	-	-
<i>A/form</i>	<i>sr.mger</i>	10(90.1)	1(50)	6(100)	1(50)	1(100)
	<i>m.mger</i>	5(100)	1(50)	2(100)	1(50)	-
	<i>jr.mger</i>	1(100)	2(100)	1(100)	1(50)	-
	<i>trainees</i>	1(100)	1(100)	-	-	-
<i>cv</i>	<i>sr.mger</i>	10(90.9)	1(50)	6(100)	2(100)	1(100)
	<i>m.mger</i>	5(100)	1(50)	2(100)	1(50)	-
	<i>jr.mger</i>	1(100)	2(100)	1(100)	2(100)	-
	<i>trainees</i>	1(100)	1(100)	-	-	-
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	8(72.7)	1(50)	4(66.7)	2(100)	1(100)
	<i>m.mger</i>	4(80)	1(50)	1(50)	2(100)	-
	<i>jr.mger</i>	1(100)	2(100)	1(100)	2(100)	-
	<i>trainees</i>	1(100)	1(100)	-	-	-
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PC (Cog.test)</i>	<i>sr.mger</i>	-	-	-	-	1(100)
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PP (Pers.test)</i>	<i>sr.mger</i>	2(18.2)	-	3(50)	-	1(100)
	<i>m.mger</i>	2(40)	-	1(50)	-	-
	<i>jr.mger</i>	1(100)	-	-	-	-
	<i>trainees</i>	1(100)	-	-	-	-
<i>AC (assessmt centre)</i>	<i>sr.mger</i>	-	-	-	1(50)	-
	<i>m.mger</i>	-	-	-	1(50)	-
	<i>jr.mger</i>	-	-	-	1(50)	-
	<i>trainees</i>	-	-	-	-	-
Total firms employing consultants	Post	(N)	(N)	(N)	(N)	(N)
	<i>sr.mger</i>	11	2	6	2	1
	<i>m.mger</i>	5	2	2	2	-
	<i>jr.mger</i>	1	2	1	2	-
	<i>trainees</i>	1	1	-	-	-

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.3
Selection techniques and backgrounds of personnel managers (experiences - local and foreign) by firms ownership

Sel.tech	Post	Forms of ownership				
		M'sian	US	W.Europe	British	Japanese
<i>Intws</i>	<i>sr.mger</i>	7(100)	1(100)	3(75)	1(50)	1(20)
	<i>m.mger</i>	7(100)	1(100)	3(75)	1(50)	1(20)
	<i>jr.mger</i>	7(100)	1(100)	4(100)	2(100)	3(60)
	<i>trainees</i>	6(85.7)	1(100)	4(100)	2(100)	1(20)
<i>A/form</i>	<i>sr.mger</i>	7(100)	1(100)	3(75)	1(50)	1(20)
	<i>m.mger</i>	7(100)	1(100)	3(75)	1(50)	1(20)
	<i>jr.mger</i>	7(100)	1(100)	4(100)	2(100)	3(60)
	<i>trainees</i>	6(85.7)	1(100)	4(100)	2(100)	1(20)
<i>cv</i>	<i>sr.mger</i>	7(100)	1(100)	3(75)	1(50)	1(20)
	<i>m.mger</i>	5(71.4)	1(100)	3(75)	1(50)	1(20)
	<i>jr.mger</i>	5(71.4)	1(100)	4(100)	2(100)	3(60)
	<i>trainees</i>	4(57.1)	1(100)	4(100)	2(100)	1(20)
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	6(85.7)	1(100)	2(50)	-	1(20)
	<i>m.mger</i>	6(85.7)	1(100)	2(50)	-	1(20)
	<i>jr.mger</i>	6(85.7)	1(100)	2(50)	-	1(20)
	<i>trainees</i>	4(57.1)	1(100)	2(50)	-	1(20)
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PC (Cog.test)</i>	<i>sr.mger</i>	-	-	-	-	1(20)
	<i>m.mger</i>	-	-	-	-	1(20)
	<i>jr.mger</i>	-	-	-	1(50)	1(20)
	<i>trainees</i>	-	-	1(25)	1(50)	1(20)
<i>PP (Pers.test)</i>	<i>sr.mger</i>	1(14.3)	-	2(50)	-	1(20)
	<i>m.mger</i>	1(14.3)	-	2(50)	-	1(20)
	<i>jr.mger</i>	1(14.3)	-	1(25)	1(50)	1(20)
	<i>trainees</i>	1(14.3)	-	2(50)	1(50)	1(20)
<i>AC (assessmt centre)</i>	<i>sr.mger</i>	-	-	-	1(50)	-
	<i>m.mger</i>	-	-	1(25)	-	-
	<i>jr.mger</i>	-	-	1(25)	-	-
	<i>trainees</i>	-	-	1(25)	-	-
Personnel managers experiences (local and foreign)	Post	7	1	4	2	5

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.4
Selection techniques and backgrounds of personnel managers (experiences - local)
by firms ownership

Sel.tech	Post	M'sian	US	Forms of ownership		
				W.Europe	British	Japanese
<i>Intws</i>	<i>sr.mger</i>	12(92.3)	-	-	1(100)	-
	<i>m.mger</i>	11(84.6)	-	-	1(100)	-
	<i>jr.mger</i>	11(84.6)	-	-	1(100)	-
	<i>trainees</i>	8(61.5)	-	-	-	-
<i>A/form</i>	<i>sr.mger</i>	11(84.6)	-	-	1(100)	-
	<i>m.mger</i>	11(84.6)	-	-	1(100)	-
	<i>jr.mger</i>	11(84.6)	-	-	1(100)	-
	<i>trainees</i>	9(69.2)	-	-	-	-
<i>cv</i>	<i>sr.mger</i>	8(61.5)	-	-	1(100)	-
	<i>m.mger</i>	8(61.5)	-	-	1(100)	-
	<i>jr.mger</i>	8(61.5)	-	-	1(100)	-
	<i>trainees</i>	3(23.1)	-	-	-	-
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	10(76.9)	-	-	1(100)	-
	<i>m.mger</i>	10(76.9)	-	-	1(100)	-
	<i>jr.mger</i>	8(61.5)	-	-	1(100)	-
	<i>trainees</i>	6(46.2)	-	-	-	-
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PC (Cog.test)</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PP (Pers.test)</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>AC (assessmt centre)</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	1(7.7)	-	-	-	-
Personnel managers experiences (local)	Post	13	-	-	1	-

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.5
Selection techniques and backgrounds of personnel managers (experiences - foreign)
by firms ownership

Sel.tech	Post	M'sian	US	Forms of ownership		
				W.Europe	British	Japanese
<i>Intws</i>	<i>sr.mger</i>	1(100)	1(20)	5(83.3)	1(100)	2(25)
	<i>m.mger</i>	1(100)	3(60)	5(83.3)	1(100)	2(25)
	<i>jr.mger</i>	1(100)	3(60)	6(100)	1(100)	2(25)
	<i>trainees</i>	1(100)	4(80)	2(33.3)	1(100)	3(37.5)
<i>A/form</i>	<i>sr.mger</i>	1(100)	1(20)	5(83.3)	-	2(25)
	<i>m.mger</i>	1(100)	3(60)	5(83.3)	-	2(25)
	<i>jr.mger</i>	1(100)	3(60)	6(100)	-	2(25)
	<i>trainees</i>	1(100)	4(80)	2(33.3)	1(100)	3(37.5)
<i>cv</i>	<i>sr.mger</i>	1(100)	1(20)	5(83.3)	1(100)	2(25)
	<i>m.mger</i>	1(100)	3(60)	5(83.3)	1(100)	2(25)
	<i>jr.mger</i>	1(100)	3(60)	6(100)	1(100)	2(25)
	<i>trainees</i>	1(100)	3(60)	2(33.3)	1(100)	3(37.5)
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	1(100)	1(20)	4(66.7)	1(100)	1(12.5)
	<i>m.mger</i>	1(100)	1(20)	3(50)	1(100)	1(12.5)
	<i>jr.mger</i>	1(100)	2(40)	2(33.3)	1(100)	1(12.5)
	<i>trainees</i>	1(100)	1(20)	-	-	1(12.5)
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PC</i> <i>(Cog.test)</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	1(20)	-	-	-
<i>PP</i> <i>(Pers.test)</i>	<i>sr.mger</i>	1(100)	-	1(16.7)	-	1(12.5)
	<i>m.mger</i>	1(100)	-	1(16.7)	-	1(12.5)
	<i>jr.mger</i>	1(100)	-	1(16.7)	-	1(12.5)
	<i>trainees</i>	1(100)	-	-	-	1(12.5)
<i>AC</i> <i>(assessmt</i> <i>centre)</i>	<i>sr.mger</i>	-	-	-	1(100)	-
	<i>m.mger</i>	-	-	-	1(100)	-
	<i>jr.mger</i>	-	-	-	1(100)	-
	<i>trainees</i>	-	-	-	1(100)	1
Personnel managers experiences (forelgn)	Post	1	5	6	1	8

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.6
Selection techniques and backgrounds of personnel managers (education - local)
by firms ownership

Sel.tech	Post	M'sian	Forms of ownership			
			US	W.Europe	British	Japanese
<i>Intws</i>	<i>sr.mger</i>	10(90.9)	-	5(83.3)	1(50)	-
	<i>m.mger</i>	10(90.9)	2(66.7)	5(83.3)	1(50)	-
	<i>jr.mger</i>	10(90.9)	1(33.3)	6(100)	2(100)	2(22.2)
	<i>trainees</i>	8(72.7)	3(100)	4(66.7)	2(100)	1(11.1)
<i>A/form</i>	<i>sr.mger</i>	10(90.9)	-	5(83.3)	-	-
	<i>m.mger</i>	10(90.9)	2(66.7)	5(83.3)	-	-
	<i>jr.mger</i>	10(90.9)	1(33.3)	6(100)	1(50)	2(22.2)
	<i>trainees</i>	8(72.7)	3(100)	4(66.7)	2(100)	1(11.1)
<i>cv</i>	<i>sr.mger</i>	8(72.7)	-	5(83.3)	1(50)	-
	<i>m.mger</i>	7(63.6)	2(66.7)	5(83.3)	1(50)	-
	<i>jr.mger</i>	7(63.6)	1(33.3)	6(100)	2(100)	2(22.2)
	<i>trainees</i>	4(36.4)	2(66.7)	4(66.7)	2(100)	1(11.1)
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	9(81.8)	-	4(66.7)	1(50)	-
	<i>m.mger</i>	9(81.8)	-	4(66.7)	1(50)	-
	<i>jr.mger</i>	8(72.7)	-	3(50)	1(50)	-
	<i>trainees</i>	5(45.5)	-	2(33.3)	-	-
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PC</i> <i>(Cog.test)</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	1(50)	-
	<i>trainees</i>	-	1(33.3)	1(16.7)	1(50)	-
<i>PP</i> <i>(Pers.test)</i>	<i>sr.mger</i>	1(9.1)	-	2(33.3)	-	-
	<i>m.mger</i>	1(9.1)	-	2(33.3)	-	-
	<i>jr.mger</i>	1(9.1)	-	1(16.7)	1(50)	-
	<i>trainees</i>	1(9.1)	-	1(16.7)	1(50)	-
<i>AC</i> <i>(assessmt</i> <i>centre)</i>	<i>sr.mger</i>	-	-	1(16.7)	1(50)	-
	<i>m.mger</i>	-	-	1(16.7)	1(50)	-
	<i>jr.mger</i>	-	-	1(16.7)	1(50)	-
	<i>trainees</i>	-	-	1(16.7)	1(50)	-
Personnel managers education (local)	Post	11	3	6	2	9

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.7
Selection techniques and backgrounds of personnel managers (education - overseas)
by firms ownership

Sel.tech	Post	Forms of ownership				
		M'sian	US	W.Europe	British	Japanese
<i>Intws</i>	<i>sr.mger</i>	10(90.9)	1(33.3)	3(50)	2(100)	3(33.3)
	<i>m.mger</i>	9(81.8)	1(33.3)	3(50)	2(100)	3(33.3)
	<i>jr.mger</i>	9(81.8)	2(66.7)	4(66.7)	2(100)	3(33.3)
	<i>trainees</i>	7(63.6)	1(33.3)	2(33.3)	1(50)	3(33.3)
<i>A/form</i>	<i>sr.mger</i>	9(81.8)	1(33.3)	3(50)	2(100)	3(33.3)
	<i>m.mger</i>	9(81.8)	1(33.3)	3(50)	2(100)	3(33.3)
	<i>jr.mger</i>	9(81.8)	2(66.7)	4(66.7)	2(100)	3(33.3)
	<i>trainees</i>	8(72.7)	1(33.3)	2(33.3)	1(50)	3(33.3)
<i>cv</i>	<i>sr.mger</i>	7(63.6)	1(33.3)	3(50)	2(100)	3(33.3)
	<i>m.mger</i>	7(63.6)	1(33.3)	3(50)	2(100)	3(33.3)
	<i>jr.mger</i>	7(63.6)	2(66.7)	4(66.7)	2(100)	3(33.3)
	<i>trainees</i>	4(36.4)	1(33.3)	2(33.3)	1(50)	3(33.3)
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	8(72.7)	1(33.3)	2(33.3)	1(50)	2(22.2)
	<i>m.mger</i>	8(72.7)	1(33.3)	1(16.7)	1(50)	2(22.2)
	<i>jr.mger</i>	7(63.6)	2(66.7)	1(16.7)	1(50)	2(22.2)
	<i>trainees</i>	6(54.5)	1(33.3)	-	-	2(22.2)
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PC (Cog.test)</i>	<i>sr.mger</i>	-	-	-	-	1(11.1)
	<i>m.mger</i>	-	-	-	-	1(11.1)
	<i>jr.mger</i>	-	-	-	-	1(11.1)
	<i>trainees</i>	-	-	-	-	1(11.1)
<i>PP (Pers.test)</i>	<i>sr.mger</i>	1(9.1)	-	1(16.7)	-	2(22.2)
	<i>m.mger</i>	1(9.1)	-	1(16.7)	-	2(22.2)
	<i>jr.mger</i>	1(9.1)	-	1(16.7)	-	2(22.2)
	<i>trainees</i>	1(9.1)	-	1(16.7)	-	2(22.2)
<i>AC (assessmt centre)</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	1(9.1)	-	-	-	-
Personnel managers education (overseas)	Post	11	3	6	2	9

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.8
Selection techniques and HRM department (specialised recruitment and selection function)
by firms ownership

Sel.tech	Post	Forms of ownership				
		M'sian	US	W.Europe	British	Japanese
<i>Intws</i>	<i>sr.mger</i>	15(93.8)	1(33.3)	6(75)	2(66.7)	2(25)
	<i>m.mger</i>	14(87.5)	2(66.7)	6(75)	2(66.7)	2(25)
	<i>jr.mger</i>	14(87.5)	2(66.7)	8(100)	3(100)	3(37.5)
	<i>trainees</i>	10(62.5)	2(66.7)	4(50)	3(100)	3(37.5)
<i>A/form</i>	<i>sr.mger</i>	14(87.5)	1(33.3)	6(75)	1(33.3)	2(25)
	<i>m.mger</i>	14(87.5)	2(66.7)	6(75)	1(33.3)	2(25)
	<i>jr.mger</i>	14(87.5)	2(66.7)	8(100)	2(66.7)	3(37.5)
	<i>trainees</i>	11(68.8)	2(66.7)	4(50)	3(100)	3(37.5)
<i>cv</i>	<i>sr.mger</i>	13(81.3)	1(33.3)	6(75)	2(66.7)	2(25)
	<i>m.mger</i>	11(68.8)	2(66.7)	6(75)	2(66.7)	2(25)
	<i>jr.mger</i>	11(68.8)	2(66.7)	8(100)	3(100)	3(37.5)
	<i>trainees</i>	5(31.3)	1(33.3)	4(50)	3(100)	3(37.5)
<i>Biodata</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Ref.</i>	<i>sr.mger</i>	12(75)	1(33.3)	4(50)	1(33.3)	1(12.5)
	<i>m.mger</i>	12(75)	1(33.3)	4(50)	1(33.3)	1(12.5)
	<i>jr.mger</i>	11(68.8)	2(66.7)	4(50)	1(33.3)	1(12.5)
	<i>trainees</i>	9(56.3)	1(33.3)	2(25)	-	1(12.5)
<i>Hw</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>Astrology</i>	<i>sr.mger</i>	-	-	-	-	-
	<i>m.mger</i>	-	-	-	-	-
	<i>jr.mger</i>	-	-	-	-	-
	<i>trainees</i>	-	-	-	-	-
<i>PC</i> <i>(Cog.test)</i>	<i>sr.mger</i>	-	-	-	-	1(12.5)
	<i>m.mger</i>	-	-	-	-	1(12.5)
	<i>jr.mger</i>	-	-	-	1(33.3)	1(12.5)
	<i>trainees</i>	-	1(33.3)	1(12.5)	1(33.3)	1(12.5)
<i>PP</i> <i>(Pers.test)</i>	<i>sr.mger</i>	2(12.5)	-	3(37.5)	-	2(25)
	<i>m.mger</i>	2(12.5)	-	3(37.5)	-	2(25)
	<i>jr.mger</i>	2(12.5)	-	2(25)	1(33.3)	2(25)
	<i>trainees</i>	2(12.5)	-	2(25)	1(33.3)	2(25)
<i>AC</i> <i>(assessmt</i> <i>centre)</i>	<i>sr.mger</i>	-	-	1(12.5)	1(33.3)	-
	<i>m.mger</i>	-	-	1(12.5)	1(33.3)	-
	<i>jr.mger</i>	-	-	1(12.5)	1(33.3)	-
	<i>trainees</i>	1(6.3)	-	1(12.5)	1(33.3)	-
HRM department (sp. recrtrnt and selection function)	Post	16	3	8	3	8

Note : Numbers in () are the percentages of the column total which the numbers represent

TABLE E 6.9 (a)
Pre - entry Medical test requirement by firms ownership

Types of firms	Are Candidates required to have a pre - entry medical test							
	Senior managers				Middle managers			
	Yes, by co.doctor	Yes, by own doctor	No	yes, if indicated health problem	Yes, by co.doctor	Yes, by own doctor	No	yes, if indicated health problem
L. Malaysian	18(90)		1(5)	1(5)	17(89.5)		1(5.3)	1(5.3)
US	2(100)				3(75)		1(25)	
W.Europeon	7(87.5)		1(12.5)		5(62.5)	1(12.5)	2(25)	
British	2(66.7)	1(33.3)			2(66.7)	1(33.3)		
Japanese	3(100)				3(100)			
Foreign - Asian	1(50)		1(50)		1(25)		3(75)	
Australian	1(100)				1(100)			
		Senior Manager (N)				Middle Manager (N)		
L. Malaysian		20				19		
US		2				4		
W.Europeon		8				8		
British		3				3		
Japanese		3				3		
Foreign - Asian		2				4		
Australian		1				1		

*Note : Numbers in () are the percentages of the column total which the numbers represent
N denotes total number of firms*

TABLE E 6.9 (b)
Pre - entry Medical test requirement by firms ownership

Types of firms	Are Candidates required to have a pre - entry medical test							
	Junior managers				Trainees			
	Yes, by co.doctor	Yes, by own doctor	No	yes, if indicated health problem	Yes, by co.doctor	Yes, by own doctor	No	yes, if indicated health problem
L. Malaysian	17(89.5)		1(5.3)	1(5.3)	15(93.8)			1(6.3)
US	3(75)		1(25)		4(80)		1(20)	
W.Europeon	7(70)	1(10)	2(20)		4(66.7)		2(33.3)	
British	3(75)	1(25)			3(100)			
Japanese	3(60)	1(20)	1(20)		3(75)		1(25)	
Foreign - Asian			4(100)					
Australian	1(100)						3(100)	

	Junior Manager (N)	Trainees (N)
L. Malaysian	19	16
US	4	5
W.Europeon	10	6
British	4	3
Japanese	5	4
Foreign - Asian	4	3
Australian	1	

Note : Numbers in () are the percentages of the column total which the numbers represent
N denotes total number of firms

TABLE F 6.1
Factors influencing the choice of selection techniques by firms ownership

Types of firms (N)	Factors influencing choice of selection techniques								
	local instn.	frgn. instn.	local conslnt	frgn. conslnt	private instn.	parent co. practices	local firm	frgn firm	local & frgn. firms
Local Malaysians (20)	9 (45)	10 (50)	6 (30)	2 (10)	4 (20)	-	1 (5)	-	5 (25)
US (6)	4 (66.7)	2 (33.3)	1 (16.7)		1 (16.7)				2 (33.3)
W.Europeon (10)	3 (30)	3 (30)	3 (30)	1 (10)	2 (20)	1 (10)			4 (40)
British (4)	3 (75)	3 (75)	2 (50)	2 (50)					
Japanese (6)	5 (83.3)	1 (16.7)	2 (33.3)				1 (16.7)		3 (50)
Foreign - Asian (5)	4 (80)	1 (20)			4 (80)				
Australian (1)							1 (100)		

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE F 6.2
Factors influencing the choice of selection techniques (presence of other firms)
by firms ownership

Types of firms (N)	Factors influencing choice of selection techniques		
	local firm	frgn firm	local & frgn. firms
Local Malaysians (6)	1 (16.7)		5 (83.3)
US (2)			2 (100)
German (1)			1 (100)
Japanese (4)	1 (25)		3 (75)
Taiwanese (1)	1 (100)		
Swiss (2)			2 (100)
Dutch (1)			1 (100)

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.1
Use of Open ended interviews between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	20(100)	20	16(84.2)	19	15(78.9)	19	16(68.8)	16
Non Malaysian	16(84.2)	19	19(82.6)	23	24(85.7)	28	18(81.8)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.2
Use of Structured interviews between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	11(55)	20	13(68.4)	19	15(78.9)	19	12(75)	16
Non Malaysian	14(73.7)	19	16(69.6)	23	20(71.4)	28	15(68.2)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.3
Use of Job Specific interviews between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	11(55)	20	13(68.4)	19	11(57.9)	19	11(68.8)	16
Non Malaysian	16(84.2)	19	19(82.6)	23	21(75)	28	14(63.6)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.4
Use of One interview between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	8(40)	20	10(52.6)	19	13(68.4)	19	11(68.8)	16
Non Malaysian	1(5.3)	19	3(13)	23	10(35.7)	28	9(40.9)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.5
Use of Several interviews between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	16(80)	20	15(78.9)	19	13(68.4)	19	7(43.8)	16
Non Malaysian	19(100)	19	21(91.3)	23	19(67.9)	28	13(59.1)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.6
Use of One to one interview between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	8(40)	20	5(26.3)	19	7(36.8)	19	7(43.8)	16
Non Malaysian	7(36.8)	19	8(34.8)	23	12(42.9)	28	12(54.5)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.7
Use of Two/Three interviews between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	11(55)	20	15(78.9)	19	15(78.9)	19	11(68.8)	16
Non Malaysian	13(68.4)	19	20(87)	23	23(82.1)	28	15(68.2)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.8
Use of Panel interviews between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	9(45)	20	8(42.1)	19	9(47.4)	19	7(43.8)	16
Non Malaysian	9(47.4)	19	8(34.8)	23	7(25)	28	6(27.3)	22

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 6.9
Use of Consultants between Malaysian and non - Malaysian firms

Types of Firms	Post of Manager							
	Sr.Mger	N	M.mger	N	Jr.mger	N	Trainees	N
Malaysian	11(52.4)	21	5(23.8)	21	1(4.8)	21	1(4.8)	21
Non Malaysian	11(28.2)	39	6(15.4)	39	5(12.8)	39	1(2.6)	39

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

TABLE G 7.0
Backgrounds of Personnel Managers between Malaysian and non - Malaysian firms

Types of firms	Experiences (Types of firms)				Formal education received		
	Both local and foreign	Local	Foreign	N	Local	Ov'seas	N
Malaysian	7(33.3)	13(61.9)	1(4.8)	21	11(52.4)	10(47.6)	21
Non Malaysians	13(33.3)	1(2.6)	25(64.1)	39	25(65.8)	13(34.2)	38

Note : Numbers in () are the percentages of the row total which the numbers represent
N denotes total number of firms

**Tabulation of Interview responses
in terms of firm's ownership**

PERSONAL INTERVIEW

List Of Questions

QN.1

Why did your firm chose the selection techniques (currently used) to select managers?

Answer

Application form :

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F./Asian (N=3)
Used as a basis for formulating question (general & specific) during the intvw			1	2	3	2		
Used to provide background information for record keeping purposes	2				1			
Used to ensure that the information neded by company are consistant since questions formulated during the interview will be based on the application form	2	1						
Used to short list candidates based on career track					3			
Used to shortlist candidates based on candidate's background such as age which is not too young or too old	1							
Used to shortlist candidates based on candidate's career path such as whether the candidates always changed from one job to another							2	
Used to shortlist candidates based on candidate's family background					2			
Used to shortlist/screen candidates based on candidate's background such as qualification and experiences	8	2	1	4	8	2	3	3

Appendix 5.1

CVs :

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Used as a basis for formulating question (general & specific) during the intvw			1	2	3	2		
Used to assess candidate's personality based on the way these candidates organised their detailed background information				1	3			
Used to shortlist candidates based on candidate's career path such as whether the candidates always changed from one job to another							2	
Used to shortlist candidates based on career track & to determine progress in career path					3			
Used to shortlist/screen candidates based on detailed candidate's background such as qualification experiences & suitability	8	2	1	3	8	2	3	3

Appendix 5.1

Interview :

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Used to as an opportunity to 'sell' the image of company such as prospects of being employed with the company/inform candidate regarding company's profile/background	1				2	1		
Used to assess candidate's 'conceptual' ability especially for senior post.	1							
Used to assess candidate's ability to answer job related or technical question or situational management question/assess relevant job knowledge	2			1	1	1		1
Used to assess candidate's communication skills	1		1		1			1
Used to assess candidate's competency for the job	1				3			
Used to assess whether the candidates has a strong committment to work with the company or for personal interest							3	
Used to assessed by Board Of Directors(panel) whether candidates have the potential (to be groomed) for senior post					1			
Used to assessed whether candidate's attitude or personality is suitable to the job	4		1	4	5	1	1	3
Used to assessed whether candidates personality fit / conform to the cos. culture	3	1		4	2			
Used to identify the right candidate based on past performance. Interview is based on behaviour dimension required for the job		1						
Used to inform candidates regarding job content	1				1			
Used to negotiate & discuss more of the salary, perks & benefits available by the personnel department	1						1	1
Used to probe deeper into the personality or behaviour of candidates in terms of "HAIR" qualities or experiences	1				1			
Used to verify or investigate further whatever information given in the app.form, cv regarding candidate's career track or experiences			1	2	1		3	1

Appendix 5.1

References :

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Used to cross check certain characters or background of candidates from previous employers	1	2			3	1	2	
Used to cross check certain characters or backgrounds of candidates after a deciding to appoint the candidate & to probe further if the feedback received is negative	1							
Used to cross check contributions or performance of candidates from previous employers					3			
Used to substantiate certain background of candidates that is ambiguous				1				

Psychological tests (Cognitive) :

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Cognitive test- forms part of the Assessment centre to test the mental alertness & technical capability of candidates	1					1		
Cognitive test- Used as a standard requirement to test the 'mental alertness' of candidates for all level of employees				1	1			
Cognitive test- Used to test the 'mental alertness' of trainees								
Cognitive test-Used to observe the responses or reactions of candidates when subjected to this test in terms of eagerness, nervousness, etc. The score has no weight in the selection process but only for record keeping purposes							1	

Appendix 5.1

Psychological tests (Personality) :

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Personality test- Forms part of the Assessment centre. Used to assess the work attitude, leadership ability etc of candidates	1					1		
Personality test-Used for record keeping purposes & references in the future if there is any vacancy for managerial post							1	
Personality test-Used to assess profile of candidates, to probe into certain areas of concern & to assess competency of candidate's profile with the job					1			
Personality test-Used to assess the personality of candidates in terms of suitability to the job[personality trait vs job requirement]	1				1	1		

Assessment Centre :

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Used to assess CEP[Career Estimated Potential] of candidates or as a development tool	1				1	1		
Used to assess technical capability, work attitude, management skill such as leadership attributes, interactive ability etc of candidates based on unstructured role-play, candidate's response to a given situation & how candidates solved a given problem	1				1	1		

Appendix 5.1

QN. 2

Do you consider these factors below to have influenced the selection techniques chosen by your firm to select managers?

- location of your firm (why, why not?)

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, still used the same selection techniques in different location in Malaysia	7	2	1		8	1	2	1
No, still used the same selection techniques in different location in Malaysia & in the US, although the criteria for suitable candidates may be different				3				
No, still used the same selection techniques in different location in Malaysia & throughout the world								1
No, still used the same selection techniques in Malaysia & in Taiwan								1
Yes, every company in different parts of Malaysia used their own selection techniques. The parent firm in Japan only gives guidelines.							1	
Yes, US firms will have a different & more complex selection techniques such as using more aptitude test. This is because the company in the US needs managers with more engineering background				2				
Yes, will not use assessment centre (AC) in different location in Malaysia due to the AC's practicality, cost, acceptability by assessors & applicants of the respective location	1					1		

Appendix 5.1

- no. of applicants (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, still used the same selection techniques. Needs to shortlist candidates into manageable size if the number of candidates increases	7	2	1	5	7	1	3	3
Yes, the assessment centre is only effective if there are more than 16 candidates in a group	1					1		
Yes, if we have very few applicants, it is not worthwhile to use a very sophisticated or elaborate selection techniques.					1			

- trade unions or staff associations organise in your firm (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, no trade unions exist in the company	3	1		4	3		3	3
No, trade unions are organised solely for non executives/management employee to bargain for better employment terms & condition	5	1	1	1	5	2		

Appendix 5.1

- specialized recruitment and selection function in your personnel department (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F./Asian (N=3)
No, do not have a specialized recruitment & selection function. It is every individual's responsibility from other department to contribute in establishing an effective selection techniques. Personnel Dept. only served as a fascilitator function	4	1			1		1	1
Yes, it helps in establishing & choosing an effective selection techniques. Due to the existant of specialized recruitment & selection function, most recruiters are professionally trained & employ structured interview, 'ability & occupational' test	1							
Yes, it helps in establishing & choosing a valid and reliable selection techniques. It also helps in establishing guidelines in recruitment & selection	1	1	1	5	7	2	1	2
Yes, it helps in establishing & choosing an effective selection techniques. The company also have an advisor who assist the recruitment & selection function by informing the latest selection technique available.							1	
Yes, it helps in establishing & choosing an effective selection techniques. The company also have some framework in terms of the suitability and effectiveness of selection techniques to be employed.	1							
Yes, it helps in establishing & choosing an effective selection techniques & processes. The company is also more focussed in selecting the right candidate	1							

Appendix 5.1

- centralized/decentralized recruitment and selection function (perhaps at certain stage in the personnel department) (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
centralized. This ensures proper control in establishing a comprehensive and effective selection techniques & guidelines for other dept. in selecting managers	8	2	1	5	7	2	3	3
decentralized, the 'user' department will identify & select suitable candidates by using selection techniques that has been established by top management					1			

Appendix 5.1

- presence of leading firms in your area and if yes, which firm - foreign, local or both? (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F./Asian (N=3)
No, do not use other leading firms as a benchmark in establishing company's selection techniques. The selection techniques established were based from company's own experiences & knowledge	1	1	1	3	1	1	1	2
No, do not use other leading firms as a benchmark in establishing company's selection techniques. The company believed that it has the best recruitment & selection system		1			1			
No, do not use other leading firms as a benchmark in establishing company's selection techniques. Parent firm gives guidelines & subsidiary adjust according to its requirements					3		1	
No, do not use other leading firms as a benchmark in establishing company's selection techniques. The company used the selection techniques established by parent firm						1		1
No, do not use other leading firms as a benchmark in establishing company's selection techniques. The company believed that the selection techniques used are standard technique commonly used by other firm	2				1		1	
Yes, used both local & foreign firms as a benchmark in establishing selection techniques in the company	4			2	2			
Yes, used local firms as a benchmark in establishing selection techniques in the company	1							

Appendix 5.1

- working experience in other firms of the key manager/personnel responsible for managerial selection process in your firm. (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, the selection techniques already existed in the company	3				1		2	1
No, the selection techniques already existed in the company. Only have working experiences with the presence firm.		1		1	1			
No, the selection techniques has already been established by parent firm. Subsidiary companies will be trained to administer the selection techniques						1		2
Yes, experiences helps individual to be more specialised						1		
Yes, experiences helps individuals to identify the pros & cons of the existing selection techniques	1							
Yes, experiences helps to contribute in terms of capability & maturity in handling and establishing the best recruitment & selection technique/practices				1				
Yes, experiences helps to improve the current selection techniques/processes	3		1	3	5		1	
Yes, experiences helps to improve the current selection techniques/processes. In addition, the company assessors of must have experiences & talent. These assessors also needs to be trained.		1						
Yes, experiences helps to refine the selection techniques & processes by learning from mistakes made in the past					1			
Yes, through experiences over a period of time individual learnt to use a better selection techniques.	1							

Appendix 5.1

- ideas, theories learnt during formal education. in HRM/Management (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F./Asian (N=3)
No, but ideas, theories learnt from courses, seminars or consultants helps to establish and improve our selection techniques and practices				1	3	1		
No, the selection techniques already existed in the company	1	2			2		1	1
No, this depend on individual's working experiences & training received	2			1				
Yes, formal education helps individual to be aware of the selection techniques used in the US but no direct impact	4		1	2	3	1	1	2
Yes, formal education helps individual to be aware of the selection techniques available in the West & this changes after a certain period of time							1	
Yes, formal education helps individual to understand, reinforce & reaffirm the theories learnt but no direct impact				1				
Yes, formal education helps individuals to resort to the theories received or learnt during formal education. It also helps individual to be able to adapt when implementing the selection technique	1							

Appendix 5.1

- selection techniques or practices of parent company of your firm. (why, why not?)

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/Asian (N=3)
No, the selection techniques established were based from company's own experiences & idea. Parent firm in Malaysia do not give guidelines	2							
No, the selection techniques established were based from company's own experiences & idea. Parent firm overseas do not give guidelines				4	5		2	1
Yes based on guidelines established by overseas parent firm, subsidiary company in Malaysia can set up, develop & improve their own selection technique.				1				1
Yes, based on guidelines established by overseas parent firm					2	1	1	
Yes based on guidelines established by overseas parent firm, subsidiary company in Malaysia can set up, develop & improve their own selection technique. The parent firm will then review & comment .					1			
Yes, based on guidelines established by overseas parent firm. The Managing Director overseas is also available as an interviewer								1
Yes, based on guidelines established by top management of the parent firm in Malaysia	4	2						
Yes, based on guidelines established by top management of the parent firm in Malaysia for senior manager post	1							
Yes, based on guidelines established by top management of the parent firm in Malaysia Other managers in the personnel function will modify & change accordingly	1		1					
Yes, based on the selection techniques established by parent firm						1		

Appendix 5.1

- features of selection techniques (why, why not?)

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F./Asian (N=3)
Yes, acceptable by decision makers & applicants	1		1					
Yes, accuracy/reliable	4	1		1	1	1	1	
Yes, ease of use/comfortable /convenient/user friendly/simple	6		1	4	6		1	1
Yes, familiarity	3		1	3	2	1		1
Yes, less costly	1			1				

Appendix 5.1

QN.3

Which selection techniques that originate from the west require modification to be used in Malaysia by your firm? (why, why not?)

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Assessment centre originate from UK. Require modification especially Case Study to suit company's requirement	1							
Assessment centre originate from UK. Require modification especially Case Study to suit company's requirement. In addition, parent firm in UK used consultants that has a local office in Malaysia which will adjust this technique according to local needs						1		
Case Study/Work sample test. It has been modified regularly & after a certain period of time has lost its originality			1					
Interview originate from US. Do not require modification since this techniques is based on "behaviour dimension" which is universal		1						
No selection techniques originate from the West, not suitable to the Malaysian culture	6	1		4	5		2	3
No selection techniques originate from the West. In future, will use psychological test(personality) known as 'Preference Inventory Test' which originate from the West. Do not require modification, since it only probes into human traits which is universal				1				
No selection techniques originate from the West. Psychological tests(cognitive) originate from Japan needs to be translated to English							1	
Personality test, originate from Australia. Require modification especially the activities in the Job title to suit company's requirement	1							
Psychological test(personality). Do not require modification since this technique is based on universal trait					3			
Psychological test(personality). Do not require modification since this technique is based on universal trait. In addition, most candidates have the necessary educational background, hence should not have any problem responding to the list of questions available in this test						1		

Appendix 5.1

QN.4

Are politicians/well known figures or relatives employed in your firm considered to be the most important referees in the selection of managers? (why, why not?)

Politicians

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, will select candidates based on merit.	5	2	1	4	4	1	2	2
No, will select candidates based on merit. Politicians "hardly remembers" when contacted by company	1							
No, will select candidates based on merit. References should be directed to previous employer to avoid biasness in favour of candidates				1				
No, will select candidates based on merit. This is to avoid any political influence/The co. do not want to be politically involved as it may not be able to progress					4	1	1	1
Yes, politicians are important in terms of networking & benefits the company will receive in future	2							

Appendix 5.1

Relatives

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, will only select candidates based on merit	5			3	5	2	3	3
No, will only select candidates based on merit. Relatives are only used as references to check candidates acceptability & degree of adaptability to work culture	1							
No, will only select candidates based on merit. This is to avoid any conflict of interest	2							
No, will select candidates based on merit. References should be directed to previous employer to avoid biasness in favour of candidates				1				
No. In the past relatives were considered as important referees but as the business grew & in order to become a 'world class' organisation, selection is presently based on skills & qualification			1					
Yes, especially if the relative is a 'militant' union leader. This background is useful to predict the character of applicants				1				
Yes, it is considered an important referee if all other criteria seek by the company remains equal					1			
Yes, it is considered as an important referee. The character or attitudes of candidates is reflected from the characters or attitudes of the relatives employed in the company		1						
Yes, it is considered as an important referee. The company encouraged family members/relatives to be employed as long as there is no conflict of interest. Family members/relatives will be allocated to different department. "this can cultivate a linking or an easily available commitment to work" with the company		1			1			
Yes, it is considered as an important referee. The company encouraged family members/relatives to be employed as long as there is no conflict of interest. The company like to be seen as 'caring' to prospective employees					1			

Appendix 5.1

QN.5

Has your firm considered using external specialists/consultants to select managers? (why, why not?)

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, has not considered using external specialists/consultants	2							
No, has not considered using external specialists/consultants. It is possible in future for specialised & senior post	2							
No, has not considered using external specialists/consultants. The company try to avoid employing consultants due to high cost & there is no guarantee of selecting the right candidates	1							
No, has not considered using external specialists/consultants. This is because the company believed that consultants do not have the expertise/ knowledge of the daily operation of the company. The company is more knowledgeable in selecting the right candidate.		1						1
No, has not considered using external specialists/consultants. There is no necessity to employ consultants				1	4			
Yes, especially for senior post when the market is competitive & when there are shortage of skilled staff	1							
Yes, especially for specialized & senior post		1						
Yes, especially for specialized & senior post & when it is difficult to find suitable candidates. These consultants know whom & where to find suitable candidates				4	3	1	1	1
Yes, especially for specialized & senior post. The company believed that through advertisement, the applicants may not be as committed, dedicated or interested in challenges as the candidates identified by the consultants					1			
Yes, in the past but due to unpleasant experiences the company do not employ consultant anymore			1					
Yes, this is because the company needs professional/ competent candidates for important post & could not afford to make mistakes in selecting incompetent candidates	1							

Appendix 5.1

QN.5(continued)

Has your firm considered using external specialists/consultants to select managers? (why, why not?)

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, has not considered using external specialists/consultants. The company believed the selection techniques currently used is the most effective & seldom make errors in selecting suitable candidates							1	1
Yes, in the past initially employed consultants from Singapore. This is not the current practise since the company has employed a HR manager to select candidates for the senior manager post. It is possible to engage a consultant if the HR manager resign							1	
Yes, since these consultants know whom & where to find suitable candidates. The consultants are also used if after advertisement, there were no applicant for the post						1		

Appendix 5.1

QN. 6

Has your firm considered the effectiveness of selection techniques currently used to select managers?(i.e.whether your firm have validated these selection techniques and whether your firm will consider validating these selection techniques in future) (why, why not?)

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
Yes, based on the performance of candidates after probationary period & the company's turnover rate		1						
Yes, based on the performance of candidates after probationary period & performance of department/NCR[Non Conformance Review] of the dept.					1			
Yes, based on the performance of candidates after probationary period /performance appraisal. The company will consider a formal validation technique if selection of candidates becomes highly selective in future				1				1
Yes, based on the performance of candidates during & after probationary period/performance appraisal of candidates or 'suitability' report	7	1	1	4	7	2	3	2
Yes, validation of assessment centre is done once in 2 years	1							

Appendix 5.1

QN.7

Has your firm considered using a more reliable and valid selection techniques such as the biodata, psychological test and assessment centre? (why, why not?)

Biodata

Response/(No. of firms)	Forms of ownership/(Total no. of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, the company believed that it has an established & effective selection technique	2	2			1			1
No, will not consider since it is not necessary to use this technique/ the company do not see the need to use this selection technique	4		1	1	1		1	
No, will not consider since the company is not familiar with this technique	1				1		1	
No, will not consider since the company is satisfied with its present selection techniques								
No, will not consider since the selection technique is time consuming & costly				1	1	1	1	
No, will not consider since this selection technique is inappropriate /not suitable				1				
Yes, it depends if the number of applicants increases					1			
Yes, since this company needs to build up a database of the background of potential candidates & also a scoring system during initial screening								1
Yes, will consider as long as the selection technique is easy, beneficial, relevant & not costly					1			
Yes, will consider as long as the system has been computerised					2			
Yes, will consider if the company expand & have enough resources								1
Yes, will consider if the selection technique helps to improve the selection process	1			2		1		

Appendix 5.1

Psychological (Cognitive) test

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, the company believed that it has an established & effective selection technique	1	2			2			1
No, will not consider since the company is not familiar this selection technique			1					
No, will not consider since the company is not familiar with this selection technique	1				1			
No, will not consider since the company is satisfied with its present selection techniques								1
No, will not consider this selection technique since all of the applicants are graduates, hence needs to assess combination of personalities instead of intelligence	1							
No, will not consider this selection technique since it is inappropriate /not suitable	1						1	
No, will not consider this selection technique since it is not necessary for managerial post	1			2	1		1	
No, will not consider this selection technique since it is perceived as an insult to the candidates	2				1			1
No, will not consider this selection technique since it is time consuming & costly				1	1			
Yes, currently used this technique as a standard requirement as advised by our overseas headquarters				1				
Yes, currently used this selection technique which forms part of the Assessment centre						1		
Yes, currently used to assess the 'alertness' for all level of employess				1	1	1		
Yes, currently used to observe the responses or reaction of candidates in terms of eagerness, nervousness, etc. the score has no weight in the selection process but only for record keeping purposes							1	
Yes, will consider this selection technique if the company expand & have enough resources								1
Yes, will consider this selection technique in future if it helps to improve the selection process	1							

Appendix 5.1

Psychological (Personality) test

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F./Asian (N=3)
No, the company believed that it has an established & effective selection technique	1	2			1			1
No, will not consider since it is not necessary to use this technique	1			1			1	1
No, will not consider since the company is not familiar with this technique	1		1		1			
No, will not consider this technique since it is inappropriate/unsuitable				1			1	
No, will not consider this technique since it is time consuming & costly				1	1			
Yes, currently used for record keeping purposes & references in future if there is any vacancy for any managerial post							1	
Yes, currently used his technique which forms part of the Assessment centre	1					1		
Yes, currently used this technique since it has proven to be effective in assessing whether candidate's personality fit with the job	1				1	1		
Yes, will consider this technique if the company expand & have enough resources								1
Yes, will consider this technique in future if it helps to improve the selection process	3			1	4			
Yes, will consider this technique only as a supporting measurement				1				

Appendix 5.1

Assessment Centre

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F./Asian (N=3)
No, will not consider since it is not necessary to use this technique				1				
No, will not consider since the company believed that it has an established & effective selection technique	1							1
No, will not consider since the company is satisfied with its present selection techniques	2	1			1		1	
No, will not consider. There are other technique available that can be used by the company						1		
No, will not consider this technique since it is inappropriate/unsuitable							1	
No, will not consider this technique since it is time consuming & costly		1		1	4		1	
No, will not consider this technique since most managers are promoted internally								1
Yes, currently used this technique which has been proven to be accurate, reliable & more superior than any other selection techniques	1				1	1		
Yes, will consider this technique if it helps to improve the selection process	3			2				
Yes, will consider using any technique as long as it is easy, beneficial, relevant & not costly					1			
Yes, will consider using this technique if the company expand & have enough resources								1
Yes, currently used this technique since it can be used to assess CEP[Career estimated potential] of candidates or as a 'development' tool	1				1			
Yes, will consider using this technique which has been proven to be accurate, reliable & more superior than any other selection techniques					2			
Yes, will use this technique provided it has been designed & modified to suit our company's requirement			1	1				

Appendix 5.1

QN.8

Are there any plans for your firm to change the selection techniques currently used to select managers? (why, why not ?). What influence your firm to make plan for these changes?

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F/.Asian (N=3)
No, there is no plan to change since the company believed that it has an established & effective selection techniques		1						1
No, there is no plan to change since the company is satisfied with the current selection techniques		1		1				
No, there is no plan to change since through validation the existing selection techniques have met the company's requirement	1							
No, there is no plan to change unless instructed by top management /Managing Director	1							
Yes, although there is no concrete plan, the company is always searching for the best selection techniques					1			
Yes, it depends on company's requirement. If the company's system changes, will change the selection techniques currently used					1			
Yes, there is a plan to change if the company expand & have enough resources.	1							
Yes, there is a plan to change if there is a need to do so & if the changes suits the current needs of the company			1					
Yes, there is a plan to change if these changes helps to improve or enhance the selection process	3			4	3		1	1
Yes, there is a plan to change since the company intend to reduce the number of stages to at least 2 stages due to time constraint					1			
Yes, there is a plan to change since the company needs to keep pace with the recent selection techniques used by other companys	1				1			
Yes, there is a plan to change. The company intend to use the assessment centre since this technique has proven to be effective & can be use to assess candidates for career development	1				1			

Appendix 5.1

QN.8(continued)

Are there any plans for your firm to change the selection techniques currently used to select managers? (why, why not ?).What influence your firm to make plan for these changes?

Response/(No.of firms)	Forms of ownership/(Total no.of firms)							
	M'sian Bumi (N=8)	M'sian Chinese (N=2)	M'sian Indian (N=1)	US (N=5)	F.N/Asian (N=8)	Bri. (N=2)	Jap. (N=3)	F.Asian (N=3)
No, there is no plan to change "unless a new HR/Personnel manager takes over the post"						1		
No, there is no plan to change unless instructed by Head Office/parent firm to change							1	
No, there is no plan to change. The top management of the company that comprises of 70% Japanese are comfortable with the current selection techniques & are "very resistant to change"							1	
Yes, there is a plan to change especially if advised by Head Office in UK						1		
Yes, there is plan to change since the company intends to be more systematic in the selection process & wish to reduce the time needed to search for suitable candidates								1

Spss Output

USE OF CV TO SELECT SR.MANAGERS

	Count Exp Val Tot Pct	USESRCV		Row Total
		yes	no	
		1.00	2.00	
NEWFIRM1				
malaysian	1.00	15 17.4 38.5%	5 2.6 12.8%	20 51.3%
non malaysian	2.00	19 16.6 48.7%	0 2.4 .0%	19 48.7%
Column Total		34 87.2%	5 12.8%	39 100.0%

Chi-Square	Value	DF	Significance
Pearson	5.45	1	.02
Continuity Correction	3.44	1	.06
Likelihood Ratio	7.38	1	.01
Mantel-Haenszel test for linear association	5.31	1	.02
Fisher's Exact Test:			
One-Tail			.03
Two-Tail			.05***

Minimum Expected Frequency - 2.44
 Cells with Expected Frequency < 5 - 2 OF 4 (50.0%)

Number of Missing Observations: 21

USE OF PERSONALITY TEST TO SELECT SENIOR MANAGERS

	Count Exp Val Tot Pct	USESRRP		Row Total
		yes	no	
		1.00	2.00	
NEWFIRM1				
malaysian	1.00	2 4.6 5.1%	18 15.4 46.2%	20 51.3%
non malaysian	2.00	7 4.4 17.9%	12 14.6 30.8%	19 48.7%
Column Total		9 23.1%	30 76.9%	39 100.0%

Chi-Square	Value	DF	Significance
Pearson	3.95	1	.05
Continuity Correction	2.59	1	.11
Likelihood Ratio	4.12	1	.04
Mantel-Haenszel test for linear association	3.85	1	.05
Fisher's Exact Test:			
One-Tail			.05
Two-Tail			.06 **

Minimum Expected Frequency - 4.39
 Cells with Expected Frequency < 5 - 2 OF 4 (50.0%)

USE OF CV TO SELECT MIDDLE MANAGERS

	Count Exp Val Tot Pct	USEMCV		Row Total
		yes	no	
		1.00	2.00	
NEWFIRM1				
1.00 malaysian	14 16.3 33.3%	5 2.7 11.9%	19 45.2%	
2.00 non malaysian	22 19.7 52.4%	1 3.3 2.4%	23 54.8%	
Column Total	36 85.7%	6 14.3%	42 100.0%	

Chi-Square	Value	DF	Significance
Pearson	4.10	1	.04
Continuity Correction	2.50	1	.11
Likelihood Ratio	4.32	1	.04
Mantel-Haenszel test for linear association	4.00	1	.05
Fisher's Exact Test:			
One-Tail			.06
Two-Tail			.08 *

Minimum Expected Frequency - 2.71
 Cells with Expected Frequency < 5 - 2 OF 4 (50.0%)

Number of Missing Observations: 18

USE OF REFERENCES TO SELECT MIDDLE MANAGERS

	Count Exp Val Tot Pct	USEMREF		Row Total
		yes	no	
		1.00	2.00	
NEWFIRM1				
1.00 malaysian	17 14.0 40.5%	2 5.0 4.8%	19 45.2%	
2.00 non malaysian	14 17.0 33.3%	9 6.0 21.4%	23 54.8%	
Column Total	31 73.8%	11 26.2%	42 100.0%	

Chi-Square	Value	DF	Significance
Pearson	4.40	1	.04
Continuity Correction	3.05	1	.08
Likelihood Ratio	4.73	1	.03
Mantel-Haenszel test for linear association	4.30	1	.04
Fisher's Exact Test:			
One-Tail			.04
Two-Tail			.08*

Minimum Expected Frequency - 4.98
 Cells with Expected Frequency < 5 - 1 OF 4 (25.0%)

USE OF PERSONALITY TEST TO SELECT MIDDLE MANAGERS

	Count Exp Val Tot Pct	USEMPP		Row Total
		yes	no	
		1.00	2.00	
NEWFIRM1				
1.00 malaysian	2 4.5 4.8%	17 14.5 40.5%	19 45.2%	
2.00 non malaysian	8 5.5 19.0%	15 17.5 35.7%	23 54.8%	
Column Total	10 23.8%	32 76.2%	42 100.0%	

Chi-Square	Value	DF	Significance
Pearson	3.37	1	.07
Continuity Correction	2.17	1	.14
Likelihood Ratio	3.60	1	.06
Mantel-Haenszel test for linear association	3.29	1	.07
Fisher's Exact Test:			
One-Tail			.07
Two-Tail			.08*

Minimum Expected Frequency - 4.52
 Cells with Expected Frequency < 5 - 1 OF 4 (25.0%)

USE OF CV TO SELECT JUNIOR MANAGERS

	Count Exp Val Tot Pct	USEJRCV		Row Total
		yes	no	
		1.00	2.00	
NEWFIRM1				
1.00 malaysian	14 16.6 29.8%	5 2.4 10.6%	19 40.4%	
2.00 non malaysian	27 24.4 57.4%	1 3.6 2.1%	28 59.6%	
Column Total	41 87.2%	6 12.8%	47 100.0%	

Chi-Square	Value	DF	Significance
Pearson	5.26	1	.02
Continuity Correction	3.41	1	.06
Likelihood Ratio	5.37	1	.02
Mantel-Haenszel test for linear association	5.15	1	.02
Fisher's Exact Test:			
One-Tail			.03
Two-Tail			.03***

Minimum Expected Frequency - 2.43
 Cells with Expected Frequency < 5 - 2 OF 4 (50.0%)

Number of Missing Observations: 13

USE OF CV TO SELECT TRAINEES

	Count Exp Val Tot Pct	USETRCV		Row Total
		yes	no	
NEWFIRM1		1.00	2.00	
malaysian	1.00	8 11.8 21.1%	8 4.2 21.1%	16 42.1%
non malaysian	2.00	20 16.2 52.6%	2 5.8 5.3%	22 57.9%
Column Total		28 73.7%	10 26.3%	38 100.0%

Chi-Square	Value	DF	Significance
Pearson	7.99	1	.00
Continuity Correction	6.02	1	.01
Likelihood Ratio	8.22	1	.00
Mantel-Haenszel test for linear association	7.78	1	.01
Fisher's Exact Test:			
One-Tail			.01
Two-Tail			.01***

Minimum Expected Frequency - 4.21
 Cells with Expected Frequency < 5 - 1 OF 4 (25.0%)

Number of Missing Observations: 22

USE OF COGNITIVE TEST TO SELECT TRAINEES

	Count Exp Val Tot Pct	USETRPC		Row Total
		yes	no	
NEWFIRM1		1.00	2.00	
malaysian	1.00	0 2.1 .0%	16 13.9 42.1%	16 42.1%
non malaysian	2.00	5 2.9 13.2%	17 19.1 44.7%	22 57.9%
Column Total		5 13.2%	33 86.8%	38 100.0%

Chi-Square	Value	DF	significance
Pearson	4.19	1	.04
Continuity Correction	2.43	1	.12
Likelihood Ratio	6.01	1	.01
Mantel-Haenszel test for linear association	4.08	1	.04
Fisher's Exact Test:			
One-Tail			.05
Two-Tail			.06 **

Minimum Expected Frequency - 2.11
 Cells with Expected Frequency < 5 - 2 OF 4 (50.0%)

Number of Missing Observations: 22

- *** Significant at p < 0.05
- ** Trend approaching significant differences at p < 0.05
- * Significant at p < 0.1

List of Ethnic Values in Malaysia

MALAYS		
Respect for elders	Friendliness	Not Aggressive
Spirituality	Politeness	Cooperation ('gotong royong')
Humility	Harmony/peace	Good manners ('sopan santun')
Face	Loyalty	Faith in God ('Tawakkal')
Tact	Apologetic	Family oriented
Generosity	Formalities	Obedience
Caring	Accommodating	Fairness
Patience	Trustworthiness	Sincerity
Feelings ('rasa')	Discipline	Courtesy
Hospitability	Teamwork	Self - respect ('hormat diri')
Feelings	Sense of Appropriateness	Non - confrontational
Honesty	Indirect	Tolerance
Rituals	Food and ceremonies	Compliance
'Budi' (tacit system of reciprocal obligations)		

CHINESE		
Food	Money	Gambling/risk taking
Hardwork	Perserverance	Filial piety
Success	Harmony	Respect for hierarchy
Diligence	Face	Integrity
Education	Thrift	Modesty
Wealth	Meritocracy	Honesty
Family oriented	Generosity	Entrepreneurship
Happiness	Prosperity	Pragmatic/Practical

INDIANS		
Fear of God	Participation	Loyalty
Sense of belonging	Hardwork	Karma
Brotherhood	Security	Champion of causes
Family	Filial piety	Harmony
Modesty	Prosperity	

WESTERN (Mainly Americans)		
Individualism	Achievement	Independence
Success	Hardwork	Freedom of speech
Punctuality	Privacy	Informality
Equality	Competition	Innovation
Assertiveness	Directness	Frankness, Openness

Source : Asma Abdullah (ed) (1992), *Understanding The Malaysian Workforce - Guidelines for Managers*, MIM, p.8

Significant Malay Value Orientation

A: MALAY RELATED

- *Budi* concept
- Adab (individual)
- * courteous
- * pleasant
- * well - mannered, *sopan santun*
- * polite, *berbahasa*
- * refined, *halus*
- * dignified
- * consensus
- * filial piety
- * moral obligations to others
- * peace loving

- *Rukun* (social)
- * humility
- * shame
- * collectivism
- * conforming
- * social relationships
- * team/peer oriented
- * respect for elders/others
- * loyalty
- * apologetic
- * tolerance
- * modesty
- * patience
- Harmony
- relationship - oriented
- give and take, compromising
- Face
- indirect
- non - confrontational

B: ISLAMIC RELATED

- Belief in life after death
- Islamic brotherhood
- Patient
- Sincerity
- Trustworthiness
- Control of passions
- Self restraint
- Empathy
- Fear of God, belief in suprem being
- Spirituality
- Cleanliness
- Balance lifestyle
- Sharing
- Self purification
- Self - discipline
- Obedience

Source : Asma Abdullah (1996), *Going Global, Cultural Dimensions In Malaysian Management*, MIM, p.37

Malaysian Values - How Others See Them

Can be perceived as	Expressed as	Core Values
Weakness Meekness Slowness	Non - confrontational	Harmony Tolerance Modesty Humility Conservativeness
Dependence	Turning to superiors	Respect for elders
Hypocrisy	Polite, vague formalized procedures	Face, Etiquette Hierarchy Protocol
Showing off	Display of status	Role, status Hierarchy Face, shame
Inscrutability	Calmness	Patience Harmony
Nepotism Corruption	Informal Give and take	Family relationships Reciprocal obligations
Being Together	Friendly chats Togetherness	"We" group orientation

Source : Asma Abdullah (1996), *Going Global, Cultural Dimensions In Malaysian Management*, MIM, p.129

Values Underlying Management Practices

Concepts	More MALAYSIAN Values	More WESTERN Values
COACHING COUNSELLING	Facework/feelings Nurturing parent - child Relationship - based Flexibility, indirect in action plans Multiple roles Shame and group harmony Person to person Third - party intervention	Information/data Adult - adult Task orientation Time specific, direct immediate action Professional role Guilt and self - esteem Face - to - face One - on - one
COMMUNICATION	High context "What is said may not be what is meant to be" Indirect and subtle Holistic Softness (vocal, tone) Politeness/good manners Less disclosure	Low context "What you see is what you get" Direct and to the point Compartmentalized, linear Clarity, openness Assertiveness, frankness Self - disclosure
CONFLICT	Aviodance, compromise "Anger suppressed" Feelings, sensitivities Collaboration Relationships - long term	Competing "Lets get it out" Logic and verbosity Confrontation Task/result - short term
CONTROLLING	Authority - centred General Shame - external driven	Self - Control Specific Guilt - internal driven
LEADERSHIP	"Power in the person" (Informal power/influence) Total character Humility, hand - in - hand Deference, respect elders Relationship, trust Seniority, maturity Consensus seeking Admiration, role model Social, national responsibility Patriachial/paternalistic	"Power in the office" (Position power) Skills competencies Assertiveness Ahead of others Result oriented Achievement oriented Combative Seperation of roles Self - actualization "me"

Source : Asma Abdullah (1996), *Going Glocal, Cultural Dimensions In Malaysian Management*,
MIM, p.240 - 241

(Continued)

Values Underlying Management Practices

Concepts	More MALAYSIAN Values	More WESTERN Values
MOTIVATING	Affiliation Relationship based Group fulfilment Spiritual meaning Success in terms of rapport with family friends, associates	Self - actualization Task orientation Individual achievement Worldly based Success in terms of material symbols
ORGANIZING	Benevolent Autocratic Organic Holistic	Democratic Participative Mechanistic Step by step
PLANNING	Polychronic Flexible Circular, global	Monochronic Timeliness, deadlines Linear, pragmatic
STAFFING	Nepotism, support network Favouritism Group loyalty Long term commitment Social obligation	Competency based Fairness Equal opportunity Objectivity Individual based
TEAM - BUILDING	Consensus seeking Subjugation of self Family oriented <i>Gotong royong, mesyuarah</i> Spontaneity Voluntariness Relationship Spiritual fulfilment Collectivism Rapport with group	Winning the game Problem solving Role clarification Task orientation Boundary definition Specificity Task orientation Individual achievement Future based Goal driven

Source : Asma Abdullah (1996), *Going Global, Cultural Dimensions In Malaysian Management*, MIM, p.240 -241

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Source : Asma Abdullah (1996), *Going Global, Cultural Dimensions In Malaysian Management*, MIM, p.240 -241

List Of Respondents (Manufacturing Sector)

Aesculap Surgical Industry Sdn Bhd	MEMC Electronics Materials Sdn Bhd
Airod Sdn Bhd	Mitsumi Electric (JB) Sdn Bhd
Asahi Industries (M) Sdn Bhd	Mona Industries Sdn Bhd
Ase Electronics (M) Sdn Bhd	Nestle Products Sdn Bhd
Asia Chinon Precision Sdn Bhd	Nylex (M) Bhd
Associated Pan (M) Cement Sdn Bhd	Palmco Holdings Bhd
Autoparts Manufacturers Co. Sdn Bhd	Penfabric Sdn Bhd
B Braun Medical Industry Sdn Bhd	Petronas
Clay Industries Sdn Bhd	Proton
Dai Hwa Electronic (M) Sdn Bhd	Quality Techno. Optoelectronics (M) Sdn Bhd
Diethelm (M) Sdn Bhd	Rectron (M) Sdn Bhd
DMIB Bhd	Revertex (M) Sdn Bhd
Dutch Baby Milk Industries (M) Bhd	Robert Bosch (M) Sdn Bhd
Epson Precision (M) Sdn Bhd	Rothmans Of Pall Mall (M) Bhd
Fujitsu Component (M) Sdn Bhd	Santronics (M) Sdn Bhd
General Electric (USA) M'sian App.Comp S.Bhd	SEH (M) Sdn Bhd
Guinness Anchor Bhd	SGS Thompson Microelectronics Sdn Bhd
Harris Advance Technology (M) Sdn Bhd	Sharp Roxy App. Corporation (M) Sdn Bhd
Hitachi Electronics Devices (M) Sdn Bhd	Sime Darby Bhd
Hitachi Semiconductor (M) Sdn Bhd	Sime Sembawang Engineering Sdn Bhd
HKT (M) Sdn Bhd	Sitt Tatt Bhd
Honsin Knitting Industries Sdn Bhd	SME Technology Sdn Bhd
Integrated Device Tech. (M) Sdn Bhd	Taiko Electronics (M) Sdn Bhd
Johor Tenggara Oil Palm Sdn Bhd	Tanashin (Johor) Sdn Bhd
Levitec Electronics Sdn Bhd	Texas Instruments (M) Sdn Bhd
Lion Corporation Bhd	Trans Capital Sdn Bhd
Malayawata Steel Bhd	Unilever (M) Holdings Sdn Bhd
Malaysia Smelting Corporation Bhd	VS Industry Sdn Bhd
Malaysian Tobacco Co.Bhd	Wearnes Electronics (M) Sdn Bhd
Master Carriage (M) Sdn Bhd	Yeo Hiap Seng (M) Bhd