An analysis of management development practices for senior executives in the Papua New Guinea public service

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Southern Cross University

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An Analysis of Management Development Practices For Senior Executives in the Papua New Guinea Public Service

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A Dissertation submitted to:
Southern Cross School of Business
Southern Cross University
In fulfilment of the requirements for the degree of
Doctor of Business Administration

May, 2011
Declaration of Originality

I hereby declare that the substance of this thesis has not already been submitted for any degree and is not currently being submitted for any other degree at this or any other University.

I also declare that to the best of my knowledge and belief, any help received in preparing this thesis and all sources used have been acknowledged in this thesis.

Signed

........................................
Nama A Polum

Date: 16 May 2011
This thesis is dedicated to the memory of my late parents - my late father, David Kini Valinakini, and my late mother, Tegana Makuna-Agarobe. I am solely indebted to them for their encouragement to persevere with life and education, who believed in me despite my struggles in sickness and health during my childhood that I will still succeed in education and career. I had no idea that one day I would be studying at this level. I am sure they would have been proud of me. Above all, they showed me the meaning of love, kindness, sharing and caring for others. Thank you for being my role models.
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Senior executives in the PNG Public Sector organisations play a key role in the delivery of the core functions of service. They provide high quality policy advice to government and implement government programs, including the delivery of services to the community. They have a particular accountability to ensure the delivery of outputs that contribute to the achievements of outcomes as determined by government. Meeting these challenges requires a unique combination of knowledge, skills, attitudes and effective HRD systems, as well as policies and strategies to nurture these competencies.

Thus, the PNGPS has undertaken a number of activities that focus on Management Development (MD) of the Senior Executive Services (SES) personnel. Management Development is increasingly adopted by organisations seeking to attract and retain talented employees. They are increasingly using MD initiatives as a means of enhancing their capability to realise their organisation goals. However, success will only occur if MD interventions are adapted and implemented in ways that are congruent with the changing needs and expectations of the new organisation.

This study assessed the current state of management development of SES personnel in the PNG Public Sector organisations. Specifically, it sought to identify interventions associated with executive development effectiveness. The pragmatic paradigm was adopted for this research, and multiple purposes of exploratory, explanatory and descriptive approach to study were used, although exploratory was more dominant.

The two-phase sequential, exploratory mixed methods approach was adopted for this study. This approach allowed the researcher to collect strategically multiple forms of evidence, such that the combination of methods presented convergent and divergent evidence, subsequently strengthening the findings of the mixed methods study. Both primary and secondary sources of data were used for the study. Phase I used interview tools to elicit data from CEOs/departmental heads from twenty-one (21) public sector organisations, while Phase II employed a self-completing questionnaire to elicit data from 150 senior executives representing different sectors of the government. Thus, triangulation was used all throughout this study. All data collection was conducted in Port Moresby.
Abstract

The focus on this research was initially on learning and development interventions. However, the interview data revealed a number of factors identified by participants as very important. Two of the interventions relate specifically to SHRD: HR policies & effective practices, Training and Development (T & D). The other two interventions relate indirectly to SHRD – capabilities and requirements of the executives and organisational support. Further two variables relating to learning and development were added onto the four interventions – pre and post leadership skills and behaviour.

The statistical tool SPSS v17.0 for Windows was used to perform exploratory and other statistical analysis of the data collected. Results from the quantitative survey (Phase II) data confirmed and supported findings from the in-depth interviews (Phase I). Inferential statistics such as paired sample t-test results revealed that there is a significant difference between pre- and post-program leadership skills, and between pre- and post-program behaviour. A stepwise multiple linear regression analysis results revealed that the most parsimonious sets of independent variables closely related to MD effectiveness are HR Policy and Effective Practices, and Training and Development. Furthermore, the study revealed that there is a lack of systematic approach to T & D in the public sector organisations and that post-program evaluation at impact level is hardly conducted in the national departments to determine the level or extent of impact the programs have on the senior executives. It also revealed that there is an absence of succession plans and exit policies, particularly at national level and some statutory organisations. For capabilities and requirements, the study found that technical or qualification requirements are met where most of the participants had acquired a basic university degree with many possessing a postgraduate qualification such as an MBA.

This research provides many contributions and implications for theory, policy and practice and provides recommendations for HR practitioners, top management and other stakeholders such as funders of capacity building activities. It does so by providing a framework on MD Effectiveness and a process or cycle on Training and Development. Finally, this study provides avenues for and recommends future research activities in relation to Management Development of SES personnel in the PNG Public Sector organisations.
Conferences & Publications

Conferences/Seminars

1. Presented a paper titled “Executive Development: Learning from the Effective Practices in the PNG Public Service” by Nama Polum & Michelle Wallace at ANZAM Conference in Melbourne, Australia, in December, 2009. The ANZAM paper was double blind refereed.
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<td>ALA</td>
<td>Australian Leadership Awards</td>
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<td>ASTD</td>
<td>American Society of Training and Development</td>
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<td>AusAid</td>
<td>Australian Aid Development</td>
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<td>CACC</td>
<td>Central Agencies Coordinating Committee</td>
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<td>CB/CD</td>
<td>Capacity building/Capacity Development</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<tr>
<td>CIPP</td>
<td>Context Input Process Product</td>
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<td>DA</td>
<td>District Administration</td>
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<tr>
<td>DEEWR</td>
<td>Department of Education, Employment &amp; Workplace Relations</td>
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<td>DEST</td>
<td>Department of Education, Science &amp; Training</td>
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<td>DNPM</td>
<td>Department of National Planning &amp; Monitoring</td>
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<td>DNPRD</td>
<td>Department of National Planning &amp; Rural Development</td>
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<td>DoF</td>
<td>Department of Finance</td>
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<td>DoT</td>
<td>Department of Treasury</td>
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<td>DPM</td>
<td>Department of Personnel Management</td>
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<td>EU</td>
<td>European Union</td>
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<td>ED</td>
<td>Executive Development</td>
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<td>GO</td>
<td>General Order</td>
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<td>GoA</td>
<td>Government of Australia</td>
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<tr>
<td>GoPNG</td>
<td>Government of Papua New Guinea</td>
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<td>HRD</td>
<td>Human Resource Development</td>
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<td>Human Research Ethical Committee</td>
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<td>HRM</td>
<td>Human Resource Management</td>
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<td>HRM/D</td>
<td>Human Resource Management/Development</td>
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<td>IPO</td>
<td>Input Process Output Outcome</td>
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<td>IRC</td>
<td>Internal Revenue Commission</td>
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<td>JASC</td>
<td>Joint ADS Selection Committee</td>
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<td>LLG</td>
<td>Local Level Government</td>
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<td>LO</td>
<td>Learning Organization</td>
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<td>MD</td>
<td>Management Development</td>
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<td>MTDS</td>
<td>Medium Term Development Strategy</td>
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<td>NEC</td>
<td>National Executive Council</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td>NPS</td>
<td>National Public Service</td>
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<td>National Statistics Office</td>
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<td>PA</td>
<td>Provincial Administration</td>
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<td>PATTAF</td>
<td>Papua New Guinea-Australia Targeted Training Facility</td>
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<td>PFMA</td>
<td>Public Finance Management Act</td>
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<td>PM &amp; NEC</td>
<td>Prime Minister &amp; National Executive Council</td>
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<td>PNG</td>
<td>Papua New Guinea</td>
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<td>PS</td>
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<td>PSMA</td>
<td>Public Service Management Act</td>
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<td>PSWDI</td>
<td>Public Sector Workforce Development Initiative</td>
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<td>PSWDP</td>
<td>Public Sector Workforce Development Programme</td>
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<td>ROI</td>
<td>Return on Investment</td>
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<td>SCMC</td>
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<td>SHRD</td>
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<td>T/D</td>
<td>Training and Development</td>
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<td>Technical and Further Education</td>
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<td>TNA</td>
<td>Training Needs Analysis</td>
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1.1: Introduction

"Searching without definite purpose is like picking up jigsaw pieces and wondering where they go. Searching with a purpose, on the other hand, is like hunting for a jigsaw piece which will link together sections already made".


1.1.1 An Overview

The research reported in this thesis assessed the current state of Management Development (MD) of Senior Executive Services (SES) personnel in Papua New Guinea (PNG) Public Sector organisations. Specifically, it sought to identify interventions associated with MD effectiveness. The objective of this chapter is to outline the purpose, significance, methodological approaches, scope and organisation of the thesis which aims to address the research questions of:

What are the interventions to MD effectiveness in the PNGPS?
How do these interventions contribute to capacity building of the executives in the PNG Public Sector organisations, and how could these interventions be improved?

1.1.2 Objectives of the study

The objectives of this study are therefore:

1. To identify the capabilities and requirements of executives as articulated in the PNG Public Service (PNGPS).
2. To analyse the current HR policies and practices that contribute to MD.
3. To determine the current policies and practices used to develop management executives in the PNGPS.
4. To determine and analyse the methods and techniques for evaluating MD strategies in the PNGPS.
5. To identify ways in which MD can be improved to contribute to capacity building in the PNGPS.
Chapter 1: Outline of the Study

6. To identify changes and suggestions that can be integrated into policies and practices for management development in the PNGPS.

7. To develop a framework on MD interventions and a checklist on systematic training and development that contributes to capacity building of SES personnel in the PNGPS.

1.1.3 Structure of Chapter 1

This chapter is presented in nine sections. Section 1.1 begins with the introduction, an overview, the objectives of the study and structure of the chapter. Next, the background providing an explanation of the significance of MD is provided in Section 1.2. The research questions are stated in Section 1.3. Section 1.4 then discusses the justification of the research followed by the research plan or methodological approaches in Section 1.5. An outline of the thesis is presented in Section 1.6. Definition of key words used in this study are provided in Section 1.7. The chapter concludes with the delimitations in Section 1.8, followed by the summary of the chapter.

A framework of Chapter 1 is graphically outlined in Fig. 1.1 below.
1.2: Background to the Research

Human resource development is vital to the capacity building of developing nations, and the development of an effective public service (PS) is one of the key building blocks for nationhood (Šiugždinienė, J. 2008). The PNGPS has undertaken a number of activities that focus on MD of the SES personnel. The question then is whether these interventions are effective in contributing to capacity building of the executives, their organisations and the PS.

Over the last two decades, public management has undergone substantial changes in both developed and developing countries. Public sector reforms have focused on the efficiency of governments seeking to transform traditional bureaucratic systems of public administration.
to market-oriented, results-driven systems of public management (Aucoin, 1995). Furthermore, duties are becoming multifaceted and very complex: they may encompass policy advice, management of human, financial and other resources, the provision of critical services and others (United Nations, 2005). This calls for a significant transformation of the human resource function in general and human resource development (HRD) responsibility in particular, creating particular opportunities for the most senior civil servants to enhance their capabilities in order to facilitate an effective implementation of public management reforms.

Private sector organisations are also striving to survive and lead in this rapidly changing and competitive environment (Kim, 2007). They are increasingly using MD initiatives as a means of enhancing their capability to realise their business goals. Likewise, MD is seen as an important method of attracting and retaining high-quality employees (D’Netto, Bakas and Bordia, 2008). However, success will only occur if MD strategies are adapted and implemented in ways that are congruent with the changing needs and expectations of the new organisation.

Increasingly, public and private organisations are committed to developing senior managers’ skills and competencies and there is evidence that leadership development budgets will continue to grow considerably in the new millennium (Nikolaou et al, 2006). Senior managers or executives are therefore a critical resource of the organisation and companies invest substantial time, money and effort in senior MD programs (Brown, 2006). Such is the case in the United States of America where billions of dollars are spent each year in developing management capability through MD programs (Kirwan & Birchall, 2006). Sugrue reported in 2003 that on average, US employers’ organisations spent more than 2.2 per cent of payroll on education and training interventions. However, evidence concerning the value that organisations derive from what they spend on training and development (T & D) interventions does not seem encouraging. For instance, some recent studies have estimated that only between 10 and 20 per cent of skills and knowledge are fully applied by employees on the job following training (Curry et al., 1994; Kaufman, 2002).

Ellis (2003) argues that past research indicates that 4 out of 10 senior managers will fail at their job within 18 months, and one possible explanation could be that a considerable number of managers find themselves in senior positions because they are adept at financial and operational procedures but do not yet possess the wider range of management skills (Martin,
2002). Furthermore, executives are often put through a few days’ worth of development programs and left to fend for themselves (Griffin, 2003). Martin (2002) further points out that managing people requires skills such as analysis of self and others, motivating teams to complete tasks, delegating and decision making. Most of these skills can be acquired through effective MD programs. The question then is: How do organisations create MD strategies and programs that have a real impact and that contribute to capacity building at the individual, organisation and national level?

The primary aim of this study is to investigate MD interventions for senior managers or executives and their effectiveness in contributing to capacity building of the executives in the PNGPS organisations. In particular, the aim is to investigate whether MD interventions build the executive capabilities needed to achieve their organisation’s strategic objectives and whether these can be improved.

The research focus is a personal and professional interest to me as a public servant within a key central agency in the PNGPS. I have focused on this topic because, while capacity building programs on MD have come to dominate the Public Sector Reform movement in PNG, there appear to be imperfections in these activities in terms of coordination, monitoring and evaluation in public sector organisations (PSWDI, 2006, PSWDP, 2005). In particular, there is a concern in all levels of the public sector on the lack of policy coherence and coordination, and the piecemeal actions do not systematically build executive competence and confidence. Furthermore, the current literature on MD is mainly focused on businesses and private sector organisations. MD in public organisations has largely been unattended to in the literature, particularly on capacity building of senior managers in developing nations. Therefore, I am interested in investigating the interventions and practices public sector organisations are using in developing their executives and whether these are systematically developing the executives.

As a result of the findings of this study, it is hoped to develop a framework on MD interventions and a checklist or systematic approach to training and development that could be used in the PNGPS organisations to build the capacity of the individual executives and their organisations that would ultimately lead to building the capacity of the PNGPS.
1.3: Research Questions

The research questions, objectives and propositions as shown in Appendix 1 (p. 268) directed the research and in-depth interviews that were applied to the issue.

The research questions flowing from and guiding the research issue are as follows:

1.3.1 The Research Questions

1. What are the capabilities and requirements of executives as articulated in the PNGPS?
2. What are the current HR policies and practices that contribute to MD?
3. Do the current policies and practices fully develop management executives?
4. How are the MD interventions evaluated?
5. In what ways could MD be improved to contribute to capacity building in the PNGPS?
6. What changes and suggestions could be integrated into policies and practices?
7. Can a framework on MD interventions and a checklist on systematic approach to training and development be developed that contribute to capacity building of the SES personnel in the PNGPS?

As the study progressed, these research questions developed into hypotheses which will be discussed in Section 2.73, Section 6.6.1 (Figure 6.7) and Section 7.4.2.

1.4: Justification for the Research

Arguably, this is a first comprehensive study to be conducted on SHRD of the PNGPS SES personnel. It contributes additional knowledge to a previous scoping study on executive development (ED), whose focus was primarily to report on the existing SES and the current system of appointing and managing departmental heads in PNGPS (PSWDI, 2006). The present study moves knowledge of this under-researched area forward as it sought to investigate the effectiveness of MD interventions in the PNG Public Sector organisations and how they contributed to capacity building of the SES personnel, their organisations and the public service. In particular, it investigated their managerial talents, T & D, related policies and implementations.
Chapter 1: Outline of the Study

The present study is important and is worthy to be a subject of this dissertation on several grounds at the macro level (the Government of PNG policies and legislations on HR) at the meso level (reports from Development Partners or funders of capacity building activities) and at the micro level (an identified gap in the literature).

1.4.1 Emerging Significance in Management Development

As will be seen in Chapter 2, the notion of MD has emerged significantly in both public and private sector organisations as they use MD initiatives as a means to enhance their capability in realising their organisation goals and to gain sustainable competitive advantage. Management Development is a core component of SHRD (Armstrong, 2006, p. 534, Brewster, 2004). It is also a major driver and facilitator of change and adaptation.

Hence, the capacity building of senior managers has become critical in an increasingly knowledge-based globalising economy. More specifically, in the public sector organisations senior managers must be developed to lead and implement the ongoing reforms successfully. The development and success of a country and their public sector organisations largely depends upon the creative skills and abilities of its human resources. Therefore, the design of any MD interventions must match the organisation’s level of commitment to strategic management and the degree of maturity of its strategic management processes. There has been considerable debates on the value and effect of MD interventions or programs. That is, whether it values and contributes to the development of the individual, their organisations and the public service.

This study is intended to embrace a broader perspective of MD in the PNG public sector organisations at different units of analysis at the executive level, the organisational level and the national level (also called the micro, meso and macro levels) as discussed briefly above. Exploring MD effectiveness in the PNGPS has substantial significance for several reasons, and they are outlined in the following sections.

1.4.2 The Government of PNG Policies

First, an exploration of MD effectiveness is in line with PNG’s Medium Term Development Strategy (MTDS) for 2005-2010, which has Public Sector Reform as one of the objectives for efficient and effective delivery of government services (DNPRD, 2004:53). Hence, Public Sector Reform (PSR) review is currently taking place. One of the priorities and strategies identified under PSR for improving performance, accountability and compliance is to
implement initiatives to improve the leadership and management skills of senior public servants (DNPRD, 2004:56). It states that poor personnel management, in which training, development and education interventions are embedded, is highlighted as one of the major causes of poor service delivery.

An exploration of MD effectiveness is also consistent with PNG Government’s new white paper or policy – The PNG National Strategic Plan 2010-2050, now called “PNG Vision 2050 (PNGV2050)”, launched in 2010. PNGV2050 seeks to address the problem that PNG’s social and economic indicators are low despite the country being blessed with an abundance of wealth in natural resources. There are seven pillars developed by the PNGV2050 on which development plans from 2010 to 2050 will be based (NSP, PSRMU, 2008:12). Of the seven pillars, PNGV2050 now focuses on three, which are core areas to be at the heart of the whole program. One of these core areas is Human Capital Development which is the third pillar and calls for Papua New Guineans to be well trained and well utilised, well paid, well treated and to contribute positively and meaningfully to national development (NSP, PSRMU, 2008:12).

Furthermore, it is consistent with another recent policy - PNG Development Strategic Plan (PNGDSP) 2010-2030, launched in 2010. The PNGDSP identifies the need for better public sector management. It states that many sectors of the public service are facing leadership problems and skill shortages (DNPM, 2010, p. 122). It outlines specific measures or strategies for revitalising public service institutions to the level of international standards. For instance, developing effective ways to recruit and retain competent public servants who perform to high standards, including mechanisms to enforce competitive merit based recruitment and promotion.

1.4.3 Reports and Studies by Development Partners on SHRD

Second, the most recent development reports of the Australian Development Scholarships (ADS) highlighted anomalies on policy and practices in relation to HRD activities in the PNGPS (TAFE Global, 2007:8). More specifically, the report identified weaknesses in the area of selection of staff for training, development and education activities, with little regard for the overall HRD/HRM direction of the organisations they worked for. In addition, there is a lack of formal HRD and HRM plans and policies within government agencies, which is a continued area of weakness.
Reports from AusAid Tracer Studies (PATTAF, 2006) are specifically selected for this study because PNG is the biggest recipient of Australian Aid and PNG gets its biggest donor funding from the Government of Australia. Australian Development Scholarships (ADS) as well as the Australian Leadership Awards Scholarships (ALA) and the Endeavour Scholarship awards, are used as one of the key MD strategies for executives in the public sector. Apart from the Australian scholarship awards, there are other forms of scholarships under the name of capacity building for short-term development programs and long-term educational programs by other development partners such as New Zealand’s Aotearoa Scholarships under New Zealand Overseas Development Aid, and European Union (EU) scholarship awards.

PNG still stands to be one of the largest recipients of the ADS awards or any other capacity building activities (TAFE Global, 2007). There is meant to be an impact after training in terms of change in performance and behaviour particularly at executive level. But questions still remain about whether there is any change of behaviour or performance on the job after training, and what the impacts of the training are on the awardee, the organisation, the stakeholders and the donor country. Therefore, there is an urgent need to assess the effectiveness of this development strategy in the PNGPS to establish if it is addressing the reform initiatives and meeting the objectives of the Australian Aid Scholarships. It is anticipated that the outcome of this study will benefit the Government of PNG in reviewing its legislations, policies and processes on T & D, in particular the MD strategies, and that they will benefit the Government of Australia in reviewing their priority areas and processes in scholarship awards and other capacity building activities.

1.4.4 Gap in the Literature

The third reason for an evaluation of higher levels of training, development and education interventions is that results and impact need to be further investigated. This study analyses the current policies and practices on evaluation of MD strategies and methods and offers suggestions for improvement where applicable. Furthermore, a framework on MD interventions and a checklist on systematic approach to T & D can be developed to guide the PS organisations in developing their executives.

The fourth reason is that although a significant body of literature has been developed on the effectiveness of the MD strategies and how these can impact on organisation performance, there is still a gap in the literature on several issues pertaining to this important subject.
Chapter 1: Outline of the Study

An Analysis of Management Development Practices for Senior Executives in the PNG Public Service

In particular, there is a gap in research into the impact of MD strategies in the public sector organisations as opposed to private organisations, firms and businesses where the body of knowledge is mainly focused on. Moreover, there is a gap in the literature on how capacity building and training activities by donors from developed countries link to SHRD of executives in the public sector organisations in developing countries such as PNG. This is an indication that public sector organisations at the supranational, national, provincial and local level, particularly in developing countries, have been largely neglected by the management academy as a focus for research.

Last, this is a first comprehensive study to investigate current MD strategies, and whether they build the individual executive capabilities needed to achieve their organisation’s strategic objectives, thus building the capacity of the PNGPS. If proven successful, the framework and the checklist in this research could be used by public sector organisations throughout the smaller Pacific island nations (PINs) in developing their SES personnel. These countries share common, if not similar, structures of public service, public sector reform, tradition and culture, and like PNG, they undergo many capacity building activities sponsored by donor countries.

Hence, this study aims to analyse current HR policies and practices that contribute to MD, to analyse the methods for evaluating MD strategies, and to identify ways on how MD can be improved to contribute to the capacity building of the executives in the PNGPS. The changes and suggestions can be integrated into policies and practices. A framework on MD interventions and a checklist on T & D can be developed that would contribute to capacity building of the executives in the PNG Public Sector organisations.

1.4.5 The expected outcomes and benefits

The expected outcomes are anticipated to benefit the individual executives, the agencies and the statutory bodies, the PNG Public Service, the research institutions, and the citizens of PNG as well as its development partners, in particular the Government of Australia (GoA) who are the major funders of capacity building activities on MD in PNG.

a) **To participants:** Upgrade individual employability with increased confidence and competencies and provides opportunities for increased job satisfaction, high level of pay, and promotion, improve performance, improve leadership and management skills.
b) **To the broader community:** Efficient and effective delivery of government services as a result of MD means better services for the broader community, thereby fostering sustainable improvements in the quality of life of Papua New Guineans.

c) **To increase knowledge:** The notion of MD is relatively new as there is a lack of literature on the application of MD in public sector organisations, particularly in less developed or developing nations, and therefore this will benefit other researchers or academics in higher learning organisations.

d) **To the Public Service:** Clear performance improvement amongst individuals and organisations in the PS; delivery of improved services by national and sub-national levels of government; public administration in PNG repositioned from low performance to high performance. The results of this applied research will help the government of PNG in making better decisions on how to maximise the MD interventions by ensuring that right participants are sent for the right programs which are linked to their job requirements and their organisation goals. It adopts a flexible, integrated, whole-of-government and evolving approach that addresses both demand and supply issues affecting the performance of PS organisations and employees.

e) **To the donor agencies:** Also referred to as development partners such as AusAid, NZODA who are funders of MD activities, they can focus on programs that address the skills and competency gaps of executives in the PNGPS rather than focusing on professional development only.

1.5: **Methodology**

A comprehensive discussion of the research methodology is provided in Chapter 4. This section outlines the philosophical stance assumed by the researcher, before providing a brief outline of some of the key methodological choices that underlie the study.

This study is exploratory, explanatory and descriptive in nature although exploratory is more dominant. The study chose to use a pragmatist paradigm using a mixed-methods approach. The *Two-phase Sequential Exploratory Mixed Methods* design was deemed appropriate for this study. It was the central premise of this study that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either
approach alone. Abductive reasoning was adopted for this study which used both qualitative and quantitative approaches sequentially, particularly where the inductive results from a qualitative approach served as inputs to the deductive goals of a quantitative approach, and vice versa.

Data collection was conducted in two phases. The first phase involved a qualitative exploration of issues in relation to policies and practices and interventions to MD effectiveness with heads of 21 PNG Public Sector organisations through in-depth interviews conducted face-to-face. The second phase involved a quantitative survey, using a questionnaire instrument (derived from the qualitative phase) on 150 senior executives representing the national departments, central agencies and statutory authorities or entities. Hence, there was triangulation of participants, methods, data and findings to establish trustworthiness and avoid biasness. A non-linear path was followed as the researcher worked between the different participants with great flexibility, going back and forth to confirm data or when new situations arose. All fieldwork was conducted in Port Moresby, PNG.

Qualitative, quantitative and secondary data (reports and official documentations) were used to generate relevant information. Qualitative analysis took the form of transcribing recorded tapes and content analysis of interviews and documents, while quantitative analysis took the form of descriptive statistics, using the SPSS v17.0 statistical software. Other statistical tests such as paired sample t-test, ANOVA, Exploratory Factor Analysis, Principal Components Analysis, Correlations and Multiple Linear Stepwise Regression were conducted to test the hypotheses.

1.6: Structure of the Thesis

This thesis follows a Seven-Chapter format principally based on the sequence of a Six-Chapter thesis designed by Perry (1995), with an additional chapter being added. Fig. 1.4 outlines the chapters of the thesis followed by a summary of the content of each of the chapters.
Throughout this seven-chapter thesis, the various elements of the research study have been described.

**Chapter 1: Introduction**

Chapter 1 provides an introduction to the study and an overview of the thesis. It provides the background and purpose to the research; states the research issue and questions; and significantly justifies the importance of the study. It is here that the overall thesis is given a context, flowing from the literature review, to the context of PNG, the methodology, limitations and assumptions, through to the conclusion. It creates the framework for the thesis to move forward.

**Chapter 2: Literature Review**

Chapter 2 presents the literature review pertaining to MD, commencing with an overview of SHRM in general, which is the first parent discipline. It reviews mainstream literature on SHRD which is the first immediate discipline. Effort is made to review literature on SHRD in the context of public sector organisations. It then examines literature on the second immediate discipline of MD. A gap is found in the literature on MD in the context of public organisations. Next, literature on the second parent discipline of capability building (cb) and its relationship to developing countries is reviewed. In doing so, it opens by reviewing literature on public sector management and public sector reform initiatives and how they
Chapter 1: Outline of the Study

relate to capacity building. Finally, this chapter states the research domain, the research questions, objectives and propositions. A theoretical framework in relation to MD effectiveness is developed to answer the seven research questions. It is from the literature review, government policy documents and reports as well as researcher’s hands-on experience that the interview questions were drawn.

Chapter 3: The Context of PNG

Chapter 3 presents background information on PNG. It begins by briefly discussing the historical background of the country, and its geographical location and then gives an overview of the system of government and the structure of the PS. Further, it describes the procedures, policies and legislations in the management and administration of public servants in the country. The aim is to provide an understanding of how public servants, specifically the most senior public servants are attracted, retained, motivated and developed in the PS.

Chapter 4: The Research Methodology

Chapter 4 explains the methodologies chosen to investigate the issues raised and to examine the research issue and explore those research questions that were developed in Chapter 2. It adopts the Two-phase Sequential Exploratory Mixed Methods approach wherein the results of the first phase (qualitative interviews) helped develop or informed the second phase (quantitative survey). This chapter gives a graphical view and discusses the research process involving the two phase (qualitative and quantitative phases). The use of the pragmatist paradigm and the mixed methods approach are justified in this chapter. It describes the triangulation of methods, participants and methods of data collection. The specific practical research design or approaches were also developed in this chapter - that is, the interview procedure and questions followed by the survey questionnaire and the analytical framework. Finally, the limitations of qualitative and quantitative research and ethical considerations were discussed.

Chapter 5: Qualitative Data Analysis – Interviews

Chapter 5 summarises the information gathered from Phase 1 - in-depth interviews with the most senior executives representing the different sectors of different public organisations and entities. It identifies and presents patterns in the combined data. The analysis of the field data collected from in-depth interviews is depicted in the form of quotations, descriptions, tables and figures. In particular, direct quotations are used extensively and frequently in
order to compare, contrast, and substantiate the findings. Finally, a coding hierarchy is created consisting of the themes and sub-themes based on the information gathered from the interviews. These help develop the survey items.

**Chapter 6: Quantitative Data Analysis – Survey**

Chapter 6 presents and describes the detailed results of data collected in Phase 2 – the survey questionnaire which comprised four main sections: demographic characteristics, pre-program information, post-program information and comments and suggestions for improvement in policy and practice at the micro and macro levels. The participants for the survey were the executives in the upper echelon of the organisations’ structures. The quantitative phase of the study was designed so that it followed from (or was connected to) the results of the first qualitative phase which were tested and evaluated through relevant tests, such as the paired sample t-test, the correlation test and the test of Multiple Linear Stepwise Regression.

**Chapter 7: Conclusion**

The final chapter, Chapter 7, integrates all elements of the thesis by summarising the findings and presenting the study’s conclusions, implications, and recommendations, in a management context. The significance of the study, considerations of the generalisability of the findings, and linkages between the findings and the extant research are also considered in this chapter. The literature review is combined with the analysis to answer the research issue. In particular, an MD Effectiveness wheel, integration of the interventions are presented, based on the findings from both phases of data collection, with a T & D cycle and checklist. Finally, this thesis highlights the need for further research in the field of MD. Appendices provide detail not suitable for incorporation into the seven chapters and a list of references, complete the work.

**1.7: Definitions**

The key definitions or terms used in this study are defined below:

*Effective Practice* - a technique for performing an activity or business process that at least one company has demonstrated works particularly well (Thompson Jr., Strickland III, and Gamble, 2007: 393)
**Capability/ies** - Capabilities, in general terms, are clusters of behaviours that a person must demonstrate to be successful in a job, role or function (DoI, 2005:3).

**Capacity Building** - strategies and methodologies used by developing country, and/or external stakeholders, to improve performance at the individual, organisational, network/sector or broader system level (Bolger, 2000, p. 2).

**Competitive Advantage** - what sets an organisation apart, its distinct edge (Robbins et al, 2006: 274).

**Development** - the growth or realization of a person’s ability, through conscious or unconscious learning. Development programs usually include elements of planned study and experience, and are frequently supported by a coaching or counselling facility (Manpower Services Commission, 1981: 15).

**Development Aid** - also referred to as development assistance, international aid, overseas aid or foreign aid, is financial, human resource and infrastructure aid given by governmental and economic agencies from developed countries to support the economic, social and political development of developing countries.

**Education** - activities which aim to developing the knowledge, skills, moral values and understanding required in all aspects of life rather than a knowledge and skill relating to only a limited field of activity. The purpose of education is to provide the conditions essential to young people and adults to develop an understanding of the traditions and ideas influencing the society in which they live and to enable them to make a contribution to it (Manpower Services Commission, 1981: 17).

**Effective/ness** - having an effect or producing the intended results. From management perspective, it means completing activities so that organisational goals are attained; referred to as ‘doing the right things’ (Robbins et al, 2006: 9).

**Management Development** – any attempt to improve current or future management performance by imparting knowledge, changing attitudes or increasing skills (Stone, 2005: 863). It is the expansion of a person’s capacity to be effective in a manager’s roles and processes (McCauley and Van Velsor, 2004; Suutari and Viitala, 2008).

**Human Resource Development** - includes T & D, career planning and development, and performance appraisal. Its focus is on the acquisition of the required attitudes, knowledge
and skills to facilitate the achievement of employee career goals and organisational strategic objectives (Stone, 2005: 861).

**Human Resource Management** – involving the productive use of people in achieving the organisation’s strategic business objectives and the satisfaction of individual employee needs (Stone, 2005: 861).

**Intervention** – the act of intervening, especially to influence or alter a situation in some way (Collins Compact Australian Dictionary, 1995: 444)

**Learning** – any relatively permanent change in behaviour that occurs as a result of experience (Robbins et al, 2006: 806). Knowledge is acquired by systematic study in any field or fields of scholarly application. Learning is to prepare the individual but not related to a specific present or future job (Nadler and Nadler, 1990: 1.18).

**Learning Organisation** – organisations where the focus is on the acquisition, sharing and utilization of knowledge to survive and prosper (Stone, 2005: 863).

**Strategic HRD** - planned learning and development of individuals and groups to be of benefit to the business as well as individual learners. It advocates aligning the format of organisation strategy and HRD activities so that they drive the strategic objectives of the organisation (Garavan et al., 1995).

**Strategic HRM** - focusing on the linking of all HR activities with the organisation’s strategic business activities (Stone, 2005: p. 869).

**Strategy**- the direction and scope of an organisation over the long term: which achieves advantage for the organisation through its configuration of resources within a changing environment, to meet the needs of markets and to fulfil stakeholder expectations (Johnson and Scholes, 2002:10).

**Training** – a planned process to modify attitude, knowledge or skill behaviour through learning experience to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to develop the abilities of the individual and to satisfy the current and future needs of the organisation (Manpower Services Commission, 1981: 62). Learning is related to present job (Nadler and Nadler, 1990: 1.18).
Training Needs Analysis – a systematic and thorough investigation of a problem with the purpose of identifying exactly the dimensions of that problem and whether or not it can be solved by training.

1.8: Delimitations of scope and key assumptions

This research is delimitated to the participants who work in the PNG Public Sector organisations. In addition, it focuses only on the senior executives in the top hierarchy of these organisations. Furthermore, the participants only represented the national departments, agencies and statutory entities in the National Headquarters of Port Moresby, and did not represent the executives in the provinces due to logistics of travel and communication. The research deliberately excludes input from HR Managers due to time and resource constraints.

Private documents and communications relating to MD were not accessed. It was not possible to gain access to other documents such as performance evaluation reports of the executives or management reports due to ethical reasons.

Although there are many dimensions of SHRD and leadership that may be studied, such as public sector leadership and management styles in PNGPS, this thesis only considers MD as the main study focus. Because this research is exploratory, explanatory and descriptive, conclusions of this research should be used for exploring issues further, rather than for generalising to a population.

The findings and conclusions that are reached must be seen against the particular and peculiar circumstances of PNG society. While this means that the conclusions may not be generalised in the traditional natural scientific fashion, they, nevertheless, provide valuable insights for relating to other similar societal settings, especially in other developing countries such as the smaller Pacific island nations.

1.9: Summary of Chapter 1

This is a first comprehensive study to investigate the effectiveness of MD of SES personnel in the PNG Public Sector organisations and how they contribute to capacity building of the executives, their organisations and the PS. Therefore, it sets the pace for further research.
This chapter has laid the foundation for this thesis and provided an overview of the research. It commenced by presenting a background to the thesis. The research issue was defined, forming the core of the thesis. Next, the research was justified. It was shown that although organisations are increasingly using MD initiatives as a means of enhancing their capability to realise their organisation goals, the question still remains as to whether the senior MD programs enhance strategic management capabilities at individual, organisation and national level. It leads to the question whether these programs are successful. It also revealed that no other study had been conducted on MD effectiveness in public sector organisations, in developing countries. In any research, it is crucial to select the appropriate methodology. In this research, it has been determined that a two-phase sequential mixed methods would best illuminate the research issue. This introductory chapter has provided the structure of the study, stated definitions and, discussed the delimitations and key assumptions of the research.

On these foundations, the report can proceed with a detailed description of the research, beginning with Chapter 2 that will review the literature that exists in relation to MD and integrate it into a series of themes. Chapter 3 gives an overview of the context of PNG, in particular the PNGPS structures, policies and practices. Chapter 4 details the research design and methodology with the data analysis presented in Chapter 5 (Qualitative interviews) and Chapter 6 (Quantitative survey). Some implications and recommendations for MD are discussed in Chapter 7. A list of references and the appendices which include a series of figures, tables, the survey instrument and accompanying letters to the participants for interviews and participants for the pilot survey as well as the final study, complete the work.
Chapter 2: Review of the Literature

2.1 Introduction

“But since we do not as yet live in a period free from mundane troubles and beyond history, our problem is not how to deal with a kind of knowledge which shall be “truth in itself,” but rather how man deals with his problems of knowing, bound as he is in his knowledge by his position in time and society”.

- Karl Mannheim, Ideology and Utopia, (1936, p. 188)

2.1.1 An Overview

In the previous chapter, the purpose of the research was outlined. An overall introduction to the research issue and research questions was given, along with a brief summary of the methodology of this study. In this second chapter of the thesis, a detailed examination of the literature relevant to this study is conducted in order to highlight the pertinent research issues and place the study into a theoretical context.

This chapter presents a review of literature in the two parent disciplines of: 1) Strategic Human Resource Management (SHRM) as informed by psychology, organisational sociology and education, and; 2) capacity building in developing countries as informed by liberalism. The aim is to analyse theory and practice in these areas and assess their relevance to SHRD and capacity building of senior executives in the PNGPS. Thus, the primary purpose of this study is to investigate the MD interventions and their effectiveness in contributing to capacity building of the executives in the PNGPS. In particular, it investigates whether MD builds the executive capabilities needed to achieve organisations’ strategic objectives and whether these can be improved.

2.1.2 Structure of the Literature Review

This chapter is presented in nine sections. Section 2.1 serves as an introduction and overviews the literature review, provides the structure of the literature review as well as the conceptual framework. Section 2.2 gives the background and rationale for this study, justifies its importance at macro, meso and micro levels, and makes the case for why this topic is worthy to be the subject of this doctoral dissertation. Sections 2.3 presents the relevant main areas of the literature on the first parent discipline of SHRM, followed by the two immediate disciplines of SHRD and MD in Section 2.4. Section 2.5 presents the
literature on the second parent discipline of capacity building in developing countries, followed by the three immediate disciplines of capacity building and development aid as they inform the development of public sector organisations in Section 2.6. The two parent literatures provide the background for the immediate disciplines, which are discussed to identify the gaps in the literature and develop a theoretical framework and related research issues. In addition, policy reports and other similar studies previously conducted related to this topic are presented in this literature review. Section 2.7 identifies the research issues for investigation. This includes the main research question underpinning this study as well as the aim, sub-questions, objectives and propositions, research hypotheses and the research framework. Section 2.8 gives the implications of the study. Finally Section 2.9 summarises the literature review based upon the surveyed literature, secondary data comprising of reports of previous studies and other policy documents, and the researcher’s own hands-on experience.

Figure 2.1 provides the overview of the organisation of the literature review as it follows this introduction.
Several fields of literature will be reviewed which form the basis of the immediate disciplines of SHRD, MD, Public Sector Management, Development Aid and Capacity Building to unearth the research issues leading to the research questions of: What are the interventions to MD effectiveness? How do they contribute to capacity building of the executives in the PNG Public Sector organisations, and how could these interventions be improved?
While reviewing the literature on the immediate disciplines, an attempt is made to also include an overview of central problems in the field of study with a summary of the major contributions on the relevant area of study. The relationships between the parent and immediate discipline/field and the research problem, as well as between the research problem and research issues, are graphically illustrated in the concept map below.

The term ‘executives’ or ‘senior managers’ has been used widely in preference to ‘managers’ (except for specific position titles as explained below), as the key subjects of this study involves those senior officers or public servants in the PNGPS in the top level of management. McNamara (2008) states that executives are those who are involved with more strategic and conceptual matters with less attention to day-to-day details, who direct the management of the organisation or a major division of the organisation and sets policies and goals, and have extensive discretionary decision-making authority. The term ‘managers’ cannot be used as it also involves and includes those at a supervisory level including frontline managers who are at the lower level of management. These officers are responsible for managing day-to-day activities of the organisation and the staff they supervise, but also for the organisation’s goals, and for using its resources in an effective and efficient manner.
Chapter 2: Review of the Literature

However, in the Public Service of PNG, there is no consistency across the agencies in the designations or position titles assigned to senior executives. For instance, within the national departments, the section heads reporting to divisional heads are assigned different titles in their structures in different departments such as: Assistant Secretary (AS), Manager or Deputy Director. In the provincial administrations, the titles used are Provincial Administrator and District Administrator or Manager. Therefore, in the current study the title or term ‘manager’ is still used to denote those holding executive roles.

The two notions of ‘Management Development (MD)’ and ‘Executive Development (ED)’ are used interchangeably in this study. ED is part of MD (McNamara (2008). Many view the term ‘MD’ as including ED (developing executives), leadership development (developing leaders), managerial development (developing managers) and supervisory development (developing supervisors) (McNamara (2008). Most of the literature cited in this research use the term ‘MD’ which include ‘ED’. Hence, the use of the terms interchangeably.

It is acknowledged that other areas of this discipline such as leadership, strategic management exist. However, within the confines of this dissertation, the notion of MD is explored.

2.2 Background and Rationale for this Study

Significance of this study and the focus on the notion of MD has been outlined in Section 1.4. This study was an initial effort to investigate the effectiveness of MD interventions in the PNG public sector organisations and how they contribute to capacity building of the executive, their organisations and the Public Service. It specifically focused on a particular group in public sector organisations in PNG – the executives – their managerial talents, T & D, and related policies and their implementation.

In today’s rapidly changing environment in the public and private sector organisations, capable managers are crucial to organisations’ success in gaining and sustaining a competitive advantage. Organisations are increasingly using MD initiatives as a means of enhancing their capability to realise their business goals. Previous research suggests that firms can gain sustainable competitive advantage through strategically managing their human resources, operationally exercised as SHRM (Wei, 2006). However, the conditions under
which a firm should employ SHRM so as to best achieve enhanced performance remains unclear (Wei, 2006).

Human resource capacity building for public service delivery has been recognised by developed, transition, and developing economies under the notion of the ‘new public management’ (NPM) reform. In the context of NPM or public sector reform (PSR), decentralisation, and human resource management and development (HRM/D) have been recognised as crucial strategic policy elements of concern in the implementation of reforms in both developed, transitional and developing countries (Analoui, 2007). In order to carry out the reforms successfully, there is a need not only to guarantee legally correct application of laws and various reform strategies, but to ensure that competent and professional civil servants are in place that are able to lead and implement the envisaged reforms (Coggburn, 2005).

Research shows that investments in human resources are a potential source of competitive advantage (Stone, 2010 p. 338). It is reported that many organisations such as Australian governments spend little on HRD and have been parsimonious when it comes to expenditure on management education (Stone, 2010 p. 338) while elsewhere such as in the United States of America, organisations spend billions of dollars each year in developing management capability through MD programs (Kirwan & Birchall, 2006). In the United Kingdom, 5 per cent of the payroll cost is spent on T & D activities. However, as discussed earlier, the value that organisations derive from what they spend on T & D interventions does not seem encouraging. It is estimated that only between 10-20 per cent of skills and knowledge are fully applied by employees on the job following training (Curry et al., 1994; Kauffman, 2002).

If MD is to be successful, the design of the interventions must match the organisation’s level of commitment to strategic management and the degree of maturity of its strategic management processes. Brown (2006) asserts that the link between MD programs and business strategy has been explored by many writers since 1990 (see for instance: Temporal (1990), Osbaldeston and Barham (1992), Bolt (1993), Michael (1993), McClelland (1994), Seibert et al. (1995), Hussey (1996), Burach et al. (1997), Brown (2003, 2004, 2005) and Luoma (2005). These writers propose that MD programs for senior managers can contribute to the formulation and implementation of strategies, the management of change and strategic capabilities at both the individual and organisational level. They continue to stress that strategic issues are seen as being the drivers of senior MD, with opportunities being created...
for challenging existing strategies, problem solving through the development of new strategies, and learning through involvement in the strategic tasks of the organisation (Brown, 2006).

MD is seen as an important method of attracting and retaining high-quality employees (D’Netto, Bakas and Bordia, 2008). However, the question still remains as to whether the senior MD programs enhance strategic management capabilities at individual, organisation and national level. How successful then are these programs? Therefore, it is imperative that the linkage between MD and strategic management and SHRD, as well as the processes and variables associated with MD be better understood.

As reported by Ellis (2003), 4 out of 10 senior managers will fail at their job within 18 months, and one possible explanation could be that a considerable number of managers find themselves in senior positions because they are adept at financial and operational procedures (Martin, 2002). Furthermore, managers are often put through a few days’ worth of development programs and left to fend for themselves (Griffin, 2003).

MD is a core component of HRD (Brewster, 2004). Continued environmental and organisational changes have precipitated a search for a more strategic integrated model of developing the management capacities in organisations (Mumford & Gold, 2004). MD is viewed as a major driver and facilitator of change and adaptation (Cecil & Rothwell, 2007). Although the importance of MD is increasingly recognised as determining strategic directions for organisational effectiveness and success, there has been considerable debate on the value and effect of MD interventions (Brewster, 2004; Luoma, 2005; Mabey, 2004).

As will be seen in the proceeding sections, most of the literature cited above in this chapter talks about business organisations and not the public sector. Therefore, there is a gap. The current literature on MD is directed primarily through the lens of organisational and self-development strategies. As a key determinant of MD in the institutional context, national policy for the public sector has largely been unattended to in the literature (Chow, 2004; Wang, 2009). Furthermore, there is a gap in the literature on MD interventions and their effectiveness in PS organisations, particularly in smaller developing countries such as PNG.

This study is intended to embrace a broader perspective of MD in PNG public sector organisations at different units of analysis at executive level, organisation level and national level or micro, meso and macro levels. Exploring MD effectiveness in PNGPS has substantial significance for several reasons as discussed in Section 1.4.1.
2.2.1 The Government of PNG Policies

First, an exploration of MD effectiveness for SES personnel is in line with various policies of the Government of PNG such as the *Medium Term Development Strategy (MTDS) for 2005-2010*, the *PNG National Strategic Plan 2010-2050*, now called “PNG Vision 2050 (PNGV2050) launched in 2010, and the *PNG Development Strategic Plan (PNGDSP) 2010-2030*, launched in 2010.

PNG’s Medium Term Development Strategy (MTDS) for 2005-2010 has Public Sector Reform as one of the objectives for efficient and effective delivery of government services (DNPRD, 2004 p. 53). It calls for improvement on performance, accountability and compliance as priorities and strategies to improve leadership and management skills of senior public servants (DNPRD, 2004 p. 56). This important policy states that poor personnel management, in which training, development and education interventions are embedded, is highlighted as one of the major causes of poor service delivery. It clearly identified that competence of the PS workforce is widely acknowledged as a major impediment to achieving PS reform and improved public sector performance (PSRMU, 2003 p. 27).

The PNGV2050 developed seven pillars which become the foundation on which development plans from 2010 to 2050 will be anchored (PSRMU, 2008 p. 12). One of the three core areas identified at the heart of the whole program is Human Capital Development which calls for Papua New Guineans to be well trained and well utilised, well paid, well treated and contributing positively and meaningfully to national development (PSRMU, 2008 p. 12).

The PNGDSP identifies the need for better public sector management and points out that leadership problems and skill shortages are affecting many sectors of the public (DNPM, 2010, p. 122). This new policy states that effective ways and strategies need to be developed to recruit and retain competent public servants who perform to high standards, including mechanisms to enforce competitive merit based recruitment and promotion.

2.2.2 Reports and Studies by Development Partners on SHRD

Second, the reports by the development partners or funders of capacity building activities have prompted this research to further analyse the policies and practices of SHRD, more specifically MD effectiveness. For instance, the reports on the ADS such as tracer studies highlighted anomalies on policy and practices in relation to HRD activities in the Public
Sector organisations in PNG (TAFE Global, 2007 p. 8). These anomalies included weaknesses in the area of selection of staff for training, development and education activities, with little regard for the overall HRD/HRM direction of the organisations they worked for. Lack of formal HRD and HRM plans and policies was reported to be a continued area of weakness within government agencies (TAFE Global, 2007).

2.2.3 Gap in the Literature

Third, as will be seen later in this chapter, there is little evidence in the literature of evaluation on higher levels of training, development and education interventions that focus on results and impact based on, for instance, Kirkpatrick’s four-level model of training evaluation (1998), Phillip’s five-level framework (1997, 2003), or Stufflebeam’s (2000) CIPP model. Literature on evaluation is not well done. This study analyses the current policies and practices on evaluation of MD strategies and methods and offers suggestions for improvement where applicable. Furthermore, a framework and a checklist can be developed to guide the public sector organisations in developing their executives.

Fourth, while there is a significant body of literature on the effectiveness of the MD methods and strategies and how these can impact on organisation performance, it focuses on the private sector. There is far less information on the public sector. There is also a gap in the literature on how capacity building and training activities by donors from developed countries link to SHRD of executives in the public sector organisations in developing countries such as PNG. This is an indication that public sector organisations at the supranational, national, provincial and local level, particularly in the developing countries, have been largely neglected by the management academy as a focus for research.

Last, this study is arguably the first of its kind to be conducted investigating current MD strategies that build the capacity of the executives and the PNGPS, and contributes to a previous scoping study on ED, primarily to report on the existing SES personnel and the current system of appointing and managing departmental heads in PNGPS (PSWDI, 2006).

Therefore, it is the premise of this study to analyse current HR policies and practices that contribute to MD, and to analyse the methods and techniques for evaluating MD strategies. It aims to identify ways in which MD can be improved to contribute to capacity building of the executives in the PNGPS organisations. Any contributions from the outcome of this research can be used by Public Sector organisations throughout the smaller Pacific Island nations (PINs) for their SES personnel.
Chapter 2: Review of the Literature

The following section will address the first parent discipline of SHRM, its emergence, aims, approaches and practices. Several fields of literature will be reviewed which form the basis of immediate disciplines such as: SHRD and MD.

2.3 Strategic Human Resource Management

2.3.1 Definition and Aim of Strategic Human Resource Management (SHRM)

Stone (2010 p. 4) defines the technical concept of HRM as that involving the productive use of people in achieving the organisation’s strategic objectives and the satisfaction of individual employee needs, whereas SHRM focuses on the linking of all HR activities with the organisation’s strategic objectives (Stone, 2010 p. 25). Wright and McMahan (1992) define SHRM as a pattern of planned human resource deployments and activities intended to enable an organisation to achieve its goals. This definition indicates that HRM can only be considered to be strategic if ‘it enables an organisation to achieve its goals’.

Armstrong (2006 p. 116) asserts that the fundamental aim of Strategic HRM is to generate a perspective on the way in which critical issues relating to people can be addressed. Moreover, it enables strategic decisions to be made that have a major and long-term impact on the behaviour success of the organisation by ensuring that the organisation has the skilled, committed and well-motivated employees it needs to achieve sustained competitive advantage. Its rationale is to gain the advantage of having an agreed and understood basis for developing approaches to people management in the longer term by providing a sense of direction in an often turbulent environment.

2.3.2 The Practice of SHRM

The practice of SHRM can be best related to its two guiding assumptions. According to Schuler and Jackson (2007 p. 215), the two guiding assumptions of SHRM are that:

1. effective HRM requires an understanding of and integration with an organisation’s strategic objectives; and
2. effective HRM leads to improved organisational performance.

They assert that when HR policies and practices are aligned with an organisation’s strategic objectives, the system can be described as “vertically integrated”. This means that the traditional activities of creating remuneration and benefits packages, tracking employee progress, bargaining collectively with unions and evaluating employee performance remain
under the aegis of HR professionals. On the other hand, the goal of developing HR policies and practices that are aligned to form a coherent system is referred to as “horizontal integration” among HR activities (Schuler and Jackson, 2007 p. 216).

SHRM is a strategic approach to managing the human resources of an organisation. However, when combining the HRM function with business strategy, SHRM reflects a more flexible arrangement and utilisation of human resources to achieve the organisational goals, and accordingly helps organisations gain a competitive advantage (Wei, 2006).

The HRM function comprises of different activities, one of which is HRD as seen in Figure 2.3 below. MD is found under this important activity.

Wei (2006) highlights that the congruence between HR practice and business strategy has been emphasised in studies related to SHRM (Miles & Snow, 1984; Baird & Meshoulam, 1988; Wright and McMahan, 1992). Increasing numbers of empirical studies have been conducted in various contexts, on the relationship between strategic HRM and organisational performance or competitive advantage (Huselid, 1995; Bjorkman & Fan, 2002, Chan, Shaffer & Snape, 2004). It can be argued that essentially, SHRM emphasises developing the firm’s...
capacity to respond to the external environment through a better deployment of human resources.

As discussed above, technical HRM activity spans a series of HR practices. These activities range from attracting high quality employees, placing them in appropriate positions, training them to work in the firm’s specific way, and motivating them to devote more enterprise to organisational goals. All organisations, irrespective of their organisational goals, and regardless of their structures, require a systematic design of HRM practices. However, if not much attention is paid to the coordination of these activities, then HRM effectiveness is bound to be decreased. For instance, an excellent employee might find it quite difficult to achieve high performance without good training compatible with organisational goals and the work itself. On the other hand, a lack of motivation among well trained employees may be linked with them performing below their potential. Therefore, a systematic coordination of all HRM activities from recruitment, T/D, and motivation to retention and renewal is of vital importance if an organisation wants to attain its goals and objectives.

The next section reviews literature on the immediate discipline of SHRD.

### 2.4 Immediate Disciplines of SHRM

The two immediate disciplines to be reviewed are SHRD and MD. Discussions are not only based on the mainstream literature of SHRD and MD and their application in businesses, companies or firms but also in their application in public sector organisations in the context of public sector reforms.

#### 2.4.1 Strategic Human Resource Development

Strategic HRD forms the connection between HRM and HRD. Garavan, Costine and Heraty (1995 p. 5) explain that strategic HRD forms the central component of the HRM strategy. All the other components of the HRM strategy are therefore dependent on Strategic HRD. They state: “Within most formulations of HRM, T & D represents the vital, if not, the pivotal component.” McCracken and Wallace (2000b p. 285) support this view and explain that the integration between HRM and SHRD should take place in both a vertical and a horizontal manner in the organisation.
Thus, SHRD has become an important component of HRM as a means to improve performance and organisational effectiveness (Horwitz, 1999). According to McCracken and Wallace (2000b), strategic HRD comprises the creation of a learning culture, within which a range of training, development and learning strategies both respond to corporate strategy and help to shape it.

SHRD has received increasing research attention in the past two decades (e.g. Garavan, 1991; 2007; Garavan, Costine & Heraty, 1995; Gilley & Eggland, 1989, Gilley & Maycunich, 2000; Grieves, 2003; Horwitz, 1999; McCracken & Wallace, 2000; Walton, 1999, Yorks, 2005). For Garavan et al. (1995), SHRD is used in many contexts and for a variety of activities. They assert that it promotes practices that enhance the strategic performance of employees and organisations. It also emphasises proactive change in management which enables organisations to survive in an increasingly complex, unstable, competitive, and global environment (Grieves, 2003).

Garavan (1991, 2007) argued that to be effective, organisational SHRD needs to integrate learning interventions into business planning. He contends that this is a critical component; when combined with the active participation of top management as key stakeholders, SHRD will flourish.

Organisational SHRD is grounded in the resource-based view of the firm (Wright, Dunford & Snell, 2001). The resource-based view provides a framework for understanding human resources as a pool of unique skills, knowledge, abilities, and experiences that can provide a resource to serve as a sustainable competitive advantage. However, the scope and nature of the activities that come within the remit of organisational SHRD is contested (Garavan, 2007; Hu, 2007; McCracken & Wallace, 2000). For example, Hu (2007) specified five key activities: (a) talent development, (b) T & D, (c) organisation development, (d) performance development, and (e) leadership development. Garavan (2007) highlighted three sets of HRD strategies: (a) organisation performance, (b) organisational learning, and (c) organisational change. There are many who agree that SHRD involves systematic and formal processes that are aligned with the needs of the organisation.

A strategic perspective involves designing and implementing HRD policies and practices to ensure that a firm’s human capital contributes to the achievement of business objectives (Davenport, Prusak, & Wilson, 2003; Garavan, 2007; Rainbird, 1994; Zula & Chermack,
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2.4.1.1 The Importance and challenges of SHRD

It has been argued that an organisation’s human resources are perhaps its most valuable assets. As such, the development of human resources should be deemed as an invaluable investment (Swanson & Holton, 2001; Yorks, 2005). A well-trained, multi-skilled workforce is essential to economic survival. Therefore, a strategic vision of the HRD function is much needed. This obviously involves changes in all the main HRM functions (attract and recruit, reward, retain and develop and so on).

A vision of the future of the public service, operating, acting and performing in changing social environments, is the key element of a strategic approach. In public organisations, introducing SHRD is not a simple task. First, it requires a careful analysis of the internal and external conditions affecting the achievement of public objectives of the organisation. Second, it demands flexibility and support systems (besides analytical efforts for strategic planning and management) in contrast with traditional bureaucracy, rigidity and isolation (Cooper, 2002).

The public sector, especially in developing countries is under pressure to improve its performance and provide quality services with fewer resources (Siugzdiniene, 2008). New technology, new ways of organising work, new means of delivering services and an increasing reliance on temporary employment have redefined the nature of public service. Furthermore, duties are becoming multifaceted and very complex: they may encompass policy advice, management of human, financial and other resources, the provision of critical services and other tasks (United Nations, 2005). Meeting these challenges requires a unique combination of knowledge, skills, attitudes and effective HRD systems, as well as policies and strategies to nurture these competencies.

The World Bank observation is underscored by the reality that the most valuable and critical resource of an organisation is its people (Analoui, 2002). Recognising that people conceive, plan, execute tasks, coordinate and organise inputs and produce outputs, it can thus be safely assumed that endeavours would succeed or fail because of the people involved (Powell, 2001). It is therefore not surprising that HRM/HRD issues have been of great concern to public sector reformers. This contradicts the assumption that NPM reform is a management philosophy largely practised in the private sector. The question has often been asked is
whether these philosophies and practices would work in the public domain with its bureaucratic and non-participative tendencies (Taylor, 2001; Hope, 2001; Turner and Hulme, 1997).

Despite efforts to improve the HRD function in the context of ongoing reforms, the following challenges remain and are emphasised by different authors (Hockey, Kakabadse et al., 2005; Maor, 2000; Gibb, 2002): the lack of a systematic approach and the very fragmented and reactive nature of the T & D function; poor alignment of T & D with institutional strategies and performance appraisal systems; and the inability of HRD specialists to assume a strategic role in addressing organisational problems. Thus, it is evident that current approaches to HRD are insufficient to ensure the development of a new set of competencies of civil servants, or to create an enabling environment within government institutions that enhances the organisation’s capacity to take on large-scale learning processes associated with major cultural and procedural change (Koch, 1999) brought about by public management reforms.

In a period of rapid organisational change as discussed above, the consequences, challenges and changes related to contracting out, decentralisation, and empowerment mean that civil servants need to be more flexible and undertake continuous learning rather than periodic training (McCracken & Wallace, 2000a). Hence, the present environment calls for significant transformation of the HRD system to reflect the demands of public management reform by creating a learning competence or capacity within government institutions to generate new knowledge and facilitate learning on a continuous basis. It must be noted that HRD is no longer limited to training, but extends to facilitating and supporting learning processes within an organisation, focusing on different forms of learning, including informal and incidental learning (Buyens & Woulter, 2001). Learning is regarded as a normal part of everyday work and working is seen as a rich source of learning.

Therefore, it can be said that an HRD system will be perceived as having strategic value in the context of public management reform, only if that system has the capability to develop a supportive environment for learning in which there is a clear connection between HRD and the strategic goals of the government institutions, which in turn have been aligned with the objectives of public management reform.

2.4.1.2 The Characteristics and Key Features of SHRD

Various characteristics of SHRD can be found in the literature (Garavan, 1991, 2007; McCracken & Wallace, 2000b p. 281-290; Grieves, 2003 p. 114-117). These characteristics
can be used as guidelines to determine whether the nature and scope of HRD found in companies can truly be regarded as strategic since McCracken and Wallace (2000a p. 427) explain: “…there has been relatively little work on the characteristics which an organisation with a strategic approach to human resource development should have.”

The characteristics of SHRD as found in the literature relate to four main aspects, namely (Garavan, 1991, 2007; McCracken & Wallace, 2000a p. 427; McCracken & Wallace, 2000b p. 281-290; Grieves, 2003 p. 114-117):

1. The alignment between the grand strategy and the strategic orientation of the company as well as SHRD;

2. The relationship between the management and development of the human resources of the company;

3. The responsibilities and relationship between role players in SHRD; and

4. The effect of SHRD on the company.

As discussed above, Garavan (1991, 2007) emphasises the need for integration into business planning as critical for SHRD, as is a contribution to corporate goals and an awareness of mission. The support and active participation of top management, as key stakeholders, are vital for the development of SHRD. In addition, he argues, continuous knowledge of the external environment, in terms of opportunities and threats for the business in general and for HRD in particular, is vital for SHRD to flourish. His nine key characteristics of SHRD include: 1) integration with organisational missions and goals; 2) top management support; 3) environmental scanning; 4) HRD plans and policies; 5) line manager commitment and involvement; 6) existence of complementary HRM activities; 7) expanded trainer role; 8) recognition of culture; and 9) emphasis on evaluation.

The specific objectives of Strategic HRD should be to develop intellectual capital and promote organisational, team and individual learning. This can be realised by creating a learning culture – an environment in which employees are encouraged to learn and develop and in which knowledge is managed systematically (Armstrong, 2006 p. 534). The components of HRD are depicted in Figure 2.4 below. As portrayed in the Figure 2.4 below, MD can be seen as a core component of SHRD and plays an important role.
As shown in Figure 2.4 above, MD is an activity on its own apart from other forms of learning or training. Learning is an essential ingredient if organisations are to survive. Learning at operational, policy and strategic levels needs to be conscious, continuous and integrated; and management is responsible for creating an emotional climate in which all staff can learn continuously (Garvin, 1993). The SHRD components of organisational learning and a learning organisation with performance thus become vital. If HRD is to become strategic, then all components must be interrelated and dependent on each other.

2.4.1.3 Organisational Learning (OL)

The role of organisational learning (OL) has been much discussed in the literature (Brinkerhoff & Gill, 1994; Dixon, 1994; Gardiner & Sadler-Smith, 2001, Gomez et al., 2004; Klimencki & Lassleben, 1998; Sadler-Smith et al., 2001; Williams, 2001). For example, Sadler-Smith et al., (2001 p. 139) state that:

….organisational learning is often presented as one way in which firms may respond to increasingly competitive market conditions by managing their knowledge assets in more effective ways.
OL establishes a link between the environment and the HRD outcomes that encourages proactive rather than reactive behaviour (Perez Lopez et al., 2006). Thus, SHRD practices aim to channel organisational inquiry (Argyris & Schon, 1996), implement organisational learning, and maximise HRD outcomes (Antoni, 2004; Bauman, 2005, Perez Lopez et al., 2006). To fulfill these objectives, SHRD must be well-organised and planned, as well as integrated into every aspect of the organisation.

2.4.1.4 Learning Organisation (LO)

The strategic HRD approach maintains a strong focus on adopting a learning organisation perspective and the application of the learning approach to strategy, as well as the shift away from individual concepts of T &D towards a more integrated concept called learning. McCracken and Wallace (2000b) emphasise the importance and interrelation with the learning culture and Horwitz (1999) suggests that a key focus of Strategic HRD is the creation of a learning environment and structural design which promotes learning and development for performance improvement and competitiveness.

Senge (2006) defines a learning organisation as, among other things, one where innovative thinking is nurtured. Building a learning organisation is key to the deployment of strategic HRD because it signals investment and a longer-term view of the outcomes of HRD (Bratton & Gold, 2003). With its recognition of the importance of Strategic HRD, a learning organisation will necessarily engage in continuous HRD.

The components of organisational learning and learning organisation and their relevance to SHRD have been discussed. The other components of SHRD involve learning, T & D. The following sections will discuss issues relating to learning, T & D and will highlight issues on systematic approaches to learning and development.

2.4.1.5 Learning and Development Process

The organisational process of developing people involves the integration of learning and development processes, operations and relationships. According to CIPA (2001), its most powerful outcomes for businesses are to do with enhanced organisational effectiveness and sustainability. For the individual, they are to do with enhanced personal competence, adaptability and employability. Developing people is therefore a critical process for public and private organisations.
Garavan, Barnicle & O’Suilleabhain (1999, p. 191) contend that within the HRD literature, there is a tendency to polarise the concepts of training, development, education and learning, and to characterise them as distinct in some way. For example, Garavan (2007) states that Strategic HRD’s tendency to adopt a more holistic perspective would perhaps imply that it is ‘more appropriate to view the concepts of training, development and education as an integrated whole with the concept of learning as the glue which holds them together. On the other hand, Doyle (1994) argues that, while education and training activities are integral components of many development programs, they do not themselves constitute MD. Nevertheless, these elements are often used interchangeably to describe the process of developing the capacities of the workforce. The elements of learning, education, development and training are involved in the process of developing people. These are briefly defined in Section 1.7.

All learning processes should be planned systematically so as to gain maximum benefit from the interventions. The question then is, do organisations plan all learning interventions systematically?

2.4.1.6 A Systematic Approach to Learning, Training and Development

The systematic approach to learning, T & D involves: a) assessment of training needs; b) conduct of the training activity; and c) evaluation of the training activity (Stone, 2005 p. 337).

Effective continuing learning, education and training are critical to sustaining the kind of skills-based government workforce required to meet the government’s current and future needs. It is important to stress that if done wisely, an investment in education and development does not just affect individual employee performance and productivity on the job; it also has an impact on employee alignment, engagement, and overall performance.

Ice (2009) argues that not only can learning and development be a significant catalyst for driving culture change and organisational transformation in the government workforce, but it can also: socialise and quickly acculturate new employees to an agency’s mission, organisational culture, and work values; communicate clear and specific work expectations to employees at a departmental, team, or work unit level; align and engage employees (both new and current) around changing mission requirements or priorities; reward high-performing employees with customised professional development and career enrichment opportunities; retain highly prized workers by giving them regular opportunities to enhance
and refresh their skills; create a nimble and resilient workforce accustomed to continuous learning on the job; and foster a strong learning culture.

However, even with these clear benefits in mind, there is still a question of whether government agencies have systematic learning and development regimes in their organisations. There are many who have yet to develop a truly comprehensive and systematic approach to employee education, T & D. With the clear benefits in mind, Ice (2009) proposes that agencies should employ five guidelines to ensure current and systematic learning within the governmental workforce. He stresses that professionals should employ these guidelines when designing education, T & D, and performance improvement initiatives for government workers:

Guideline # 1: Considering all the ways for incorporating continuing education and training into the employee lifecycle – from the first day on the job to skills training and career advancement opportunities.

Guideline # 2: Conducting annual, or more frequent, assessments to determine training needs and knowledge gaps. These can change all the time.

Guideline # 3: Ensuring that there is a strong succession plan in place – begin developing future managers and leaders now.

Guideline # 4: Understand that people have different learning styles and preferences, and develop the education and training program based on these differences.

Guideline # 5: Using education and training as a way to create a strong learning culture in the organisation. It will help maintain day-to-day job satisfaction as well as increase recruitment.

The assertion that the five guidelines proposed by Ice (2009) provide a systematic approach is open to challenge, as is the contention that all stages of SHRD are involved. For instance, all five guidelines concentrate on identification of training needs and the conduct of the training activity. They do not however include the final stage of training evaluation.

A review of the practices of senior MD across the upper echelons of the public services of major jurisdictions of various countries shows that while the need to develop leaders is universally recognised by governments, there are still considerable gaps in the development function (Bhatta, 2002). The primary purpose of this exploratory research is to provide guidance, primarily in the domain of developing future managers and leaders, for countries that are developing and/or revamping the upper echelons of their public services.
The study sought to find out how central agencies could get relevant and accurate information, not only on those in the senior public services but also on existing and potential development opportunities so that they could best target the right development interventions to the right individuals. Bhatta (2002) identifies one of the key gaps that this study focuses on: the identification and targeting of individuals in the potential management pool and ascertaining clearly what their needs and career aspirations are. Bhatta argues that this gap is central to the T & D function. In that regard, T & D has continued to be supply-driven rather than demand-driven. Bhatta’s (2002) process of T &D in any sector across all jurisdictions can be seen in Figure 2.5 below.

### Figure 2.5: The T & D cycle

*Source:* Adapted from Bhatta (2002)

It is clear from Figure 2.5 that in order for the right people to be developed, there are five problems that need to be addressed – those of identification, selection, application, measurement, and alignment. Moreover, Bhatta (2002) contends that while all are important in their own right, the concern here is with the first one, since that determines the nature and orientation of the T & D interventions. Bhatta warns: “get the identification wrong, and you are targeting the wrong people and/or the wrong skills gap.”
This study is an evaluation research project which is concerned with the impact these interventions have on executives. For this reason, the main area of focus is on the post-program phase.

2.4.1.7 Post-program Evaluation and its Effectiveness

Stone (2005 p. 337) argues that the effectiveness of T & D is enhanced when training activities are preceded by comprehensive analysis. He asserts that this permits the HR manager to demonstrate how T & D contribute to the organisation’s strategic business objectives. Training or program evaluation is defined by Kraiger, McLinden and Casper (2004 p. 341) as the study of whether training or learning works – produces desired changes in trainees’ knowledge or skills. Put another way, evaluation tries to answer the question: did training/learning work, and if not, why not? The primary purpose of evaluation is to improve training or learning by discovering which training processes or strategies are successful in achieving their objectives. Program evaluation therefore serves as a very important tool or mechanism for any training or learning activity. It is the last stage of HRD. Based on the adult learning theories and operating within a managerial orientation, Delahaye (2005 p. 22) identifies four stages of HRD. These are:

1) Investigation – where needs are investigated and identified.
2) Design – where aims, objectives and content are examined.
3) Implementation – where formal or informal activities occur.
4) Evaluation – where the worth of the learning experience is assessed.

There are different types of models for evaluating T & D. For instance, Kirkpatrick’s four-level model (1959/1998), Phillip’s (1997) five-level framework and Stufflebeam’s (2000) CIPP model. Kirkpatrick’s four-level model is used in this study as the framework because it is easily understood. Kirkpatrick’s four-level model can be highlighted because it is the most widely used by organisations and the most widely referenced in studies about this subject due to its simple and practical approach.

Kirkpatrick’s (1998) model uses a goal-based evaluation method and is based on four simple questions that translate into four levels of evaluation. The four levels are widely known as reaction, learning, behaviour and results, often referred to by the acronym RLBR (Phillips, 2003). ‘Reaction’ measures how participants feel about the program. ‘Learning’ measures the amount of learning that takes place in the program. ‘Behaviour’ measures changes in
behaviour on the job. ‘Results’ measures the achievement of results desired such as reduction of costs, turnover, absenteeism, and grievances; increase in quality and productivity; improved morale. This study focuses on behaviour and results.

Phillip added return-on-investment (ROI) as a fifth level to the Kirkpatrick four-level framework. Phillip’s (1997) five-level framework incorporates the variables of Kirkpatrick framework and integrates the steps of cost-benefit analysis (Phillips, 2003).

Stufflebeam’s (2000) CIPP model seems more appropriate with Kirkpatrick’s model for this study as it follows the systems approach. Stufflebeam’s CIPP (2000) model is a comprehensive framework for conducting and reporting evaluations. Corresponding to the letters in the acronym CIPP, the model’s core concepts are: context, input, process and product evaluation (Stufflebeam, 2000). Table 2.1 shows the measures of training effectiveness model that can be used with Kirkpatrick’s 4-level model and Philip’s return-on-investment.

Table 2.1: Measures of training effectiveness

<table>
<thead>
<tr>
<th>Measures</th>
<th>Indicators</th>
<th>How Measured</th>
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<tbody>
<tr>
<td>Reactions</td>
<td>• Satisfaction</td>
<td>• Questionnaire</td>
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<tr>
<td></td>
<td>• Enjoyment</td>
<td>• Interviews</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Focus Groups</td>
</tr>
<tr>
<td>Learning</td>
<td>• Knowledge (e.g. OH&amp;S regulations, EEO requirements)</td>
<td>• Pencil and Paper test</td>
</tr>
<tr>
<td></td>
<td>• Skill (e.g. computer program or machine operation)</td>
<td>• Oral examination</td>
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<td></td>
<td></td>
<td>• Work sample</td>
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<tr>
<td></td>
<td></td>
<td>• Observation of performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Performance ratings</td>
</tr>
<tr>
<td>Behaviour</td>
<td>• Changes in attitudes, behaviour, motivation</td>
<td>• Observation of performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Performance ratings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Third-party feedback (e.g. customer feedback)</td>
</tr>
<tr>
<td>Results</td>
<td>• Productivity</td>
<td>• Production Statistics</td>
</tr>
<tr>
<td></td>
<td>• Sales</td>
<td>• Sales Statistics</td>
</tr>
<tr>
<td></td>
<td>• Quality</td>
<td>• HR statistics</td>
</tr>
<tr>
<td></td>
<td>• Absenteeism</td>
<td>• OH&amp;S statistics</td>
</tr>
<tr>
<td></td>
<td>• Labour turnover</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Accident frequency</td>
<td></td>
</tr>
<tr>
<td>Return on investment</td>
<td>• Dollar value</td>
<td>• Cost-benefit analysis</td>
</tr>
</tbody>
</table>


Kirkpatrick’s (1998) four-level training evaluation model and Philip’s (1997) five-level return-on-investment (ROI) model were used in a study by D’Netto, Bakas and Bordia (2008), to identify the variables most closely associated with MD effectiveness. This will be discussed further in Section 2.4.2.8.
Skilled and competent public sector executives are required to carry out the reforms successfully (Coggburn, 2005). This is where executives play a major role in organisation effectiveness. Hence, management and development of executives has become an important issue in public organisations. Thus, recruitment, development and retention of high calibre public sector executives are very important. The question is: do the government agencies and departments have systems and interventions in place to develop the capacity of their executives and organisations?

The second immediate discipline for which the literature is reviewed is Management Development. The aim is to see how MD enhances the performance of senior managers in their roles which ultimately leads to improved organisational performance.

**2.4.2 Management Development**

**2.4.2.1 Overview of Management development**

In the late 1990s MD moved rapidly up corporate agendas as a factor that may create competitive advantage (Goodge, 1998; Luoma, 2005). The competence-based model for MD was subsequently applied in companies throughout many countries (Briscoe and Hall, 1999). Recent trends in MD have seen the field of MD mature considerably over the past few decades. MD has now become a major tool for revitalising corporations and building learning-oriented competitiveness instead of being targeted to a select few individuals (Conger and Xin, 2000).

MD can be defined as the expansion of a person’s capacity to be effective in management and with the processes of management (McCauley and Van Velsor, 2004). Stone (2005 p. 863) defines MD as any attempt to improve current or future management performance by imparting knowledge, changing attitudes or increasing skills while Brown (2005) defines Strategic Management Development (SMD) as MD interventions which are intended to enhance the strategic capability and corporate performance of the organisation.

MD effectiveness can be defined as the extent to which MD programs have yielded desired outcomes (D’Netto, Bakas and Bordia, 2008). As Jensen et al. (2001) point out, effective MD can result in higher job satisfaction, lower turnover, less stress resulting from skill inadequacies, and less difficulty in filling executive vacancies. It follows then that while effective MD results in increased knowledge and skills for participants, the organisation also
benefits from higher productivity, lower absenteeism and better customer service. For public sector organisations, this means better service delivery for its citizens.

Mabey (2004) found that where management and leadership development was reported to have been strategically driven, with board-level support and strong links to organisational business objectives, it had a significant positive impact on organisational performance. It is argued that a number of underlying issues must be addressed if organisations and their managers are to be made more effective including: job definition, selection, T & D, the identification of development needs, culture and context, and the link between development and organisational systems and structures (Garavan, Barnicle & O’Suilleabhain, 1999).

Luoma (2005) points out that nowadays, there is consensus about MD’s role as a key organisational process that helps the whole organisation prepare for its future competitive environment in addition to preparing individuals for promotion. In several recent articles, the enduring performance of successful companies has been explained by their ability to make MD a central part of doing business (Fulmer et al., 2000; Tichy, 2002).

2.4.2.2 Senior Executive Services in the Public Sector

In the public sector organisations, the same forces which have led to much of the reform in the operation of government organisations have also impacted on the way in which public sector executives are being managed (Morley & Vilkinas, 1997). That is, the reform process has meant that methods of managing private sector employees are being adopted for the management of public sector employees in a similar way to that in which financial and other management strategies are being adopted from the private sector.

For instance, at executive level, this has seen the introduction internationally of “senior executive services (SES)”. The United States Government in 1978 introduced the first SES and since then, their concept has been adopted in other countries such as Australia and New Zealand (Renfrow, 1989). International experience suggests that the SES should be solidly built on a firm policy framework that identifies clearly the cadre of officials to be known as the SES, the purpose of such officials to public service management, their terms and conditions and how they are going to be managed (PSWDI, 2006 p. 35). The premise underlying the introduction of SES is that there are no significant differences between public and private sector executives and, therefore, that public sector executives should be managed in the same way as private sector executives.
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As explained in Section 3.4.1, public sector organisations in PNGPS do not have SES in their structures although there is some indicative description of the SES in Section 9 of the PSGO in describing the senior officers or executives (PSWDP, 2005).

2.4.2.3 Goals of Management Development

Boxall and Gilbert (2007) assert that the overall goals of firms for the management of managers are to:

1. recruit and retain, or attract and defend, suitable managers in a competitive labor market;
2. develop managerial competencies and renew them as the competitive context changes; and
3. motivate managers to perform and appropriate or harvest sufficient, if not, levels of shareholder value from their work.

In a nutshell, firms seek to attract and nurture management talent while simultaneously needing to exploit and renew it. This shows that firms cannot simply rely on ‘soft’ (humanist, developmental) HRM, at the expense of ‘hard’ (rational, calculative) HRM, but need a suitable blend of soft and hard HR practice. The three sets of overlapping domains are depicted in Figure 2.6.

![Figure 2.6: Broad goal domains in the management of managers](source: Boxall, P & Gilbert J 2007, ‘The management of Managers: A review and conceptual Framework, Journal of Management Reviews, vol. 9, issue 2, pp. Figure 295-115)

2.4.2.4 Approaches and Methods in MD

There are different approaches to MD. According to Suutari and Viitala (2008), these can be viewed as a continuum between a behaviourist conception and a constructivist conception of MD. They contend that the former sees MD as a process of acquiring skills, with no emphasis on the process or on deeper understanding, whereas the latter sees MD as a process
of constructing mental models appropriate for interpreting organisational phenomena, with no importance attached to concrete skills (Hogan and Warenfeltz, 2003). It represents the notion of learning in which managers undergo a gradual build-up of experience created out of specific learning incidents; they internalise this experience, and use it, both consciously and unconsciously, to guide their future actions (Burgoyne and Hodgson, 1983).

Several categorisations regarding the type of learning and development methods for executives are described in the literature. For instance Mumford (1997 p. 58) categorises unplanned and planned development into three types: wholly unplanned accidental learning, planned on-the-job learning, and planned and program development processes outside everyday work. For Yukl (2002 p. 370), the three main development approaches identified are:

1. formal training (and evaluation);
2. developmental activities (e.g. mentoring and special assignments); and
3. self-help activities (reading books, viewing videos, and using interactive computer programs).

MD programs can be internally or externally organised – both having their own benefits and drawbacks. Internal programs tend to provide the opportunity to link learning and development to the company’s specific strategic imperatives (Neary and O’Grady, 2000). They assert that when learning takes place within the company, it makes it possible to develop a systematic and unifying approach to MD. However, external programs may be necessary when there is no up-to-date information about the subject within the organisation.

Woodall and Winstanley (1998) propose that it is possible to differentiate between more short-term management training and more long-term management education. That is, short-term training is more specific concerning the skills that managers need to perform their jobs more effectively. In contrast, management education is defined as the acquisition of a broad range of conceptual knowledge and skills in formal classroom situations. This often involves degree-granting institutions and the training involves introducing, extending or improving managers’ learning and increasing their level of understanding about the managerial role and context they occupy (Keys and Wolfe, 1988). It is therefore stressed that although management training and education are important components in a development process, they should not constitute the whole organised management in an organisation.
There is evidence that the focus of MD has shifted to emphasising activities such as coaching, action learning, natural learning, self development processes, mentoring and other peer-related learning activities (Garavan, Barnicle and O’Suilleabhain, 1999). A study on the MD of senior executives to discover the preferences for MD methods by Suutari and Viitala (2008) found that the dominance of traditional short-term MD activities continues while more longitudinal methods emphasising experience-based learning were reported to be more effective in supporting the development of senior managers. This concept has itself broadened to emphasise development of the whole person rather than the acquisition of competencies for a particular role.

Development programs for public sector executives are becoming an increasingly common part of the focus on senior executive structures and the increasing focus on the performance of public sector executives. Yet the identification of the critical qualities for development has received less attention. If public sector executives need to take on the challenges of ensuring successful reform and of assisting successful government into the next century, then what qualities and capabilities will they need?

2.4.2.5 Capabilities and Requirements of Executives in the Public Sector

The identification of competencies needed for effective performance must, in one form or another, play a major role in any MD initiative. Efficient and effective achievements of government outcomes across government jurisdictions depend on the capabilities of the people involved. Capabilities comprise not only the technical skills and knowledge people have, but also their attributes, attitudes and behaviours. Senior executive leaders in public sector organisations play a key role in the delivery of the core functions of service. They provide high quality policy advice to government and implement government programs, including the delivery services to the community. They have a particular accountability to ensure the delivery of outputs that contribute to the achievements of outcomes as determined by government. They must be able to focus on the outputs specific to their agency, and the links between these outputs and broader government goals. This requires them to create a shared vision and sense of purpose for their organisations, to motivate their staff to achieve high standards of performance.

Based on information from the international public sector reform literature, from the leadership and management literature, and from models used in Australia, Morley and Vilkinas (1997) identify 16 qualities for public sector executives: mission, vision;
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implementation; strategy; people management, relationship with the public; complexity; relationship to politics; accountability; achievement; intellectual capacity; personal characteristics, in particular, self-management; policy; relating with others/interpersonal skills; change; communication and resource management.

A Situational Analysis and Research on ED, primarily to report on the existing SES and the current system of appointing and managing departmental heads in PNGPS (PSWDI, 2006 p. 56), revealed nine potential competencies thought to be important for SES personnel from a survey of 18 departments. Of the nine competencies, five were regarded as crucial for managing today’s public service: ‘results-based management, managing resources against budget, change management and decision-making at the strategic and operational levels’ (PSWDI, 2006 p. 57).

A capability framework can be developed across government jurisdictions that seek to establish a shared understanding of the critical success factors for performance in public sector leadership roles. Capabilities, in general terms, are clusters of behaviours that a person must demonstrate to be successful in a job, role or function (DoI, 2005 p. 3). For instance, the Senior Executive Leadership Capability Framework for the Australian Public Service Commission (APSC, 2003) identified five core criteria for high performance by senior executives (although it did not describe the functions or responsibilities of particular senior executive roles): shapes strategic thinking; achieves results; cultivates productive working relationships, exemplifies personal drive and integrity; and communicates with influence. The agency-specific criteria, such as particular qualifications or mobility requirements, can be added to the framework to meet agency requirements.

Clearly, generic capabilities in behaviour and skills can be identified. What is important is to have a formal policy document that will help to establish a shared understanding of the critical success factors for performance in public sector executive roles. Such frameworks can also help executives to determine their strengths and developmental opportunities and ensure that learning and development within their agencies is focused on the capabilities that will support their agencies in delivering its objectives and strategies.

2.4.2.6 The Importance of MD Strategies and Policy Guidelines

MD strategies can be linked to a systems approach. If management skills and activities are conceptualised as being situation specific and embedded in the organisations in which they are practised, then the question arises: what is the best way to prepare managers for the
complexity, uncertainty, uniqueness and value conflicts’ which Schon (1988) postulates characterise organisational environments. MD strategies have been the issue of attention. Fulmer (1992) cautions that success will only occur if MD strategies are adapted and implemented in ways that are congruent with the changing needs and expectations of the new organisation.

Storey (1989b) is critical of the MD literature for propounding “universal nostrums” without “due regard for content” because it is context which shapes and influences the way development is formulated and enacted. Furthermore, Margerison (1991) cautions that MD may fail if there are no clear policy statements. Doyle (1994) lists a number of guidelines for preparing such a policy. These guidelines generally emphasise a holistic approach which links to the reality of what managers do: take cognisance of required competencies and characteristics; consider organisational culture and context; focuses on linkages with business strategies and policies; and map out the cultural philosophy of management. The policy should also ensure flexibility so that both organisational and individual needs can be accommodated.

Apart from the strategies, policies and guidelines, organisations also have their own practices which they demonstrate as having worked particularly well in contributing to MD effectiveness, commonly referred to as their “best practices”.

2.4.2.7 Best Practices in Management Development

A technique for performing an activity or business process that at least one company has demonstrated works particularly well can be used as a best practice. However, the term ‘best practices’ can cause uncertainties in its meaning and may not be accepted in practical reality. That is, what one organisation or firm considers to be their best practices may not be applicable or relevant to other organisations or firms. The external environment (political, economic, social and technological) are not the same, and the cultures and ethos of organisations are not necessarily the same. Furthermore, when the word ‘best’ is used, it denotes that it is better than the other available practices. Therefore, other relevant terms should be considered such as ‘preferred practices’, ‘effective practices’, ‘good practices’ and ‘high performing work practices’. As Delano (2008 p. 8) puts it:

A best practice for one company may be a waste of resources for another. ED can only create strategic advantage when it is highly contextualized to the unique circumstances of that organisation, its culture and its strategy.
A systematic and an extensive review of the literature on best practices was conducted by Leskiw and Singh (2007), with the aim of proposing a series of steps or practices that can be used in developing and assessing the leadership and MD strategies and programs of best practice organisations. Six key factors were found to be vital for effective leadership or MD. These factors were:

I. a thorough needs assessment;
II. the selection of a suitable audience;
III. the design of an appropriate infrastructure to support the initiative;
IV. the design and implementation of an entire learning system;
V. and evaluation system; and
VI. corresponding actions toward success and improve on deficiencies.

Similarly, D’Netto, Bakas and Bordia (2008) in their study on predictors of MD effectiveness for Australian managers identified variables associated with MD effectiveness. They categorised the variables under pre-program and post-program components.

**Pre-program components:**

I. organisational learning culture;
II. individual initiative;
III. top management support; and
IV. link to corporate strategy.

**Post-Program components:**

I. post-program evaluation;
II. line manager support; and
III. opportunity for skill utilisation.

Although their findings indicate that the two variables most closely associated with MD effectiveness were corporate strategy and opportunity for skill utilisation, the other variables or components were equally important. As explained above, the best practices for one organisation or country may not be accepted as the ‘best’ in other organisations or country due to differences in environment, culture and other factors. However, some practices are preferred as they are generic. For example: thorough needs analysis, selection of a suitable
audience, top management support, link to corporate strategy, implementation of a learning culture/system, and skill utilisation.

2.4.2.8 Models of Management Development


Burgoyne (1988) emphasises that MD can be conceptualised as a progression through different levels of maturity, a progression that can only take place in the context of a holistic approach to MD in which both “hard” and “soft” managerial issues are considered in framing the right strategy. It includes six levels of maturity that organisations tend to follow when they seek to strengthen MD’s role as a strategic activity.

Mumford (1993) classifies three approaches to MD which similarly have significant implications for MD strategy and which reflects particular sets of organisational contingencies.

Louma (2005) reviewed Burgoyne’s and Mumford’s models which linked MD strategic management, and drawing from these, elaborated a sequential logic which encompasses various forms of strategic MD. Luoma’s (2005) study aims to clarify how organisations manage their MD processes in order to enhance competitiveness. The study suggests that there are linkages between an organisation’s positioning on strategic MD, managers’ strategic awareness, and the perceived effectiveness of the activity. The study subscribed to the systematic view of MD, which emphasises the interrelatedness and co-evolution of several managerial processes as elements of an organisation’s performance.

Louma’s three stages are presented as follows (Louma, 2005):

- Sporadic MD - MD is uncoordinated and the target setting is vague. Line organisation ownership of MD initiatives is weak. Learning benefits individuals rather than the organisation.

- Reactive MD - MD is used as a response to identified problems or anticipated failures in performance. There is some consistency in various MD initiatives, which represent
mainly formal learning. MD is designed to benefit the organisation rather than individuals.

- Integrative MD - Various MD initiatives, formal and non-formal, form an integrated whole. MD’s input to business strategy is sought intentionally. MD benefits both individuals and the organisation.

This view supports earlier comments and thinking by Doyle (1994) who points out that MD is perhaps best conceptualised as an open system consisting of “an assemblage of interrelated elements” directed towards common goals. The process, then, is neither fragmented nor piecemeal, but integrated, congruent and supportive of organisational goals. The empirical evidence from Finnish managers in this study implies that the perceived effectiveness of MD and the level of strategic awareness of managers are highly interrelated.

Delano (2008, p. 2) uses the concept of ED and uses the ‘sailboat’ metaphor to describe ED for strategic advantage. That is, in order to provide strategic advantage, *ED needs to be more dynamic and agile than it has been historically – a sailboat cutting through the water rather than an immovable pyramid.* In this metaphor, she refers to the sailboat as an integrated system of components, able to rapidly adjust so the craft can navigate changing currents and winds. A comparable ED system creates advantage for the organisation by supplying leaders who are uniquely prepared for the contingencies of their emerging business environments.

In sum, Strategic HRD plays an important role in generating improved organisational performance and individual growth. Strategic HRD conceptualises planned learning and development of individuals and groups to be of benefit to the business as well as individual learners. By planning and developing the senior managers effectively in an organisation, the organisational goals can be realised. MD programs can be effective if all interrelated parts of a whole system (the organisation), support it. These can be referred to as pre-program factors and post-program factors. The capabilities of the senior managers can be enhanced through different types of learning and training interventions. The question then is, do the strategies have an impact on the senior managers and the organisation? That is to say, is there capacity building at the individual, organisation and national levels?

The first parent discipline is to do with issues on SHRM and is concerned with positioning of the right people to achieve the highest possible performance in order to meet strategic goals. From the first parent discipline came the notion of SHRD, which served as the first
immediate discipline. It concerns preparing and continually developing people and learning systems to achieve the highest possible performance in order to meet strategic goals. Thereafter, the literature was reviewed on the second immediate discipline of MD as the study concerns capacity building of a specific group of people – executives or senior managers.

The next section will review and analyse the second parent discipline of capacity building, particularly from the perspective of developing countries. The aim is to see how capacity building enhances the performance of senior managers in their roles which ultimately leads to organisational performance.

### 2.5 Capacity Building in Developing Countries

This section will begin by giving an overview of the concept of ‘capacity building’ from the perspective of developing countries and particularly in their public sector organisations. Thereafter, discussions on the first immediate discipline of the nature of Public Sector organisations will follow. Then the concept of Development Aid will be discussed in depth before moving onto the last immediate discipline of Capacity Building and how it is linked to capacity building activities.

#### 2.5.1 An Overview

Development and the economic success of a country largely depend upon the creative skills and abilities of its people. In the development aid literature, it is widely accepted that it is the human resources of a nation, not its raw materials or capital that determine and ultimately shape the pattern, rate and character of its economic, social and political development (Schumacher, 1976; Gran, 1983; Fagerlind and Saha, 1983, 1989; Meier, 1984; Psacharopoulos and Woodhall, 1985; Todaro, 1997). When the colonial era came to an end and the world turned its attention to the problems of the majority of mankind who lived below the poverty line, the initial diagnosis was that problems were due to a lack of investment capital to facilitate economic growth. This view was soon dispelled through the experience of the developing countries and the subsequent discovery that the problems lie elsewhere, “prominently in the field of human resources” (Singer, 1975). This shift of attention to human resource development was forcefully put by Harbison (1973):
Human resources – not capital, not income, nor material resources – constitute the ultimate basis for the wealth of nations. Capital and natural resources are passive factors of production; human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organisations, and carry forward national development. Clearly, a country which is unable to develop the skills and knowledge of its people and to utilise them effectively in the national economy will be unable to develop anything else.

The UNDP (1990) lent support to such a view and suggested the 1990s as the decade for human development by proclaiming that: “People are the real wealth of a nation”. Building the capacity of the human resources therefore became the attention of development.

‘Capacity building’ is the objective of many development programs and is a component of most others. Increased interest in capacity development in recent years is a response to widely acknowledged shortcomings in development assistance over the past fifty years or so – for example, the dominant role of donor-led projects, and inadequate attention to long-term ‘capacity’ issues (CIDA, 2001). Capacity building has become a key concept in international development in recent years. Other approaches involving technical cooperation, in which knowledge and skills were to be transferred to developing countries, have been unsuccessful.

There is a gap in the literature on strategic management and the development of executives in public sector organisations. The mainstream literature on SHRM and SHRD concentrates mainly on private sector organisations or businesses. However, this study focuses on MD effectiveness in PNG public sector organisations. Therefore, it is important to have a better understanding of the nature of public sector organisations.

### 2.6 Immediate Disciplines of CB in Developing Countries

#### 2.6.1 The Nature of Public Sector Organisations

Christensen et al. (2007 p. 8–9), propose an organisational theory for the public sector which is based on democratic theory and theories about decision-making in formal organisations. They argue that ‘formal organisations in the public sector’ is a term which refers to: ministries, agencies, banks, courts, state-owned companies, local and regional government administration, military organisations, public universities, public health-care enterprises,
public nursing homes, public museums and public foundations. They further explain that these organisations differ from one another in many respects, but they share characteristics as formal organisations; they were all established in order to attend to collective interests and special tasks; and they have relatively stable patterns of behaviour, resources and rewards connected to their activities (Christensen, et al, 2007 p. 9). The public sector’s primary mandate is to serve the people. It carries out tasks on behalf of society.

This study involves the three types of public sector organisations in PNG along the continuum of government institutions (public administration and government), public sector institutions and state enterprises. The government institutions act as agents for the interests of the community and citizens of PNG. This includes the national departments, provincial, district and local administrations and municipalities or city councils. Public sector institutions do not act as agents for the community but provide access to facilities and work for the interests of the whole community. Examples of these are schools, public hospitals, public prisons and several other non-profit organisations providing services to the public. As for the state enterprises, such as postal services, telecommunication or the waterboard, they operate in a way that is more similar to private enterprises.

2.6.1.1 Approaches to Public Organisations

Christensen et al. (2007 p. 3) view public organisations using two approaches: the structural-instrument approach and an institutional approach. A major distinction they identify between instrumental and institutional perspectives is that instrumental perspectives view organisations as tools in the hands of leaders. Rationality is implicit in formal organisational structure; it imposes limitations on an individual’s choice of action and creates a capacity to realise particular goals and values. The underlying logic of action in an instrumental perspective is a logic of consequence, which is based on a means-ends rationality, where one tries to predict the future effects of an executed action. Goals, from an instrumental perspective, are defined exogenously and are formulated by leaders, and policy-making largely consists of finding suitable means to achieve the goals. There are many long-standing traditions that view organisations as instruments. For example, among the classic social scientists, Max Weber’s analysis of bureaucracy as an organisational form; Frederick Taylor’s Scientific Management tradition (Taylorism); Luther Gulick’s Scientific Administration; and Herbert Simon’s administrative decision-making behaviour.
Institutional perspectives, on the other hand, allow organisations to have their own institutional rules, values and norms, which in turn exert an independent influence on decision-making behaviour. Christensen et al. argue that organisations do not, in any simple or unproblematic way, adjust to shifting managerial signals from leaders. This means that all institutions are organisations, but not all organisations are institutions. In practice, however, most organisations will have some institutional traits. The two institutional perspectives presented are cultural and myth which are based on a logic of appropriateness. This simply means that a person acts in accordance with his or her experience of what has worked well in the past, or upon what feels fair, reasonable and acceptable in the environment the person works within.

Therefore, to understand how public sector organisations work in practice, there is a need to apply an instrumental perspective – including both hierarchically based and negotiation-based variants, and institutional perspectives, specifically a cultural perspective and a myth perspective.

2.6.1.2 Delimitations, fragmentation and complexities of public organisations

Notwithstanding the reform movement and the changes and impacts in public organisations, there are also delimitations, fragmentation and complexities. Public service organisations are not only complex but also fragmented in many ways. Some examples of the characteristics of this fragmentation and complexity as clearly put by Karp and Helgo (2008) are: Public organisations operate in a complex external and internal environment; vital assumptions tend to change due to dynamic developments in society. Public organisations have multiple accountabilities, such as the government, ministers, media and citizens; and the need to balance the ongoing power play and influence of all these. The public sector is not evaluated on the basis of its profit making ability, but by its capacity to create sociality for its citizens. The evaluation of the amount of social value created in the public sector is a more complex and ambiguous undertaking than that of evaluating an organisation’s profit making ability. Public organisations are rich in people diversity, structure, activities, processes and culture, and it is not possible for a management team, or a single leader, to understand cause-effect loops, or systematic connections. Public organisations are woven into a complex political and social network of organised interests, citizens, user groups and clients. They experience competing logics, loyalties and sources of influence that are rooted in their organisation’s political and administrative leadership, as well as in its culture and external environment.
The public sector is now faced with the paradox of requiring flexibility and innovation in order to cope with the changing demands of the environment, while at the same time maintaining focus on not-for-profit service and accountability to a diverse range of stakeholders. The changing nature of public service requires new leadership and management which must promote flexibility and adaptability in organisations and individuals. Public sector executives therefore play a crucial role because as organisations develop and change, they also need to be managed and controlled.

Having discussed the fact that increased interest in capacity development in recent years is a response to widely acknowledged shortcomings in development assistance over the past fifty years or so, it is imperative to review the literature on the notion of development aid to see its linkage to the capacity building of public sector organisations.

2.6.2 Development Aid

This section presents a review of literature of the immediate discipline of development aid as informed by liberalism. It discusses the aims, objectives and criticisms of development aid as it relates to capacity building activities in the developing countries. The techniques and methods used to evaluate development aid and how education, HRD and capacity building are linked to development aid. Given the nature of this study which is concerned with the investigation of MD interventions and how they contribute to capacity building of the executives and the PNGPS, it is critical to analyse theory and practice in the areas of development aid capacity building and assess their relevance to the SHRD of executives. In particular, this applies to whether the capacity building activities under development aid meets its objectives in terms of developing the capacity of the individual, organisation or the institutions as well as the country.

2.6.2.1 The Concept, Background and Objectives of Development Aid

Development aid, also referred to as development assistance, international aid, overseas aid or foreign aid, originally dates back to the nations of the Organisation for Economic Co-operation and Development (OECD), made up of the developed nations of the world, who have committed to providing a certain level of development assistance to underdeveloped countries. The term “development aid” is often used to refer specifically to Official Development Assistance (ODA), which is aid given by governments on certain concessional terms, usually as simple donations (CIDA, 2001). It is given by governments through individual countries’ international aid agencies – for example, by the government of
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Australia through AusAid, and through multilateral institutions such as the World Bank and the Asian Development Bank, and by individuals through development charities such as Caritas, Oxfam and World Vision.

Tarp (2006) points out that development aid covers governmental transfers to poor countries that are destined for developmental purposes. Others such as Godfrey et al. (2002) argue that the ultimate objective of all technical assistance, as of external assistance in general, is to increase output and incomes and stability in the recipient economy.

2.6.2.2 Criticisms of Development Aid

Over the years, there has been criticism of aid. Some see it as aid seldom given from motives of pure altruism. For instance, it is often given as a means of supporting an ally in international politics; it may also be given with the intention of influencing the political process in the receiving nation. But whether one considers such aid bad may depend on whether one agrees with the agenda being pursued by the donor nation in a particular case. Aid to underdeveloped countries has sometimes been criticised as being more in the interests of the donor than the recipient, or even as a form of neo-colonialism (Erixon, 2005 p. 4).

The term “neo-colonialism” is used by late 20th century critics of developed countries’ involvement in the developing world. Critics of neo-colonialism argue that existing or past international economic arrangements created by former colonial powers were used to maintain control of their former colonies and dependencies after the colonial independence movements of the post World War II period. The term “neo-colonialism” can combine a critique of current actual colonialism (where some states continue administering foreign territories and their populations in violation of United Nations resolutions) with a critique of modern capitalist businesses involvement in nations which were former colonies (UN General Assembly Resolutions 1514). It first saw widespread use, particularly in reference to Africa, soon after the process of decolonisation which followed a struggle by many national independence movements in the colonies following World War II. PNG was a former ‘colony’ of Australia and Britain.

Asante (1985) states that some of the specific motives a donor may have for giving aid are: defence support, market expansion, foreign investment, missionary enterprise, and cultural extension. In recent decades, aid by the International Monetary Fund (IMF) and the World Bank has been criticised by some as being primarily a tool used to open areas up to global capitalists, and being only secondarily, if at all, concerned with the wellbeing of the people in
the recipient countries. This is still a controversial issue. Erixon (2005 p. 4) in his published article “Aid and development: Will it work this time?” argues that:

It is quite clear that the idea of providing a takeoff sustained growth by foreign aid has been a dismal failure. Overall, aid has not promoted economic growth, nor has it led to improved policies in developing countries. Rather, there is much evidence supporting the view that aid largely has backed political regimes with little interest in growth and development. Most donors have failed to follow the Hippocratic principle of ‘do no harm’.

Besides criticism of its motives, aid may be criticised simply on the grounds that it was not effective, that is, that it did not do what it was intended to do or help the people it was intended to help. This is essentially an economic criticism of aid. The two types of criticism are not entirely separate: critics of the ideology behind a piece of aid are likely to see it as ineffective; and indeed, ineffectiveness must imply some flaws in the ideology (Djankov, Montalvo and Reynal-Querol, 2005).

2.6.2.3 Evaluation of Development Aid

Evaluation is one of the fastest growing disciplines in the world. Within the broad field of evaluation in general, the evaluation of development aid had an early start, and for many of the largest aid agencies, its main period of development was the 1970s and 1980s (Cracknell, 2000). There are many approaches to evaluation and what may be right for one institution may not be right for another.

Since its inception and adoption in the USA in the early 1960s there has been a tension between the two competing objectives of development aid evaluation namely: accountability on the one hand and lesson-learning on the other. The main purpose of the former is to answer such questions as ‘does aid work?’, and ‘how effective is development aid?’. On the other hand, the main purpose of the latter is to study selected successes and failures with a view to learning why some actions were successful and others not, and to ensure that the relevant lessons are learned and acted upon (Cracknell, 2000).

The donor agency (who is interested in knowing why aid has succeeded or failed), as one of the principal stakeholders, would generally prefer to emphasise the lesson-learning objective of development rather than the accountability objective simply because it is naturally anxious to improve the efficiency and effectiveness of its own operations. To them, evaluation is a tool to throw up useful lessons for improving future performance. However, the
accountability objective obviously predominates in the case of those stakeholders who might be called the ‘paymasters’ who are interested in knowing whether aid has succeeded or not such as national treasuries, and parliaments – that is, those who represent the taxpayers who provide the funds for official aid (Cracknell, 2000). It is noted that tension between these two basic objectives always has a major influence on how evaluation is organised in most aid agencies.

It is argued that the donor-recipient asymmetry of interest manifests itself in a number of ways, generally tending to complicate the evaluation exercise. For instance, Nagao (2006) contends that to start with, there are divergent dispositions in respect of the purpose of evaluation. According to Nagao (2006), the party that insists on evaluation is usually the donor, who must account for the development assistance funds to their government and ultimately, to their taxpayers. It is pointed out that donor agencies are pressed towards outcome-oriented planning and results-based evaluations of project effectiveness. On the other hand, the recipient is generally not interested in the evaluation of projects that are ending or have ended, unless the exercise could lead to future project possibilities, and even then their interest is likely to be a passive one (Nagao, 2006).

Evaluation of development aid or assistance first gained international prominence when an Expert Group on Aid Evaluation was created within the OECD’s Development Assistance Committee (DAC) in 1982. It also established the so-called five ‘DAC Evaluation Criteria or Model’: relevance, effectiveness, efficiency, impact and sustainability, which are now used by most aid agencies and international organisations for evaluating the impact of their assistance projects (Nagao, 2006).

The scope of evaluation actually done on development assistance projects, however, remained quite modest for many years. It consisted mainly of project monitoring and output accounting, and not much attention was paid to systematic verification of outcomes achieved or impacts on the target beneficiary (Bamberger, 2000). It was only in the late 1990s, with the spread of the practice of results-based management (RBM) in donor country governments, that evaluation came to assume greater relevance in development assistance (Nagao, 2006).

In terms of the five DAC Evaluation Criteria or model, the donor agencies’ concern for results-based evaluation may be best represented by a relative emphasis placed on the combination of effectiveness and efficiency (Svensson, 1997). Evaluation should indicate that the project has achieved the intended purpose (that is, effectiveness) and has done so
cost-effectively (that is, efficiency). Of the five criteria, the most neglected criterion appears to be sustainability of impact after project termination (CIDA 2001). Cracknell (2000) stresses that the criterion of sustainability (the extent to which a development activity survives once the aid comes to an end) is important because it cannot be left to chance – it has to be planned for from the very beginning.

Traditional evaluation generally focuses on objectives (that is, designing the objectives and turning inputs into outputs and outcomes) and gives only cursory attention to impacts. Ellis (2006) stresses that higher-order outcomes and impacts are difficult to measure without making a big effort – and hence they are only rarely measured. He further states that what makes an impact evaluation different is the emphasis and priority that it gives to establishing the impact of the initiative; and the rigorous social sciences methods that it uses to do so. An impact evaluation would often consider all the traditional evaluation criteria, but place more weight on credible examination of impact. Impact evaluation can use either qualitative or quantitative methods or both. However, good research that convinces a range of clients on the difficult question of causality always requires a combination of techniques (Ellis, 2006).

As discussed earlier, many development partners often use capacity building as the main objective or aim of their aid programs and projects. Capacity building has become a lead approach within international development cooperation and has become a key concept in international development in recent years.

2.6.3 Capacity Building and its Relevance to Development Aid

This section on the last immediate discipline of capacity building reviews literature on capacity building and its relevance to development. It also relates to building the capacity of the public sector executives and their organisations.

2.6.3.1 Background of Capacity Building and Development Aid

Early efforts in the field of international development were focused on the development of infrastructure and technology, and on the transfer of financial capital to the developing world to stimulate economic growth. As it became clear that the focus on growth alone would not achieve development, attention turned to more human and social aspects, leading to the emergence of the ‘human development approach’ which is concerned with enlarging people’s choices. Key to that approach is the building of human capabilities. There is strong emphasis through this strand of thinking in terms of the development of ‘capacity’, meaning:
the ability of individuals, organisations, and whole societies to define and solve problems, make informed choices, order their priorities and plan their futures, as well as implement programs and projects to sustain them (Nair, 2003).

The two current main strands of development thinking and practice are: 1). orthodox neo-liberal approaches to economic development, which stress the need for sound policies (especially efficient markets) to sustain, coupled with sound financial and legal institutions to foster investment; and 2). the approach which focuses more on investment in humanist and social capital, and the strengthening of civil society. The two approaches concern themselves with governance but each focuses on somewhat different aspects. Furthermore, the nature of capacity to be developed differs somewhat depending on which of these views of development is preferred. However, whichever approach is adopted, there has been strong agreement since the mid-1990s that development ‘partnerships’ between donors and recipients are critical, that people need to participate in and shape their own development, and that having capable institutions is essential to achieving development outcomes (Nair, 2003).

Recent thinking suggests that a shift from partnership to ‘ownership’ is essential. The call for greater local ‘ownership’ of the development endeavour has been matched by the recognition that local institutions do not always have the requisite capabilities to meet the challenge they face to fully take that ownership, and it is recognised that the wider conditions in which they operate may be part of the problem (Fukuda-Parr, Lopes & Malik, 2002).

In early work on capacity building, emphasis was placed on the capacity of individuals, and a major strategy was educational scholarships and other ‘manpower’ development approaches. The next focus was on organisations and their policies, systems and approaches to service delivery. The institutional framework and ‘culture’, or enabling environment, remained as an unexamined constraint (DFID), 2002).

However, the British official development agency, the Department of International Development (DFID), states that ‘turning individual competencies into organisational capacity requires institutional change’ (DFID, 2002). They conclude that:

best practice for capacity development is likely to require a mix of interventions at these three levels: the individual (tools and training), the organisation (restructuring, reform or strengthening of business management systems) and the institutional (pay, promotion, and possibly culture change) ((DFID, 2002).
Social capital theory suggests that bridging and linking capital in particular can assist economic development through building networks of trust and social relationships. However, recent research suggests that social capital approaches may need to take cultural contexts into account more carefully and warns that the assumption that strengthening social capital will lead to development is politically naïve; poor people’s engagement with public administrations and associations is constrained, and this approach may simply reproduce their exclusion (Cleaver, 2005; Foundation for Development Cooperation, 2002). Thus, Lavergne (2004b) argues that capacity building is nevertheless ‘[far] more than just HRD or organisational development’.

2.6.3.2 Capacity Building

There is a relationship between capacity building and development aid. This term has a very broad variety of meanings as discussed in the earlier sections of this thesis, but within the international development community, it is referred to as an instrument, a process, an objective, a general approach to development and the reason for, as well as the overall solution to, the failure of many development attempts so far. Capacity development is also described as an approach or process, for example, towards the reduction of poverty, while others see it as a development objective, targeting the development of individual or organisational capacity (CIDA, 2001).

The UNDP and the World Bank generically define ‘capacity building’ as the process by which individuals form their abilities to achieve development goals (UNDP, 1998; World Bank, 2005). Many donor agencies have adopted that rather vague definition. In general, there appears to be widespread consensus among the development players that capacity building is an inherently positive concept. However, very few academic studies on the very meaning of the notion exist. Inevitably, such diverse uses of the term can lead to confusion about what is done in its name and how to evaluate programs which claim to do it.

There are however critics who assert that capacity building lacks a clear definition. For instance, Pielemeier and Salinas-Goytia (1999) openly admit that ‘the concept of capacity building is not necessarily different from concepts such as institution building, institutional strengthening, development management and others’. They point out that, in their view, ‘capacity building…emphasizes the creation or strengthening of capacity for program’. For others, the expression has become an over-pompous synonym for training, even worse than the expressions of ‘staff/human resource development’. Moore (1995), highly critical of the
concept, traces its origin to the more precise notion “institution building” and claims that capacity development is such a vague term that it mainly serves aid agencies to reposition themselves and to refresh their already outdated development vocabulary. Institutional capacity or building is a vital ingredient in providing effective services. Capacity development is far from being a neutral technical term, but has deep political implications. It is being used by donors to impose their viewpoints on organisations in the South and by recipients in the South to cover imprecise project applications and improve their possibilities of being eligible for funding.

There are some conceptual distinctions which should not be ignored. For instance, Franks (1999) usefully distinguishes between capabilities – meaning the ‘knowledge, skills, attitudes of the individuals, separately or as a group, and their competence to undertake the responsibilities assigned to them’, and capacity, as ‘the overall ability of the group or individual to actually perform the responsibilities’. Thus, capacity depends on the size of the task, the resources allocated and the context in which it is to be carried out. Put simply, underfunded or understaffed activities will fail even where capabilities exist. Furthermore, Horton et al. (2003) emphasises that management, including strategic leadership, program and process management, and networking and linkages are also critical to turning capabilities into organisational performance.

Furthermore, a distinction must be made between ‘hard’ and ‘soft’ capacities. The elements of ‘hard’ capacities include personal skills, functions, structures, systems and factors such as equipment, infrastructure and financial resources. In contrast, the elements of ‘soft’ capacities include those less easily definable and quantifiable factors such as the so-called “incentives” motivational and demand factors, of a material, cultural or social nature (Land, 2000). The distinction applies at both the individual and the organisational level, as well as in the broader governance environment, and research and experience indicates that the ‘soft’ elements are extremely, if not critically, important (Kaplan, 1999; Morgan, Land & Baser, 2005).

2.6.3.3 Approaches to Capacity Building

Capacity building can also be seen as a means, a process or an end in itself as clearly shown by Bebbington and Mitlin (1996). As a means, capacity building may be designed to enable an organisation to deliver a service or program defined by another agency. As a process, capacity may be about developing the capacity to deal with constant change in the external
environment, and as an end, capacity building may be about strengthening an organisation to participate in sustainable development.

Oxfam (2002) sees capacity building not as a tool, but as an approach to development and quotes Eade (1997), who says,

> Capacity building is an approach to development, not something separate from it. It is a response to the multi-dimensional process of change, not a set of discrete or pre-packaged technical interventions intended to bring about a pre-defined outcome (Oxfam, 2002).

It can be concluded from the above discussions that at least some official donors have also come to this view, referring to the ‘mainstreaming’ of capacity development, and to capacity development as the central concept in development (Lavergne, 2004b).

Potter and Brough (2004) assert that however satisfactory definitions continue to elude us, it is widely suspected of being too broad a definition to be useful. They contend that, too often ‘capacity building’ becomes merely a euphemism, referring to little more than training.

The concept of ‘capacity building’ is so widely used that it has become a cliché, part of the jargon used in many public sector organisation developments when referring to ‘lack of capacity’ or the need to develop ‘more capacity’ and specifically ‘management capacity’ or ‘institutional capacity’.

The idea that it is important to develop peoples’ capacities to assert their own values, determine their own priorities, and enable them to act on these is not new but it represents a paradigmatic shift in how development is undertaken. It is a shift from a linear, reductionist model which sought to transfer capacities from outside, to one which is holistic and systematic, and which involves recognising, working with, and enhancing existing local human and other resources and building relationships (Hunt, 2005). The UNDP (1999) has well summarised ‘Ten Default Principles for Capacity Development’ based on the lessons of capacity as shown in Appendix 2 (p. 269). These principles emphasise the long-term nature of the process and the need to respect local value systems, shift power, challenge mindsets, build on existing capacities, create positive incentives in systems, maintain accountability to the poor and remain engaged even in difficult situations.

These approaches are supported by findings of a recent major study undertaken by ECPDM for the Organisation for Economic Cooperation and Development (OECD) Network on
Governance and Capacity Development (ECDPM, 2003) on capacity development. The study involved 20 case studies and investigated how organisations and systems, mainly in developing countries, have succeeded in building capacity and improving their performance. The scale of these studies varied from whole sectors, to major institutions and non-government organisations. The study explores the factors that encouraged capacity development, how these differ according to context, and why efforts to develop capacity have been more successful to some places than others (Hunt, 2005).

According to Land (2000), ‘a “systems” approach to understanding capacity development…can help to sort out inherent complexities, and in doing so provide a basis for strategic design’. Porter and Brough (2004) argue that a more rigorous systematic approach would lead to better problem diagnosis, better project and program design and more effective monitoring and evaluation. They assert that capacity building consists of meeting a hierarchy of needs which all need to be considered in a logical order if investments in development are to pay off.

Capacity building can be approached systematically using the series of interconnected levels. A systems approach is relevant because systems are made up of many units or levels which must depend on each others to survive. In their attempt to find the best way to illustrate the systematic capacity building approach, Potter and Brough (2004) developed different models to show the effectiveness of this approach. Appendix 3 (p. 270) shows the Capacity Pyramid, and the nine components of systems capacity building, giving examples from the health sector. These are outlined and discussed in Appendix 4 (p. 271). They differentiated the nine separate but interdependent components of the unitary concept ‘capacity building’.

This model clearly illustrates that by systematically applying the pyramid to the system and asking what the capacity shortfalls are in terms of each component, a better understanding of the organisational shortfalls can be assessed and a more logical approach can be taken regarding where action is needed most. For instance, in the case of training teachers or doctors, there is little point in training them if they are not going to be allowed to use the skills or techniques they are taught, or if lack of consumables or power means that it is impossible to treat patients or teach students. Potter and Brough (2004) argue that simply offering more training can be a cynical exercise in blaming the victims, and handing out ever-more buildings and equipment enables vested interests to give the impression of addressing the needs of their people while actually continuing to exploit them.
Systems thinking approaches emphasise that careful attention to the ways in which power is exercised through implicit as well as explicit rules, values, norms and behaviours is tremendously important. Furthermore, those engaging with people whose capacity is to be developed have to be acutely aware of their own behaviours and attitudes and how they are communicated – both personally and institutionally, if their capacity development efforts are to succeed. This is supported by Lopes and Theisohn (2003) who assert that recent research and reflection has highlighted that intangible ‘mindsets, vested interests and power differentials may make the biggest contribution to development success or failure’.

Lopes and Theisohn’s (2003) ‘Vicious Cycle of Disempowerment’ shown in Appendix 5 (p. 272), portrays the systemic consequences of certain mindsets and power relationships, in which implicit inequalities and attitudes of superiority are conveyed, in this case by donors, to developing country recipients. The Vicious Cycle of Disempowerment illustrates that donor agencies confidently set priorities, plan directions and programs, and control resources. They then set the standards of accountability and see poor results as confirming weak capacity in development countries. Recipients, often lacking confidence in their own abilities, do not accept ownership of these imposed ideas, which may not reflect their priorities. They see the requirements placed on them as unrealistic and the standards unattainable and simply resort to getting what they can out of the system.

Lopes and Theisohn (2003) contend that capacity development can turn the ‘vicious cycle of disempowerment’ into the ‘virtuous cycle of empowerment’, when external players show respect, respond positively to local initiatives, take some risks, and allow local people to take ‘ownership’ of their own development in a partnership of growing trust, with mutually agreed standards of evaluation. This is best illustrated in Appendix 6 (p. 273). The approach taken in this model is in line with, and is pursuant to, the UNDP’s Ten Default Principles discussed earlier.

The notion of capacity building as it relates to development or international aid is best applied in systems thinking where all parts or units of the system which are linked must work together and depend on each other for any capacity or development to be effective. For instance, the returnees from the ADS, ALA or Endeavour scholarship awards cannot utilise their new skills or knowledge if there are no mechanisms in place to support them.
2.6.3.4  Capacity building in the PNGPS

As explained in Section 3.8.1, capacity building has come to dominate the public sector reform movement in PNG. The development partners such as the Government of Australia (GoA) provide capacity building activities for public sector executives to complement programs that are funded by the Government of PNG (GoPNG). However, the question still remains as to whether the public sector MD programs enhance strategic management capabilities at individual, organisation and national level.

As indicated above, most of the capacity building activities under the reform initiative are supported by the GoA. ADS awards are by far the largest and the longest running scholarship since their inception in 2002 compared to Australian Leadership Award (ALA) scholarships and Endeavour Scholarships. All AusAid awards have been the main methods or strategies used for executive and leadership development for senior public servants.

In summary, the effective practices for capacity development require a mix of interventions at these three levels: the individual (tools and training), the organisation (restructuring, reform or strengthening of business management systems) and the institutional (pay, promotion, and possibly culture change). The ‘hard’ capacities include personal skills, functions, structures, systems and factors such as equipment, infrastructure and financial resources, while the ‘soft’ capacities include those less easily definable and quantifiable factors such as the so-called “incentives” motivational and demand factors, of a material, cultural or social nature. However, research and experience indicates that the ‘soft’ elements are extremely, if not critically, important.

Approaching capacity building systematically can help to sort out inherent complexities, and in doing so provides a basis for strategic design. A more rigorous systematic approach would lead to better problem diagnosis, better project and program design and more effective monitoring and evaluation. Capacity building activities under development aid in PNG Public Sector are numerous but their effectiveness and impact on the individual, organisation and the public sector must be evaluated. This needs to be done to assess their relevance, to see if the objectives are met, to assess the effectiveness and efficiency of the activities, to assess the impact they have on the senior executives, their agency and on the public sector, and finally to assess their sustainability so that policies and efforts can be concentrated on strategies that are best suited to the agency. There is a concern in all levels of the public sector...
sector on the lack of policy coherence and coordination, and the piecemeal actions do not systematically build executive competence and confidence.

2.7 Identification of Research Issues for Investigation

2.7.1 An Overview

The literature on SHRM, SHRD, MD, Capacity Building, and the Nature of Public Sector Organisations has helped inform this study on developing the executives to enhance their capabilities to achieve their organisation goals and objectives. More specifically, the activities, practices, systems and approaches.

- The definitions and goals of MD and capacity building helped inform the review of literature and set the scene in the development of the research issue, questions, objectives and hypotheses.

- The current best or preferred practices as identified in the literature such as the APSC’s capability framework, management of learning and development, as well as findings of the recent studies, can be applied when analysing policies and practices in the PNG public sector organisations.

- Garavan’s (1991, 2007) nine SHRD key characteristics have been identified. These characteristics guide the development of a coherent framework for a systematic approach to T/D.

- Bhatta’s (2000) T & D Cycle is useful in developing a T & D cycle for executives in the PNGPS.

- The goals and methods of MD are clearly presented and can be used to guide the development of executives and which can also be linked to the T/D cycle.

- Theoretical models of MD which focus on the linkage between strategic management and MD have been identified and can be used or adapted as a source but changes can be made where appropriate to suit the different structures of the organisations and the government. Of particular use are Luoma’s (2005) three-stage MD model and
Delano’s (2008 p. 2) ‘sailboat’ metaphor of ED to describe MD for strategic advantage.

- Kirkpatrick’s four-level evaluation model is used as the framework because it is easily understood. It can be a guide when measuring training effectiveness, more specifically at the behaviour and results levels which are the focus of this study.

- Stufflebeam’s CIPP model is used in conjunction with Kirkpatrick’s model as it follows a systems approach and is a comprehensive framework for conducting and reporting evaluations. All SHRD interventions must be evaluated to establish if they are relevant and sustainable.

- Potter and Brough’s (2004) models of systematic capacity building are simple to understand and apply.

- Lopes and Theisohn’s (2003) model of the Virtuous Cycle of Empowerment is more appropriate to apply as it relates to external players showing respect and responding positively to local initiatives, thereby allowing local people to take ownership of their own development in a partnership of growing trust with mutually agreed standards evaluation.

Other than the theories and concepts derived from the literature, content analysis of government policies and reports from the governments of PNG and Australia also served as important source documents for this study.

Based on the literature review, several issues have emerged which warrant further investigation:

- Identifying the interventions that contribute to MD effectiveness. (Pre and Post-Program)

- Identifying the capabilities and requirements of executives as articulated in the PNGPS. (Pre-Program)

- Analysing the current HR policies and practices that contribute to MD. (Pre-Program)
Chapter 2: Review of the Literature

- Determining the current policies and practices that fully develop management executives. (Pre-Program)

- Determining and analysing the methods for evaluating MD strategies. (Post-Program)

- Identifying strategies on how MD can be improved to contribute to capacity building of SES personnel in the PNGPS.

- Identifying whether there are significant differences in leadership skills and behaviour before and after MD learning programs. (Pre and Post-Program)

- Identifying the changes and suggestions that can be integrated into policies and practices. (Post-Program)

- Determining whether a framework can be developed on MD strategies and a checklist on T/D that contribute to capacity building of the PNGPS. (Post-Program)

Discussions along these lines now point to the development of a foundation from which to guide the theoretical framework and the choice of research questions and hypotheses.

While there is extensive literature on SHRD and some literature specific to MD, the focus is more on the private sector. The link between MD and organisational effectiveness has been established. However, there is only one piece of research thus far into ED in the PNGPS. There is an identifiable research gap. This prompts the research questions.

2.7.2 The Research Questions

The research issue with the related questions, objectives and propositions for this study have been outlined in Section 1.3.1 and are restated below:

1. What are the capabilities and requirements of executives as articulated in the PNGPS?

2. What are the current HR policies and practices that contribute to MD?

3. Do the current policies and practices fully develop management executives?

4. How are the MD interventions evaluated?

5. In what ways could MD be improved to contribute to capacity building of executives in the PNGPS?
6. What are the changes and suggestions that could be integrated into policies and practices?

7. Can a framework be developed on MD interventions and a checklist on systematic approach to T & D that contribute to capacity building of the executives in the PNGPS?

2.8 Research Framework

A research framework was developed from the research issue, questions and objectives, including the methods by which to ascertain data on the research questions. This framework is graphically illustrated in Figure 2.7 below. As discussed earlier, the results from Phase One of data collection (qualitative in-depth interviews) helped inform and develop the six hypotheses.

![Figure 2.7 The Research Framework](source: Developed for this research)
2.9 Implications of the study

For any MD program to be effective, organisations need to adopt a systematic approach to developing not only the current managers but potential managers. It follows that organisations need to create custom-designed MD strategies, systems and programs that build the executive capabilities needed to achieve their strategic objectives. The question then is: How do organisations create MD strategies and programs that have a real impact that contributes to capacity building at the individual, organisational and national levels?

Management, including strategic leadership, program and process management, and networking and linkages are also critical to turning capabilities into organisational performance. But all capacity building initiatives must be linked and planned systematically to attain organisational performance. Thus, it is important for organisations to create custom-designed MD strategies, systems and programs that build the executive capabilities needed to achieve their strategic objectives. This raises the question of whether these strategies contribute to capacity building at all levels in an organisation and if not, how can they be improved.

2.10 Summary of Chapter 2

In this chapter, a review of the literature relevant to this study has been undertaken. The literature review has presented a number of theories, models and concepts relevant to the disciplines of: SHRM, SHRD, MD and capacity building. This highlighted the significance of the research issue and the specific research questions outlined above.

An overview of the literature on effective practices has highlighted ways in which current HR policy and practices in the PNGPS can be compared and checked against. The research issues identified the importance of MD in any organisation. Any training or learning intervention must be systematically planned. The current and future executives in any organisation must be systematically developed to enhance their capabilities to achieve their organisation goals and objectives. The components of the HRD serve as a guideline and to remind us that for any MD strategy to be effective, it must be linked to the corporate strategy and needs the support of top management.
Capacity building dominates the reform initiatives of the PNGPS. However, the donor-recipient relationship and trust must always be maintained. Like any other HRD activity, it must be systematically planned. It is of the utmost importance that any training or learning intervention is evaluated to assess its relevance and impact on the capacity building of the PNGPS.

Having reviewed the literature relevant to SHRD of executives and defined the research issue, questions and hypotheses, the next chapter – Chapter 3, will present the context of PNG so as to have an understanding of the structures, systems, practices and procedures in the PNGPS. Specifically, it sets the scene on how public sector executives are managed and developed.
3.1: Introduction

“When government has the right people, and the right system, and the right intentions, many good things are possible. The trick is knowing which ones they are.”

Alan Ehrenhalt (1998, p. 11)

3.1.1 An Overview

In Chapter 2, a detailed examination of the literature relevant to this study was conducted, in order to highlight the pertinent research issues and place the study into theoretical context. The purpose of this chapter is to provide an understanding of the function of HRD in the Public Service of PNG through an examination of policies and practices as well as systems. This will provide insights into how public sector executives are managed and developed.

3.1.2 Structure of Chapter 3

This chapter is presented in eleven sections. First an overview and structure of the chapter are presented in Section 3.1. Section 3.2 then gives a brief history of PNG and its geographical location. An overview of the system of government is presented in Section 3.3 which is followed by discussion on the government and the PS in Section 3.4. Section 3.5 presents an overview of public sector reform. The relevant legislations and regulations that manage the PNGPS are briefly discussed in Section 3.6. Section 3.7 discusses recruitment and selection while Section 3.8 briefly discusses terms and conditions. Then in Section 3.9 capabilities and requirements of SES personnel are presented before discussing T & D in Section 3.10. Finally, the summary of the chapter is given in Section 3.11.

A framework of Chapter 3 is graphically outlined in Fig. 3.1.
3.2: **Brief History and geographic location of Papua New Guinea**

A brief description of PNG background will assist the reader to appreciate the HRD issues discussed in this thesis.
PNG includes the eastern half of the island of New Guinea, the second-largest island in the world. PNG shares a land border with the Republic of Indonesia, on the west. To the south of PNG lie the Coral Sea and Australia, while the South Pacific Ocean lies to the north. The country is mostly mountainous, with coastal lowlands and rolling foothills, and one of the world's largest swamps along its southwest coast.

Its unique geography makes it very difficult and expensive for communication from the highest bureaucratic level of the government at the national scale down to the lowest level of government at the community scale. The total land area is 452,860 square kilometres. PNG is home to about 6.7 million people. Melanesian, Papuan, Negrito, Micronesian, and Polynesian ethnic groups make up the bulk of the population. PNG is characterised by enormous linguistic and cultural diversity. There are over 800 language groups and thousands of ethno-political groups, each with its distinctive cultural attributes (Smith, 1985).

The British colonial administration ruled Papua between 1899 and 1906. It was then handed over to Australia as a territory. A German administration ruled New Guinea from 1884 until after the First World War in 1918, when Australia was given the mandate to oversee New Guinea as well. The two territories were administered separately by Australia from 1906 to 1945. After the Second World War, the United Nations declared the two territories to be one single territory comprising Papua and New Guinea. Global pressures on colonial powers (Smith, 1985) pushed Australia to prepare Papua and New Guinea to gain full independence on 16 September, 1975. The new nation was called Papua New Guinea.
3.3: The System of Government

PNG has a Constitutional Parliamentary System of Government – a Westminster system of government. The three arms of government are: legislative, executive and judiciary. The PS exists within the executive to put into effect the decisions of the parliament. The PNGPS operates within a decentralized system of government but within a unitary framework. In this case, what the centre of government does has a bearing on the senior executives in the provincial and local levels.

The three levels of government within PNG’s system of government are: provincial, district and local level governments. Through the Organic Law on Provincial and Local Level Government (1995), certain legislative and executive functions were decentralized to lower levels of government.

3.4: The PNG Public Service

The PS is responsible for the implementation of Government policies, providing policy and technical advice for the Government, and to manage and disburse public funds. Members of the public service are accountable to the Government and tax payers. Many sectors of the public service face leadership problems and skill shortages. The large presence of high cost foreign advisors and consultants are evidence of this. Since independence, the cost of the public service has also been an issue. However, the size of the public service is about 70,000 which is very small by international standards. There is approximately 1 public servant for every 90 people in PNG which compares with developed countries like Australia where the number is about 1 for every 15 people (DNPM, 2010, p. 122).

The PNGPS comprises a wide range of public and semi-independent organisations that are funded and controlled either directly or indirectly by the government. It consists of central government departments under direct ministerial control, provincial departments under the control of provincial governments, and semi-autonomous commissions, boards, statutory authorities and entities. The GoPNG has classified the public sector under three broad headings: national departments, statutory authorities and provincial and district administrations (PSWDP, 2005).

Currently, there are 30 national departments and agencies, 56 statutory bodies and 20 provincial administrations including the national capital district. The structure of the
National Public Service is portrayed in Figure 3.4 below. It has the Central Agencies Coordinating Committee (CACC) made up of all heads of central agency departments with the statutory bodies, the national departments and agencies, and the provincial administration below it.

Typically the organisational structure of a national department has three layers. These are from the top: divisions, branches and sections. The reporting system and chain of command are depicted in Figure 3.4. The target for this study includes Assistant Secretary to Secretary (Departmental Head). The reporting system in a statutory body is slightly different.
3.4.1 The Senior Executive Services (SES)

There is an absence of SES in the PNGPS. The presence of SES could facilitate in attracting, retaining, developing and motivating the management services who would in return contribute meaningfully to the capacity building of the PS. The governing legislation of the PNGPS, the PSMA, does not provide a working definition for SES personnel. However, there is some indicative description of the SES in Section 9 of the PSGO in describing the senior officers or executives (PSWDP, 2005). The PNGPS does not have a comprehensive framework on MD. The notion of MD which the SES concept is built on and one which is the focus of this study, is a fairly recent one in-so-far as the reforms in the PNGPS are concerned. SES personnel includes those senior officers or public servants in the PNGPS in the top level of management such as the departmental head, deputy head of the organisation, First Assistant Secretaries, also known as Directors or Executive Managers, and Assistant Secretaries, also known as Deputy Directors or Managers.

As was explained and discussed in Section 2.1.3, there are inconsistencies in the position titles or designations assigned to senior executives in different agencies. This can cause confusion in so far as the roles and responsibilities as well as the remunerations are concerned.

3.4.2 Types of PS Organisations

The different terminologies used within the national government when referring to the public organisations are:

1) **Central agency departments**: concern the management and operation of all agencies. For example, the monitoring of personnel management practices such as T & D is the responsibility of the Department of Personnel Management.

2) **Line departments**: are for the provision of services outside of the public service. For example, the role of the Health Department is the provision of health services to the public. This is not an operational concern for other agencies. Therefore, it is a line department.

3) **National agencies**: may be an ‘Office’ or a ‘Commission’. Each one serves a particular government purpose as distinct from the delivery of services to the public. For example, the Internal Revenue Commission (IRC) is responsible for collecting taxes for the National Government. The National Statistics Office (NSO) is responsible for
collecting socio-economic data and other statistical information which the government uses for planning.

3.5: The Public Sector Reform

PNG has had significant experience in carrying out public sector reform since independence. Initially, these initiatives were primarily directed at establishing institutions, processes and structures suitable or appropriate to a newly independent state as opposed to the institutions, processes and structures used by the Australian colonial administration. Reform of the Public Sector is a major policy of the government.

The overall vision and goal for public sector reform work in PNG is.

*To achieve excellence in the performance and delivery of government services to the people of Papua New Guinea within the resource (human and financial) capacity of the nation (PSRMU, 2003).*

The four main rationales for reforming the Public Sector in PNG are:

i) PNG’s Public Sector is not performing effectively, and consumes much of the country’s resources, yet its delivery of services is not getting any better.

ii) The public sector regime is widely seen as being ineffective by politicians, public servants and the public and is increasingly under pressure to meet escalating demands (i.e. to do more with less).

iii) The PNGPS needs to be more efficient, cost effective and innovative and it needs to focus on delivery of services. It must also enhance accountability and transparency.

iv) PNG’s Public Sector needs to be proactive and keep abreast of global trends and technical advancements without compromising its national aspirations and culture (PSRMU, 2003).

In the PNG Public Sector, the decentralization of authority is referred to as “devolution of power”. In 2007, the central agency responsible for public sector management, the Department of Personnel Management (DPM) (DPM, 2007), delegated to the offices of the heads of Government Departments, Provincial Administrators and other Government Agencies all the powers, responsibilities and limitations on core HR functions. The offices
included: Departments of Works, Education, Treasury, Provincial Administrations of Milne Bay, Manus, and Autonomous Bougainville Government, and the Internal Revenue Commission. The powers and responsibilities included: creation of offices, recruitment, training, discipline, resignation and retirement, and contact employment. The limitations were mainly up to deputy secretaries and deputy provincial administrators.

Thus, certain agencies and departments as identified above are now able to assume fuller responsibility over core HR functions. Under such an approach, control activities are conceded for a more proactive and involved function of HR and the central personnel agency, the DPM, is called on to shift from its customary control orientation to a new consultant or advisor role.

GoPNG’s new policy document, *The Development Strategic Plan – 2010-2030 (DNPM, 2010: 124)* has highlighted that the whole public service system will be reformed by pursuing innovative ways of doing business such as forging new alliances, sharing knowledge, and reorienting bureaucracies with mechanisms and incentives to attain high standards. Specific measures to revitalise PS institutions to the level of international standards are outlined below: (p. 124):

i) develop effective ways to recruit and retain competent public servants who perform to high standards, including mechanisms to enforce competitive merit based recruitment and promotion;

ii) review and enforce the Public Service Management Act with a performance and output oriented focus, including effective remuneration rewards for good performance and sanctions for poor performance;

iii) introduce by 2015 minimum criteria of tertiary education for newly appointed executive officers in the public service and by 2020, post-graduate tertiary education for all agency and department heads;

iv) maintain a database of the skills and education credentials of public service personnel in order to achieve a better match of skills to job requirements. This will lift the efficiency of the public service, particularly if staff movements are flexible within a department or within the public service;

v) establish mechanisms to ensure strong compliance with regulations guiding public service performance and with the public service code of conduct; and
vi) prepare contracts for department heads and executive level public servants that are tied to the relevant sector specific targets as identified in the Medium Term Development Plans.

3.6: Public Service Legislations and Regulations

Certain Laws, Acts and Regulations are put in place by the National Parliament to govern the Public Service. The operations and management of departments in the PNGPS are governed by two key legislations: the Public Service Management Act 1995 (PSMA) and the Public Finance Management Act 1995 (PMFA) and associated orders such as the Public Services General Orders 2002 (PSGO). The Public Services (Management) Act gives power to the Secretary, DPM, to administer and enforce the General Orders (GO). General Orders are, therefore, by law a very important part of the Public Services (Management) Act. Public servants are required to follow only lawful instructions which follow the GOs.

However, it must be noted that the current PSGO has not been reviewed since 2002, and every effort should be made to have this important policy document reviewed and updated in line with the reform initiatives. HR policies and other related documents pertaining to development of senior executives in the PS are agency specific and developed at micro level. However, there is an absence of succession plans and exit policies in many government agencies. There is also the issue of whether the HR policies are effective and whether agencies adhere to these policies. The PNGPS currently does not have an articulated policy framework on Management Development at macro level, and so development of executives is done differently in each agency.

3.7: Recruitment and Selection

Public sector recruitment and selection is governed by a set of General Orders: GO 3 – Recruitment, Selection, Appointment and Manpower Reporting, GO 8 – Departmental Heads and Provincial Administrators, and GO 9 – Contracts for Officers appointed to Senior Management positions. GO 8 and GO9 deal specifically with senior officers or executives.

In the PNGPS, heads of national departments, statutory authorities, agencies and provincial administrators are appointed according to the processes laid down in the Constitution s.193 (1A) as amended and the PSMA s.31A(1). Details of the appointment process are provided
in PSGO Section 8.15-8.17 (DPM, 2002), and the Statutory Instrument No. 5, Public Services Selection and Appointment of Departmental Heads and Provincial Administrators regulation 2003. For the appointment of other SES personnel, the procedure follows a different route in that it is done internally or in-house through the Selection Committee. PSGO Section 3 prescribes the composition of the Selection Committee and the procedures involved in the appointment of senior executives (PSWDP, 2006).

Newspaper advertisements, internal advertisements and online advertisements are the major methods of recruitment. Most national departments and provincial administrations have rigorous recruitment procedures established as part of their personnel management processes.

As discussed in Section 3.5, the powers and responsibilities for Creation of Offices, Recruitment and Contract Employment are delegated to the offices identified. All matters relating to these functions are coordinated and managed by the organisations identified and they no longer have to rely on the DPM to complete the process. Variations must therefore be done on these relevant GOs.

### 3.8: Terms and Conditions

Actual conditions of service are determined by the government Salaries and Conditions Monitoring Committee (SCMC) mainly for the national departments except for the statutory authorities who have their own terms and conditions which differ from those of the normal public service. Section 9 of the PSGO (DPM, 2002) sets out the standardised contracts for officers appointed to senior management positions while Section 13 sets out the salaries and allowances for all public servants in the national departments.

As discussed above in 3.4.1, the position titles and classifications are not consistent in different government agencies. Moreover, the remuneration which includes base salaries, allowances and other benefits are also not consistent from one government agency to another.

### 3.9: Capabilities and requirements of SES Personnel

The capabilities and requirements of SES personnel are indicated in the respective job descriptions (JDs) and vary according to the seniority of the job designations. However, the capabilities and requirements, more specifically the qualification requirements, of different agencies or departments vary. While most agencies require a basic university degree, only a
few require a postgraduate qualification. Furthermore, the position classifications or grades as well as the remuneration also differ from one agency to another particularly in central agencies but the roles and responsibilities remain the same or similar. It therefore raises questions and animosity among public servants in PNG.

As articulated in the PNGPS, all senior executives are expected to acquire a basic university degree in a related field and must have a minimum of five to ten years’ relevant work experience in a managerial or executive role. However, it has now been recommended that qualification requirements for public sector executives be upgraded to a postgraduate level (DNPM, 2010, p. 124). All public sector executives are required to have managerial and leadership skills and qualities, and are expected to have a sound knowledge of all government legislations and policies.

JDs are the basis for contractual employment and provide the means for results-oriented performance and accountability. Section 2 of the PSGO (DPM, 2002) “Organisational Design and Position Classification”, provides the overarching format of the JD of the SES. For the Departmental Heads and Provincial Administrators, the PSMA, PFMA and Section 2 and 8 of the PSGO (DPM, 2002) describes the jobs, a format which is slightly different from all other SES personnel. Form 2.3 in Section 2 of the PSGO (DPM, 2002) prescribes five main areas to be specified in the job description: (a) Purpose, (b) Accountabilities, (c) Major Duties, (d) Reporting and Working Relationships, and (e) Position and Person specifications.

### 3.10: Training and Development

When it became independent in 1975, PNG did not possess a workforce with the skills required to partner government and capital in economic and social enterprise. Since then, successive governments have identified HRD as a fundamental priority for economical and social development. The three most recent policies aimed at addressing this priority have been the Medium Term Development Strategy (MTDS) the PNG Vision 2050 and the Development Strategic Plan – 2010-2030 (DNPM, 2010: 124).

The Medium Term Development Strategy (MTDS) for 2005-2010 stressed that poor personnel management, in which training, development and education interventions are embedded, is one of the major causes of poor service delivery (DNPRD, 2004:56). Therefore, T & D or HRD became a priority.
The PNG National Strategic Plan 2010-2050, now called “PNG Vision 2050 (PNGV50)”, and launched in 2010, identified Human Capital Development as the third pillar, for Papua New Guineans to be well trained, well utilised, well paid, well treated and contributing positively and meaningfully to national development (NSP, PSRMU, 2008:12).

The Development Strategic Plan – 2010-2030 identified specific measures to revitalise PS institutions to the level of international standards (DNPM, 2010: 124). These include, for instance, upgrading of education level of executives, developing executives to perform to high standards.

3.10.1 Capacity Building of Public Sector Executives

The problem of a lack of strong leadership and management within the PNGPS is an ongoing one, as evidenced by the performance of the PNGPS since the mid-1980s (PSWDP, 2006:9). One of the priorities and strategies identified under PSR for improving performance, accountability and compliance is to implement initiatives to improve the leadership and management skills of senior public servants. This is an important move under the reform strategies because leaders and managers need to be supported to manage change both as individuals, and as they guide their agencies toward the shared goals of improved effectiveness and service delivery. Leaders and managers need to understand factors affecting performance (positive and negative), and to identify and foster constructive incentives for improved performance.

Capacity building has come to dominate the Public Sector Reform movement in PNG. Hence, the GoPNG has now adopted HRD as one of its priority areas and has invested more money and time in developing its public servants. The development partners such as Australia and New Zealand also support and fund other capacity building activities in the PNGPS that complement the programs funded by GoPNG. The Government of Australia is by far the biggest donor of aid programs in PNG. Among other programs supported by GoA, the Australian Development Scholarships, Australian Leadership Award Scholarships and Endeavour Scholarships are examples where many PNG public servants are awarded scholarships annually to undertake various long-term and short-term educational programs in Australia.

At this stage, the Public Sector does not have a clearly articulated framework for developing its leaders and managers. Nevertheless, certain public sector agencies through the Public
Sector Workforce Development Program (PSWDP), a capacity building program of the Government of PNG, are in the early stages of developing executive leadership and MD programs. This is an indication that T & D efforts for public sector executives in the name of capacity building have somewhat increased over the last few years. However, if MD is to be successful, the design of the capacity building interventions must match the organisation’s level of commitment to strategic management and the degree of maturity of its strategic management processes. Moreover, the question still remains as to whether the public sector MD programs enhance strategic management capabilities at individual, organisation and national level. How successful are these programs? The issue of post-program evaluation remains unsolved by the participating organisations to these programs and the funders of these programs.

Public sector T & D is governed by a set of General Orders, more specifically PSGO Sections 5 and 6 which establish specific procedures. However, with the devolution of power taking place, these procedures do not apply. The PSGO Section 5 merely discusses evaluation at reaction and learning levels but does not go further to examine the behaviour, result and impact level. The current evaluation of training in the PNGPS is identified in the TNA process (diagram 5.1, PSGO Section 5.29:30).

Figure 3.5 The current Training Needs Analysis Process in the PNGPS

Source: PSGO 5, DPM, 2002:30

Evaluation of training is included in the process as depicted above but whether all elements in this process are followed is another issue. The process itself is simple to follow but it does not fully portray the systematic approach to T & D. For T & D to be effective, it should include all five stages of: identification, selection, application, measurement and alignment. Therefore, while capacity building programs on MD may have dominated the Public Sector Reform movement in PNG, there is found to be imperfections in these activities in terms of
coordination, monitoring and evaluation in public sector organisations (PSWDI, 2006, PSWDP, 2005). There is also concern in all levels of the public sector on the lack of policy coherence and coordination, and the piecemeal actions do not systematically build executive competence and confidence.

3.11: Summary

This chapter has considered the systems, policies and practices that have helped to describe the PNG context - its historical background, human resource and systemic concerns. It provided a discussion of the PS and the implications of its policies for practice. It has highlighted some anomalies, inconsistencies and practices involving management development. It is likely that knowledge drawn from empirical research and review reports has shaped the beliefs, understanding and capacity building of the public sector executives.

The next chapter describes the research design, with justifications for methodology, data gathering strategies and analysis. Issues of validity, trustworthiness, triangulation and ethical considerations are also addressed.
4.1: Introduction

“We cannot begin to understand something until we have looked at it from several directions, or in several ways.”

4.1.1 An Overview

Chapter 3 discussed the context of PNG, its historical background, the government and the public service, with particular attention to policies and practices in human resources development issues.

The objective of this chapter is to explain the methodology chosen to investigate and examine the research issue and explore the research questions and hypotheses that were developed in Chapter 2. It describes the research methods, approaches and paradigms available for business and management science research. It then describes the chosen methodology and explains reasons for this choice. The strengths and weaknesses of the methods are also discussed and how they were handled during the conduct of this study.

4.1.2 Structure of Chapter 4

This chapter is presented in ten sections. Section 4.1 serves as the introduction and provides an overview of the study. In Section 4.2 the practice of social research, and the types of research are explained, particularly the types of applied research relevant to this study. The justification of the paradigms is discussed in Section 4.3. Then in Section 4.4 the research methods and approaches, including data collection methods, sampling and triangulation available for business administration, management science research are presented. The methodology adopted for this study is explained and justified in Section 4.5. The data collection methods, procedures and analysis for this study are discussed in Section 4.6, followed by ethical considerations (Section 4.7). The reliability and validity of the data collection practices are discussed in Section 4.8. The chapter ends with a discussion of the study’s delimitations in Section 4.9 and the summary of the chapter in Section 4.10.

A framework of Chapter 4 is outlined in Figure 4.1


4.2: Practice of Social Research

The intent of this chapter is to describe and justify the methods and procedures used in this study. It commences by giving an overview of social research thereafter outlining the types of research and their purposes, thus providing a better understanding of the term. The variety
of considerations given allows the researcher to relate to the current type of research in the present study.

Hallebone and Priest (2009, p. 195) state that a research approach comprises a philosophy of science, a study’s reasoning and logic, a methodology, stance and methods. Collectively these represent a study’s investigative theory.

4.2.1 Purposes of Research

Social researchers may give a myriad of reasons or purposes for why they conduct research or study. Nevertheless, the purposes or reasons of research can be categorised into three groups based on what they are trying to accomplish - exploratory research, descriptive research, or explanatory research (Neuman, 2006, p. 33). For exploratory research, the primary purpose is to examine a little-understood issue or phenomenon in order to develop preliminary ideas and move toward refined research questions by focusing on the “what” question. For descriptive research, the primary purpose is to “paint a picture” using words or numbers and to present a profile, a classification of types, or an outline of steps to answer questions such as “who”, “when”, “where” and “how”. On the other hand, explanatory research is research in which the primary purpose is to explain why events occur and to build, elaborate, extend, or test theory. According to Neuman (2006), studies may have multiple purposes (for example, both to explore and to describe), but one purpose is usually dominant. Purposes of research are further described in Table 4.2.

<table>
<thead>
<tr>
<th>EXPLORATORY</th>
<th>DESCRIPTIVE</th>
<th>EXPLANATORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Become familiar with the basic facts, settings, and concerns.</td>
<td>• Provide a detailed, highly accurate picture.</td>
<td>• Test a theory’s predictions or principle.</td>
</tr>
<tr>
<td>• Create a general mental picture of conditions.</td>
<td>• Locate new data that contradict past data.</td>
<td>• Elaborate and enrich a theory’s explanation.</td>
</tr>
<tr>
<td>• Formulate and focus questions for future research.</td>
<td>• Create a set of categories or classify types.</td>
<td>• Extend a theory to new issues or topics.</td>
</tr>
<tr>
<td>• Generate new ideas, conjectures, or hypotheses.</td>
<td>• Clarify a sequence of steps or stages.</td>
<td>• Support or refute an explanation or prediction.</td>
</tr>
<tr>
<td>• Determine the feasibility of conducting research.</td>
<td>• Document a causal process or mechanism.</td>
<td>• Link issues or topics with a general principle.</td>
</tr>
<tr>
<td>• Develop techniques for measuring and locating future data.</td>
<td>• Report on the background or context of a situation.</td>
<td>• Determine which of several explanations is best.</td>
</tr>
</tbody>
</table>

Source: Neuman, W.L. 2006, Social Research Methods: Qualitative and Quantitative Approaches, 6th edition, Boston, Sage, Allyn and Bacon, Box 2.2, p. 34.
4.2.2 Purposes of Research relevant to this study

Multiple purposes applied in this study and the approaches used were very much interconnected. For instance, descriptive studies were relevant when the characteristics contributing to the problem were identified and described. This occurred when government reform reports and policy documents were examined in the literature review or as part of analysis. Pre-existing data mainly from the reports by development partners and other government reports were also presented for further research and analysis. Explanatory research was undertaken when a survey was used to establish the status of employment and performance of the executives that undertook any MD training or learning interventions. Exploratory research was applied with the most senior public servants (CEOs, department heads or their nominees) when the researcher became familiar with the basic facts, settings, and concerns and was able to formulate questions for further research based on discussions and the questionnaire survey. Hence, all three types of research were applied but exploratory research was dominant.

4.2.3 Types of Research

Research comes in different forms or types. Neuman (2006, p. 24) identifies these as basic research and applied research. Basic research (academic research) is research designed to advance fundamental knowledge about how the world works and build/test theoretical explanations. In contrast, applied research is research designed to offer practical solutions to a concrete problem or address the immediate and specific needs of clinicians or practitioners. However, applied research too can build new knowledge. Applied and basic researchers adopt different orientations toward research methodology as shown in Table 4.1 below.

<table>
<thead>
<tr>
<th>ASPECT</th>
<th>BASIC</th>
<th>APPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Audience</td>
<td>Scientific community and other researchers</td>
<td>Practitioners, participants, or supervisors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(non-researchers)</td>
</tr>
<tr>
<td>Evaluators</td>
<td>Researcher peers</td>
<td>Practitioners, supervisors</td>
</tr>
<tr>
<td>Autonomy of researcher</td>
<td>High</td>
<td>Low-moderate (but can be high in some cases)</td>
</tr>
<tr>
<td>Research rigor</td>
<td>Very High</td>
<td>Varies, moderate to high</td>
</tr>
<tr>
<td>Highest priority</td>
<td>Verified truth</td>
<td>Relevance</td>
</tr>
<tr>
<td>Purpose</td>
<td>Create new knowledge</td>
<td>Resolve a practical problem but can be to create</td>
</tr>
<tr>
<td></td>
<td></td>
<td>new knowledge</td>
</tr>
<tr>
<td>Success indicated by</td>
<td>Publication and impact on</td>
<td>Direct application to address a specific concern/</td>
</tr>
<tr>
<td></td>
<td>knowledge/scientists</td>
<td>problem</td>
</tr>
</tbody>
</table>

Source: Adapted from Neuman, W.L. 2006, Social Research Methods: Qualitative and Quantitative Approaches, 6th edition, Boston, Sage, Allyn and Bacon, Chart 2.2, p. 26
4.2.4 Types of Applied Research

The three types of applied research according to Neuman (2006, p. 26) are:

1) *Evaluation research* – in which one tries to determine how well a program or policy is working or reaching its goals and objectives;

2) *Action research* – one in which the primary goal is to facilitate social change or bring about a value-oriented political-social goal; and

3) *Social impact assessment* – one that documents the likely consequences for various areas of social life if a major new change is introduced into a community.

4.2.5 Type of Research Relevant to the Present Study

The most appropriate type of research for this study is *applied research* and the most relevant type of applied research in this case is *evaluation research*. This is because the study tries to evaluate how well the policies and processes in relation to the MD interventions in the PNG public sector organisations are working or reaching their goals and objectives. The real-world problem pertaining to the effectiveness of MD programs in SHRD of executives in the PNGPS is evident. As well as just identifying the deficiencies and gaps and discussing new ideas, theories and programs were developed with a view to offering suggestions on MD in the PNGPS.

This study was an evaluation research and therefore a better understanding of its purpose is necessary. Clarke (2005, p. 1) asserts that the term ‘evaluation’ is used in a myriad of contexts, settings and circumstances. It can be described as an ‘elastic word’ that stretches to cover ‘judgments of many kinds’. The literature is replete with definitions of evaluation, of which the following are examples:

Evaluation research according to Hessler (1992) fits on a continuum between, at the one end, pure basic research, and at the other, social action. While social action and basic research are inherently incompatible, evaluation research is closer to social action than it is to basic research. Evaluators strive for the best of basic research, that is, carefully designed valid and reliable research, and the best of applied research where research findings ought to really make some impact or difference in the society (Hessler, 1992, p. 302).
Such research is inevitably value laden, making judgments about how well objectives are met. For Weiss (1972), the purpose of evaluation research is defined as follows:

… to measure the effects of a program against the goals it sets out to accomplish as a means of contributing to subsequent decision making about the program and improving future programming (Weiss, 1972, p. 4).

4.2.5.1 Basic Types of Evaluation

Scriven (1967) identifies the two types of evaluation, formative and summative. This dichotomy was eventually applied to program evaluation in general. Formative evaluation is done to provide feedback to people who are trying to improve something. It refers to a particular type of evaluation activity, in which the primary objective is to support the process of improvement (1991, p. 20). Consequently, in a formative study, the emphasis is on identifying the strengths and weaknesses of a program or intervention. In contrast, summative evaluation is primarily concerned with determining the effectiveness of a treatment or planned intervention (Patton, 1987, p. 66). Such evaluations are usually commissioned by policymakers and funders to help them to reach decisions on the future of a particular project. Patton (1987, p. 66) continues to observe that summative evaluations tend to be conclusion-oriented whereas formative evaluations tend to be action oriented.

The stakeholders or funders include all the government departments or agencies, the public servants, policy makers in the public service, the politicians, the people of PNG, the scholars and the funding agencies who sponsor the programs under development aid, especially AusAid. All of these stakeholders, particularly the Governments of PNG (the host country) and Australia (the donor country) may require different things from this evaluation study. The Government of Australia is specifically mentioned here due to its active involvement in funding and supporting of most of the capacity building activities for MD in the PNG Public Service. Therefore, any information or findings provided must conform to the expectations of the different stakeholders.

Due to the gap in the literature on MD effectiveness in public sector organisations in PNG, this study not only offers practical solutions to the policy makers but also creates new knowledge. Having explained the intent of this study and the features, it can be seen that the types of evaluation in the present study are both formative and summative.
The type and purpose of research for this study has been identified. The next step is to select an appropriate philosophy of science and a logic of inquiry.

4.3: **Paradigms in Social Research**

The chosen philosophy of science and the logic of inquiry contribute to a paradigmatic choice which empowers and constrains the ongoing research effort, its reporting and its subsequent use.

4.3.1 **Paradigms and Knowledge Claims**

Kuhn (1962, p. 23) regards a paradigm as an accepted model or pattern, as an organising structure, a deeper philosophical position relating to the nature of social phenomena and social structures. This use of the term relates it directly to research, as an epistemological stance. In this sense, a paradigm directs research efforts; it serves to reassert itself to the exclusion of other paradigms and to articulate the theories it has already established (Kuhn, 1962, p. 24).

‘Paradigm’ as used here embodies a combination of philosophy of science and logic of inquiry. Hallebone and Priest (2009, p. 32) contend that this is rather different from the normal use of paradigm and that it refers only to the philosophy of science. This definition is used because the specification of a logic of inquiry in the context of the philosophy of science is the most compact choice that determines highly distinctive and practical aspects of a study.

Paradigms therefore serve as general organising frameworks for theory and research that include basic assumptions, key issues, models of quality research, and methods for seeking answers (Neuman, 2006). However, paradigms can also involve difficulties because we tend to take it for granted that they are absolute and unquestioned. For instance, Marshall (2002, p. 17) argues that paradigms do have advantages and disadvantages.

An advantage is that they prevent scientists wasting time on problems they are not best equipped to solve. In this way they facilitate the benefits of specialisation. A disadvantage is that they blinker researchers to other valid ways of looking at the issues.
Creswell and Clark (2007) identify four worldviews or knowledge claims used in research: post positivism, constructivism or interpretivism, advocacy/participatory, and pragmatism which are summarised in Table 4.3.

Today, a multiplicity of paradigms exist, ranging from positivism at one extreme to interpretivism at the other extreme. Kuhn (1962) is credited with coining the term ‘paradigm’ and also with inspiring the notion of incommensurability between paradigms, which fundamentally implies that different paradigms cannot and should not be mixed. The reasons for this are their opposing and incompatible ontological assumptions and beliefs. Ontology is concerned with the nature of reality; is there one truth or multiple realities? Epistemologically, can a researcher be an independent observer or is he/she fundamentally integrated into the subject of investigation? Regarding axiology, should the beliefs of the researcher be removed from the research or are these values inherent in every decision in the research process?

The positivist paradigm can be described as the paradigm adopted in the first wave of social science research (Johnson & Onwuegbuzie, 2004). It is underpinned by the belief that there is a singular universal truth, tested and proved by rigorous scientific means – quantitative methodologists. This ubiquitous philosophy was first opposed in the 19th century by philosophers such as Kierkegaard, Nietzsche and Heidegger (Jackson, 1996). The interpretivism that they proposed has since been part of the second wave of social science research. Interpretivists question the inflexible faith of their positivist contemporaries in relationality and in the ability of defining, circumscribing, and knowing the truth (Jackson, 1996). They advocate the use of qualitative methodologies. Ultimately, it was not until the late 20th century that interpretivism and the qualitative methods with which it is associated began to appear in the research methodology textbooks (Onwuegbuzie & Leech, 2005b). The clash between positivism and interpretivism has been labeled as the ‘paradigm wars’ and still endures today. With positivists on one side and interpretivists on the other, only in the social and behavioural sciences are the merits of both research paradigms so vehemently debated (Sechrest & Sidana, 1995).

A third wave in social sciences has led to the pragmatism paradigm (Johnson & Onwuegbuzie, 2004). Howe (1988) first noted the emergence of pragmatism in social science research, but it has its roots in the postmodernist ideals of Lyotard (1979). Postmodernism is now rooted in the social sciences (Ritzer, 2004), and through the pragmatist paradigm it attacks the concept of absolute truth advocated by the positivist
movement. Where positivists claim that the essence of science is objective verification and that their methods are objective, they actually disregard the fact that many research decisions are made throughout the research process that precede objective verification decisions (Onwuegbuzie, 2002). All research starts with a foundation of the researcher’s paradigm and pre-understanding, and these are mainly qualitative assumptions representing our interpretation of the world (Gummesson, 2005). What is clear is that subjectivity + objectivity = subjectivity (Onwuegbuzie, 2000a).

Heisenberg’s principle reinforces this point, ensuring that positivist scientists are well aware of the fact that they are not independent of a world that cannot be fully predicted (Cupchik, 2001). Gummesson (2005, p. 316) substantiates this point by stating that “even a questionnaire instrument can be handled rigorously but will still give rise to judgment calls and interpretation”. Conversely, pragmatism also recognises that interpretive research is in need of some scientific rigor (Onwuegbuzie & Leech, 2005a). Interpretivists’ claims that multiple, contradictory, yet valid accounts of the same phenomenon always exist, is extremely misleading and can lead to an “anything goes, relativist attitude” (Onwuegbuzie & Leech, 2005a, p. 378).

Ultimately, pragmatists ascribe to the philosophy that the research question should drive the methods used (Onwuegbuzie & Leech, 2005a). Pragmatism advocates a mixing of paradigms, combining the complementary outlooks of positivism and interpretivism and rejecting Kuhn’s (1970) notion of incommensurability. Even Kuhn’s position on incommensurability is unclear because he asserts that no one paradigm can achieve ultimate understanding (Kuhn, 1970). Pragmatists hold that the research objectives drive the methodological decisions (Tashakkori & Teddlie, 2003).

Table 4.3 summarises these common elements, the different worldviews, and how the elements and worldviews are translated into practice.
Table 4.3  Common Elements of Worldviews and Implications for Practice

<table>
<thead>
<tr>
<th>Worldview Element</th>
<th>Postpositivism</th>
<th>Constructivism</th>
<th>Advocacy and Participatory</th>
<th>Pragmatism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology (What is the nature of reality?)</td>
<td>Singular reality (e.g., researchers reject or fail to reject hypothesis)</td>
<td>Multiple realities (e.g., researchers provide quotes to illustrate different perspectives)</td>
<td>Political reality (e.g., findings are negotiated with participants)</td>
<td>Singular and multiple realities (e.g., researchers test hypotheses and provide multiple perspectives)</td>
</tr>
<tr>
<td>Epistemology (What is the relationship between the researcher and that being researched?)</td>
<td>Distance and impartiality (e.g., researchers objectively collect data on instruments)</td>
<td>Closeness (e.g., researchers visit participants at their sites to collect data)</td>
<td>Collaboration (e.g., researchers actively involve participants as collaborators)</td>
<td>Practicality (e.g., researchers collect data by “what works” to address research question)</td>
</tr>
<tr>
<td>Axiology (What is the role of values?)</td>
<td>Unbiased (e.g., researchers use checks to eliminate bias)</td>
<td>Biased (e.g., researchers actively talk about their biases and interpretations)</td>
<td>Biased and negotiated (e.g., researchers negotiate with participants about interpretations)</td>
<td>Multiple stances (e.g., researchers include both biased and unbiased perspectives)</td>
</tr>
<tr>
<td>Methodology (What is the process of research?)</td>
<td>Deductive (e.g., researchers test an a priori theory)</td>
<td>Inductive (e.g., researchers start with participants’ views and build “up” to patterns, theories, and generalisations)</td>
<td>Participatory (e.g., researchers involve participants in all stages of the research and engage in cyclical reviews of results)</td>
<td>Combining (e.g., researchers collect both quantitative and qualitative data and mix them)</td>
</tr>
<tr>
<td>Rhetoric (What is the language of research?)</td>
<td>Formal style (e.g., researchers use agreed-on definitions of variables)</td>
<td>Informal style (e.g., researchers write in a literary, informal style)</td>
<td>Advocacy and change (e.g., researchers use language that will help bring about change and advocate for participants)</td>
<td>Formal or informal (e.g., researchers may employ both formal and informal styles of writing)</td>
</tr>
</tbody>
</table>


4.3.2 The Paradigm Adopted for this Study

Different paradigms have their own preferred methods and theories. Discussion on the mixed-methods research approach as well as a justification for its usage are given in the following sections. However, the most preferred ontological position applied in this study is pragmatism.

Pragmatism is the overarching paradigm for mixed methods because it is typically associated with mixed methods research in that inquirers draw liberally from both quantitative and qualitative assumptions when they engage in their research. It involves multiple methods of data collection that inform the problems under study, are problem-centred and are real-world practice oriented. Pragmatism as a research paradigm supports
the use of a mix of different research methods as well as different modes of analysis and a
continuous cycle of abductive reasoning as will be discussed in Section 4.3.4, while being
guided primarily by the researcher’s desire to produce socially useful knowledge.
Pragmatism can serve as a rationale for formal research design as well as for a more
grounded approach to research. Moreover, Tashakkori and Teddlie (2009, p. 87) who state
the approach most commonly associated with mixed methods research, although clearly not
the only one, is pragmatism, which offers an alternative worldview to those of
positivism/postpositivism and focuses on the problem to be researched and the consequences
of the research.

As an alternative paradigm, pragmatism sidesteps the contentious issues of truth and reality,
accepts, philosophically, that there are singular and multiple realities that are open to
empirical inquiry and orients itself toward solving practical problems in the “real world”
(Cresswell & Plano Clark, 2007, p. 20-28). Due to this, pragmatism allows the researcher
to be free of the mental and practical constraints imposed by the “forced choice dichotomy
between postpositivism and constructivism (Creswell & Plano Clark, 2007, p. 27), and in
Robson’s (1993, p. 291) words, researchers do not have to “be the prisoner of a particular
research method or technique”.

Howe (1988) argues that pragmatism appears to be the best paradigm for justifying the use
of mixed method and mixed model studies for the following reasons:

(a) it gives us a paradigm that philosophically embraces the use of mixed methods and
a mixed model design,

(b) it eschews the use of metaphysical concepts (such as truth and reality) that have
caused much endless (and often useless) discussion and debate, and

(c) it presents a very practical and applied research philosophy of: Study what interests
and it is of value to you, study it in the different ways that you deem appropriate, and
use the results in ways that can bring about positive consequences within your value
system.

It was possible in this research for paradigms and worldviews to be mixed or merged due to
the nature of this research wherein both qualitative and quantitative approaches are used for
data collection and data analysis. This was consistent with the current line of thinking which
suggests that multiple paradigms can be used in a study. In particular, the “dialectical
position” advanced by Greene and Caracelli (1997, Creswell & Clark, 2007) who saw value in using multiple paradigms and recommended that researchers be explicit about and honour the paradigm stances in their research. In this case, a constructivism/interpretivism paradigm was used to support a pragmatist worldview. Constructivists/interpretivists assume that reality is constructed and arises out of social interaction, and that it supports qualitative research, that there is not a single reality but many realities, and considers other realities which are of equal importance. Hence, this research involved multiple participants to collect data, and to gauge different views of what really is going on in the public service of PNG. In-depth interviews and document analysis, all of which are qualitative data collection methods, were used in this study.

The goal of constructivism is to rely as much as possible on the participants’ views of the situation being studied. Hence, an understanding of different participants’ views, multiple participant meanings, social and historical construction, and theory generation relate to the goal of constructivism. On the other hand, postpositivism, which is associated with a quantitative approach, cannot be ruled out despite the usage of survey questionnaire being the only quantitative data collection method.

4.3.3 The Role of Theory and Data in Research

Hallebone and Priest (2009, p. 199) describe theory as a statement (which may or may not have been tested) that concerns ideas or concepts and their relationship(s) as well as tentative conjectures about the world, about human behaviour or knowledge, about an organisation or about some aspect of such entities. A theory typically includes some form of cause and effect relationship(s) between ideas or concepts which may themselves be expressed as variables.

According to Gilbert (1993), the three major ingredients in social research are:

- the construction of theory, the collection of data and, no less important, the design of methods for gathering data. All of them have to be right if the research is to yield interesting results (Gilbert, 1993, p. 18).

Theory is often an answer to the question ‘Why?’. A theory provides an answer to puzzling questions because it links together different elements in a causal process to produce a more general explanation of the particulars that have been observed. The ‘why’ question can be posed by the client organisation or the researcher at the initial discussion about the research.
Theory is a set of interrelated propositions that are used to make sense of the social world in which we live. In the scientific sense, a theory is two or more interrelated hypotheses that have been supported by evidence. A theory is also different from a law, for a theory explains or can predict something in a proportion of cases, but a law explains something in every case. Marshall (2002, p. 16) categorises theories as strong and weak.

- Strong theories may be used for predictions.
- Weak theories are only sufficient for explanation.

The strongest theories will be expressed in quantitative, rather than qualitative terms. The development of scientific knowledge progresses by focusing initially on facts or theories.

4.3.4 Chain of Reasoning in Research

A study’s reasoning and logic of inquiry reflect the deliberate choice of reasoning paths and associated forms of reasoning such as: deduction, induction and abduction. Deduction and Induction differ in their directions in conducting research which are explained below (Trochim, 2006):

a) **Deductive approach: theory testing (abstract-concrete):** Deductive reasoning works from the more general to the more specific, sometimes referred to as a “top-down” approach. That is, it begins with a theory related to the research area, followed by setting of hypotheses that can be tested and observations obtained by collecting data and finally the hypotheses are tested with specific data to confirm or refute the original theories.

b) **Inductive approach: theory building (concrete-abstract):** Inductive reasoning takes a different approach and direction in that it moves in an opposite direction from specific observations to broader generalisations and theories. It is sometimes referred to as a “bottom-up” approach.

The third method is abductive or abduction reasoning. Beyond deduction and induction, abductive approach is used to create explanatory critiques.

c) **Abductive approach:** Instead of beginning with many observations, or starting with a theoretical premise, abduction “tries on” a potential rule and asks, What might follow from this rule? Both ideas and observations are placed into alternative frames and then examined, and the “what if” question is asked. A researcher using abduction applies and
evaluates the efficacy of multiple frameworks sequentially, and creatively recontextualises or redescribes both data and ideas in the process. Thus, abduction means repeated re-evaluations of ideas and data based on applying alternative rules or schemes and learning from each other (Neuman, 2006).

This study chose to use pragmatism as the preferred paradigm because the pragmatic approach relies on abductive reasoning that moves back and forth between induction and deduction – first converting observations into theories and then assessing those theories through action. Abductive reasoning is relevant for this study which adopts the mixed methods approach, and uses both qualitative and quantitative approaches sequentially, particularly where the inductive results from a qualitative approach can serve as inputs to the deductive goals of a quantitative approach, and vice versa (Morgan, 2007; cited in Clark & Creswell, 2008). Using qualitative and quantitative approaches sequentially means one type of data (e.g. qualitative), provides a basis for the collection of another (e.g. quantitative). It answers one type of question (qualitative or quantitative) by collecting and analysing two types of data. A non-linear path was followed as the researcher worked between the different participants with great flexibility going back and forth to confirm data or when new situations arose.

Morgan (2007, in Clark and Creswell, 2008, p. 58) proposes an organising framework for understanding what the pragmatic approach can offer social science methodology as illustrated in Table 4.4 below.

<table>
<thead>
<tr>
<th></th>
<th>Qualitative Approach</th>
<th>Quantitative Approach</th>
<th>Pragmatic Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection of theory and data</td>
<td>Induction</td>
<td>Deduction</td>
<td>Abductive</td>
</tr>
<tr>
<td>Relationship to research process</td>
<td>Subjectivity</td>
<td>Objectivity</td>
<td>Intersubjectivity</td>
</tr>
<tr>
<td>Inference from data</td>
<td>Context</td>
<td>Generality</td>
<td>Transferability</td>
</tr>
</tbody>
</table>


The level of analysis in this theoretical framework involved all three levels: the micro level (individuals executives who have different professional backgrounds such as accountants, lawyers, economists, and doctors, who interact on the same level or seniority within the agency), the meso level (the network of CEOs and departmental heads from all agencies) and the macro level which is the key central agency or the public service as a whole.
Once the research paradigm and logic of reasoning were established, a research design was developed to follow a path from the topical question to its answer or outcome in a way that was consistent theoretically and practically with the research paradigm. However, before justifying the research methodology adopted for this study, it is necessary to be aware of what is available in the “tool kit” for researchers in the social science field of management science, business, administration and related fields.

4.4: The Research Design and Plan

Research design can be defined as the structure of the research project to solve a particular problem. It can be thought of as the road map for researchers. It is the means by which investigators plan the collection of data to answer a pertinent research question. Its primary purpose is to guide researchers in their quest to solve problems under study. The design process can be thought of as a series of decisions: what concepts will be studied, how these concepts will be measured, who will be studied, how the data will be collected and analysed, and, ultimately, how the information that was collected will be presented to solve the problem (Davis, 2005, p. 134).

4.4.1 Approaches to Research

As discussed earlier, knowledge claims, strategies and methods all contribute to a research approach. The three main approaches to research are: the quantitative approach, the qualitative approach and the mixed methods approach. Creswell (2009, p. 15) defines and clarifies these approaches below:

1) A quantitative approach: is one in which the investigator primarily uses postpositivist claims for developing knowledge (that is, cause and effect thinking, reduction to specific variables and hypotheses and questions, the use of measurement and observation, and the testing of theories), employs strategies of inquiry such as experiments and surveys, and collects data on predetermined instruments that yield statistical data.

Gall, Gall and Borg (2003, cited in Mertens, 2005) focus on education and psychology research and evaluation, and assert that quantitative research is rooted in a postpositivist paradigm which holds that the purpose of research is to develop confidence that a particular knowledge claim about an educational or psychological phenomenon is true or false by collecting evidence in the form of relevant phenomena. They contend that
A research design can be defined as a process of creating an empirical test to support or refute a knowledge claim. According to them, two tests of knowledge claims exist in the positivist paradigm: (a) Is the knowledge claim true in this situation (does it have internal validity)? (b) Is the knowledge claim true in other situations (does it have external validity or generalisability)?

2) A qualitative approach: is one in which the inquirer often makes knowledge claims based primarily on constructivist perspectives (that is, the multiple meanings of individual experiences, meanings socially and historically constructed, with an intent of developing a theory or pattern) or advocacy/participatory perspectives (that is political, issue-oriented, collaborative, or change oriented) or both. It also uses strategies of inquiry such as narratives, phenomenologies, ethnographies, grounded theory studies, or case studies. The researcher collects open-ended, emerging data with the primary intent of developing themes from the data.

A more generic and recent definition of qualitative research is that offered by Denzin and Lincoln (2008). They describe qualitative research as that situated activity that locates the observer in the world. It consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them.

3) A mixed methods approach: is one in which the researcher tends to base knowledge claims on pragmatic grounds (consequence oriented, problem-oriented, and pluralistic). It employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems. The data collection also involves gathering numeric information (for example, using instruments) as well as text information (for example using interviews) so that the final database represents both quantitative and qualitative information.

Denzin and Lincoln (2008) describe mixed-method designs as direct descendants of classical experimentalism. They presume a methodological hierarchy in which quantitative methods are at the top and qualitative methods are relegated to ‘a largely
auxiliary role in pursuit of the technocratic aim of accumulating knowledge of “what works”.

The mixed methods research approach is described by Creswell and Clark (2007) as:

… a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone.

The three research approaches are further explained in Table 4.5 below.

| Table 4.5 | Qualitative, Quantitative and Mixed Methods Approaches |
|---|---|---|---|
| **Tend to or Typically** | Qualitative Approaches | Quantitative Approaches | Mixed Methods Approaches |
| Use these philosophical assumptions | Constructivist/Advocacy/Participatory knowledge claims | Postpositivist knowledge claims | Pragmatic knowledge claims |
| Employ these strategies of inquiry | Phenomenology, grounded theory, ethnography, case study, and narrative | Surveys and experiments | Sequential, concurrent, and transformative |
| **Employ these methods** | Open-ended questions, emerging approaches, text or image data | Closed-ended questions, predetermined approaches, numeric data | Both open- and closed-ended questions, both emerging and predetermined approaches, and both quantitative and qualitative data and analysis |
| **Use these practices of research, as the researcher** | Positions himself or herself | Tests or verifies theories or explanations | Collects both quantitative and qualitative data |
| | Collects participant meanings | Identifies variables to study | Develops a rationale for mixing |
| | Focuses on a single concept or phenomenon | Relates variables in questions or hypotheses | Integrates the data at different stages of inquiry |
| | Brings personal values into the study | Uses standards of validity and reliability | Presents visual pictures of the procedures in the study |
| | Studies the context or setting of participants | Observes and measures information numerically | Employs the practices of both qualitative and quantitative research |
| | Validates the accuracy of findings | Uses unbiased approaches | |
| | Makes interpretations of the data | Employs statistical procedures | |
| | Creates an agenda for change or reform | | |
| | Collaborates with the participants | | |

*Source: Creswell, 2009, ‘Research Design: Qualitative, Quantitative & Mixed Methods Approaches’, p. 17*
In the mixed methods approach, data can be collected sequentially or concurrently and will vary depending on the type of mixed methods design adopted. In concurrent data collection, the quantitative and qualitative data are collected at roughly the same time, as in the case of Triangulation and Embedded Designs. However, in sequential data collection, the quantitative (or qualitative) data is collected first, and the results inform the second (qualitative or quantitative) form of data collection, as in the Explanatory, Exploratory, and Embedded Designs. When data are collected concurrently, the two forms of data are independent of each other but when collected sequentially, the two forms of data are connected or related (Creswell and Clark, 2007, p. 116).

Sequential exploratory design has two common variants: the instrument development model and the taxonomy development model (Creswell and Plano Clark, 2007). Each of these models begins with an initial qualitative phase and ends with a quantitative phase, and they differ in the way the researcher connects the two phases and in the relative emphasis of the two methods. The instrument development model is used when the researcher needs to develop and implement a quantitative instrument based on qualitative findings. As for the taxonomy development model, the initial qualitative phase is conducted to identify important variables, develop a taxonomy or classification system, or develop an emergent theory, and the secondary, quantitative phase tests or studies these results in more detail (Morgan, 1998; Tashakkori & Teddlie, 1998).

Two important research tools are used in reviewing the studies in mixed methods research. These tools are a notation system and visual diagrams for describing the procedures, methods and products of mixed methods studies. For instance, the notion system first used by Morse (1991) uses (+) to indicate methods that occur at the same time and arrows (→) to indicate methods that occur in a sequence. Parentheses are used to indicate methods that are embedded within other methods (Plano Clark, 2005). The primary method is indicated with uppercase letters (i.e. QUAN or QUAL) and the secondary method with lowercase letters (quan or qual). The shorthand “quan” and “qual” is used to illustrate the equal stature of the two methods.

Synthesising the various typologies that arise from reviews of existing mixed methods research, it was revealed that a diversity of ways are used by the social researchers who use mixed methods (Bryman, 2006; Greene et al., 1989; Rocco, Bliss, Gallagher, & Perez-Prado, 2003, with Collins et al. (2006, p. 78-79) identifying four broad rationales and 65 specific purposes existing within the extensive range of mixed methods research that they reviewed.
For instance: (a) some researchers use mixed methods to improve the accuracy of their data; (b) others use mixed methods to produce a more complete picture by combining information from complementary kinds of data or sources; (c) it is sometimes used as a means of avoiding biases intrinsic to single-method approaches – as a way of compensating specific strengths and weaknesses associated with particular methods; (d) it has been used as a way of developing the analysis and building on initial findings using contrasting kinds of data or methods; and (e) it is used as an aid to sampling with, for example, questionnaires being used to screen potential participants for inclusion in an interview program.

4.4.2 Methods of Data Collection

The purpose of data collection is to learn something about people or things.

4.4.2.1 Data collection methods in quantitative and qualitative approach

Methods of data collection in qualitative research include: observation, interviewing, focus groups, ethnography, case study, action research, grounded theory and critical theory. For quantitative research, the main data collection methods are survey questionnaire and experiment or observation. All methods have their advantages and challenges or limitations as seen in Table 4.6 below.

<table>
<thead>
<tr>
<th>Method</th>
<th>Overall Purpose</th>
<th>Advantages</th>
<th>Challenges</th>
</tr>
</thead>
</table>
| Questionnaires, surveys, checklists | When you need to quickly and/or easily get lots of information from people in a non-threatening way | • Can complete anonymously  
• Inexpensive to administer  
• Easy to compare and analyse  
• Administer to many people  
• Can get lots of data  
• Many sample questionnaires already exist | • Might not get careful feedback  
• Wording can bias client’s responses  
• Are impersonal  
• In surveys, may need sampling expert  
• Does not get full story |
| Interviews | When you want to fully understand someone’s impressions or experiences, or learn more about their answers to questionnaires | • Get full range and depth of information  
• Develops relationships with client  
• Can be flexible with client | • Can take much time  
• Can be hard to analyse and compare  
• Can be costly  
• Interviewer can bias client’s responses |
### Table 4.6 Overview of Methods to Collect Information/Data (Cont.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
<th>Pros</th>
<th>Cons</th>
</tr>
</thead>
</table>
| Documentation review | When you want an impression of how a program operates without interrupting the program. Comes from a review applications, finances, memos, minutes etc. | - Get comprehensive and historical information  
- Does not interrupt program or client’s routine in program  
- Information already exists  
- Few biases about information | - Often takes much time  
- Information may be incomplete  
- Need to be quite clear about what looking for  
- Not flexible means to get data, data restricted to what already exists |
| Observation          | To gather accurate information about how a program actually operates, particularly about processes | - View operations of a program as they are actually occurring  
- Can adapt to events as they occur | - Can be difficult to interpret seen behaviours  
- Can be complex to categorise observations  
- Can influence behaviours of program participants  
- Can be expensive |
| Focus Groups         | To explore a topic in depth through group discussion (e.g., about reactions to an experience or suggestion, understanding common complaints, etc); useful in evaluation and marketing | - Quickly and reliably get common impressions  
- Can be efficient way to get much range and depth of information in short time  
- Can convey key information about programs | - Can be hard to analyse responses  
- Need good facilitator for safety and closure  
- Difficult to schedule a large number of people together |
| Case Studies         | To fully understand or depict a client’s experiences in a program and to conduct comprehensive examination through cross-comparison of cases | - Fully depicts client’s experience in program input, process and results  
- Powerful means to portray program to outsiders | - Usually quite time-consuming to collect, organise and describe  
- Represents depth of information, rather than breadth |


#### 4.4.2.2 Data collection methods in mixed methods approach

There are no specific data collection methods in mixed methods research because it involves and relies on collection of data from qualitative and quantitative research. Data collection procedures will depend very much on the type of design adopted as briefly discussed in the preceding sections. The data collection methods listed above in Table 4.6 are applied in mixed methods research.
4.4.3 Sampling

One main reason for sampling is that it is often not feasible to study all the people or things which have the qualities we are interested in. The funding may not be available for such a large operation and logistically, it might be difficult too. Another reason is that sampling is often more accurate than studying all the people, or things, in which we are interested.

Relying on the researcher’s own judgment as to whom to include in the sample is not the best way of ensuring representativeness, as this can introduce all kinds of unsuspected bias. Nor is a large sample size by itself any guarantee of its representativeness either. If the sample is biased in selection so that some groups are under-represented, then merely having more people in the sample will not correct that. Therefore, the best way of ensuring that the sample is representative of the population concerned is to use random methods of selection.

The basic distinction in sampling methods is between random or probability samples and purposive or non-probability samples. A random sample is one where each person or thing in a population has a known chance of being chosen. If a sample is not randomly selected it is called a purposive sample or non-probability sample. The common types of sampling under these two categories are discussed below.

4.4.3.1 Common Types of Sampling

The most common types of sampling are (Hall and Hall, 1996, p. 109):

i) Random/Probability

*Simple random sampling* – based on the use of chance in selection. Everyone in the population has the same chance of selection, and the choice is made objectively by random means.

*Cluster random sampling* – already formed groups of individuals within the population are selected as sampling units. Because the group is the unit of selection, a relatively large number of groups must be selected.

*Stratified random sampling* – used when the proportion of subgroups (strata) are known in the population; selection is random but from each of these strata.

*Multistage random sampling* – combines cluster sampling technique with others. First select clusters, then within each cluster select individuals randomly or with certain attributes similar to stratified samples.
ii) **Purposive/Non Probability Sampling**

*Quota sampling* – one in which the researcher first identifies general categories into which cases or people are selected, and then he or she selects cases to reach a predetermined number of cases in each category.

*Snowball or chain sampling* – where individuals are selected on the basis of information from other selected sample members or from other individuals. The process is repeated again and again. Because each new person has the potential to provide information regarding more than one other suitable case, the sample mushrooms as the study continues.

*Judgmental or purposive sampling* – one in which the researcher uses a wide range of methods to locate all possible cases of a highly specific and difficult-to-reach population. That is, it relies on the researcher to try to obtain as wide a representation of individuals as possible, taking account of likely sources of differences in their views and experience. This may be the only feasible method in certain circumstances, when access to the population is difficult or restricted.

*Accidental or convenience sampling* – sampling is done on the basis of availability and ease of data collection rather than in terms of suitability based on research objectives/questions. In other words, the researcher selects anyone he or she happens to come across or whoever happens to be around at the time. Persons meet at random, that is accidentally, do not comprise a random sample.

4.4.3.2 **Characteristics of Mixed Methods Sampling Techniques**

Tashakkori and Teddlie (2009, p. 180–181) present the characteristics of mixed methods (MM) sampling techniques, which are combinations of (or intermediate points between) the QUAN and QUAL traits. These are presented separately to focus on the particular characteristics of MM sampling. MM sampling strategies employ all of the probability and purposive techniques discussed earlier. The characteristics of MM sampling strategies are presented in Table 4.7.
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### Table 4.7  Characteristics of Mixed Methods Sampling Strategies

<table>
<thead>
<tr>
<th>Dimension of Contrast</th>
<th>Mixed Methods Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall purpose of sampling</td>
<td>Designed to generate a sample that will address research questions.</td>
</tr>
<tr>
<td>Issue of generalisability</td>
<td>Focus on external validity issues for some strands of a design; focus on transferability issues for other strands.</td>
</tr>
<tr>
<td>Number of techniques</td>
<td>All those employed by both probability and purposive sampling.</td>
</tr>
<tr>
<td>Rationale for selecting cases/units</td>
<td>Focus on representativeness for some strands of a design; focus on seeking out information-rich cases in other strands.</td>
</tr>
<tr>
<td>Sample size</td>
<td>Multiple samples varying in size from a small number of cases to a large number of units of analysis; sample size dependent on the research questions.</td>
</tr>
<tr>
<td>Depth/breadth of information per cases/unit</td>
<td>Focus on both depth and breadth of information across the research strands.</td>
</tr>
<tr>
<td>Time of sample selection</td>
<td>Mostly before a study starts, though QUAL-oriented questions may lead to the emergence of other samples during the study.</td>
</tr>
<tr>
<td>Selection method</td>
<td>Focus on expert judgment across the sampling decisions, especially because they interrelate with one another. Application of mathematical sampling formulae required for some QUAN-oriented strands.</td>
</tr>
<tr>
<td>Sampling frame</td>
<td>Both formal and informal frames.</td>
</tr>
<tr>
<td>Form data generated</td>
<td>Both numeric and narrative data.</td>
</tr>
</tbody>
</table>

**Source:** Adapted from Tashakkori and Teddlie 2009, Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences, Table 8.2, p. 181

Each type of sampling strategy has its advantages and disadvantages. Purposive samples can provide better descriptive data, while random samples are better if one is seeking to explain or predict something rather than describe its nature. Purposive samples tend to be used in the early stages of any branch of knowledge, for here the focus is on describing what later researchers will seek to explain (Marshall, 2002, p. 57).

#### 4.4.3.3 Types of Sampling used in this study

Several sampling designs were used for the qualitative interview and quantitative survey in the present study based on the types of sampling designs as outlined in Table 9.3 of Davis (2005, p. 239–240).

Random sampling was used for executives, who had an equal chance of being selected for the sample. Non-probability sampling was used on the CEOs and departmental heads in the top hierarchy of the structures, excluding the other levels or managers at supervisory level. The other two sampling methods which were very closely relevant were Stratified Random Sampling where sampling uses a population segregated into a number of mutually exclusive
sub-populations or strata (executives put into groups of national departments, provincial administrations, and statutory bodies), and Judgment Sampling where certain groups of people who are in a better position to provide the information are selected. In this case, the CEOs and departmental heads were in a better position to give information on organisational impact as a result of the MD interventions, as opposed to other divisional heads. In the case of the executives, it was very important that they were surveyed to give first-hand information on their status of SHRD, and in particular on MD interventions and how they contributed to capacity building of the public service, rather than getting the information from the central government agency that coordinates all T & D matters for the public sector.

4.4.4 Triangulation

Triangulation can be discussed in terms of the weaknesses of one method being offset by the strengths of another (Tashakkori & Teddlie, 1998). Denzin (1978) identifies four basic types of triangulation, which are:

- data triangulation (the use of variety of data sources);
- investigation triangulation (the use of several different researchers);
- theory triangulation (the use of multiple perspectives to interpret the results of a study); and
- methodological triangulation (the use of multiple methods to study a research problem).

His concept of triangulation involved combining data sources to study the same social phenomenon. Jick (1979) states that the benefits of triangulation can include increasing confidence in research data, creating innovative ways of understanding a phenomenon, revealing unique findings, challenging or integrating theories, and providing a clearer understanding of the problem.

Triangulation of participants leads to triangulation of findings. As Marshall (2002, p. 92) puts it, ‘We cannot begin to understand something until we have looked at it from several directions, or in several ways’.

Data was collected from different levels of participants. When there was any negative evidence, then the theory or problem was re-examined. Another way of validating qualitative findings is to present the report to the participants or subjects studied and ask them if the researcher has got it right (Marshall, 2002, p. 47).
Having presented what is available in the “tool kit” for researchers in the social science field of management science, business, administration and related fields, the next section will discuss and justify the research methodology and approaches adopted for this study.

### 4.5 Justification of the Methodology Adopted for this Study

With the earlier explanations and perspectives of different research approaches in mind, it can be concluded that all research is quantitative because anything can be counted – even purely verbal responses, perhaps after sorting comments into similar groups. On the other hand, all research is qualitative because answers to even the firmest numeric questions may conceal a variety of meanings. It may be claimed that there is no such thing as qualitative data – that is, that “everything is either 1 or 0” (Miles and Huberman, 1994, p. 40) that there is no such thing as quantitative data and that “all data are basically qualitative”.

The strengths and weaknesses of qualitative and quantitative research are a perennial, hot debate, especially in the social sciences. The issues invoke a classic ‘paradigm war’. The personal thinking style of the researcher and/or the culture of the organisation is under-recognised as a key factor in the choice of methods. Overly focusing on the debate of “qualitative versus quantitative” frames the methods in opposition. It is important to focus also on how the techniques can be integrated, such as in the mixed methods research. More good can come of social science researchers developing skills in both realms than in debating which method is superior. With this in mind, a suitable research approach can be identified.

#### 4.5.1 Adoption of a Suitable Research Approach for the Study

The present study adopted a mixed methods research approach in which quantitative and qualitative approaches are used in choosing the type of questions, research methods, data collection and analysis procedures and/or inferences.

The four major types of mixed methods design are: the Triangulation Design, the Embedded Design, the Explanatory Design, and the Exploratory Design which are briefly described below (Creswell and Clark, 2007, p. 62; Creswell, 2009, 14):

1. **Triangulation Design** – its purpose is to “to obtain different but complementary data on the same topic” to best understand the research problem (Morse, 1991, p. 122). The intent in using this design is to bring together the differing strengths and non-overlapping weaknesses of quantitative methods (large sample size, trends, generalisation) with those
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of qualitative methods (small N, details, in depth) (Patton, 1990). It is a one-phase design in which researchers implement the quantitative and qualitative methods during the same timeframe and with equal weight.

ii. Embedded Design – one in which one data set performs a supportive, secondary role in a study based primarily on the other data type (Creswell, Plano Clark et al., 2003). The premises of this design are that a single data set is not sufficient, that different questions need to be answered, and that each type of question requires different types of data.

iii. Explanatory Design – also known as Explanatory Sequential Design, is a two-phase design with the overall purpose that qualitative data helps explain or build upon initial quantitative results (Creswell, Plano Clark, et al., 2003).

iv. Exploratory Design – also known as the Exploratory Sequential Design, is a two-phase design with the overall purpose of enabling the results of the first method (qualitative) to help develop or inform the second method (quantitative) (Greene et al., 1989). This design is based on the premise that an exploration is needed for one of several reasons: measures or instruments are not available, the variables are unknown, or there is no guiding framework or theory.

A two-phase sequential exploratory mixed methods design was deemed appropriate for this study because the results of the first method (qualitative) helped develop or inform the second method (quantitative) (Greene et al., 1989). The data collection methods adopted were: in-depth interviews, questionnaire survey and document analysis. The two phases of two data collection will be discussed in detail in subsequent sections. This study started with the in-depth interviews which were qualitative, after which the survey questionnaire was developed which was quantitative. Hence, the Sequential Exploratory Design (QUAL→quan) was suitable for this study. The second, quantitative phase of the study was designed so that it followed from (or connected to) the results of the first qualitative phase.

Tashakkori & Teddlie (2006, 2009) suggest that mixed methods researchers can either select a pre-existent mixed methods design or develop a specific design to address the study’s particular objectives, purposes and research questions.

As discussed in Section 4.3.2, the pragmatist’s ethos of ‘what works’ (Howe, 1988) was applied to this study, which adopts a sequential mixed methods approach to data collection and analysis to best contend with the research objectives. Pragmatism involves cooperation.
and dialogue between paradigms and their associated ontological, epistemological and axiological assumptions; a process that becomes essential when the objectives of a study amount to both exploration and explanation (Creswell & Tashakkori, 2007b).

Debates about singular or universal truths or approaches to viewing the world (Socrates, Plato) versus multiple or relative truths (Sophists such as Protagoras and Gorgias) versus mixtures of the extremes (Aristotle’s ‘golden mean’) go at least back to ancient Western philosophy (Johnson, Onwuegbuzie & Turner, 2007, p. 113).

Mixed methods research can be positioned between the extremes of Plato (quantitative research) and the Sophists (qualitative research) (Johnson et al., 2007). In practice, quantitative and qualitative approaches can be combined because they share the goal of understanding the world in which we live (Haase & Myers, 1988). According to Sale, Lohfield and Brazil (2002), mixed methods research is being adopted uncritically by a new generation of researchers who are overlooking the underlying philosophical assumptions inherent in research. Pragmatism provides the underlying philosophical underpinning to mixed methods which allows researchers to combine empirical precision with descriptive precision and, therefore, arms them with a bifocal lens to zoom in to microscopic detail or to zoom out to indefinite scope (Willems and Rausch, 1969). Thus the macro and micro issues of a research issue can be combined (Onwuegbuzie & Leech, 2005a).

The mixed methods approach was selected for several reasons:

- The combination of both forms of data can provide the most complete analysis of the research issue. The researcher can situate numbers in the contexts and words of participants, and she can frame the words of participants with numbers, trends, and statistical results. Both forms of data are necessary.

- Qualitative research has evolved to a point where writers consider it a legitimate form of inquiry in the social and human sciences (Denzin & Lincoln, 2008).

- Quantitative researchers, on the other hand, recognise that qualitative data can play an important role in quantitative research.

- Qualitative researchers, in turn, realise that reporting only qualitative participant views of a few individuals may not permit generalising the findings to many individuals (Creswell
& Clark, 2007, p. 13). For example, using in-depth interviews alone does not permit
generalisation of the findings.

- Audiences such as policy makers in the PNG Public Service, the Government of PNG,
practitioners, other stakeholders or donors such as the Government of Australia who
provide assistance in any form of capacity building of executives, in applied areas need
multiple forms of evidence to document and inform this research problem. Hence, a call
for increased sophistication of evidence leads to a collection of both quantitative and
qualitative data.

Hence, it is the central premise of this study that the use of quantitative and qualitative
approaches in combination provides a better understanding of research problems than either
approach alone.

Greene, Caracelli and Graham (1989) propose additional rationales for mixed methods
research: development, complementarity, initiation and expansion. Development is where
the results of the quantitative phase of inquiry inform the qualitative phase or vice versa.
Complementarity is where each method enhances the qualities and findings of the other (Sale
et al., 2002). Initiation means that mixing quantitative and qualitative methods in data
collection and analyses facilitates iteration and flexibility in the research methods. Finally,
expansion infers that quantitative methods provide breadth in the study and qualitative
methods provide depth. The current study draws on these benefits as the justification for
adopting a mixed methods research design.

4.5.1.1 Type of MM Design Adopted for this Study

For this study, the instrument development model was appropriate. This design is based on
the premise that an exploration is needed for one of several reasons: measures or instruments
are not available, the variables are unknown, or there is no guiding framework or theory. As
this design begins qualitatively, it is best suited for exploring a phenomenon (Creswell, Plano
Clark, et al., 2003). Thus, this design was particularly useful because the researcher needed
to develop and test an instrument as there was none available, and to identify important
variables to study quantitatively as the variables were unknown. It was also appropriate
because the researcher wanted to generalise results to different groups. Because this design
began qualitatively, investigators would normally place priority on qualitative data.
However, this depends on the type of variant used in this design.
As mentioned above, there were no measures or instruments such as a survey questionnaire available. The variables were also difficult to identify. This was due largely to the gap in the literature where no other studies or research had been conducted on a similar topic as this study. The researcher first qualitatively explored the research topic with a few participants in in-depth interviews with twenty-one (21) CEOs and departmental heads in January 2009. The qualitative findings then guided the development of items and scales for a quantitative survey instrument such as the survey questionnaire for the 150 executives in September 2009. The survey questionnaire was implemented and validated quantitatively in the second data collection phase. The qualitative and quantitative methods were connected through the development of the instrument items.

A visual diagram of the two-phase sequential exploratory design using the Instrument Development Model is thus shown in Figure 4.2 below.

![Diagram](image)

**Figure 4.2:** Two-phase sequential exploratory design

**Source:** Adapted from Creswell and Clark, 2007, Figure 3.6, p. 53, modified and developed for this research.

### 4.5.3 Strengths and Challenges of Sequential Exploratory Design

i) **Strengths**

The Sequential Exploratory Design has strengths which make it appropriate for various reasons (Creswell & Plano Clark, 2007, p. 78). For instance, it is the most straightforward mixed methods designs. The two methods are conducted in two separate phases and one type of data is collected at a time. Single researchers can conduct this design without having to engage a research team. The final report can be written in two phases, making it...
straightforward to write and providing a clear delineation for readers. Although the design typically emphasises the qualitative aspect, the inclusion of a quantitative component can make the qualitative approach more acceptable to audiences who are biased towards quantitative data. Furthermore, the design lends itself to multiphase investigations, as well as to single mixed methods studies.

**ii) Challenges**

However, despite its straightforward collection and analysis of data, the Sequential Exploratory Design also has challenges. For instance, a large amount of time is required for implementation of the two phases. Researchers need to recognise that the qualitative phase (depending on the emphasis) may take more time than the quantitative phase, but that the qualitative phase can be limited to a few participants. In this study, there were few participants for the in-depth interviews. Still, adequate time had to be budgeted for the qualitative phase. The prolonged data collection and analysis within the two phases may also cause problems due to financial constraints, especially when data is collected in a foreign country. Therefore, the researcher must decide whether to use the same individuals for both phases, to use individuals from the same sample for both phases, or to draw participants from the same population for the two phases. Because this study involved different levels and units of analysis, the same individuals could not be used for the two phases. Rather, participants from the general universe such as the CEOs and departmental heads, also within the PNG Public Service, were involved for the second phase. It can be difficult to secure internal review board or the ethics committee approval, especially if the researcher cannot specify how participants will be selected for the second phase, or if instruments are not developed for the second phase until the initial findings are obtained. Therefore, it was important that the researcher clearly identified the participants for the two phases from the very beginning and drew up possible indicative questions to what were the likely responses or findings from the first phase for survey questionnaire. These could be modified following analysis of the CEO/departmental heads’ interviews in order to investigate issues that had not been thought of initially.
4.6  Data Collection Methods, Procedures & Analysis Adopted for this Study

Johnson and Turner (2003) note that the investigator’s selection of data methods reflects the fundamental principle of mixed methods: that the ‘methods should be mixed in a way that has complementary strengths and non-overlapping weaknesses’ (Johnson and Turner, 2003, p. 299). This approach allows the researcher to collect strategically multiple forms of evidence, such that the combination of methods presents convergent and divergent evidence, subsequently strengthening the findings of the mixed methods study (Johnson & Turner, 2003; Johnson & Christensen, 2008). In the present study, multiple forms of evidence were collected as depicted in Figure 4.3 and Figure 4.4 below.

Both primary and secondary sources of data were used for the study. Phase I used interview tools to elicit data from twenty-one (21) CEOs/departmental heads (Appendix 7 p. 272), while Phase II employed a self-completing questionnaire (Appendix 8 p. 274) to elicit data from 150 senior executives. Due to financial, logistical constraints and time limitations, data collection was only conducted in Port Moresby, National Capital District. Participants were selected from the national departments and statutory authorities and entities in Port Moresby, except for the Provincial Administrators who are located in their respective provinces. At the national level, there were at least three distinct groups of organisations, namely the central agencies, the line departments and the statutory bodies or semi-government bodies. Other sources of data collection were the literature review and document analysis of secondary data. Therefore, the research was undertaken in two sequential phases of empirical investigation. Each of the data collection phases is discussed further after presenting the data collection procedures.

Figure 4.3 shows the triangulation of qualitative and quantitative data as applied to each level of participant and data sources.
Two-phase Sequential Exploratory Mixed Methods – Triangulating qualitative and quantitative data

Secondary Sources

- Desk Study
  - Literature Review

Documents:
- Published and unpublished govt. reports
- Govt. Policy papers
- Acts of Parliaments & related legislative and executive instruments
- Reports by donor agencies

Primary Sources

Phase I - Qualitative
- Semi-structured Interviews:
  - With 21 key people – heads of targeted PS organisations

Phase II - Quantitative
- Questionnaire:
  - Administered on sampled 150 executives
  - Self-completion

Figure 4.3  Triangulation of qualitative and quantitative data and participants
Source: Developed for this research

Triangulating of qualitative and quantitative data as shown above resulted in triangulation of findings. Hence, findings are collected from multiple points as shown below in Fig. 4.4

Figure 4.4  Triangulation of findings
Source: Developed for this research
Triangulation was used throughout this study. There was triangulation of participants, methods, data and findings to establish trustworthiness and avoid biasness. The overall triangulation of data, participants and methods will ensure rigor and reliability.

The following sections will explain how two types of data – primary and secondary – were collected. It will begin with primary data collection then onto secondary data.

Figure 4.5 below shows the primary data collection procedures for various stages in this study. Based on Creswell and Clark’s (2007) data collection model, data collection in this research is conceptualised as having three stages. In the first stage, data was collected by interviewing the CEOs/departamental heads in PNG in their offices in January 2009. Once data from interviews was collected and analysed in Stage 1, decisions were made in Stage 2 about how the results were used to influence the Stage 3 data collection and analysis – the development and pilot-testing of the survey questionnaire. Stage 3 began the second data collection by implementing and analysing the survey questionnaire for the executives in PNG in September 2009. In this approach, the final Stage 3 data collection and results were built on the initial Stage 1 results. Thus, Stage 2 is inserted into the process between the two data collection stages. An approximate timeline for each stage is provided as a guide.

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-depth Interviews (CEOs/Departl. Heads)</td>
<td>Analyse data from interviews</td>
<td>How will Stage 1 results be used in Stage 3?</td>
</tr>
<tr>
<td>Timeline: 2 months</td>
<td></td>
<td>• Develop and pilot test the survey questionnaire</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Analyse data from survey questionnaire</td>
</tr>
<tr>
<td>Timeline: 5 months</td>
<td></td>
<td>Timeline: 4 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Timeline: 5 months</td>
</tr>
</tbody>
</table>

Figure 4.5  Primary data collection procedures
Source: Adapted from Creswell & Clark, 2007, Figure 6.2, p. 122, modified and developed for this research
4.6.1 Phase I – Qualitative in-depth interviews

The first phase of the research design assumed an exploratory role and utilised a qualitative approach (in-depth interviews) to obtain evidence relevant to the research questions and objectives (macro-level investigation). The aim was to scope the area of research and determine key issues that would provide a critical foundation for the next stage of the study (Creswell & Plano Clark, 2007). That is, it sought top executives’ views on MD effectiveness within their respective organisations with particular emphasis on MD interventions and their impact on the individuals and organisation. In other words, the intention was to assess whether these interventions were effective in contributing to capacity building of the executives, their organisation and the public service as a whole. The results and findings from the interviews helped develop the survey questionnaire implemented on executives in Phase II of data collection. Interview questions for the departmental heads/CEOs is attached as Appendix 7 (p. 274). Justification on the use of primary questions, details or parts of the interview protocol or instrument are discussed in Section 4.6.1.1.

In-depth interviews are useful for providing in-depth information through probing and interpretation (Tashakkori & Teddlie, 2009, p. 239). Verbal communication comprises the conversation between the researcher and the respondent and includes communicative elements such as pauses, tone of voice, and volume of speech (Clarke, 2001). Non-verbal communication comprises facial expressions, eye contact, body language and gesture, psychophysical responses (e.g. blushing, yawning), and emotions (Clarke, 2001). In a face-to-face setting, these ‘cues’ form an important part of the data collection process (Parameswaran, 2001). The other methods of conducting in-depth interviews such as telephone and email, make the awareness and recognition of these components more difficult (Scholl, Mulders and Drent, 2002). Therefore, the face-to-face settings helped to fulfill the raison d’être of the in-depth interviewing method; in-depth data collection, interpretation and analysis.

4.6.1.1 The interview protocol

The interview protocol was rigorous enough to ensure validity while also facilitating flexibility and encouraging respondent interaction (Patton, 2002). The review of literature on SHRD, more specifically on MD, helped inform the development of the interview questions which were reviewed by an expert panel of methodologists. The questions were designed to
help the interviewees express their views on MD, organisational support for MD and the impacts of MD interventions on the executives, the organisation and the PS. It involved questions about their own development experiences and perceptions of development opportunities currently available in the PNGPS, including on- and off-the-job development, short and long courses and donor-funded capacity building activities such as aid-funded study overseas.

The interview protocol comprised of three sections namely: Section A: Pre-program and general questions, Section B: Post-program questions and Section C: General comments. Section A questions required the participants to discuss what they thought of MD, the externally and internally organised interventions, and other pre-program activities. Section B questions were more directed towards the impact these interventions had on the individual, the organisation and the public service. Finally, Section C questions required the respondents to volunteer suggestions or give their comments on any improvement on policy and practice on SHRD of executives in the organisations and the public service. Because they were answers to open-ended questions, the responses given in Question 1 in fact covered responses relating to many other questions, particularly those in Section B.

The next section outlines the procedures followed in data analysis of the interviews as well as the schedule of interviews.

4.6.1.2 The interview process

As explained earlier, all interviews were executed in a face-to-face setting, which allowed for in-depth interpretation through the observation and recording of verbal and non-verbal communication. The in-depth interview process for this was executed over a two-month period. All interviews, except for three, were recorded using a hand-held digital recorder with the consent of the respondent, and lasted from 45 minutes to one hour and were conducted at venues chosen by the respondents. Appendix 15 (p. 308) shows the schedule of all interviews conducted.

4.6.1.3 Analysis of qualitative interviews

As illustrated in Figure 4.6 below, the process of data analysis involved the following six steps: developing the interview questions, conducting the interviews (tape recorded), transcribing the interviews (all done by the researcher), generating labels next to each line or paragraph with coloured highlighters, developing the general category schemes or codes
from labels, developing coding hierarchy (tree node), content analysing the themes and sub-themes to identify the interventions to MD effectiveness. Data from the interviews were transcribed and analysed using Glaser and Strauss’s (1967) method of constant comparison, Miles and Huberman’s (1994) suggestions for coding qualitative data and Strauss and Corbin’s (1990) coding hierarchy. The interviews generated two types of data: interviewer field notes and transcripts.

As explained above, all interviews were transcribed by the interviewer. Transcriptions were read to obtain an overall flavour of the interviewees’ responses. Next to each line or paragraph, labels were generated to reflect the initial coding and general category schemes were developed. Different coloured highlighters were used for this. The themes were arranged in hierarchical order as shown in Appendix 16 (p. 309). This involved thinking about what kinds of things were being coded and what questions were being answered, so that their relationship could be seen more clearly. By categorising the responses, the researcher could develop an understanding of participants’ view of the world, in this case the effectiveness of MD in the public sector organisations.

Questions were often followed by additional questions to probe for detailed explanations. However, this was not the case for all interviews. It was found that for many interviews,
there was no probing required at all as the interviewees knew exactly what the questions were alluding to and were well versed with the research topic. From observation, it appeared that this applied to a certain category of interviewees with similar educational background.

In circumstances where valuable comments were made after the recording had finished, the researcher made brief written notes, which were expanded after the interview. Interviewees were thanked for their time and participation at the beginning and end of the interviews. The researcher made an effort as much as possible to keep silent and listen actively to the interviewee. Where an interviewee struggled to respond to a question or did not respond immediately, the researcher focused on non-verbal cues. Member checks were done to confirm if the researcher got it right.

Categories and themes were content analysed and presented in tables. After content analysing the categories and themes, four themes emerged as factors or interventions that influence or contribute to MD effectiveness: organisational support, capabilities and requirements, HR policies and effective practices, and T & D. Two further variables: pre and post-program leadership skills and behaviour, were added on to the four interventions. These informed the development of the survey. Six hypotheses were developed and tested in the quantitative survey to be discussed in the proceeding section.

4.6.1.4 Sampling

The sample for the interviews was drawn from the chief executive officers and department heads of twenty-one (21) public sector organisations. Those classified as executives in this study included: the heads of the organisation known as the departmental heads or secretaries, chief executive officers or managing directors or equivalent designations, deputy secretaries/deputy CEOs, first assistant secretaries/directors, executive managers and assistant secretaries or deputy directors. These senior executives were chosen because they are in the top level of the management structure, and are involved with more strategic and conceptual matters with less attention to day-to-day details. They direct the management of the organisation or a major division/department of the organisation and set policies and goals, and have extensive discretionary decision-making authority.

An information letter (Appendix 9 p. 285) on SCU letterhead was initially sent to the chief executive officers and department heads to explain the purpose of the research and invite their organisations to participate in this research. It explained confidentiality, anonymity, the right not to participate, and the complaints process. The Human Research Ethics Committee
(HREC) approval number was stated. All letters were delivered personally by the researcher to the PS organisations in Port Moresby. Self-addressed envelopes were enclosed with the letter for return of their consent forms (Appendix 10 p. 288) which were also enclosed. Completed consent forms were either returned to the researcher by mail or collected by the researcher personally.

As explained earlier, due to financial, logistical and timing constraints, data collection for both phases in this study could not be conducted in the provinces. Other forms of communication such as email, the postal service and telephone calls are also not feasible due to many constraints and setbacks. Domestic air travel is expensive, the cost of telephone calls is also expensive, not every executive in the provinces has access to email and postal system is often slow. Therefore, all interviews were done with the heads of organisations in Port Moresby, the government headquarters and the capital of PNG.

Letters on SCU letterhead were sent to selected chief executive officers and department heads inviting them to participate in an interview. The invitation letter (Appendix 11 p. 290) explained the purpose of the research, confidentiality, anonymity, the right not to participate, and the complaints process. In this letter, permission was also sought for the use of a tape recorder to record the interviews, as well as a request for interview dates and times convenient to the participants and to specifically ask for details of their nominees, if they were not available. The HREC ethics approval number was stated. For the interviews, it was not necessary for an informed consent form as this was done with the first letter. Any follow-ups with the respondents were arranged through a combination of email and telephone communication between the researcher and the relevant respondents. All interviews were undertaken at venues chosen by the respondents.

Although there are no specific rules for sample size in qualitative enquiries, Patton (2002) and Creswell (1998, p. 113) recommend that 20–30 persons should be interviewed in order to achieve “data in the theory”. In this study, the researcher was able to conduct 21 interviews.

A profile of the participating organisations by organisation type and gender as well as by designations or tenures is presented in Tables 4.8 and 4.9 below.
Chapter 4: Methodology

Table 4.8  Summary of the participating organisations

<table>
<thead>
<tr>
<th>No. of participating organisations</th>
<th>Type of organisation</th>
<th>Gender of Interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National Department</td>
<td>Statutory Body/Authority</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>11</td>
</tr>
</tbody>
</table>

Table 4.9  Profile of participants’ designations or tenures

<table>
<thead>
<tr>
<th>Designation Category</th>
<th>National Departments</th>
<th>Statutory Body/Entities</th>
<th>Overall total of designations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Departmental Head/Secretary, Chief Executive Officer, Managing Director etc.</td>
<td>5</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Deputy Secretary, Deputy/Assistant CEO, Deputy Managing Director</td>
<td>4</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Executive Manager, HR Executives</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

The organisations represented all sectors of the government namely: administration, social, law and order, economic and infrastructure, and provincial.

4.6.1.5  Challenges Encountered in the Process

During Phase I data collection, the researcher encountered and experienced challenges, many of which were unforeseen circumstances beyond her control. Some examples of these are as follows:

Timeframe of the process: the process of data collection commenced in mid-January 2010 but there were delays in organisations consenting to participate due to the absence of the heads of organisations who were still on their breaks for the festive season, better known as the ‘shut-down period’. It is mandatory in the PNGPS that all staff take a weeks’ break during the Christmas and New Year festive season. Although there were caretaker staff on duty, most organisations preferred to leave the informed consent forms to be actioned by the incumbents of the positions or substantive office holders. In some cases, the resumption of duty by office holders was delayed, leading to delays in providing responses.

Reprinting and submission of research documents: this was due to organisations being unable to locate the research papers such as Information Sheets and Informed Consent Forms because they had displaced or misplaced their documents and then asking the researcher to provide reprints. For two organisations, reprints had to be given twice. This caused delays in their providing their responses or consent to participate.
Cancellation of scheduled interviews before interview due to work pressure and demand: this occurred in a few organisations who cancelled scheduled interviews at the very last minute due to work demands. This could not be helped because some of the work demands were unexpected and required that the participants complete the tasks on hand immediately.

Interruptions during interview due to urgent calls by top bureaucrats and politicians: this occurred when the interviews had already begun. Interviews had to be halted and postponed a few times because of urgent calls from the top bureaucrats (such as the Chief Secretary to the Government) and politicians (such as the Minister and Deputy Prime Minister) who required the attendance and presence of the participants immediately at their offices or at the Parliament House.

With these setbacks, the researcher tried in every possible way to reschedule appointments but it was not easy to switch or swap interviews with other organisations as all top executives had tight and busy schedules of work. Despite these problems, all interviews were completed on schedule.

4.6.2 Phase II – Quantitative Questionnaire Survey

The only quantitative method used was a questionnaire survey for the executives. Survey research by means of a self-completion questionnaire instrument was selected as the most appropriate approach to explore macro-level issues (Sale & Brazil, 2004). The quantitative research phase was theoretically conceptualised to ensure that the survey instrument was valid, reliable and inextricably linked to the research objectives (Morse, 1997). The main objective of the quantitative phase was to connect to or from the main findings from the in-depth interviews. The questionnaire survey method was adopted because it is inexpensive to administer, easy to compare and analyse, can be administered to many participants, can get lots of data.

4.6.2.1 The Survey Instrument – Questionnaire

The questionnaire used in this study consisted of four sections. The first section sought to collect demographic information. The second section comprised antecedent components which referred to pre-program information that was under the control of the organisation and the individual executives. The third section comprised post-program information which referred to activities that organisations must use in order to ensure that the new knowledge and skills acquired in MD were actually transferred to the workplace, more specifically it
related to the impact of the interventions on the executives. Sections two and three focused on what happened before and after learning occurs. The final section of the questionnaire consisted of open-ended questions in which the respondents were asked to provide comments and suggestions on improvement in policy and practice at micro and macro levels in the PNG public sector organisations. They were also asked to provide any additional information they believed was relevant to this study. The questions related to general information, or to pre-program and post-program responses. The results from this survey are presented in the same order as the questions in the questionnaire. The survey instrument is attached as Appendix 8 (p. 276).

4.6.2.2 Measurement Scales

Pre-existing scales were not available to measure the variables due to the gap in the literature, particularly in the context of MD interventions in the PNG public sector organisations. The themes and sub-themes or variables were developed from the qualitative interviews. Four main key themes which, with their corresponding sub-themes characterise factors to MD effectiveness, were recorded from the responses of the interviews. These themes were: 1) organisational support, 2) capabilities and requirements of the executives, 3) HR policies and effective practices, and 4) T & D. Depending on the nature of the questions, these themes were categorised as pre-program or post-program information. The scaling technique used was the Likert scale of 7, where the respondents indicated the amount of agreement or disagreement with a variety of statements about some attitude or statement. The Likert scale, frequently called the method of summated ratings, is a widely accepted and adopted technique, and is highly reliable (Davis, 2005, p. 212). The questionnaire had clear instructions on how to complete it, the aim of the research, the issue of anonymity and confidentiality. The three scales of measurement: nominal, ordinal (which are categorical) and scales (which is continuous), were used in this survey.

4.6.2.3 Data Entry

Prior to the analysis, the collected data were reviewed for accuracy of data entry and any missing responses. It was found that all data entries were within the possible range of 1 – 7 and there were no identifiable problems relating to outliers. The statistical tool SPSS v17.0 for Windows was used as well as MS Excel 2003, to perform exploratory and other statistical analysis of the collected data. MS Excel 2003 was used initially during data collection since the researcher had no access to the SPSS software program. Upon installation of the much-
needed SPSS v17.0 software, all data were re-entered in the data file using the new software program because the variable labels had to be modified to suit the program. SPSS v17.0 was used to measure reliability and validity of the dataset. As well as that, descriptive statistics was used. The software is a Window-based module and is user-friendly and is easy to use for the researchers. The validity of the data was measured with correlation whereas the reliability of the data was measured with Cronbach’s coefficient alpha.

4.6.2.4 Pilot Study

Both pilot study and pre-testing are required to refine the conceptual aspects of the research as well to ensure that questions are understood in the way intended by the researcher. In this research, the questionnaire was pilot tested qualitatively with a small sample group of ten (10) executives with characteristics similar to those of the intended group. They represented various public sector agencies and entities representing different executive levels, including a representative from the development partners or funders of MD programs. A profile of pilot participants has been given in Table 4.10 in Chapter 4.

It was pre-tested to overcome the inherent weaknesses related to respondents’ interpretations of the questions. The aim was to improve both construct validity and reliability. The objective of the pilot study was specifically for taking note of any ambiguous areas or unclear questions that may have become apparent in the process of filling out this questionnaire. More specifically, the participants’ comments and feedback on the following were sought: the length, layout, instructions, type of questions, repetition of questions, relevance, biased or ambiguous questions and gaps or questions that should have been asked. Their feedback was needed to re-draft the questionnaire to ensure that executives in the PNGPS were able to understand the questions asked. Space (in a shaded box) and lines were made available at the end of each section for comments and feedback on that particular section.

Pilot participants were given a draft questionnaire accompanied by a letter explaining the nature and purpose of the pilot-survey. The pilot survey together with the information letters were emailed to each participant and they were given up to three weeks to complete them and return them with their feedback. Any follow up or checking on the progress of this process was done via email or telephone calls. Upon completion, the respondents were asked to save the document and return the completed questionnaire with their comments and feedback to the researcher’s supervisor within the timeframe allowed to them. The return of the
completed pilot survey to the researcher’s supervisor ensured the anonymity of the respondents. The returned pilot surveys were downloaded and passed on to the researcher. The return of their completed survey response form implied their consent in this research project. The information letter to pilot participants is attached as Appendix 12 (p. 294) while the pilot survey is attached as Appendix 13 (p. 296).

The survey questionnaire was modified after receiving feedback from the pilot participants. A range of comments and suggestions were made by the pilot participants, some of which were: ambiguous questions, logical sequence of questions, order of questions on the 7-point Likert scale, questionnaire layout, and modify interviewer’s manual of instructions.

<table>
<thead>
<tr>
<th>Participant No.</th>
<th>Gender</th>
<th>Position/Title</th>
<th>Organisation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>Director</td>
<td>National Department</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>Managing Director</td>
<td>Statutory authority</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>Commissioner</td>
<td>National Department</td>
</tr>
<tr>
<td>4</td>
<td>Female</td>
<td>Advisor, Strategic Management</td>
<td>AusAid</td>
</tr>
<tr>
<td>5</td>
<td>Female</td>
<td>Deputy Secretary</td>
<td>National Department</td>
</tr>
<tr>
<td>6</td>
<td>Female</td>
<td>Deputy Director (Assistant Secretary)</td>
<td>National Department</td>
</tr>
<tr>
<td>7</td>
<td>Male</td>
<td>Managing Director</td>
<td>Statutory Authority</td>
</tr>
<tr>
<td>8</td>
<td>Female</td>
<td>Secretary</td>
<td>National Department</td>
</tr>
<tr>
<td>9</td>
<td>Male</td>
<td>Commissioner</td>
<td>Statutory authority</td>
</tr>
<tr>
<td>10</td>
<td>Male</td>
<td>Managing Director</td>
<td>Statutory authority</td>
</tr>
</tbody>
</table>

4.6.2.5 Challenges during pilot study

Several challenges were faced in the process, more specifically on following up the pilot study as the researcher was contacting the participants via email and telephone from Australia. When emails did not get responded to, the next option was to call them on telephone. Telephone charges from Australia to PNG are very high, despite the close proximity of the two countries, and so phone calls proved to be an expensive commodity and therefore other options were considered. The timeline allowed for this procedure had elapsed despite constant reminders. The researcher found that it was not only time consuming to conduct the pilot survey from a distance but was also expensive. Hence, she travelled back to PNG – to be physically present at the site where it was more convenient and easy access to the pilot participants. The responses were collected within two weeks.
4.6.2.6 The Final Study

There are about 30 national departments and agencies, 56 statutory bodies/entities and 20 provincial administrations including the national capital district as listed in the PNG Telephone Directory (2009, p. 146-172). Due to constraints explained in Phase I data collection, public sector executives in the provinces were excluded from the survey. Hence, the study focused on government agencies, statutory bodies and entities in Port Moresby, the national capital which is also the site of the central headquarters of all public sector organisations.

Due to the shortage of, or absence of data on manpower in PNG public sector organisations, data could only be accessed through the Alesco/Concept Government payroll. The 2009 figure from Alesco/Concept Government Payroll (DoF, 2009) showed that there are 81,081 public servants within the central government, provincial administrations and statutory bodies as of December, 2009. Out of this total figure, at least 1,948 were holding contracts on Grade 13 and above which could be classified as senior public servants or executives (ITD, Dept. of Finance, 2009). However, this did not portray the exact number of executives, as the contract officers in the PNGPS also includes those holding supervisory roles which are not classified as executives in this study. Therefore, although the exact number of senior executives was not known at this stage, it is estimated to be around 600 but for this study it would be less as the public sector executives in the provinces were excluded. Reasons for their exclusion are explained earlier.

A total of 300 paper questionnaires were distributed to the selected government agencies, statutory authorities and state entities representing the different sectors of the government. For protocol purposes, these were addressed specifically to the heads of the organisations before being distributed to the executives. Of these, 150 questionnaires were returned, representing a response rate of 50%. A summary of the respondents is shown in Table 4.11 below. Further details on the respondents will be discussed in Chapter 6.

<table>
<thead>
<tr>
<th>No. of Respondents</th>
<th>Gender of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>150</td>
<td>119</td>
</tr>
</tbody>
</table>
4.6.2.6 *Survey Administration*

All questionnaires were administered by mail and hand-delivered to all organisations personally. A letter explaining the study (highlighting necessary research protocols and caveats (Appendix 14 p. 307) together with self-addressed envelopes accompanied the questionnaires. After a little over one months’ wait, completed questionnaires were returned with an interval of two weeks between them. Others returned the questionnaires after the researcher had returned to Australia, after numerous follow-up emails and telephone calls to them at various intervals.

They were clearly instructed on the procedures involved. The completed questionnaires were put in the self-addressed envelopes, with the signatures of the individual executives put on front bottom left-hand corner, and put into sealed boxes which were located at a nominated or selected location in their departments. The sealed box had an opening at the top where envelopes were dropped. A nominated person was identified in each organisation as a point of contact where all completed forms were returned in sealed envelopes. Likewise, the nominated persons were informed of their role in gathering the envelopes and returning them to the researcher. The importance of confidentiality was emphasised to them and that the envelopes were not to be opened. The researcher personally collected the boxes of envelopes at a given time, thus allowing an ample time of up to four weeks for the executives to complete them. Questionnaire survey is attached as Appendix 11 (p. 292).

4.6.2.7 *Quantitative Data Analysis*

Analysis of data began with descriptive statistics which involved transformation of raw data into a form that made them easy to understand and interpret. Thereafter, and as the analysis progressed beyond the descriptive stage, other tools of inferential statistics such as paired sample t-tests and multiple linear stepwise regression were applied. It presented the results of data analysis from statistical tests using SPSS Version 17.0. As illustrated in Figure 4.7 below, the process of data analysis followed six stages which included: developing hypotheses on constructs identified from the interviews, identifying the scales of measurement, entering data, checking for missing values, creating composite variables, evaluating their validity and reliability, correlation and finally evaluating and testing the data.

The following figure portrays the procedure to be followed in the data analysis of the survey.
The statistical techniques utilized to measure the validity and reliability of the scales include Correlation Analysis, Exploratory Factor Analysis, Reliability Analysis, Principal Components Analysis (PCA), Cronbach’s alpha, Bartlett’s Test of Sphericity and Kaiser-Meyer-Olkin (KMO) measure of adequacy. Paired sample $t$-test was used to see if there was any significant differences in leadership skills and behaviour before and after MD learning programs. The multiple linear stepwise regression was used to find out from the four interventions, the best predictors to MD effectiveness.

### 4.6.3 Literature review and document analysis

#### 4.6.3.1 Literature review

A review of the literature relevant to this study was undertaken. The literature review had presented a number of theories, models and concepts relevant to the disciplines of: SHRM, SHRD, MD and capacity building. This highlighted the significance of the research issue and specific research questions outlined in Chapters 1, 2 and 7.
4.6.3.2 Document Analysis

Appropriate and relevant secondary documents completed the two primary sources of data. Triangulating sources and data and using more than one source of data is expected to strengthen the study. Qualitative (interview method), quantitative (survey questionnaire method) and secondary data (reports and official documentations) were used to generate relevant information.

Obtaining data through secondary source is very important. Document analysis therefore becomes crucial. It can get comprehensive and historical information, information already exists and therefore saves a lot of time as compared to other means of data collection, and there is few biases about information. Document analysis came in the form of secondary data. This involved viewing and analysing of publicly available PNGPS and other documents. In document research, the issues involve locating the materials, often at sites, and obtaining permission to use the materials. The main source of document or secondary data was PNG Government’s main legislations that govern administration and management of all public servants, the PSGO. Other documents were sought from various government agencies such as the corporate plans, HR policies, strategic plans, Strategic HRD Plans, HRM Policies. Database or survey reports from PATTAF were obtained to analyse the effectiveness of the capacity building activities, including the ADS Scholarships awards. In some cases, it was not possible to have access to some of these documents from government organisations such as the annual management reports, performance appraisal reports for the reason of confidentiality.

4.6.4 Research Questions, Data Sources and Collection Methods

All data sources identified above can be applied to answer the research issue and the research questions, as illustrated below in Table 4.12. Tashakkori and Teddlie (2009, p. 129) define mixed methods research questions as questions ‘concerned with the unknown aspects of a phenomena and are answered with information that is presented in both narrative and numerical forms’. They recommend developing one mixed methods question that serves as an overarching question and this question can be extended into qualitative and quantitative sub-questions.

In the present study, one mixed method question was developed which served as an overarching question followed by the sub-questions which are both quantitative and
qualitative as shown in Table 4.12 below. Here, the linking questions to the main research question as well as their corresponding data sources and data collection method identify that the questions are mixed.

**Table 4.12 Summary of the Research Questions, Data Sources and Data Collection Method**

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Data Sources</th>
<th>Data Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the capabilities and requirements of executives as articulated in the PNGPS?</td>
<td>• Reports, legislations (the PNG Public Service General Orders); Job Descriptions&lt;br&gt;• Executives&lt;br&gt;• CEOs and Departmental Heads</td>
<td>• Secondary data&lt;br&gt;• Survey Questionnaire&lt;br&gt;• Interviews</td>
</tr>
<tr>
<td>2. What are the optimum HR Policies and Effective Practices that contribute to MD?</td>
<td>• CEOs and Departmental Heads&lt;br&gt;• HRD/HRM Policies and other legislations&lt;br&gt;• Executives</td>
<td>• Interview&lt;br&gt;• Secondary data&lt;br&gt;• Survey Questionnaire</td>
</tr>
<tr>
<td>3. Do the current policies and effective practices fully develop management executives?</td>
<td>• CEOs and Departmental Heads&lt;br&gt;• Executives</td>
<td>• Interview&lt;br&gt;• Survey Questionnaire</td>
</tr>
<tr>
<td>4. How are the MD interventions evaluated?</td>
<td>• CEOs and Departmental Heads&lt;br&gt;• Executives</td>
<td>• Interview&lt;br&gt;• Survey Questionnaire</td>
</tr>
<tr>
<td>5. In what ways could MD be improved to contribute to capacity building of the executives in the PNGPS?</td>
<td>• CEOs and Departmental Heads</td>
<td>• Interviews</td>
</tr>
<tr>
<td>6. What are the changes and suggestions that could be integrated into policies and practices?</td>
<td>• CEOs and Departmental Heads&lt;br&gt;• Executives</td>
<td>• Interviews&lt;br&gt;• Survey Questionnaire</td>
</tr>
<tr>
<td>7. Can a framework on MD interventions and a checklist on T &amp; D be developed that contribute to capacity building of executives in the PNGPS?</td>
<td>• CEOs and Departmental Heads&lt;br&gt;• Executives</td>
<td>• Interviews&lt;br&gt;• Survey Questionnaire</td>
</tr>
</tbody>
</table>

Source: Developed for this research

### 4.7 Reliability and Validity of Data Collection Procedures

Irrespective of the type of approach taken in research, the researcher needs to know how much value is there to attach to the findings. For instance, are they an accurate
representation of what actually exists? In other words, are the findings valid? Reliability and validity are central concerns in qualitative research but are more applicable in quantitative research (Neuman, 2006). Measurement reliability means that the numerical results produced by an indicator do not vary because of characteristics of the measurement process or measurement instrument itself. Measurement validity is how well empirical indicators and the conceptual definition of the construct that the indicator is supposed to measure “fit” together (Neuman, 2006:189-192). However, reliability and validity are both discussed and related to the two data collection procedures of survey questionnaire (quantitative) and in-depth interviews (qualitative).

A common definition of validity by Hall and Hall (1996, p. 3) is:

The extent to which a test, questionnaire or other operationalisation is really measuring what the researcher intends to measure.

Researchers assess the validity of their research by looking at evidence, at how the research was carried out, whether anything could have interfered with the research process and confused the results, and the nature of the connection between the evidence and the generalisations. For instance, in the past, some researchers have claimed that experiments and surveys are methods with a high validity because they are standardised or controlled (Hall & Hall, 1996, p. 43). However, such methods can be artificial. That is, a finding may be valid in the respondent’s office or laboratory, where nothing has interfered with the finding or confound the results, but it cannot be applied to the real world where social interaction is more complex. For instance, the use of self-completion survey questionnaire in this study. Such research is arguably high on internal validity but low on external validity (generalisability to a wider population). On the other hand, using in-depth interviews with a small number of informants such as the chief executive officers or the departmental heads, may be criticised for being low on internal validity but high on external validity because they relate to people in everyday settings.

Researchers are also concerned with whether or not their results can be replicated. A common definition of reliability by Hall and Hall (1996: 44) is:

The extent to which a test would give consistent results if applied by different researchers more than once to the same people under standard conditions.
For the present study, reliability and validity measurements were applied on the questionnaire survey. Here, the researcher or the interviewer must be trained to ask questions in the same way and several surveys may repeat the same questions so that comparisons can be made between samples over time. There was reliability in the survey questionnaire because each executive being studied was asked the same questions. Discussions and tests on ‘reliability’ and ‘validity’ of the items in the questionnaire are covered in Section 6.6.1.2 and 6.6.1.3 in Chapter 6 (pp. 181-183. However, more problematic in terms of reliability are in-depth interviews. That is, would two different researchers get the same data from interviewing the same person using a loosely structured schedule? There was reliability in the in-depth interviews because there was only one researcher or interviewer asking the same semi-structured questions.

There were other possible limitations to the proposed data collection methods. These are some of the limitations or disadvantages. For example, interviews provided indirect information filtered through the views of interviewees, they provided information in a designated place rather than the natural field setting, researcher’s presence may bias responses and people are not equally articulate and perceptive. With the questionnaire, one big limitation was that people do not always complete and return questionnaires and a low response rate. Researcher can raise response rates by sending non-respondents reminder letters, but this adds to the time and cost of data collection. Researcher cannot visually observe the respondents’ reactions to questions, physical characteristics or the settings. Also, no one is present to clarify questions or to probe for more information when respondents give incomplete answers. Someone other than the sampled respondent (e.g. spouse, new resident) may open the mail and complete the questionnaire without the researcher’s knowledge. In this case, the only other way to minimize this problem was to send all questionnaires to a nominated person in the agency and allow her/him to coordinate the process from their end.

### 4.8 Ethical Consideration

Several ethical issues must be addressed such as voluntary participation, informed consent, privacy, confidentiality, anonymity and deception before designing the study. Considerations must also be given to political risks, and human right laws. This is mainly to protect the participants. Neuman (2006, p. 132) identifies different ways a research participant can be harmed. They include: physical harm, psychological harm, legal harm,
and harm to a person’s career or income. Because of the sensitivity of the issue, the researcher must also be protected.

First and foremost, letters were written to all government agencies in the PNGPS and statutory bodies informing them of this study, the aim, significance and benefits and to seek their written consent. Patton (2002) points out that the informed consent statement should be simple, straightforward and understandable. The researcher is a current senior public servant in a central agency in the PNGPS. Therefore, to avoid any potential biases pertaining to the results of the study, the researcher from the outset, made her position clear as to why this study was being conducted. The workplace position of the researcher was separated from being a researcher or a doctoral candidate.

In the PNGPS organisations, as in many developed and developing countries, the male executives outnumber female executives. However, it must be noted here that the number of females acquiring top positions in both the private and public sector is improving. For example, there are now increased number of women appointed as chief executive officers or departmental heads in the PNGPS and the statutory bodies. Therefore, the issue of men not cooperating with a female researcher was not seen as a problem or gender bias. In addition, participants and informants were informed of the ethics approval for confirmatory purposes of this study and details of ethics address and contact numbers were made available for verification of this study as well as the channel for any complaints or queries.

In the case of co-researchers, they were informed about the processes of data collection and were also alerted to the confidentiality protections that were provided. Participants were identified by using code/case numbers or names, or pseudonyms and they were well informed of the nature of the research right from the beginning to avoid any embarrassing or emotionally painful situations if they were misinformed. Participation was voluntary, that is they could withdraw if they felt uncomfortable, threatened or fear of losing their jobs. Personal names were not used at all times, that is they remained nameless. All data was held in strict confidence and documents were stored in a locked cupboard at the university. The researcher emphasised and reiterated the importance of confidentiality, anonymity and no mentioning of personal names during interviews.

As for document analysis, some documents were protected and information not publicly available. For example, the management reports and performance appraisal reports. Materials may be incomplete and not be authentic or accurate. Therefore, the researcher
 ensured that documents sought after were current and that permission was sought before gaining access to certain documents such as reports. The ethical aspects of this study had Southern Cross University Human Research Ethics Committee approval (No. 08-156).

4.9 Delimitations

The first delimitation concerns the exclusion of executives in the provinces. Due to financial, logistical, time and practical reasons, data was only collected in Port Moresby, the capital city of PNG. Interviews and survey could not be conducted in the provinces and making a telephone call to the provinces is a very expensive commodity. One other limitation is the accessibility to reach the executives in the provinces. The most common mode of travel within provinces in PNG is by air which is very expensive, and not every government office in the provincial capital centres have access to email or internet services. Thus, any communication will be by telephone which is costly or by postage mail which can cause delays in reaching its destination for up to a month or so to arrive and another week or two to arrive back after being posted. Hence, it was impossible for an online survey as well as a postage survey.

Another delimitation was the absence of input from the HR Managers in focus group at the forefront of SHRD, particularly with respect to MD, did not enhance the validity of the findings and conclusions drawn from the research. Due to time and practical reason, in-depth interviews were only conducted with the heads of the organisations.

4.10 Summary

This chapter has justified the appropriateness of mixed methods approach as the main research methodology in investigating how MD interventions contribute to capacity building of executives in the PNGPS. The combination of both forms of data provided the most complete analysis of the research issue. The two-phase sequential exploratory mixed methods design was deemed appropriate because the results of the first method (qualitative) helped develop or informed the second method (quantitative). The pragmatic paradigm was considered to be the most appropriate for this research. This study used multiple purposes of exploratory, explanatory and descriptive approach to study, although exploratory was more dominant.
A non-linear path was clearly followed as the researcher worked between the different participants with great flexibility going back and forth to confirm data (member check) or when new situations arose. There was triangulation of participants, methods, data and findings to establish trustworthiness and avoid biasness. Finally, this study was complex and sophisticated as it is very political involving not only the Government of PNG, but also the major development aid donor such as the Government of Australia, who fund the majority of the capacity building activities in PNG. Thus all stakeholders involved in development of the executives in the PNG Public Service would require multiple forms of evidence to document and inform this research issue. Furthermore, due to its sensitivity, the importance of ethical consideration at an early stage of the research was addressed. Having identified and explained the appropriateness of the mixed methods approach used in this study, the master plan can be developed as thus in Figure 4.8.

![Master Plan for this study](source: Developed for this research)

In the next chapter, Chapter 5, the analysis of the data collection for Phase I (In-depth interviews) will be presented.
5.1 Introduction

“There are many ways to move from the field to the text, many ways to inscribe and describe experience.”
“Interpretation is an art that cannot be formalized”
(Denzine, N.K. (1994, p. 511)

5.1.1 An Overview

The previous chapter, Chapter 4, outlined, explained and justified the methodology chosen to investigate the issues raised and to examine the research issue and explore the research questions that were developed in Chapter 2.

The objective of this chapter, Chapter 5, is to present the findings and analysis of the field data collected from in-depth interviews with the most senior executives representing the different sectors of different public organisations and entities. The analysis of the field data collected from in-depth interviews is depicted in the form of quotations, descriptions, tables and figures. In particular, direct quotations are used extensively and frequently in order to compare, contrast, and substantiate the findings. Finally, a coding hierarchy of nodes is created consisting of themes and sub-themes from the information gathered from the interviews which helped develop the survey items.

The purpose of Phase I was to answer the research question assessing the effectiveness of the MD interventions in the PS organisations. MD interventions included any situation used to improve MD. Qualitative methodology was ideal for this phase of investigation because it allowed for the exploration of social events, programs, interaction, and relationships of interest in a natural setting. It required the analysis of data inductively, and it allowed for the documentation of variables using written words. That is, it sought to gain insights or views from the very senior executives or heads of organisations on their perception of MD effectiveness in their organisations. The data from the interviews helped inform and develop the questions for the survey which was conducted on the executives.

5.1.2 Structure of Chapter 5

Chapter 5 has six sections. Section 1 serves as an introduction to the chapter and gives an overview and structure of Chapter 5. Section 2 examines the background of the PS organisations and the profile of the participants. Section 3 discusses the interview process and
the protocol while Section 4 presents and links the interview questions with the research questions and presents selected quotes from the interviews. Section 5 analyses the interview data and identifies the themes emerging from the interviews. These are graphically shown in the coding hierarchy as well as the MD Effectiveness wheel. Finally, Section 6 gives the summary of the interview data analysis and provides the hypotheses for the quantitative survey questionnaire to be discussed in the next chapter, Chapter 6. A framework of Chapter 5 is outlined in Figure 5.1 below.

Figure 5.1: Structure of Chapter 5
Source: Developed for this research

5.2 Background of Participating Organisations and Participants

This section is concerned mainly with introducing the participating organisations and the profile of the participants. To ensure that the measure would be appropriate for investigating the effectiveness of MD interventions, regardless of the type and level of organisation in the Public Service of PNG, members of several sectors of Public Sector organisations were interviewed. The target group for the in-depth interviews for Phase 1 of the data collection were particularly those at the top executive level, on the basis of the organisational hierarchy such as the Departmental Heads or Secretaries as they are also referred to in the Public
Service institutions (or their nominees), as well as the Chief Executives Officers (or their nominees) of the statutory bodies.

The purpose of the interviews was to seek top executives’ views on MD effectiveness within their organisations with particular emphasis on MD interventions and their impact. In other words, to investigate whether these interventions are effective in contributing to capacity building of the executives, their organisation and the Public Service. The results and findings from the interviews helped develop the survey questionnaire implemented on executives in Phase II of data collection.

5.2.1 Sample

The sample of the study for Phase I (in-depth interviews) consisted of senior executives from twenty one (21) public sector organisations in PNG. All were based in Port Moresby, the capital city of PNG and the administrative headquarters of the government. The selection of the organisations was made using the Government and Statutory Body Listings of the White Pages of the 2009 PNG Telephone Directory (pp. 146-172). The contact information was also gained from the same source.

Currently, there are about 30 national departments and agencies, 56 statutory bodies/entities and 20 provincial administrations including the national capital district. Due to constraints explained in Chapter 1, Chapter 2 and Chapter 4, public sector executives in the provinces were excluded from the interviews. Hence, the study focused on government agencies, statutory bodies and entities in Port Moresby.

5.2.2 Summary of the participating organisations

A summary of participating organisations is shown in Table 4.8 (p. 127) while the profile of participants’ designations and tenures are shown in Table 4.9 (p. 127).

As can be seen, there was an almost equal number of interviewees from the two main levels of government bureaucracy – 11 from the national departments and 10 from the statutory bodies and entities, representing a cross-section of the government jurisdiction. Of the twenty one participants interviewed, three were females and eighteen were male. The gender imbalance is due mainly to the fact that in PNG, women are underrepresented in any form of paid employment. Males clearly outnumber females in the Public Sector organisations and the disparity is more acute at the executive level. Almost equal number of
senior executives holding various senior positions from both levels of the public sector participated.

The interviewees were those at the highest executive level, on the basis of their organisational hierarchy. The designations or position titles varied from the national departments to the statutory bodies and entities. For instance, a secretary or head of department in a national department could be called a chief executive officer, managing director, or commissioner-general in others. As can be seen, most of the participants held the top positions in their respective organisations – nine were heads of organisations and nine were deputy heads of organisations. A minority (3) were HR executives.

They represented all sectors of the government namely: Administration, Social, Law and Order, Economic and Infrastructure, and Provincial. A schedule of the interviews is shown in Appendix 1 (p. 310).

During the course of the interviews, the participants revealed their highest formal education obtained. Table 5.1 depicts the highest education level attained by the participants.

<table>
<thead>
<tr>
<th>No. of participants</th>
<th>Highest qualification achieved by the interviewed participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Doctorate</td>
</tr>
<tr>
<td>21</td>
<td>2</td>
</tr>
</tbody>
</table>

Out of the 21 participants, 18 possessed a basic university bachelor’s degree. Of these, the highest number of participants (thirteen) had attained a master’s degree (mostly MBA degrees from overseas through full-time study or distance education, and one in-country), followed by bachelor’s degrees (three in-country). For the remaining participants, at least two had attained a doctoral qualification from overseas, and another two had a tertiary certificate. Only one participant had attained a diploma level of qualification from overseas. Of the fourteen (14) that attained their qualifications overseas, twelve (12) were sponsored under the AusAid Scholarships – the Australian Development Scholarship (ADS) while the other two were under the sponsorship of other scholarships.

Having discussed the sample for the study as well as the profile of the participants, the next section seeks to explain the interview protocol and thereafter the process of interview data analysis is discussed.
Chapter 5: Data Analysis - Interview

The following section presents the interview questions and their linkage to the research questions, as well as a summary of the responses.

5.3 Research questions, interview questions and the responses

The interview questions were developed in order to answer the research issue and research questions. First, the research questions are restated, then the corresponding interview questions are identified. Thereafter, the responses to the interview questions are summarised followed by an analysis of the findings.

5.3.1 The Research and Interview Questions

In this sub-section, the research questions are presented in bold text, with the corresponding interview questions directly below them with a brief discussion on the questions. Table 5.2 shows the interview questions and how these are linked to the research questions.

<table>
<thead>
<tr>
<th>Table 5.2: Linking interview questions to the research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research Questions</strong></td>
</tr>
<tr>
<td>1. What are the capabilities and requirements of executives as articulated in the PNG Public Service?</td>
</tr>
<tr>
<td>2. What are the current HR Policies and Effective Practices that contribute to MD?</td>
</tr>
<tr>
<td>3. Do the current policies and practices fully develop management executives?</td>
</tr>
<tr>
<td>4. How are the MD interventions evaluated?</td>
</tr>
<tr>
<td>5. In what ways could MD be improved to contribute to capacity building of the executives in the PNGPS?</td>
</tr>
<tr>
<td>6. What are the changes and suggestions that could be integrated into policies and practices?</td>
</tr>
<tr>
<td>7. Can a framework on MD interventions and a checklist on T &amp; D be developed that contribute to capacity building of the executives in the PNGPS?</td>
</tr>
</tbody>
</table>

Source: Developed for this research

Part A: Pre-program and General Questions

RQ1: What are the capabilities and requirements of executives as articulated in the PNGPS?

The first research question (RQ1) aimed to determine primarily whether capabilities and requirements of executives as specified in the job descriptions are perceived by heads of organisations to play a specific role in MD effectiveness.
Chapter 5: Data Analysis - Interview

The first interview question (IQ1a) aimed to ascertain data from the most senior executives their general view of the effectiveness of MD in their organisations and in Public Sector organisations. More specifically, the aim was to identify the factors or interventions which had an impact to MD effectiveness.

IQ1a)  *What is your view of the MD involving your department and the PNGPS in terms of the interventions that contribute to its effectiveness and, how they contribute to capacity building of the executives, your organisation and the PNGPS?*

The overall view gauged from the respondents was whether MD is effective in their organisations, and what interventions contributed to MD effectiveness.

The next interview question sought to ascertain the generic capabilities and requirements of executives as specified in the job descriptions.

IQ2a)  *Are the capabilities and requirements of executives’ positions clearly specified in their job descriptions? Please elaborate on the job descriptions and give examples on some of these standard or generic capabilities and requirements as articulated in the PNGPS.*

RQ2:  *What are the current HR Policies and Effective Practices that contribute to MD?*

The second research question aimed to determine the current HR Policies and effective practices that public sector organisations may employ in the context of MD effectiveness.

The first interview question aimed to investigate the types of HR policies organisations were using in the context of MD effectiveness.

IQ3a)  *What are some of the HR policies that your organisation uses in administration, coordination and monitoring of the strategic development of your executives?*

The second interview question sought to establish the practices that worked well for the organisations thus contributing to MD effectiveness.

IQ3b)  *What would be your effective practices that work well for your organisation in developing your management executives?*

RQ3:  *Do the current policies and practices fully develop management executives?*

Having ascertained the types of HR policies and effective practices used in the public sector organisations, the aim of the next research question was to establish if these policies and practices fully developed management executives.
The interview question aimed to find out if these policies and practices were actually working to develop the management executives. Although policies and practices are in existence, the question is whether these are adhered to or complied with when developing the executives. For instance, if the procedures and processes of staff development and career path are specified in these policies, how relevant are they and are they always complied with?

IQ3c) How effective or sound are these policies and practices in developing the management executives?

Part B: Post-program Questions

RQ4: How are the MD interventions evaluated?

The fourth research question specifically focused on post-program evaluation, and aimed to determine whether the organisations evaluated the MD interventions and the methods by which these are evaluated.

The interview question with its follow-up questions were purposely designed to find out if and how evaluation is done. The main questions aimed to determine the types of learning programs preferred by the organisation.

IQ4a) What are the types of MD programs or interventions your organisation adopts to develop and build the capacity of your executives?

IQ4b) Which of these programs have impacted more positively on the executives, and how?

IQ4c) Does your organisation evaluate MD interventions to determine their effectiveness or the impact they have on the executives, their respective divisions/branches, the organisation and the Public Service as a whole?

Part C: Suggestions and Remarks for Improvement and Change

RQ5: In what ways could MD be improved in your organisation to contribute to capacity building of the executives in the PNGPS?

The fifth research question aimed to determine the areas of improvement in the context of SHRD of executives.

The interview question sought to elicit senior executives’ views on areas of improvement in capacity building of the executives in their organisations.
Chapter 5: Data Analysis - Interview

IQ5a)  Do you think there is a need for improvement in SHRD of the executives in your organisation (micro level) so that they can contribute meaningfully to capacity building of the PNGPS? If so, what would be the areas of improvement?

RQ6:  What are the changes and suggestions that could be integrated into policies and practices?

The sixth research question aimed to determine the changes and suggestions in policy and practice at the macro level in the context of SHRD of executives.

The interview question sought comments and suggestions (if any) in the context of MD effectiveness at the macro level.

IQ6a)  Do you have any further comments, suggestions or changes that could be integrated into policy and practice on SHRD at the macro level for executives in the whole of the PNGPS?

RQ7:  Can a framework on MD interventions and checklist on T&D be developed that contribute to capacity building of the PNGPS?

The seventh research question aimed to determine whether a framework on MD interventions and a checklist on T & D can be developed to guide all public sector organisations in the management and development of management executives.

Although no specific interview questions were developed for this research question, the overall findings from the other interview responses contributed to answering this research question because they related to developing a framework to attract, develop, motivate and retain the management executives in the PS organisations.

The next section will summarise the findings of the interviews under each research question.

5.3.2  Summary of the Findings for the Research Questions

Responses to the interview questions under each research question have been summarised and presented below. The aim was to ascertain the common themes and sub-themes that contribute to MD effectiveness in the PS organisations. Selected responses for each interview question which answer the research questions, are depicted in the form of quotations and descriptions. In particular, direct quotations are used extensively and frequently in order to compare, contrast, and substantiate the findings. Participating organisations were identified by using code letters and personal names were not used at any
Chapter 5: Data Analysis - Interview

time - that is, the participants remained nameless. For direct quotations, respondents were identified with the code letters. The researcher emphasised and reiterated the importance of confidentiality, anonymity and that personal names should not be used during the interviews.

Table 5.3: Summary of responses from RQ1: What are the capabilities and requirements of executives as articulated in the PNGPS?

<table>
<thead>
<tr>
<th>General view of MD effectiveness in the organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 • Organisations support MD in terms of structures, tools, skills utilization, T &amp; D programs.</td>
</tr>
<tr>
<td>2 • Training and Development given priority in the budget</td>
</tr>
<tr>
<td>3 • Less attention paid to Training and Development budget</td>
</tr>
<tr>
<td>3 • There is no standardised MD program – training is done on adhoc basis</td>
</tr>
<tr>
<td>3 • For any MD intervention to be effective, there must be policies and procedures in place.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capabilities and Requirements of Executives</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 • All management executives should possess the required capabilities and qualifications as stipulated in the job descriptions (JDs).</td>
</tr>
<tr>
<td>5 • JDs must be clearly defined for executives to evaluate their strengths, weaknesses and development.</td>
</tr>
<tr>
<td>6 • Must have management and leadership skills and be well versed in government legislations</td>
</tr>
<tr>
<td>7 • Must have good written and oral communication skills</td>
</tr>
<tr>
<td>8 • Must always be strategic in their thinking, planning and organising</td>
</tr>
<tr>
<td>9 • Must manage budget and finances well</td>
</tr>
<tr>
<td>10 • Must manage physical assets</td>
</tr>
<tr>
<td>11 • Should be confident in their work, have a positive attitude to work and be punctual and have consistent attendance at work.</td>
</tr>
</tbody>
</table>

Source: Analysis of field data

‘My department supports MD although we do not have a standardised program specifically for our executives. Training is done on ad-hoc basis when the need and opportunity arises – many of which are through the capacity building programs funded by development partners…but programs must be linked to organisation goals’. (Org. N). Others that shared the same view were Org. S and Org. R.

‘Training and Development is given priority in our budget…HRD is one of the priorities in the government’s white papers - Medium Term Development Strategy and Vision 2050, but we haven’t actually concentrated on MD’. (Org. G).

‘Unfortunately, we’ve cut our budget on T & D activities … most activities are funded by the development partners’. (Org. M, I, Q). Orgs. I and Q also said the same about T/D not being supported in the budget.

‘We take care of our executives because they have the “bird’s eye view” of our organisation. They know what goes wrong, what works and what improvements are needed. We endeavour to nurture, develop, and motivate them to stay on in our organisation’. (Org. A).
‘MD works in my organisation because we make sure they have the required capabilities and qualifications when recruiting them. Once they join us, we develop them by sending them for further T & D programs…but we also ensure that the newly acquired skills are utilised’. (Org. A). Those that shared the similar view were Orgs. C, F, and G.

‘For this organisation, the most important thing is to have the policies in place that would develop the executives, otherwise everything will be done on adhoc basis and there will be inconsistencies.’ (Org. C). Most of the participants expressed the same view.

‘Everything we do here must be strategic….therefore all T & D programs must be linked to the job requirement and organisation goals and objectives…we prefer sending our executives for short-term programs rather than long-term training – the impact of short-term development programs are immediate’. (Org. P).

‘This is a learning organisation where T & D is encouraged for all officers but at the same time, we need to have stringent policies and procedures in place as the basis for all human resource development activities. – we need to adopt a systematic approach to T & D’. (Org. B). The same view was expressed by Org. D and Org. E.

‘There’s no such thing as MD in this organisation – all staff are treated equally when it comes to human resource development….usually the officers use their initiatives to identify programs of interest and submit their expression of interest for the top management to approve….therefore HR Branch has little authority over this’. (Org. M). Org. Q expressed a similar view on the absence of MD in their organisations.

‘The generic capabilities and requirements of executives should be clearly specified in the job descriptions. That is why the JDs must be reviewed annually so that the incumbents can evaluate their strengths, weakness and further development against the JDs but in many cases, that does not seem so’. (Org. T). The same comments on JDs were expressed by Org. U and Org. D.

‘If we’re talking about senior executives, then they must possess leadership skills with positive attitude and behaviour towards their responsibilities….be well versed with government legislations and policies, and have a good standing in the community’. (Org. S).

‘Our executives must know how to manage budget and finances as well as physical assets….skills that many senior public servants are lacking in’. (Org. G).
‘The capabilities and requirements in the JDs must match the actual roles and responsibilities that the executives perform….often at times, these do not match’. (Org. T).

‘All executives should possess an MBA qualification…and have strong leadership skills such as: managing and leading people, adaptive to change, good communication skills and be strategic in their thinking and planning…..positive attitude to work, be confident in their work and have good punctuality and attendance to work …..be seen as role models to their subordinates’. (Org. O). Org. T expressed a similar view.

The findings from the general question was that all respondents declared that MD was supported in their organisations and that the perceived importance of developing the executives was regarded as being significant in contributing to meeting the organisation’s goals and objectives. Furthermore, the participants identified that there were systems and structures in place to facilitate individual and collective growth and development. The analysis disclosed an inconsistent picture with regards to the extent of the organisational support. Most statutory authorities asserted that there were standardised MD programs, continuous upskilling of executives, nurturing, coaching and mentoring of young potential ‘high flyer’ executives whereas in the national departments, there were no standardised MD program for executives. A very few admitted that there was very little or no upskilling and nurturing of executives. These respondents reported that executives were left to fend for themselves, and were expected to learn by observation and experience. However, the analysis also revealed that there was an absence of a SES in the organisations and an absence of a standard MD program which meant training was done on an ad-hoc basis, particularly in the national departments.

The findings from the first research question was that all respondents contended that all executives should and must possess the required qualification and capabilities as stipulated in the job descriptions. Although there were inconsistencies in the job descriptions on qualification requirements, the analysis disclosed that all executives should possess a minimum qualification of a basic university degree although a postgraduate qualification in a related field would be desirable. The analysis revealed that, particularly in the national departments, that job descriptions were outdated and needed review with clearly defined roles, capabilities and responsibilities that would enable the executives to evaluate their
strengths, weaknesses and development for promotional purposes. JDs were outdated with qualification requirements that had not been upgraded.

The organisations represented different sectors of the government and therefore the functions and thus technical skills and requirements differed somewhat. However, the generic capabilities and requirements as identified by the respondents included: management and leadership skills, good written and oral communication skills, always being strategic in their thinking and planning, being able to manage finance and budget well, and physical assets, and a sound knowledge of government legislations. Some of the problems identified by most respondents were to do with the behaviour of executives in terms of their attitudes to work, a lack of confidence in their ability to perform their roles and responsibilities and problems with punctuality and attendance. These problems were particularly apparent in many national departments.

**Table 5.4: Summary of responses from RQ2: What are the current HR policies and Effective Practices that contribute to MD?**

<table>
<thead>
<tr>
<th>HR Policies</th>
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<tbody>
<tr>
<td>1. Public Service General Orders (PSGO) &amp; Public Service Management Act (PSMA)</td>
<td></td>
</tr>
<tr>
<td>2. PSGO and PSMA outdated and need to be reviewed immediately</td>
<td></td>
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<tr>
<td>3. Training Plan and Policy</td>
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<tr>
<td>4. Succession Plan</td>
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<tr>
<td>5. Equal Employment Opportunity Policy</td>
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</table>

<table>
<thead>
<tr>
<th>Effective Practices</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Retreat training and workshops</td>
<td></td>
</tr>
<tr>
<td>8. Systematic approach to T &amp; D</td>
<td></td>
</tr>
<tr>
<td>Stringent selection process and criteria</td>
<td></td>
</tr>
<tr>
<td>Supporting infrastructure – structures and systems</td>
<td></td>
</tr>
<tr>
<td>Opportunity for skill utilization</td>
<td></td>
</tr>
</tbody>
</table>

Source: Analysis of field data

‘Our main source document or legislation is the PSGO but it needs to be reviewed as it is outdated. We also have a training plan and policy but we do not have a Succession Plan in place which is a very important document’ (Org. S).

‘Other than the usual PSGO, we have our own training plan and policy but these need to be reviewed annually’. (Org. D).

‘…the relevant policies are in place and we have a Succession Plan as well as a Equal Employment Opportunity policy in place. These are reviewed annually or if not, every two years so we have no problems with relevant policies’ (Org. K).

‘Unfortunately, we do not have a current training plan and policy and this is an issue we need to address immediately. All T & D is done on an ad-hoc basis’. (Org. Q).
‘We do not have a training plan or policy in our organisation - … - we just simply do a training needs analysis annually and select senior executives to undergo training when they become available in the country’. (Org. I).

‘I make it my business to ensure that every process - training or recruitment, is strategic…no ‘wantok’ system involved…..a thorough Training Needs Analysis (TNA) is conducted to identify areas of strength and weaknesses – and whether T & D is the solution to the weaknesses….setback in post-program evaluation,…no evaluation method to measure effectiveness of MD intervention….we simply rely on Staff Performance Appraisal (SPA) to measure performance of staff and take it from there’. (Org. P).

‘….PNGPS should have competency framework for executives to guide departments and agencies in identifying relevant programs of training….currently no policy framework for MD and no competency framework….inconsistencies in the job descriptions for the executives…managerial and leadership capabilities and requirements of executives different from each others…so we devise our own policy to suit our organisation’. (Org. G).

‘….PNGPS should review its policies on overseas training - ADS awards…..a lot of good public servants, former awardees of ADS, with a wealth of knowledge and skills resigned due to reasons such as: not given the opportunity to utilise the skills, made redundant or displaced while on studies, lack of proper facilities to utilise skills etc….so I’m beginning to wonder and ask: is the current selection process and criteria for long-term formal training (overseas and in-country) strategic?’. (Org. R).

‘..PSGO 5 on Training outlines selection procedures and criteria for short term and long term training, that training be relevant to the job requirements of an officer and be aligned to organisation’s goals and objectives but doesn’t specify procedures after training – career path, future employability etc…only requires training evaluation at reaction level…so. what good is the training if they cannot utilise their skills and they leave the organisation….no return on investment… so here we have our own policy addressing post-program issues’. (Org. B).

‘…well, we don’t want to be disturbed by the ongoing telephone calls, and people such as politicians, wantoks (a word used in one of the national languages of PNG – New Guinea Pidgin which denotes anyone who is a relative, who speaks the same language as you, and who comes from the same region or province), friends unexpectedly calling in for a casual chat.…we want to concentrate and see whether we’ve achieved our objectives for the year, and work on our annual plans from the
lessons learnt….good to have consultants coming in to impart new knowledge to us…have learnt a lot from these workshops….have implemented changes at work…the impacts are immediate, so we’re grateful’. (Org. O).

‘The timing and location of retreat workshops are perfect for us….we are logical in our thinking, and more strategic….able to think analytically on ways to improve our divisions and the departments…yes, a lot better than if we were having the workshop within the work premises and if the workshop was for a much longer period of time…..cannot afford to send our executives away for a longer periods of time….especially for long term studies which would cause a lot of staffing setbacks’. (Org. E).

‘We have the GDP program in place now….a similar program was adopted before independence (1975) but abolished shortly after independence….produced some of PNG’s top bureaucrats, politicians, diplomats and academics portrayed as role models, mentors and ambassadors of PNG…..good to see it reintroduced but departments and agencies must have good Exit Policies and their manpower ceiling within budget’. (Org. N).

‘…first batch of graduates almost coming to the end of their probationary period … can proudly say they’re exceptionally good … can already see them as high-growth potential executives. They have been put on job rotation in all units within headquarters and provincial offices….only problem is that we do not lose them to our competitors .. so must retain them by offering them good incentives - a concern in the PNGPS because incentives are not competitive to their counterparts in private sector….if the PNGPS wants to retain these high-growth potential executives, then it must review the terms and conditions’. (Org. L).

The main legislation for all national departments or agencies is the PSGO but every agency is required to formulate its own training policies and plans and other relevant HR policies which must all comply with the PSGO. The statutory authorities and entities do not necessarily conform to the PSGO as they have their own policies which of course are mainly derived from the PSGO. Other important policies such as the Succession Plan and the Equal Employment Opportunity policy are rarely found in the national departments and agencies.

It must be noted that the respondents represented various sectors and arms along the continuum of public sector organisations. This simply denotes that not all would abide and conform to the main legislations of the normal public service such as the PSGO, the PSMA,
and the PS Financial Management Act (PSFMA). In particular, the statutory authorities and entities have their own legislations to adhere to.

Almost all participants identified that having annual retreat training or workshops away from their work sites for a few days, were a way forward for their executives and the organisation. They adopted this intervention as opposed to having the workshop in the work location for various reasons: so that they could concentrate and not be disturbed by telephone calls or unscheduled appointments; the length or duration of the workshop is shorter and so it does not cause major setbacks on work demand; and they were able to learn new skills or knowledge from external or internal resource persons brought in to run workshops on topics of importance.

Graduate Development Program (GDP) was reintroduced in the PNGPS in 2008 therefore when this thesis was written, not all departments and agencies had introduced it. However, those that have implemented the program, and even those who have yet to adopt the program, have spoken highly of it. They see that it prepares the graduates to be better personnel through career development into executive positions. They go through on-the-job training which includes job rotation in all the units of the organisation thus giving them the advantage of understanding how the organisation and the Public Service functions.

All the participants indicated that a systematic approach to T & D or HRD was a very crucial factor in that the right executives were identified for the right type of MD intervention. However, they also identified anomalies that could be improved. Some of the anomalies included: selection of the right participants for the right programs, post-program evaluation, linking of learning programs to job requirement and organisation goals and objectives.

Most participants identified that there are systems and structures in place to facilitate individual and collective growth and development. There is continuous upskilling and nurturing of executives who are given the opportunity to utilize their new skills and knowledge.

Table 5.5: Summary of responses from RQ3: Do the current policies and practices fully develop management executives?

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Non-compliance with TNA in PSGO – outdated, cycle incomplete</td>
</tr>
<tr>
<td>2</td>
<td>Training Plan and Policy – not always adhered to</td>
</tr>
<tr>
<td>3</td>
<td>No specific policy in existence for MD therefore everything done on ad-hoc basis</td>
</tr>
<tr>
<td>4</td>
<td>HR executives comply with policies and practices to develop executives</td>
</tr>
<tr>
<td>5</td>
<td>T &amp; D cycle not systematic therefore not fully developing management executives</td>
</tr>
</tbody>
</table>

Source: Analysis of field data
‘We do not always comply with the training needs analysis processes in the PSGO because it is not clearly specified and can be confusing…so we tend to do away with it and have developed our own procedures’. (Org. R).

‘We’re very strict in conforming to policies and practices and I make it my business that our senior executives and HR executives always comply with our rules and regulations so that our management executives are developed to the fullest’. (Org. U).

‘It is sad to see that even though we have the main legislation – the PSGO, very little is focused on development of the existing and future executives. Therefore, if there is a policy framework in place for MD, then that would be the guiding principle for all Public Sector organisations to adhere’. (Org. F).

Almost all participating organisations expressed the need to have the PSGO reviewed and updated as it is outdated. While Training Plans and Policies were found in all organisations, except for two, the issue were whether it was always adhered to and whether it was reviewed annually. In some cases, it was revealed that the procedures and criterias were not always followed in developing the executives. For instance, the TNA, which linked learning programs to job requirements and organisation objectives, was not always followed. For other organisations, the policies and practices worked well for developing their executives.

Table 5.6: Summary of responses from RQ4: How are the MD interventions evaluated?

<table>
<thead>
<tr>
<th>Types of MD learning programs</th>
<th>Post-program or intervention Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Graduate Development Program</td>
</tr>
<tr>
<td>2</td>
<td>Short-term leadership and management programs – impact immediate</td>
</tr>
<tr>
<td>3</td>
<td>Long-term educational programs – full-time, part-time and external mode – new skills and knowledge</td>
</tr>
<tr>
<td>4</td>
<td>Overseas attachment – exposure and gain experience</td>
</tr>
<tr>
<td>5</td>
<td>Job rotation – exposure to other divisions and know the functions of the org. well</td>
</tr>
<tr>
<td>6</td>
<td>Coaching and mentoring</td>
</tr>
<tr>
<td>7</td>
<td>Seminars and workshops</td>
</tr>
<tr>
<td>8</td>
<td>Self-help activities</td>
</tr>
</tbody>
</table>

Source: Analysis of field data

‘Our executives have undertaken various types of learning programs in the country and overseas but short-term T & D programs are preferred because their impact is immediate and they do not cause staffing setbacks’. (Org. B). The same view was also expressed by Orgs. E, I, and M.
‘We encourage short-term programs but that does not mean that we should rule out the long-term programs because we still require our executives to upgrade their qualifications so professional development is still necessary….particularly at an overseas institution where they are exposed to acquiring new skills and knowledge on global practices and systems of doing things’. (Org. L).

‘The short-term T & D programs have a more positive impact because the officers return after training and apply the management skills and competencies immediately’. (Org. I).

‘Seminars and workshops are good but then you can’t expect the executives to grasp and learn as much as they can within this short span of time…so for our executives, short-term leadership programs are very important….there is an improvement on their leadership and management skills’. (Org. M).

‘A blend of long-term and short-term programs are preferred. Professional development programs enables the executives to acquire new skills and knowledge while the short-term programs focus on specific skills training….would like to see that the Graduate Development program be reintroduced to all public sector organisations’. (Org. G).

‘The staff are evaluated annually on their overall performance against the key performance indicators but not specifically after attending a learning program’. (Org. T).

‘Yes, we have a system here that assesses the officers after undertaking a program to see if there is any improvement on performance and behaviour’. (Org. A).

Organisation support for MD programs included respondents’ views on MD and what they thought about the different approaches or programs that develop the executives. There was a mixed reaction to the types of T & D programs supported and encouraged in their organisations. The two main responses where that they either supported and encouraged all forms of MD interventions or only supported the short-term programs. None of the participants indicated to have supported the long-term programs only. All indicated that MD was a critical area that needed much support from the top management.

The support reasons varied according to the type of learning programs adopted. For instance, for those that supported all forms of MD programs, the reasons given included the view that a blend of all programs was required in their organisations. One interviewee said:
‘We need executives to improve on specific competencies or sharpen their skills by way of short term interventions but still need executives to bring in new knowledge, skills and experiences gained from their long-term formal training, particularly at postgraduate level such as an MBA qualification’. (Org. A).

That is to say, that the executives needed new skills and knowledge; the higher qualification was needed as a prerequisite for promotion and to build their confidence. On the other hand, some respondents opposed long-term training. They all put forward similar arguments to support this view. These included: prolonged absences from duty caused staffing shortages; benefits were not immediate as it takes executives time to settle back at work by which time many forget the new knowledge or skills; programs of study are not always relevant to the current jobs; and there is high attrition rate after gaining higher qualification. As one interviewee said:

‘There is “brain drain” in this organisation because many of those executives returning from long-term studies after gaining higher qualification and new knowledge are poached by our rivals or competitors mainly in the private sector, for greener pastures. We cannot retain these officers unless we increase their remuneration packages akin to those in the private sector.’

For most interviewees that supported short-term interventions, almost all gave the same or similar reasons for their support. That is, the impacts are immediate; training under this category of T & D is more specific and relevant to a specific need or competency; and did not require executives to be absent from duty for longer periods of time thus causing staffing shortages.

It was found that although long-term formal training is a prevalent way of development, most senior officers preferred short-term interventions. About 60% of those senior officers obtained their postgraduate qualifications from overseas institutions through various scholarships but mostly under the ADS awards. However, they now have a different view to this intervention. For instance, the PNGPS has evolved from a simple organisation to a more complex organisation. Previously, it was possible to send away executives for longer time without having any major setbacks on staffing, but it is not possible to do so now due to more complex work demands and other budgetary implications. However, other modes of study were recommended. In fact, four of the participants had obtained Australian postgraduate qualifications (MBA) through distance study via offshore centres.
Almost all respondents expressed the view that there is a lack of an evaluation system in the PNGPS to monitor and evaluate whether the MD interventions are effective. Post-program evaluation, particularly at impact or result level, is rarely done in the national departments and agencies. The PSGO stipulates that evaluation should take place at reaction and learning levels but does not go further to say it should be undertaken at the behaviour, result and impact levels. Respondents added that relying on the normal staff performance appraisal (SPA) is not sufficient to say that the training was effective. Improvement on performance could be due to other factors and not merely to training. Moreover, particular training programs would be difficult to assess using SPA when the officer has undertaken more than one type of MD intervention.

Table 5.7: Summary of responses from RQ5: In what ways could MD be improved in your organisation to contribute to capacity building in the PNGPS?

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1</td>
<td>Merit-based appointments for all executives in the organisation</td>
</tr>
<tr>
<td>2</td>
<td>Review and upgraded JDs annually</td>
</tr>
<tr>
<td>3</td>
<td>Continuous upskilling and support from top management</td>
</tr>
<tr>
<td>4</td>
<td>T &amp; D programs linked to job requirements</td>
</tr>
<tr>
<td>5</td>
<td>Evaluation of MD programs</td>
</tr>
<tr>
<td>6</td>
<td>Introduce graduate development programs</td>
</tr>
</tbody>
</table>

Source: Analysis of field data

‘…merit-based appointment so that right type of executives are recruited…ensure that the job descriptions are reviewed annually so that the roles and duties are clearly specified and they are coached and nurtured by the top management’. (Org. F).

Almost all national departments shared the same view.

‘All T & D programs must be linked to job requirements and organisation goals and must be evaluated to determine the impact it has on the officers’. (Org. K).

‘…..evaluation of executives after attending training programs to see if they’ve improved on their jobs and whether there’s new skills applied to their jobs’. (Org. B).

‘The structures and systems must be in place to allow skill utilisation after training’. (Org J).

The majority of the respondents indicated that merit-based appointments were a must so that the right cadre of talented officers with the right skills and knowledge were recruited into the organisation. Once recruited, they would be developed and prepared to assume higher responsibilities and roles. They asserted that it is then the responsibility of top management to support them and retain them. Respondents also indicated that one of the strategies for attracting, developing, motivating and retaining potential high flier executives was through
the Graduate Development Program. For statutory entities, MD was well entrenched in their system and structures which proved to be very effective. Almost no public sector organisations or agencies had senior SES entrenched in their structures that focused on the management executives separately from the rank and file staff. The presence of such services could contribute to attracting, retaining, developing and motivating management services personnel who would in return contribute meaningfully to the capacity building of the PS.

The issue of T & D emerged again, with some respondents expressing the view that priority must be given to selecting the right candidates for the right programs. This brought up the issue of the need for a systematic approach to T & D and the impact these programs had on the executives. Again, all these relate to HR policies and practices.

### Table 5.8: Summary of responses from RQ6: What are the changes and suggestions that could be integrated into policies and practices?

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<table>
<thead>
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<tbody>
<tr>
<td>1</td>
<td>Review merit-based appointment process and criteria</td>
</tr>
<tr>
<td>2</td>
<td>Policy Framework for Executives</td>
</tr>
<tr>
<td>3</td>
<td>Review terms and conditions for executives in the public sector</td>
</tr>
<tr>
<td>4</td>
<td>Capability Framework for executives</td>
</tr>
<tr>
<td>5</td>
<td>Review PSMA &amp; PSCO</td>
</tr>
</tbody>
</table>

**Source:** Analysis of field data

‘There must be a standard merit-based appointment process and criteria across the whole of the PS so that all organisations are consistent in their recruitment selections’. (Org. D). The same view was expressed by most national departments.

‘It’s a must for DPM to develop a Policy Framework on MD without delay as all PS organisations are devising their own guidelines, procedures when dealing with MD…and in some cases, there are lots of inconsistencies in selection criteria, position titles or designations, salary grades’. (Org. D). Almost all national departments expressed this view.

‘It’s about time the government reviews terms and conditions for executives in the public sector organisations, more specifically in the national departments and agencies, so that they are in par with their counterparts in the statutory bodies, entities and the private sector…otherwise the private sector will continue to poach them’. (Org G). Most of the national departments raised this as a concern.

‘A capability and qualification framework needs to be drawn up for executives as a guide for all PS organisations’. (Org. R).

‘Definitely, first and foremost, the PSGO and the PSMA must be reviewed as they are outdated’. (Org. S, U, O). Every national department raised this issue.
‘…if the PNGPS wants to attract, develop, motivate and retain its current and future executives, it must change its culture and mentality…must review terms and conditions for public servants – more importantly, the executives…because the executives have the ‘bird’s eye view’ of the organisation. They hold the organisation in their hands – they know where it has gone wrong and where it is heading, and how to make it a better organisation’. (Org. A).

The need to review the processes and criteria for the appointment of executives was raised. Almost all participating organisations representing the national departments and agencies indicated that a policy framework for MD is necessary, as it will determine the objects, composition and structure, operation, mobility and management of the executives. The main governing legislation of the PNGPS is the Public Services Management Act (PSMA) 1995 (GoPNG, 1995). The PSGO 9 (DPM, 2002) – specifies the provision of executives and their appointments, (although it does not specify their development) and identifies the important roles they play in the PNGPS. The PSGO derives its laws and provisions from the main legislation, the PSMA. Therefore, if there is an indicative description of executives in the PSGO, then a policy framework should be drawn up to guide the PS organisations in managing MD.

Respondents said that because of the absence of such a coherent policy framework on the notion of MD, there is a lot of inconsistency in how the PS organisations manage their executives and MD interventions are done on ad-hoc basis – put simply, there are no policies or procedures for the nurturing and progression of executives. This is a crucial area because if PS executives are already trained and have the necessary skills and competencies, that capability must be harnessed with the support of top management.

Reviewing terms and conditions was raised by almost all respondents from the national departments and agencies as well as other statutory bodies as having an impact on MD. The issue was also raised in the discussions on other factors. Participants from the statutory bodies and authorities said their organisations used this practice as well as rewarding success with bonuses, as they have a different policy on terms and conditions and have the freedom to do so, unlike the national departments and agencies where terms and conditions are standard and fixed. A major concern was the brain drain and poaching of current and potential skilled executives by competitors or rivals. Apart from well defined JDs, another aspect of MD was the need to develop a capability framework and qualification framework for all executives in the public sector.
Based on the findings from the respondents and the current state of MD in the Public Sector organisations, it is evident that a framework can be developed on MD interventions in the PNGPS although no specific interview questions were asked on this research question. A checklist on T & D cycle could be drawn up to complement the existing TNA cycle in the PSGO. The aim would be to guide the PS organisations to establish a systematic approach to T & D which would then meet the goal of MD. In addition, an MD Effectiveness wheel could be developed to show a graphical view of the interventions or factors that contribute to MD effectiveness.

In sum, the interviews revealed a rather consistent picture, in that most interviewees held the view that their organisations supported MD but there was an absence of a standard program for MD and a lack of systems to evaluate the effectiveness of MD learning programs, particularly at a micro level. The responses reflected the types of programs undertaken and whether there was an impact on the executives. Most participants supported short-term development programs such as seminars and workshops as the impacts were immediate, although others expressed the view that long-term educational programs were still important for acquiring new skills and knowledge.

The views on what practices were effective were not consistent in the two levels of the public sector due mainly to the terms and conditions of executives, and the policies and guidelines. The analysis also revealed other issues at the micro level. They included: the need to appoint executives based on merit and not through a wantok system or nepotism; the need for reviews of departmental training policies and plans and other related HR policies; the selection of the right candidates for the right types of training programs; linking the programs of learning to job requirements and organisational goals; nurturing, coaching and mentoring of potential executives; and the generic capabilities and requirements of executives in the JDs which in many cases were irrelevant or outdated. Continuous support from top management was considered to be vital because often the executives are put through some development programs and are then left to fend for themselves. Clearly, it was disclosed that executives are already trained but must be supported to utilise their skills. At
the macro level, one of the main concerns raised by the national departments was the lack of a clearly articulated framework for executive leaders and managers in the Public Sector to guide the development of executives. Furthermore, the need to have proper HR policies and an urgent call to review the current PSGO was raised as it is outdated. Almost all participants from the national departments called for a review of terms and conditions for executives to that they were on par with their counterparts in statutory and private organisations. The poaching of potential public leaders by the competitors was a common problem and respondents believed it would continue unless the terms and conditions of executives were addressed. With all other factors discussed above, this raises the question of whether Public Sector organisations are achieving the goals of MD, which are to attract, defend, motivate and retain.

Having presented some of the quotes from the interview questions, the next step is to identify the common themes that emerged from the responses to answer the research issue of: What are the interventions to MD effectiveness? How do they contribute to capacity building of the executives in the PNG Public Service, and how could these be improved?

5.4 Themes Emerging from the Interviews

The overall findings for each research question have been summarised and discussed. The next subsection will discuss and present the common themes that have emerged from the interviews.

5.4.1 Common Themes

Many respondents gave similar perceptions and views on MD effectiveness and content analysis revealed four distinct themes in their responses. Thereafter, a tree node or coding hierarchy (Appendix 16 p. 311) was developed. Table 5.10 shows the summary of common themes that contribute to MD effectiveness. They are graphically shown in Figure 5.5.

<table>
<thead>
<tr>
<th>Table 5.10: Themes emerging from the interviews to MD effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Themes</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Organisational Support</td>
</tr>
<tr>
<td>Capabilities and Requirements of Executives</td>
</tr>
<tr>
<td>HR Policies and Effective Practices</td>
</tr>
<tr>
<td>Training and Development</td>
</tr>
</tbody>
</table>

Source: Analysis of field data
As can be seen above, the four common themes that emerged concerning the interventions to MD effectiveness were: organisational support; capabilities and requirements of executives; HR policies and effective practices; and T & D. These interventions consist of antecedent components or pre-program components which are under the control of the organisation and the individual executive; or post-program components which the organisation must use in order to ensure that the new knowledge and skills acquired in MD programs are actually transferred to the workplace.

The four interventions are briefly explained below.

**Organisational support** includes pre-program components which are under the control of the organisation such as the tools, facilities, infrastructure, structures and roles skills and post-program components which the organisation must use in order to ensure that the new knowledge and skills acquired in MD programs are actually transferred to the workplace. Support at the organisational level is essential to ensure that investment in MD yields the desired results.

**The capabilities and requirements of executives** includes the roles, responsibilities and expectations of their positions. Executive capabilities and requirements not only concern qualification requirements but also leadership skills and behaviour as well as a knowledge of policies and legislations. It is the JDs that contain and entail the requirements and therefore it is important to include this document as part of capabilities and requirements of executives.
**HR policies and effective practices** includes all related HR policies used to develop management executives. It also includes any practices or strategies organisations use that work well for them in developing the executives.

**Training and development** includes all forms of learning programs that organisations use to develop and build the capacity of their executives. This includes: short-term development programs, long-term educational programs, seminars and workshops, and self-help activities.

The themes and subthemes in coding hierarchy serve as a guide to the researcher in developing the items for the survey questionnaire which will be presented in the next chapter, Chapter 6. On the basis of the four common themes identified from the interviews, as well as on responses about the impact of T & D that contributes to SHRD of the executives, six hypotheses were developed to be tested in Phase II:

- **H₁**: There is a significant difference between pre and post-program leadership skills and competencies.
- **H₂**: There is a significant difference between pre and post-program behaviour and attitude.
- **H₃**: There is a significant positive relationship between organisation support and MD effectiveness.
- **H₄**: There is a significant positive relationship between Capability and Requirements of the executives and MD Effectiveness.
- **H₅**: There is a significant positive relationship between HR policies, effective practices and MD effectiveness.
- **H₆**: There is a significant positive relationship between T & D (MD learning programs) and MD effectiveness.

As explained in Chapter 1 and Chapter 4, Phase II is connected to, and follows on from Phase I when the themes from the interviews (Phase I) are tested in Phase II. The aim is to collect statistical data that would complement the findings from Phase I. Linking the qualitative and quantitative components effectively are the basis for producing integrated findings that are greater than the sum of their parts.
5.4 Summary

In sum, the interviews revealed a consistent picture, in that most interviewees held the view that their respective organisations supported MD but there was an absence of a standardised MD program and there was no system in place to evaluate the effectiveness of MD learning programs. One of the main concerns raised by the national departments was the absence of a coherent policy framework for MD in the Public Service to guide the development of executives. Furthermore, respondents said there was a need to have proper HR policies and there was an urgent call to review the current PSGO. The interviewees also disclosed similar views on the T & D programs and their impact on executives. The need for merit-based appointment procedures and criteria to be established in national departments was raised throughout the interviews. The capabilities and requirements of the roles and expectations as stipulated in the JDs was another important issue raised. The summaries of the responses to interview questions which were formulated to address the research questions highlights that, for MD to be effective, the following conditions need to be met: there must be organisational support; the capabilities and requirements of the executives must be consistent with the job requirements and expectations as stipulated in the JDs; there must be sound and effective HR policies, including effective practices that develop the executives; and there must be continuous T & D of executives to keep pace with changing technology, systems, environment, procedures and structures.

As the study adopted a two-phase sequential exploratory mixed methods approach, the findings from the interviews will follow or connect to the next phase of data collection and analysis which is the survey questionnaire presented in the next chapter, Chapter 6.

Statistical data were collected in Phase II to complement the findings from the interviews. The six hypotheses will be tested in the next chapter, Chapter 6.
6.1: Introduction

“Measurement, in short, is not an end in itself. Its scientific worth can be appreciated only in an instrumentalist perspective, in which we ask what ends measurement is intended to serve, what role it is called upon to play in the scientific situation, what functions it performs in inquiry”.


6.1.1 An Overview

In the previous chapter, data from the interviews were analysed to gauge the views of the most senior executives on the effectiveness of MD in their organisations and in the PNGPS. It drew attention to the common themes and codes that emerged from the interviews on the different interventions that contribute to the effectiveness of MD. From these, the survey questionnaire was developed. Issues relating to the construction and the implementation of the survey instrument were then considered. Thereafter, sample selection and procedures for data analysis were discussed.

In this chapter, the results of the survey are presented and discussed. The aim is to enable the researcher to handle data efficiently and to *tell a story* with the data that has been produced. Analysis of data in this chapter will begin with descriptive statistics which involve the transformation of raw data into a form that will make them easy to understand and interpret. Responses will be described. Thereafter, and as the analysis progresses beyond the descriptive stage, other tools of inferential statistics such as paired sample *t*-tests and multiple linear stepwise regression will be applied. The statistical techniques utilised to measure the validity and reliability of the scales include correlation analysis, factor analysis, reliability analysis, principal components analysis (PCA), Cronbach’s Alpha, Bartlett’s Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of adequacy.

6.1.2 The Structure of Chapter 6

This chapter is presented in nine sections. Section 6.1 serves as an introduction and gives an overview to the chapter with a conceptual overview or map of the structure of the chapter. Section 6.2 gives a summary and profile of the respondents and their demographics while Section 6.3 gives the summary of the pre-program information. Section 6.4 describes post-program items. Section 6.5 presents the process of data analysis. Section 6.6 presents
preliminary analysis of data as well as testing of the data. Then in Section 6.7, the results of data testing are summarised to show the significance of the hypotheses being tested. In Section 6.8, analysis of qualitative data for extra items on open questions relating to comments and suggestions are presented. Finally, in Section 6.9, the summary of data analysis is presented.

A graphical view of the structure of Chapter 6 is thus presented in Figure 6.1 below.
Figure 6.1 Structure of Chapter 6

Source: Developed for this research
6.2: The Respondents and their Demographics

6.2.1 Profile of Respondents

Section A of the survey comprised respondents’ demographics. Before providing a comprehensive analysis of the data as it emerged in the conduct of the study, it is essential to describe the demographic characteristics of the executives. Such a description allows the data to be placed in context. Seven questions were related to the profile of respondents in this research. Those questions focused on the respondents’ gender, age, the type of organisation they worked in, their position, the length of time they had served as executives in their current positions, the length of time spent in the organisation and their highest level of education. Table 6.1 gives a summary of the profile of the respondents.

<table>
<thead>
<tr>
<th>DEMOGRAPHIC VARIABLE</th>
<th>CATEGORY</th>
<th>FREQUENCY (n=150)</th>
<th>PER CENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>119</td>
<td>79.3%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>31</td>
<td>20.7%</td>
</tr>
<tr>
<td>Age Group</td>
<td>Under 30 years</td>
<td>2</td>
<td>1.3%</td>
</tr>
<tr>
<td></td>
<td>31–40 years</td>
<td>39</td>
<td>26.0%</td>
</tr>
<tr>
<td></td>
<td>41–50 years</td>
<td>67</td>
<td>44.7%</td>
</tr>
<tr>
<td></td>
<td>51–60 years</td>
<td>42</td>
<td>28.0%</td>
</tr>
<tr>
<td></td>
<td>Over 60 years</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Type of Organisation</td>
<td>National Departments/Agencies</td>
<td>91</td>
<td>60.7%</td>
</tr>
<tr>
<td></td>
<td>Statutory bodies/authorities &amp; entities</td>
<td>58</td>
<td>38.7%</td>
</tr>
<tr>
<td></td>
<td>Provincial/District Administration</td>
<td>1</td>
<td>.7%</td>
</tr>
<tr>
<td>Position</td>
<td>Departmental Head/Secretary/CEO</td>
<td>15</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Deputy Secretary/Deputy CEO</td>
<td>17</td>
<td>11.3%</td>
</tr>
<tr>
<td></td>
<td>Director/First Assistant Secretary/Executive Manager</td>
<td>49</td>
<td>32.7%</td>
</tr>
<tr>
<td></td>
<td>Deputy Director, Assistant Secretary/Manager</td>
<td>56</td>
<td>37.3%</td>
</tr>
<tr>
<td></td>
<td>Central District Manager</td>
<td>1</td>
<td>.7%</td>
</tr>
<tr>
<td>Capabilities and requirements of executives (See Table 6.2 below)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length of time as Executive</td>
<td>Less than 1 year</td>
<td>16</td>
<td>10.7%</td>
</tr>
<tr>
<td></td>
<td>1–2 years</td>
<td>26</td>
<td>17.3%</td>
</tr>
<tr>
<td></td>
<td>3–5 years</td>
<td>27</td>
<td>18.0%</td>
</tr>
<tr>
<td></td>
<td>6–10 years</td>
<td>41</td>
<td>27.3%</td>
</tr>
<tr>
<td></td>
<td>11–20 years</td>
<td>28</td>
<td>18.7%</td>
</tr>
<tr>
<td></td>
<td>More than 20 years</td>
<td>12</td>
<td>8.0%</td>
</tr>
<tr>
<td>Length of time in Organisation</td>
<td>Less than 1 year</td>
<td>5</td>
<td>3.3%</td>
</tr>
<tr>
<td></td>
<td>1–2 years</td>
<td>6</td>
<td>4.0%</td>
</tr>
<tr>
<td></td>
<td>3–5 years</td>
<td>13</td>
<td>8.7%</td>
</tr>
<tr>
<td></td>
<td>6–10 years</td>
<td>20</td>
<td>13.3%</td>
</tr>
<tr>
<td></td>
<td>11–20 years</td>
<td>39</td>
<td>26.0%</td>
</tr>
<tr>
<td></td>
<td>More than 20 years</td>
<td>67</td>
<td>44.7%</td>
</tr>
</tbody>
</table>
Gender was the first demographic characteristic to be considered. Table 6.1 above indicates a greater response to the survey by males than their female counterparts. Of the 150 responses received, only 31 (20.7%) were females. As can be seen, there were no missing values as all respondents indicated their gender.

For the age groups, the highest number (44.7%) of surveyed executives were within the 41 to 50 age group, with the second highest number (28%) being in the 51 to 60 age group. The third largest age group 31–40 years (26% of the total) while the lowest number was in the under 30 age group (1.3%). All participants indicated their age group.

For type of public sector organisation, the largest number of respondents came from the national departments (60.7%), with the statutory bodies and authorities including state agencies and enterprises making up the second largest number (38.7%). All respondents indicated the type of public sector organisation they worked in.

Responses regarding current position showed that the respondents represented a cross-section of the executives in the public sector organisations based in Port Moresby. Justification for the exclusion of provincial public sector executives is given in Chapter 4 and elsewhere in this thesis. The largest number (37.3%) of executives that participated in the survey were those holding the positions of deputy director, assistant secretary or managers of divisions or sections. The second largest group was made up of their superiors who were directors, executive managers or first assistant secretaries (32.7%). Members of this group are sometimes known as divisional heads. Deputy Secretaries or Deputy CEOs constituted the next highest percentage of 11.3%, followed by the top hierarchy of the organisations – the CEOs or departmental heads who comprised 10% of the total respondents. All respondents in this study indicated the positions held.

For time as executives, the highest percentage (27.3%) of respondents had been on their current jobs from 6 to 10 years, while the next highest (18.7%) had been in executive roles for 11 to 20 years. Eighteen per cent had been on their roles as executives for 3–5 years,
17.3% had been on their executive roles between 1–2 years, followed by those who were new to their executive roles with less than one year’s experience (10.7%), and finally 8% had been in executive roles for over 20 years.

Unlike the data presented for time as executive, which showed that most respondents had been in their roles for durations spread across a range of timeframes, the data shown above in Table 6.1 clearly show that a vast majority of executives (44.7%) had been in their organisations for more than 20 years and the next highest percentage (26%) had been in their organisation for 11–20 years. The lowest percentages were those who had been in the public sector for less than 1 year (3.3%), for 1–2 years (4%) and for 3–5 years (8.7%). Everyone who responded indicated their time in the organisation.

In terms of highest level of education possessed, 67% had attained a basic university bachelor’s degree. Of these, 26.7% had attained a master’s degree, 2.7% with doctoral qualification, while the remaining respondents had attained other education levels. All participants responded to this question.

### 6.2.2 Capabilities and requirements of current position

<table>
<thead>
<tr>
<th>DEMOGRAPHIC VARIABLE</th>
<th>CATEGORY</th>
<th>FREQUENCY (n=150)</th>
<th>PER CENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Management and Leadership skills</td>
<td>132</td>
<td>88.0%</td>
</tr>
<tr>
<td></td>
<td>Strong Analytical and Research Skills</td>
<td>105</td>
<td>70.0%</td>
</tr>
<tr>
<td></td>
<td>Strong Written and Oral Communication Skills</td>
<td>128</td>
<td>85.3%</td>
</tr>
<tr>
<td></td>
<td>Public Relations and Inter-personal relations Skills</td>
<td>116</td>
<td>77.3%</td>
</tr>
<tr>
<td></td>
<td>Organisational Skills – Team Player</td>
<td>120</td>
<td>80.0%</td>
</tr>
<tr>
<td></td>
<td>Computer Skills/Literate</td>
<td>113</td>
<td>75.3%</td>
</tr>
<tr>
<td></td>
<td>Proficient level of general accounting principles and practices</td>
<td>73</td>
<td>48.7%</td>
</tr>
<tr>
<td></td>
<td>Proficient level of Financial Management policies, procedures and systems</td>
<td>83</td>
<td>55.3%</td>
</tr>
<tr>
<td></td>
<td>Proficient level of Public Finance (Management) Act</td>
<td>76</td>
<td>50.7%</td>
</tr>
<tr>
<td></td>
<td>Proficient level of Public Service (Management) Act, and the Public Services General Orders</td>
<td>75</td>
<td>50.0%</td>
</tr>
<tr>
<td></td>
<td>Proficient level of Organic Law on Provincial and Local Level Government</td>
<td>43</td>
<td>28.7%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>24</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*
For capabilities and requirements of their current roles as executives, the sets of capabilities and requirements listed in this survey were generic. It can be seen that while some of the items were rated highly such as management and leadership skills (88%), written and oral communication skills (85%) and organisational skills (80%), others such as sound knowledge of the government legislations like the Public Service Management Act (50%), and Organic Law (28 %) were given a low rating (as shown in Table 6.2).

6.2.3 Types of MD learning programs undertaken

<table>
<thead>
<tr>
<th>DEMOGRAPHIC</th>
<th>CATEGORY</th>
<th>FREQUENCY (n=150)</th>
<th>PER CENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management development Programs undertaken in the last 10 years</td>
<td>In-house development programs including the Graduate Development Program</td>
<td>94</td>
<td>62.7%</td>
</tr>
<tr>
<td></td>
<td>External Management Programs</td>
<td>56</td>
<td>37.3%</td>
</tr>
<tr>
<td></td>
<td>Long-term overseas educational programs</td>
<td>59</td>
<td>39.3%</td>
</tr>
<tr>
<td></td>
<td>Long-term in-country educational programs</td>
<td>30</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>Overseas assignments or attachments</td>
<td>28</td>
<td>18.7%</td>
</tr>
<tr>
<td></td>
<td>Coaching and Mentoring</td>
<td>42</td>
<td>28.0%</td>
</tr>
<tr>
<td></td>
<td>Task Force/Projects</td>
<td>44</td>
<td>29.3%</td>
</tr>
<tr>
<td></td>
<td>Seminars and Workshops</td>
<td>127</td>
<td>84.7%</td>
</tr>
<tr>
<td></td>
<td>Secondments</td>
<td>16</td>
<td>10.7%</td>
</tr>
<tr>
<td></td>
<td>Internet-based learning</td>
<td>14</td>
<td>9.3%</td>
</tr>
<tr>
<td></td>
<td>Job Rotation</td>
<td>31</td>
<td>20.7%</td>
</tr>
<tr>
<td></td>
<td>Not attended any – none</td>
<td>3</td>
<td>2.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>6</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The most popular types of MD learning programs attended by the respondents were seminars and workshops (84.7%), while the least popular program was internet-based learning (9.3%). Two per cent (2%) indicated they had not attended any MD learning program, while 4.0% indicated they had attended other types of MD learning programs not listed above (as shown in Table 6.3).

6.3: Pre-Program Information

This section comprised antecedent components which refers to pre-program information that was under the control of the organisation and the individual executives. As this study was the first to be conducted on the effectiveness of MD interventions in the public sector of PNG, it was essential to gather pre-program information to establish what happens before
training takes place in regards to policies, systems and practices. These included self-assessment of leadership skills, competencies, behaviour and attitude before MD learning programs, identification of training and selection procedures, as well as HR policies and effective practices which are discussed below.

6.3.1 Self-assessment of skills, competencies, behaviours and attitudes before undertaking MD learning programs.

This was a general self-assessment exercise and did not specifically ask them to assess themselves against a particular program of learning. The aim of the self-assessment question was to allow them to assess their leadership skills and competencies as well as their behaviour or attitudes before undertaking the learning programs and then later to assess themselves again using the same set of items after undertaking the learning programs. This sought to establish if there were significant improvements in their leadership skills and competencies as well as in their behaviour before and after the learning programs.

Appendix 17 (p. 317) shows the descriptive statistics on the mean averages of the self-assessment items before the executives attended MD programs. As can be seen, the item with the highest mean average of 5.94 is Item SAB1.20 – Attitude to work while the item with the lowest mean average of 4.67 is Item SAB1.14 – Contributing to organisation’s ability to influence and inform policy decision by the government. As shown, the highest mean averages fall within items that relate to behaviour and attitude.

To compare if there was any change or improvement on the leadership skills and behaviour before and after undertaking the MD learning programs, respondents were given the opportunity to assess their leadership skills and behaviour after MD learning programs on the same set of items. Other statistical tools such as a paired sample $t$-test was used to test if there were significant differences between the variables before and after MD programs. This will be discussed in Section C – Post-Program Information.

6.3.2 Identification of Training and Development Selection Procedures

Appendix 18 (p. 318) shows details of how training is identified and the selection procedures involved.

Most of the respondents (72.7%) indicated that they had learnt of the MD programs through their employing organisations. Others used their initiative to seek program information through other means such as newspaper, word of mouth, internet or education roadshows.
There is clear indication that most (65.3%) nominations for T & D for the executives went through the normal process. A very few (19.3%) indicated quite the reverse while a small number (11.3) indicated they were not sure if their nomination were endorsed by the training committee.

When asked for reasons why they chose a particular MD program, the majority (46.7%) of the respondents indicated that it was recommended by their organisation and as a requirement of the organisation, they had to attend the program. Others were influenced by other means.

6.3.3 HR Policies and Effective Practices used in MD

Data shown in Appendix 19 (p. 319) indicates the relevant HR Policies and Effective Practices PS organisations use in developing their executives.

As seen, the two most common policies or legislations used by the public sector organisations in developing their executives were the training plans (69.3%) and the training policies (64.7%), followed by the PS General Orders (58.7%). Succession Plans only constituted 29.3%, while other policies only constitute a small percentage.

Effective practices one organisation uses may not be effective for another. However, there were indications of common practices. Systematic approach to HRD such as identification of training needs (89.3%), with training linked to organisation goals and objectives (70.7%) was practised by many of the organisations. Organisation support and infrastructures in place (46.6%) was next common practice. Post-program evaluation only constituted 30.7%.

6.4: Post-Program Information

The previous section on Pre-program information included antecedent components that are under the control of the organisation and the individual executives. This section comprises of post-program information which refer to activities that organisations must use in order to ensure that the new knowledge and skills acquired in MD is actually transferred to the workplace, more specifically it relates to the impact of the interventions on the executives.
6.4.1 Self-assessment of skills, competencies, behaviours and attitudes after undertaking MD programs.

As discussed earlier in Section B, respondents were asked to assess their leadership skills and behaviour before they undertook the MD learning programs. This section shows the results of the leadership skills and behaviour after undertaking the MD learning programs using the same set of items. Appendix 20 (p. 320) shows the descriptive statistics on the mean averages of the self-assessment items after they undertook the MD programs.

As can be seen, the item with the highest mean was still *Attitude to work* (Item SAC1.20) with a mean of 6.35, while the item with the lowest mean (Item SAC1.7) had changed to *Computer Skills* with a mean of 5.51. However, to determine the extent of the improvement or change, two mean differences for each item had to be compared. This is discussed in the next section.

6.4.1.1 Comparing pre- and Post-Program Mean Differences on Leadership Skills and Behaviour.

In order to see if there is a significant improvement after MD learning programs, a separate analysis was conducted as shown in Appendix 21 (p. 320), that provides a summary of the two means.

Comparing the two mean differences indicates: 1) whether there has been improvement as a result of the MD learning programs; 2) the item with the biggest improvement after undertaking an MD learning program; and 3) the item with the least improvement after undertaking an MD learning program.

The second item, *Adapting to change and innovation*, proved to be the competency or skill that improved the most after MD programs with a mean average difference of 1.05, while the last item, *Attitude to work*, was the least improved with a mean difference of 0.41 after MD programs even though it had the highest mean average before and after MD programs.

6.4.2 Interventions to MD Effectiveness

The preliminary analysis in Section 6.6.2 will measure the validity and reliability of the items and thereafter test the four constructs and their relationships to the dependent variable, MD effectiveness. To test the four interventions to MD effectiveness, statements were developed under each intervention. Using a 7-point Likert scale of ‘1 – Strongly Disagree’ to ‘7 – Strongly Agree’, the respondents were asked to rate how strongly they agreed or disagreed.
for each item by circling the number on the response scale. This item is analysed and tested in Section 6.6.4.

6.4.3 Evaluation of MD Learning Programs

Table 6.4  Evaluation of MD programs

<table>
<thead>
<tr>
<th>DEMOGRAPHIC</th>
<th>CATEGORY</th>
<th>FREQUENCY (n=150)</th>
<th>PER CENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Program Evaluation</td>
<td>Yes</td>
<td>31</td>
<td>20.7%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>71</td>
<td>47.3%</td>
</tr>
<tr>
<td></td>
<td>Not Sure</td>
<td>48</td>
<td>32.0%</td>
</tr>
<tr>
<td>Reporting of evaluation results to top management</td>
<td>Yes</td>
<td>27</td>
<td>18.0%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>35</td>
<td>23.3%</td>
</tr>
<tr>
<td></td>
<td>Not Sure</td>
<td>88</td>
<td>58.7%</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

When asked if MD programs were evaluated, the majority (47%) said they were not, while only 20% said they were. The second-highest number of respondents (32%) said they were not sure if the programs were evaluated. On the other hand, when asked if the results of the evaluation were relayed to top management, only 18% said they were, with 23% saying they were not and a large number (58.7%) were not sure.

6.4.4 Impact of the MD Programs

Although respondents were asked earlier about how MD programs had impacted on their performances, this question sought to find out the specific MD learning programs and their impact by rating them from ‘1 being the biggest impact’ to ‘5 the least impact’. Table 6.5 shows the ranking order based on ‘1 – the biggest impact’.

Table 6.5  Ranking of MD programs with the most positive impact on executives

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Type of Program</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Seminars and Workshops</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>Long-term overseas educational programs</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>In-house management program (including Graduate Development Programs)</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>Long-term in country educational programs</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Coaching and Mentoring</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>External management programs</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>Overseas attachments/assignments</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Other (short term in country programs)</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>Task force/projects</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Job Rotation</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Internet based learning</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Secondments</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

Based on ‘1’ being the biggest impact, seminars/workshops scored the biggest impact (24 respondents) followed by long-term overseas educational programs (19 respondents), then in-
house management programs which includes graduate development programs (14 respondents). Table 6.5 shows the ranking order of the MD programs.

According to the ratings in Table 6.5 above, seminars and workshops was ranked first. The second in ranking order was long-term overseas educational programs while the in-house management programs (including the graduate development program) was ranked third. The lowest ranked programs with only 1 response each were: job rotation, internet-based learning and secondments.

The next section discusses how the survey questions were linked to the research questions, the conceptual framework for the quantitative phase and the hypotheses.

### 6.5: Linking survey questions to research questions and analysis of data

This study started with in-depth interviews which were qualitative, after which the survey questionnaire was developed which was quantitative. As discussed above and elsewhere in this thesis, the results of the in-depth interviews helped inform or develop the survey questions which were linked to the research questions. On the basis of the four common themes identified from the interviews, as well as on responses about the impact of T & D that contributes to SHRD of the executives, a conceptual framework for the quantitative phase was developed. From the conceptual framework, six hypotheses were developed to be tested. These will be discussed in the proceeding sections.

#### 6.5.1 Linking Survey Questions to Research Questions

Table 6.6 shows how the survey questions were linked to the research issue and the questions.
Table 6.6 Linking survey questions to research questions

<table>
<thead>
<tr>
<th>Research Questions (RQ)</th>
<th>Survey Questions (SQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the capabilities and requirements of executives as articulated in the PNGPS?</td>
<td>A5, A8</td>
</tr>
<tr>
<td>2. What are the current HR Policies and Effective Practices that contribute to MD?</td>
<td>B6, B7</td>
</tr>
<tr>
<td>3. Do the current policies and practices fully develop management executives?</td>
<td>B8</td>
</tr>
<tr>
<td>4. How are the MD interventions evaluated?</td>
<td>B7.5, C3.1, C3.2, C3.3, C4.1, C4.2, C4.3</td>
</tr>
<tr>
<td>5. In what ways could MD be improved to contribute to capacity building in the Public Service?</td>
<td>D1, D2</td>
</tr>
<tr>
<td>6. What are the changes and suggestions that could be integrated into policies and practices?</td>
<td>D1, D2</td>
</tr>
<tr>
<td>7. Can a framework on MD interventions and a checklist on T &amp; D be developed that contribute to capacity building of the executives in PNGPS?</td>
<td>D1, D2</td>
</tr>
</tbody>
</table>

*Source: Developed for this research*

As can be seen, several questions were linked or related to the same research questions.

The research issue sought to determine the interventions that contributed to MD effectiveness. Analysis of the interview responses showed that these were: organisational support, capabilities and requirements of executives, HR policies, effective practices and T & D. The survey questions are based on these findings. As the study concerns SHRD of executives, it was deemed necessary to include a self-assessment question on pre- and post-program leadership skills and behaviour to see if there was a significance difference after undertaking any MD learning programs in general, although T & D is a construct on its own.

### 6.5.2 Conceptual Framework – Quantitative phase

Following on from the themes identified above, six hypotheses were developed. Hence, the conceptual framework for the quantitative phase is shown as thus in Fig. 6.2 below. It consists of one dependent variable, *MD effectiveness*, and six independent variables.
The six hypotheses are restated below:

H₁: There is a significant difference between pre- and post-program leadership skills and competencies.

H₂: There is a significant difference between pre and post-program behaviour and attitude.

H₃: There is a significant positive relationship between organisational support and MD effectiveness.

H₄: There is a significant positive relationship between capability and requirements of the executives and MD effectiveness.

H₅: There is a significant positive relationship between HR policies, effective practices and MD effectiveness.

H₆: There is a significant positive relationship between T & D (MD learning programs) and MD effectiveness.

### 6.5.3 Data Analysis Procedure

As was explained in Section 4.6.2 and as portrayed in Figure 4.7, the analysis of data followed six stages, from developing the hypotheses, identifying the scales of measurement, entering the data, checking for missing values, creating composite variables, evaluating their validity and reliability and correlation, and finally evaluating and testing data. Data analysis procedures will be discussed next.
6.6: Data Evaluation and Testing

This section begins by presenting the exploratory analysis of the data using correlation analysis, factor analysis, principal component analysis and reliability analysis. Before any statistical tests or multivariate techniques could be conducted, it was necessary to clean and transform the data. Hair et al. (2010 p. 33) state that by cleaning and transforming data, the researcher evaluates the impact of the missing data, identifies outliers, tests for the assumptions underlying most multivariate techniques. The objective of these data examination tasks is as much to reveal what is not apparent as it is to portray the actual data, because the hidden effects are easily overlooked.

6.6.1 Data Cleaning

Several steps were taken to check the validity and reliability of the scales before any statistical tests on multivariate techniques could be conducted by applying exploratory factor analysis. Correlations were examined for internal consistency and homogeneity. Composite variables were created followed by the evaluation of their validity and reliability. Other statistical techniques such as Cronbach’s Alpha for reliability and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were utilised to predict if the data was likely to factor well. In addition, Bartlett’s Test of Sphericity was utilised to calculate the determinant of the matrix of the sums of products and cross-products.

6.6.1.1 Creating Composite Variables (Summated Scales) for the Variables

First, composite variables were created for the variables used in the self-assessment of pre- and post-program leadership skills and behaviour. Composite variables were also created for the four constructs of the MD interventions. Some items had to be re-coded without having to overwrite the original data. Hair et al. (2010 p. 3) described composite variables, also known as summated scales, as a method of combining several variables that measure the same concept into a single variable in an attempt to increase the reliability of the measurements through multivariate measurement. In most instances, the separate variables are summated and then their total or average score is used in the analysis. Summated scales is one of the recent developments in academic research. It has experienced increased application in applied and managerial research as well (Hair et al., 2010: p. 127). The ability of the summated scale to portray complex concepts in a single measure while reducing measurement error makes it a valuable addition in any multivariate analysis.
The composite variable in pre-program leadership skills “Preleadership” was calculated by taking the sum of the 17 items relating to leadership skills, while the composite variable for pre-program behaviour “Prebehaviour” was calculated by taking the sum of the three items relating to behaviour and attitude. The same procedure applied to post-program leadership skills and behaviour. For organisational support, the composite variable “OrgSupport” was calculated by taking the sum of five items relating to organisational support; composite variable “CapReq” was calculated by taking the sum of the seven items relating to capabilities and requirements of executives; composite variable “HRPEP” was calculated by taking the sum of the nine items relating to HR policies and effective practices, while composite variable “TD1” was calculated by taking the sum of 18 items relating to T & D. Table 6.7 below shows a summary of the number of items in each construct and the new variable names.

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Items</th>
<th>New Composite Variable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership skills before MD program</td>
<td>17</td>
<td>PreLeadership</td>
</tr>
<tr>
<td>Behaviour before MD program</td>
<td>3</td>
<td>PreBehaviour</td>
</tr>
<tr>
<td>Leadership skills after MD Program</td>
<td>17</td>
<td>PostLeadership</td>
</tr>
<tr>
<td>Behaviour after MD Program</td>
<td>3</td>
<td>PostBehaviour</td>
</tr>
<tr>
<td>Organisation Support</td>
<td>5</td>
<td>OrgSupport</td>
</tr>
<tr>
<td>Capabilities and Requirements of Executives</td>
<td>7</td>
<td>CapReq</td>
</tr>
<tr>
<td>HR Policies and Effective Practices</td>
<td>9</td>
<td>HRPEP</td>
</tr>
<tr>
<td>Training and Development</td>
<td>18</td>
<td>TD1</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

6.6.1.2 Checking the Internal Consistency of Composite Variables by Examining Correlations

Once the new composite variables were created, the validity (homogeneity) of the composite variables was examined by examining the correlations with all items included. Gregory (2000 p. 108) reports that the most common approach to evaluating homogeneity of the items is to correlate every component item with the composite variable made up from adding the components together. These are commonly referred to as the item-to-total correlations (or item-total correlations). The rationale is that if each item is measuring the same thing as the total, then the scale is homogenous. It is assumed that the total score is a true measure of the concept, but if it contains one or more items that are not truly related to it, then they have to be removed and a new total recalculated. The correlation then needs to be checked again to ensure that the others are working properly (Manning & Munro, 2007 p. 26). In addition, inter-item correlation was used to examine the correlations between the individual items used
to create the composite variable. Rules of thumb provided by authors such as Hair et al. (2010 p. 125) suggest that the item-to-total correlations should exceed .50 and the inter-item correlations should exceed .30 (Manning & Munro, 2007 p. 26).

The first measures to be considered relate to each separate item, including the item-to-total correlation (the correlation of the item to the summated scale score) and the inter-item correlation (the correlation among items). Validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure (Sekaran & Bougie, 2010 p. 157). If the composite variable really does represent a single underlying property or concept, then the component items will be homogenous or internally consistent.

6.6.1.3 Reliability Test

The second type of diagnostic measure is the reliability coefficient, which assesses the consistency of the entire scale, with Cronbach’s Alpha being the most widely used measure. The reliability of a measure indicates the extent to which it is without bias (error free) and hence ensures consistent measurement across time and across the various items in the instrument (Sekaran & Bougie, 2010 p. 161). In other words, the reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the “goodness” of a measure.

There are different reliability coefficients used to measure consistency. In this study, Cronbach’s Alpha was adopted as the measure of internal consistency. Cronbach’s coefficient alpha is a test of the consistency of respondents’ answers to all the items in a measure. To the degree that items are independent measures of the same concept, they will be correlated with one another (Sekaran & Bougie, 2010 p. 162). The generally agreed-upon lower limit for Cronbach’s Alpha is .70, although it may decrease to .60 in exploratory research. Also available are reliability measures derived from confirmatory factor analysis. Generally, values of coefficient alpha above .70 are considered to represent ‘acceptable’ reliability, above .80 ‘good reliability’, and above .90 to represent ‘excellent reliability.

The preliminary analyses for all constructs shown in Section 6.7.2 shows the reliability of all constructs – that is, pre- and post-program leadership skills and behaviour, organisational support, capability and requirement, HR policies and effective practices, and T & D.

Reliability tests were undertaken to ensure the scales were all measuring the same underlying attribute. Factor analysis was then considered to be a suitable method to identify the
underlying factors that explain the correlations among the variables. Therefore, factor analysis was used to examine the convergent validity of the measures of the leadership skills and behaviour before and after MD learning programs. It was also used for the four constructs of the factors that contribute to MD effectiveness.

6.6.1.4 Factor Analysis

Factor analysis, a data reduction technique, was used in most of the items or questions to reduce a large number of variables to a smaller set of underlying factors that summarise the essential information contained in the variables (Coakes, Steed & Ong, 2009 p. 129). It is employed in relation to multiple-indicator measures to determine whether groups of indicators tend to bunch together to form distinct clusters, referred to as factors. In other words, it is used for large numbers of variables to establish whether there is a tendency for groups of them to be interrelated (Bryman, 2008 p. 694). Its main goal is to reduce the number of variables with which the researcher needs to deal.

Principal component analysis (PCA), a more sophisticated way of checking the homogeneity of a scale, can be run. PCA is a type of factor analysis (FA) which is used to summarise the relationships between variables which are displayed in a correlation matrix (Manning & Munro, 2007 p. 167).

Here, only one underlying component (dimension) with an eigenvalue greater than 1.0 should be extracted. If we get more than one component with an eigenvalue greater than 1.0, then the items are not measuring a single underlying concept and some choices have to be made. In this case, the composite variables were calculated using the items which were correlated with the first of the underlying components. These correlations are represented by the component loadings. The factor loadings provide information analogous to the item-to-total correlations and items with larger factor loadings provide better measures of the underlying property than do items with small factor loadings. When examining individual items, Hair et al. (2010 p. 99) suggest that if the loadings have an absolute value of .50 or greater, then they should be considered to be practically significant (Manning & Munro, 2007 p. 26). In the process of principal component testing, there are two ways to determine whether the PCA can continue or not. For instance, the KMO value can be used to measure the sampling adequacy which should be greater than 0.60. The other is the result of Bartlett’s Test of Sphericity which should have a large chi-square value and be satisfying (p<.05) (Manning & Munro, 2007).
6.6.2 Preliminary Data Analysis

This section presents the preliminary evaluation of the data via correlation analysis, exploratory factor analysis. Results of the preliminary analysis for the constructs are presented separately with all items and with selected items removed.

A summary of preliminary analysis table using exploratory analysis is provided below which serves as a guide when deciding where items should be retained or deleted. A list of items under each factor is attached as Appendix 22 (p. 322).

Table 6.8 Summary of preliminary analysis - Exploratory Analysis

<table>
<thead>
<tr>
<th>Scale Evaluation</th>
<th>Source: Adapted from Day (2005 p. 145).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 6.0</td>
<td></td>
</tr>
<tr>
<td>Kaiser-Meyer-Olkin Measure of Sampling (KMO)</td>
<td></td>
</tr>
<tr>
<td>p &gt; .05</td>
<td></td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity (Bartlett’s) p &lt; .05</td>
<td></td>
</tr>
<tr>
<td>Less than .30</td>
<td></td>
</tr>
<tr>
<td>Correlations</td>
<td></td>
</tr>
<tr>
<td>Between .30 and .90</td>
<td></td>
</tr>
<tr>
<td>More than .90</td>
<td></td>
</tr>
<tr>
<td>Factor Loadings</td>
<td></td>
</tr>
<tr>
<td>More than .50</td>
<td></td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td></td>
</tr>
<tr>
<td>More than .70</td>
<td></td>
</tr>
</tbody>
</table>

Delete items                                      Retain items

6.6.2.1 Preliminary analysis for pre-program leadership skills and behaviour

Table 6.9: Preliminary analysis for pre-program leadership skills and behaviour with all items

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreLeadership</td>
<td>1 item (SAB1.7) &lt;.5</td>
<td>1 item (SAB1.7) &lt;.3</td>
<td>1 – 10.840</td>
<td>.962 with 17 items</td>
<td>.936</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>PreBehaviour</td>
<td>All items &gt;.5</td>
<td>All items &gt;.3</td>
<td>1 – 2.493</td>
<td>.896 with 3 items</td>
<td>.708</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

Pre-program Leadership skills was measured using 17 items (items SAB1.1–17) before the preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.9, confirm that there was a high KMO value (.936>.60) and the Bartlett’s test indicated it had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item–total and inter-item correlation indicated PreLeadership had one low correlation, item SAB1.7 – Computer Skills – while the other coefficients were all within the acceptable range for data analysis.
In addition, EFA indicated that there were two components with eigenvalues of greater than 1 which meant that these two components explained more variations than did the original item. Despite this, Cronbach’s Alpha was .962 with 17 items, which signified excellent reliability of the scales. However, based on the other two factors of low correlations and having more than one component with eigenvalues, the item SAB1.7 (Computer Skills) had to be removed from the analysis.

### Table 6.10 Preliminary analysis for pre-program leadership skills with items removed.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreLeadership</td>
<td>All items &gt;.5</td>
<td>All items &gt;.3</td>
<td>1 – 10.661</td>
<td>.966 with 16 items &gt;.962</td>
<td>.934</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*

The summary on the rerun of the construct PreLeadership without item SAB1.7 is shown in Table 6.10. As shown in the summary, after item SAB1.7 was deleted from the analysis, there were sufficient correlations which were high and within the acceptable range, to enable the factor analysis to proceed. Bartlett’s test still indicated a significant probability level (p<0.05) while the KMO value dropped slightly (.934 < .936). The Cronbach’s Alpha was .966 > .962 with 16 items, and still signified excellent reliability of the scales.

EFA indicated only one component with an eigenvalue greater than 1, and so the remaining 16 items for leadership skills were homogenous and the 16 item loading ranged from 0.74 to 0.88. The component matrix indicated that the ‘best’ item at representing the concept was item SAB1.13 – *Influence towards positive attitudinal change of our clients*, while the ‘worst’ item at representing the concept was item SAB1.17 – *Managing physical assets in my division and organisation to achieve results while protecting their value*. All 16 items had loadings greater than .50. Therefore all were useful (Hair et al, 1998 p. 111). The new composite variable was named PreLeadership.

Pre-program Behaviour was measured using the three items (items SAB1.18–20) before the preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.9 confirmed that there was a high KMO value (.708 >.60), and the Bartlett’s test indicated it had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item-total and inter-item correlation indicated that all coefficients were within the acceptance range for data analysis. After examining the reliability, it was found that Cronbach’s Alpha was .896 with 3 items, which indicated good reliability of the scale.
EFA indicated only one component with eigenvalue greater than 1, and so the remaining three items for behaviour were homogenous and the three-item loading ranged from 0.89 to 0.95. The component matrix indicated that the ‘best’ item at representing the concept was item SAB1.20 – *attitude to work*, while the ‘worst’ item at representing the concept was item SAB1.18 – *Having confidence in my work*. All three items had loadings greater than .50. Therefore all were useful (Hair et al, 1998 p. 111). The composite variable was named PreBehaviour.

### 6.6.2.2 Preliminary data analysis for post-program leadership skills and behaviour with all items

**Table 6.11** Preliminary analysis for post-program leadership skills and behaviour with all items

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>PostLeadership</td>
<td>All items &gt;.5</td>
<td>1 item (SAC1.7) &lt;.3</td>
<td>1 – 10.639, 2 – 1.021</td>
<td>.961 with 17 items</td>
<td>.940</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>PostBehaviour</td>
<td>All items &gt;.5</td>
<td>All items &gt;.3</td>
<td>1 – 2.592</td>
<td>.920 with 3 items</td>
<td>.745</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*

Post-program Leadership skills was measured using the 17 items (items SAC1.1–17) before the preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.11, confirmed that there was a high KMO value (.940 >.60) and the Bartlett’s test indicated it had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item-total and inter-item correlation indicated Post-program Leadership had one low correlation, item SAC1.7 – *Computer Skills* – while the other coefficients were all within the acceptable range for data analysis.

In addition, EFA indicated that there were two components with eigenvalues of greater than 1 which meant that these two components explained more variations than did an original item. Despite this, Cronbach’s Alpha was .961, with 17 items, which signified excellent reliability of the scales. However, based on the other two factors of low correlations and having more than one component with eigenvalues, the item SAC1.7 (Computer Skills) had to be removed from the analysis.

Post-program Behaviour was measured using the three items (items SAC1.18–20) before the preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.11, confirmed that there was a high KMO value (.745 >.60), and the Bartlett’s test indicated it
had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item-total and inter-item correlation indicated that all coefficients were within the acceptance range for data analysis. After examining the reliability, it was found that Cronbach’s Alpha was .920 with three items, which indicated excellent reliability of the scale.

EFA indicated only one component with an eigenvalue greater than 1, and so the remaining three items for behaviour were homogenous and the three-item loading ranged from 0.92 to 0.95. The component matrix indicated that the ‘best’ item at representing the concept was item SAB1.20 – attitude to work, while the ‘worst’ item at representing the concept was item SAB1.19 – Punctuality and attendance to work. All three items had loadings greater than .50. Therefore all were useful (Hair et al, 1998 p. 111). The composite variable was named Post-Behaviour.

**Table 6.12**  
**Preliminary analysis for post-program leadership with items removed.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>PostLeadership</td>
<td>All items &gt;.5</td>
<td>All items &gt;.3</td>
<td>1 – 10.32</td>
<td>.963 with 16 items &gt;.961</td>
<td>.934</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*

The summary on the rerun of the construct Post-program Leadership without item SAC1.7 is shown in Table 6.12. As shown in the summary, after item SAC1.7 was deleted from the analysis, there were sufficient correlations which were high and within the acceptable range, to enable the factor analysis to proceed. Bartlett’s test still indicated a significant probability level (p<0.05) while the KMO value dropped slightly (.934 <.936). The Cronbach’s Alpha was .963 > .961 with 16 items, and still signified excellent reliability of the scales.

EFA indicated only one component with an eigenvalue greater than 1, and so the remaining 16 items for leadership skills were homogenous and the 16 item loading ranged from 0.71 to 0.86  The component matrix indicated that the ‘best’ item at representing the concept was item SAB1.9 – Interpersonal skills and using different techniques to establish good working relationships with people within and outside the organisation, while the ‘worst’ item at representing the concept was item SAC1.17 – Managing physical assets in my division and organisation to achieve results while protecting their value. All 16 items had loadings greater than .50, therefore all were useful (Hair et al, 1998 p. 111). The new composite variable was named PostLeadership.
6.6.2.3 Preliminary data analysis for Organisational Support

Table 6.13 Preliminary analysis for organisational support with all items.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrgSupport</td>
<td>1 item (OSC4.1) &lt;.5</td>
<td>1 item (OSC4.1) &lt;.3</td>
<td>-</td>
<td>.726 with 5 items</td>
<td>.767</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The construct Organisational Support was measured using the five items (items OSC4.1, OSC4.5, OSC4.13, OSC4.16 and OSC4.23) before the preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.13, confirmed that there was a high KMO value (.767>.60) and the Bartlett’s test indicated it had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item-total and inter-item correlation indicated Organisational Support had no correlation, item OSC4.1 – Increased Investment on MD program, while the other coefficients were all within the acceptable range for data analysis.

In addition, EFA indicated that there were two components with eigenvalues of greater than 1 which meant that these two components explained more variations than did an original item. Despite this, Cronbach’s Alpha was .726 with five items, which signified acceptable reliability of the scales. However, based on the other two factors of low correlations and having more than one component with eigenvalues, the item OSC4.1 (Increased Investment on MD programs) had to be removed from the analysis.

Table 6.14 Preliminary analysis for organisation support with items removed.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrgSupport</td>
<td>All items &gt;.5</td>
<td>All items &gt;.5</td>
<td>1 – 2.394</td>
<td>.77 with 4 items &gt;.7774</td>
<td>.767</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The summary on the rerun of the construct Organisation Support without item OSC4.1 is shown in Table 6.14. As shown in the summary, after item OSC4.1 was deleted from the analysis, there were sufficient correlations which were high and within the acceptable range, to enable the factor analysis to proceed. Bartlett’s test indicated a significant probability level (p<0.05) while the KMO value was (.767). The Cronbach’s Alpha was .77 with four items, and still signified acceptable reliability of the scales.

EFA indicated only one component with eigenvalue greater than 1, and so the remaining four items for Organisation Support were homogenous and the four-item loading ranged from
0.70 to 0.81. The component matrix indicated that the ‘best’ item at representing the concept was item OSC4.13 – *Enabling environment such as structures, systems and facilities is conducive to transfer to learning*, while the ‘worst’ item at representing the concept was item OSC4.16 – *There is opportunity for skill utilisation*. All four items had loadings greater than .50. Therefore all were useful (Hair et al, 1998 p. 111). Hence, all of the seven items were reliable and internally consistent. The composite variable was named OrgSupport.

### 6.6.2.4 Preliminary Data Analysis for Capabilities and Requirements

#### Table 6.15 Preliminary analysis for capabilities and requirements with all items.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>CapReq</td>
<td>All items &gt;.5</td>
<td>All items &gt;.3</td>
<td>1 – 4.170</td>
<td>.880 with 7 items</td>
<td>.821</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*

The construct Capabilities and Requirements, was measured using the seven items (items CRC4.3, 4.14, 4.20, 4.21, 4.22, 4.27, 4.33) before the preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.15, confirmed that there was a high KMO value (.821 >.60), and the Bartlett’s test indicated it had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item-total and inter-item correlation indicated that all coefficients were within the acceptance range for data analysis. After examining the reliability, it was found that Cronbach’s Alpha was .880 with seven items, which indicated good reliability of the scale.

EFA indicated only one component with an eigenvalue greater than 1, and so the seven items for Capabilities and Requirements were homogenous and the seven-item loading ranged from 0.61 to 0.90. The component matrix indicated that the ‘best’ item at representing the concept was item CRC4.20 – *The capabilities and requirements in my Job Description help me to evaluate my own weaknesses*, while the ‘worst’ item at representing the concept was item CRC4.3 – *Capabilities and requirements of executives are clearly defined in the Job Descriptions*. All seven items had loadings greater than .50. Therefore all were useful (Hair et al, 1998 p. 111). Hence, all of the seven items were reliable and internally consistent. Items were unaltered. The composite variable was named CapReq.
6.6.2.5 Preliminary data analysis for HR policies and effective practices

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRPEP</td>
<td>All items &gt;.5</td>
<td>All items &gt;.3</td>
<td>1 – 5.228 2 – 1.111</td>
<td>.907 with 9 items</td>
<td>.861</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The construct HR policies, was measured using the nine items (items HRC4.2, 4.4, 4.9, 4.10, 4.11, 4.12, 4.15, 4.28, 4.29) before the preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.16, confirmed that there was a high KMO value (.861 >.60), and the Bartlett’s test indicated it had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item-total and inter-item correlation indicated that all coefficients were within the acceptance range for data analysis. After examining the reliability, it was found that Cronbach’s Alpha was .907 with nine items, which indicated excellent reliability of the scale.

EFA indicated that there were two components but the reliability was excellent and all coefficients were within the acceptable range for data analysis, with high KMO value and significant reliability. Therefore, items were unaltered. The nine items for HR Policy and Effective Practices were homogenous and the nine-item loading ranged from 0.63 to 0.86. The component matrix indicated two components, meaning that it had two underlying dimensions. Items under Component 1 all had loadings greater than .50. Therefore, all were useful (Hair et al, 1998 p. 111). However, for Component 2, the items were less than .50. Due to other factors considered above on reliability and validity, items were unaltered. The composite variable was named HRPEP1.

6.6.2.6 Preliminary data analysis for T & D

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD1</td>
<td>All items &gt;.5</td>
<td>7 items &lt;.3</td>
<td>1 – 9.284 2 – 1.861 3 – 1.540 4 – 1.305 5 – 1.117</td>
<td>.942 with 18 items</td>
<td>.866</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The construct T & D, was measured using the 18 items (items TDC4.6, 4.7, 4.8, 4.17, 4.18, 4.19, 4.24, 4.25, 4.26, 4.30, 4.31, 4.32, 4.34, 4.35, 4.36, 4.37, 4.38, 4.39) before the...
preliminary data analysis process was run. Based on the preliminary data process summary as outlined in Table 6.8, the results of the different tests shown above in Table 6.17, confirmed that there was a high KMO value (.866>.60) and the Bartlett’s test indicated it had a significant probability level (<0.05). Therefore, it was appropriate to apply PCA to this data set. The results of item-total and inter-item correlation indicated Training and Development had seven low correlations, items TDC4.6, 4.7, 4.17, 4.18, 4.19, 4.38, 4.39) – while the other coefficients were all within the acceptable range for data analysis.

In addition, EFA indicated that there were five components with eigenvalues of greater than 1 which meant that these five components explained more variations than did an original item. Despite this, Cronbach’s Alpha was .942 with 18 items, which signified excellent reliability of the scales. However, based on the other two factors of low correlations and having more than one component with eigenvalues, the seven items (TDC4.6, 4.7, 4.17, 4.18, 4.19, 4.38, 4.39) had to be removed from the analysis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item-to-total Correlation</th>
<th>Inter-item Correlation</th>
<th>Components &amp; Eigenvalues</th>
<th>Cronbach’s Alpha</th>
<th>KMO</th>
<th>Bartlett’s Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>TD1</td>
<td>All items &gt;.5</td>
<td>All items &gt;.3</td>
<td>1 – 6.424 2 – 1.371 3 – 1.101</td>
<td>9.27 with 11 items &lt;.942</td>
<td>.857</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The summary on the rerun of the construct Training and Development without the seven items is shown in Table 6.18. As shown in the summary, after the seven items were deleted from the analysis, there were sufficient correlations which were high and within the acceptable range, to enable the factor analysis to proceed. Bartlett’s test still indicated a significant probability level (p<0.05) while the KMO value dropped slightly (.857 <.866). The Cronbach’s alpha was .927 > .942 with 11 items, and still signified excellent reliability of the scales.

EFA indicated three components with eigenvalues greater than 1, which was less than five. However, the reliability was still excellent with high KMO values and a significant probability level, and sufficient correlations, the remaining items for Training and Development were homogenous and showed internal consistency. The new composite variable was named TD1.

The component matrix indicated three components meaning that it had three underlying dimensions. Items under Component 1 all had loadings greater than .50, therefore all were
useful (Hair et al, 1998 p. 111). For Component 2, two items were less than .50, while for Component 3, three items were less than .50. Due to other factors considered above on reliability and validity, items were unaltered. The composite variable was named TD1.

Having completed the preliminary analysis of six scales which was based on the analysis of reliability and PCA, all six scales were found to be reliable and therefore were used and are discussed in further analysis.

6.6.3 Testing for Normality

Each construct was inspected for normality, skew and kurtosis. The constructs were analysed via tests of skewness and kurtosis for normality in this research. The test of normality is an important step for any multivariate analysis because the assumption of correlation and regression analysis is normal distribution. The common problem concerning normality is the occurrence of skewed distribution, including positive skewness and negative skewness (Manning & Munro, 2007). To decide whether it was large enough to say the distribution varied significantly from normality, the skew value was divided by the standard error (SE) of skew to create a $z$-score.

The criterion presented by Tabachnick and Fidell (1996) states that for samples of less than 300, if this value exceeds an absolute value of 2.58, then the skew is significant. For samples greater than 300, if the calculated value exceeds an absolute value of 3.29, then the skew is significant. Normality tests were run for pre- and post-leadership skills and behaviour (Table 6.19), and the factors to MD effectiveness (Table 6.20) below.

**Table 6.19  Test for normality skewness and kurtosis – pre- and post-leadership skills and behaviour**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Std. Error</td>
</tr>
<tr>
<td>PreLeadership</td>
<td>150</td>
<td>27.13</td>
<td>103.38</td>
<td>74.7775</td>
<td>15.09955</td>
<td>-.544</td>
<td>.198</td>
</tr>
<tr>
<td>PreBehaviour</td>
<td>150</td>
<td>4.67</td>
<td>16.33</td>
<td>13.3267</td>
<td>2.44872</td>
<td>-.890</td>
<td>.198</td>
</tr>
<tr>
<td>PostLeadership</td>
<td>150</td>
<td>53.19</td>
<td>105.44</td>
<td>86.5625</td>
<td>11.63471</td>
<td>-.565</td>
<td>.198</td>
</tr>
<tr>
<td>PostBehaviour</td>
<td>150</td>
<td>7.00</td>
<td>16.33</td>
<td>14.4289</td>
<td>2.00162</td>
<td>-1.388</td>
<td>.198</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*
The sample size for this study was 150 which is less than 300. As shown in Appendix 23 (p. 326) and Table 6.19 above, the ratios of skew to S.E. for the four variables were bigger than 2.58 in absolute terms indicating significant levels of skew or kurtosis.

### Table 6.20 Test for normality, skewness and kurtosis – factors to MD effectiveness

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness Statistic</th>
<th>Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>OrgSupport</td>
<td>150</td>
<td>6.25</td>
<td>22.25</td>
<td>15.2283</td>
<td>3.66474</td>
<td>-.224</td>
<td>.198</td>
<td>-.383</td>
<td>.394</td>
</tr>
<tr>
<td>CapabReq</td>
<td>150</td>
<td>10.29</td>
<td>43.00</td>
<td>31.0438</td>
<td>6.65261</td>
<td>-.503</td>
<td>.198</td>
<td>-.223</td>
<td>.394</td>
</tr>
<tr>
<td>HRPEP</td>
<td>150</td>
<td>8.78</td>
<td>54.67</td>
<td>34.6185</td>
<td>9.31227</td>
<td>-.113</td>
<td>.198</td>
<td>-.144</td>
<td>.394</td>
</tr>
<tr>
<td>TD1</td>
<td>150</td>
<td>27.18</td>
<td>70.64</td>
<td>51.0170</td>
<td>9.09366</td>
<td>-.168</td>
<td>.198</td>
<td>-.674</td>
<td>.394</td>
</tr>
<tr>
<td>Valid N</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

Having inspected the data for anomalies in normality, the next step was to test the constructs Pre- and Post-Leadership and Pre- and Post-Behaviour by using paired sample t-test.

### 6.6.4 Data Testing

#### 6.6.4.1 Paired Sample t-test Analysis on Self-Assessment of Leaderships Skills and Behaviour.

As previously discussed in Sections 6.4 and 6.5 respectively, the aim of self-assessment of leadership skills and behaviour was to establish if there were any significant differences before and after undertaking MD learning programs. Section 6.4 showed the mean average of all items before MD program, while Section 6.5 showed the mean average of the same set of items after MD program. Furthermore, it calculated the mean differences of the same items to show the impacts of each item.

In this section, the statistical technique using the paired sample t-test was used for the same set of items to test if there were any significant difference before and after MD programs. Paired sample t-tests are used when doing something before and after, to compare the means of the groups. The aim is to assess the statistical significance of the difference between two
sample means for a single dependent variable (MD effectiveness). The t-test is a special case of ANOVA for two groups or levels of a treatment variable (Hair et al., 2010 p. 442).

Table 6.21 Results of paired samples t-test – self-assessment on pre- and post leadership skills and competencies

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
</table>

Source: Analysis of survey data

The observed mean difference between Pre Leadership and Post Leadership was \(-11.785\), the \(t\) value was \(-11.548\) while \(p\) value (Sig. 2-tailed) was .000. Significance at .000 is < than 0.05 than the alpha which was set at 0.05, which was statistically different. Therefore, it was concluded that the leadership skills and competencies of executives were different after the learning programs – there was an improvement as a result of the learning programs.

Table 6.22 Paired Samples t-Test – Self-Assessment on Pre and Post Behaviour and Attitude

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>Pre Behaviour - Post Behaviour</td>
<td>-1.102</td>
<td>1.881</td>
<td>.154</td>
<td>-1.406</td>
<td>-.799</td>
<td>-7.176</td>
<td>149</td>
<td>.000</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The observed mean difference between Pre and Post Behaviour was negative: \(-1.102\), \(t\) value was negative \(-7.176\) while \(p\) value (Sig. 2-tailed) was .000. Significance at .000 was < than 0.05 than the alpha which was set at 0.05, which was statistically different. Therefore, it was concluded that the behaviours and attitudes of executives were different after the learning programs – there was an improvement as a result of the learning programs. This answered the first two hypotheses.
After conducting the paired samples $t$-test to determine if there were significant differences in leadership skills and behaviour before and after undertaking MD learning programs, the next step was to conduct a statistical test on the four interventions or factors that contributed to MD effectiveness, as identified from the in-depth interviews.

6.6.4.2 Multiple Linear Stepwise Regression Analysis of Constructs – Interventions

Multiple regression analysis was conducted to examine the relationships between the four constructs or independent variables and the dependent variable. Multiple regression is the appropriate method of analysis when the research problem involves a single metric dependent variable such as MD effectiveness, presumed to be related to two or more metric independent variables such as organisational support, capabilities and requirements of executives, HR policies and effective practices, and T & D (Hair et al., 2010 p. 16). The objective of adopting the multiple regression analysis was to predict the changes in the dependent variable in response to changes in the independent variables. This objective was most often achieved through the statistical rule of least squares.

There are at least three different approaches to multiple linear regression: standard, hierarchical and stepwise and the approach will depend on the researchers’ goal (Manning & Munro, 2007 p. 103). For this study, the aim was to connect and analyse the findings (constructs) from the qualitative interviews – to see what the best predictor/s are for the dependent variable MD effectiveness.

Hair et al. (2010 p. 161–161) define stepwise estimation as a method of selecting variables for inclusion in the regression model that starts by selecting the best predictor of the dependent variable. Additional variables are selected in terms of the incremental explanatory power they can add to the regression model. Independent variables are added as long as their partial correlation coefficients are statistically significant. Independent variables may also be dropped if their predictive power drops to a non-significant level when another independent variable is added to the model.

In the stepwise analysis, at the first step, the independent variable (predictor) with the highest bivariate correlation with the dependent variable is identified. A regression equation with this single predictor is derived and $R^2$ calculated. In the second step, the independent variable whose entry would cause the next-greatest increase in $R^2$ is entered. A new regression equation using this pair of predictors is derived and $R^2$ is calculated. In the third step, another independent variable may be added (so long as it increases model fit) and also
one of the variables already included in the equation in a previous step may be removed (if this increases parsimony without affecting $R^2$). The process of adding and deleting variables at each step continues until there are either no independent variables left, or (more likely), the inclusion of another independent variable will not significantly increase $R^2$. What is produced is the smallest set of independent variables which will explain the largest proportion of variance in the dependent.

6.6.4.3 Results of the Multiple Linear Stepwise Regression on the MD Interventions.

A stepwise multiple linear regression was employed to identify the most parsimonious set of predictors of MD effectiveness, using a set of four predictors. The summary or results are detailed in Table 6.23 below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>4.395</td>
<td>.563</td>
<td>7.806</td>
<td>.000</td>
</tr>
<tr>
<td>HRPEP</td>
<td>.085</td>
<td>.016</td>
<td>.410</td>
<td>5.380</td>
</tr>
<tr>
<td>TD1</td>
<td>.024</td>
<td>.011</td>
<td>.315</td>
<td>3.621</td>
</tr>
<tr>
<td>Organisational Support</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
<tr>
<td>Capabilities &amp; Requirements</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data

The potential predictors (independent variables) comprised: organisational support (OrgSupport), capabilities and requirements (CapReq), HR policies and effective practices (HRPEP), and Training and Development (TD1). The analysis terminated after two steps with two predictors extracted, HRPOL, $sr^2_i = .073$ $t = 3.62, p< .05$, and TD1 $sr^2 = .027$ $t = 2.21, p< .05$. At step 2, with HRPEP and TD1 entered into the equation, the multiple correlation coefficient ($R = .44$) was significantly different from zero. $F= 17.302, p< .05$, 18.5% of the variation in the dependent variable was explained by the set of independent variables ($R^2 = .196$, adjusted $R^2 = .185$). The equation of prediction produced by this analysis describes the relationship between the variables to be:

$$\text{MD Effectiveness} = .065 \times \text{HRPEP} + .024 \times \text{TD1} + 2.990$$

It is therefore concluded that of the four independent variables (MD interventions – organisational support, capabilities and requirements, HR policy and effective practices, and T & D), the most parsimonious sets of independent variable predictors closely related to MD effectiveness are HR policy and effective practices, and T & D. The other two independent
variables, organisation support and capabilities and requirements were weak and had no positive relationship with the dependent variable, MD effectiveness.

6.7: Analysis of the findings against the Conceptual Framework

The conceptual framework as illustrated in Figure 6.2 above was designed to collect data to answer the research issue and questions. The framework of the analysis has evolved from the themes developed from the qualitative interviews with the most senior executives in public sector organisations in PNG. The approach to using themes serves to organise the findings in a logical manner. It will also assist in integrating the analysis with the qualitative findings and literature review in the next chapter, Chapter 7. The results of this study will be used to answer the research questions. This section will address the research issue raised in Chapter 1 of the study as the framework for the analysis, namely:

What are the interventions to MD effectiveness? How do they contribute to capacity building of the executives in PNGPS, and how could these be improved?

As discussed in the literature review, MD is increasingly adopted by organisations seeking to attract and retain talented executives. This study assessed the current state of MD in public sector organisations in PNG. Specifically, it sought to identify interventions associated with MD effectiveness.

Six hypotheses were developed from the themes and sub-themes derived from the qualitative interviews. They include four hypotheses related to the four types of interventions that contribute to MD effectiveness (organisational support, capabilities and requirements of executives, HR policies and effective practices and T & D), as well as self-assessment of pre- and post-program leadership skills and behaviour.

The six hypotheses derived from qualitative interviews and the literature review were developed in Chapter 5, and are stated in Section 6.6.1 above.

Hypotheses 1 and 2 were tested using a paired sample t-test, a method which is used when doing something before and after, purposely to compare the means of the groups. In this study, respondents were asked to assess their leadership skills and competencies before and after undertaking learning programs, and their behaviours or attitudes before and after undertaking learning programs. The aim was to see if there was any significant difference after undertaking the learning programs. It was found that there was a significant difference
between pre- and post-program leadership skills; and between pre- and post-program behaviours. In other words, there is change after undertaking MD training programs. It must be emphasised that because no specific learning program was used for the self-assessment item, the findings cannot be generalised across all types of learning programs. However, these results can provide useful information. The technique used in this question proves very reliable and useful for those in policy and practice. It shows the areas of improvement and where emphasis should be placed when considering learning and development programs for executives. As indicated in Appendix 21, the results showed that the item with the biggest mean difference or change was ‘Adapting to change and innovation’ while the item with the least mean difference or change was ‘Attitude to work’.

The four interventions to MD effectiveness were tested by using multiple linear stepwise regression. The objective of adopting the multiple regression analysis was to predict the changes in the dependent variable in response to changes in the independent variables. This objective was most often achieved through the statistical rule of least squares. For this study, the aim is to confirm and analyse the findings (constructs) from the qualitative interviews – to see what the best predictor/s are for the dependent variable MD effectiveness.

It was found that two interventions, HR policy and effective practices, and T & D, were the most significant predictors to MD effectiveness. Organisational support and capabilities and requirements were weaker and less significant predictors of MD effectiveness. Hence, hypotheses H₃ and H₄ were supported.

In summary, having used different statistical tests, the findings revealed the types of interventions to MD effectiveness, how they contribute to capacity building of the executives and the areas of improvement are identified.

6.8: Analysis of Qualitative Data of Extra Items (General Comments and Suggestions)

Section D of the survey instrument sought qualitative data in the form of individual respondents’ comments, remarks and suggestions for improvement at both micro and macro levels. Respondents were provided with an opportunity to express their own views, without the constraints of the specific choices offered for the items listed in the other sections of the survey instrument. Similarly, it was envisaged that the data gathered through this process might supplement the findings of the quantitative analysis.
6.8.1 Changes and suggestions for improvement at the micro-level (open-ended questions)

Of the 150 respondents, 120 took the opportunity to make or offer any comments or suggestions for improvements in policy and practice at the organisational level and the level of the public service as a whole. Those that did not offer any comments or suggestions either felt no need to make any specific comments, suggestions for improvement or simply chose not to respond to this section or were reluctant to do so for obvious ethical reasons.

Those that responded to this section offered a total of about 120 comments or suggestions for improvements at micro and macro levels. Different but similar suggestions were made for improvement from which several distinct items emerged from the responses. After subjecting the comments and suggestions to content analysis, several distinct items emerged from the responses.

Table 6.24 lists the comments and suggestions for improvement at micro and macro levels by the respondents as well as the frequency with which they occurred.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Merit-based appointment of executives</td>
<td>100</td>
</tr>
<tr>
<td>Annual review of Job Descriptions</td>
<td>50</td>
</tr>
<tr>
<td>Training and development programs linked to job requirements</td>
<td>80</td>
</tr>
<tr>
<td>Coaching, mentoring and nurturing of executives</td>
<td>45</td>
</tr>
<tr>
<td>Opportunities for skill utilisation after training.</td>
<td>60</td>
</tr>
<tr>
<td>Evaluation of MD programs.</td>
<td>90</td>
</tr>
<tr>
<td>Graduate Development Programs be introduced.</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Developed for this research

Most respondents were of the view that executives must be appointed on merit – that selection criteria must be strictly complied with. Many raised the concern that there was a lack of evaluation of MD learning programs after training to determine their effectiveness and the impact they had on executives. In addition, the need to link T & D programs to job requirements was expressed by many respondents. There were other suggestions such as reviewing or updating of job descriptions, coaching and mentoring of potential executives, giving opportunities for executives to utilise their new skills and knowledge after training, and reintroducing graduate development programs.
6.8.1 Changes and suggestions for improvement in policy and practice at the macro level (open-ended questions)

Table 6.25: Comments and suggestions for improvement in policy and practice at macro level.

<table>
<thead>
<tr>
<th>Comments/Suggestions</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review merit-based appointment process and criteria</td>
<td>105</td>
</tr>
<tr>
<td>Policy Framework for Executives</td>
<td>110</td>
</tr>
<tr>
<td>Review terms and conditions for executives in the public sector</td>
<td>120</td>
</tr>
<tr>
<td>Capability Framework for executives</td>
<td>100</td>
</tr>
<tr>
<td>Review PSMA &amp; PSGO</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Developed for this research

At the macro level, almost all respondents emphasised the urgent need to review terms and conditions for executives in the public sector so as to retain them. Lack of a policy framework to manage and develop the executives in the public sector organisations was another common issue raised by many respondents. Again, the issue of review of merit-based appointment processes and criteria for executives was raised, particularly at the macro level.

6.9: Summary

In this chapter, the analysis of the field data collection in relation to interventions to MD effectiveness has been described. The analysis of data described in this chapter began with descriptive statistics which involved the transformation of raw data into a form that made them easy to understand and interpret. Thereafter, and as the analysis progressed beyond the descriptive stage, other tools of inferential statistics such as paired sample t-tests and multiple linear stepwise regression were applied. The chapter presented the results of data analysis from statistical tests using SPSS Version 17.0. The process of data analysis followed six stages which included: developing hypotheses on constructs identified from the interviews, identifying the scales of measurement, entering data, checking for missing values, creating composite variables, evaluating their validity and reliability, correlation and finally evaluating and testing the data.

First, the respondents’ demographic information was introduced and descriptive statistics were used for analysis. Second, the pre-program information comprising antecedent components were presented and analysed using descriptive statistics. Similarly, post-program information were presented using both descriptive statistics and inferential statistics.
Basically, pre-program and post-program information focused on what happened before and after learning occurred. Responses to open-ended questions by way of comments and suggestions for improvements to policy and practice at the micro and macro levels in PNG public sector organisations were content analysed and presented.

The results from this survey have been presented in the same order as the questions in the questionnaire. The themes identified in the qualitative interviews provided a focus for analysis. The results of the research were analysed in accordance with the methodology outlined in Chapter 4. Validity and reliability tests of statistical analysis were examined. Exploratory factor analysis, paired sample $t$-tests and multiple linear stepwise regression were conducted and the results were discussed.

In sum, it was found that interventions HR policy and effective practices as well as T & D were the significant predictors of MD effectiveness. It was also found that there was a significant difference or improvement in leadership skills and behaviour after undertaking MD learning programs. The analysis showed the most improved and least improved items.

In the next and final chapter, Chapter 7, an overall summary of the study and its findings from the qualitative interviews and quantitative survey will be presented and integrated. Conclusions will be drawn in relation to the research findings, the implications of the findings, and recommendations for the ongoing improvement of the effectiveness of MD in the PNG public sector organisations. The research issue and questions will be addressed. Potential further research, and the contributions and limitations of this study will also be discussed.
7.1: Introduction

“We can never fully know what consequences our work will have on others. We cannot control context and reading. But we can have some control over what we choose to write and how we write it”.

- Richardson, L. (1997, p. 117)

7.1.1 An Overview

In the previous chapter, the results of the quantitative data analysis were presented and briefly summarised in a descriptive way and, where relevant, through the use of statistical analysis. In this, the final chapter, conclusions in relation to the conduct of the research and the findings, both in the qualitative interviews and the quantitative survey, will be drawn and briefly discussed. The research questions that guided the study will, once again, be reviewed, in order to determine the extent to which the study has achieved its overall objectives. After consideration of each of the research questions, the broader research issue will be revisited to ensure it has been addressed adequately. A summary of the recommendations will be discussed. A framework on MD Effectiveness interventions as well as a checklist on systematic approach to SHRD which have been developed for this study will be presented.

7.1.2 Summary of the Previous Chapters

Throughout this seven-chapter thesis, the various elements of the research study have been described. Chapter 1 provided an introduction to the study and an overview of the thesis. It provided the background and purpose to the research; stated the research issue and questions; and justified the importance of the study. It was here that the overall thesis was given a context flowing from the literature review, to the context of PNG, to the methodology, delimitations and assumptions, and through to the conclusion.

A comprehensive review of literature relating to SHRM, SHRD, MD, and Capacity Building in developing countries was undertaken in Chapter 2. Other literature relating to MD and public sector management and reform was also reviewed, because of the specific context of this study. Previous studies relating to SHRD were also explored.

The context of PNG was presented in Chapter 3. It briefly discussed the historical background of the country and its geographical location and offering an overview of the
system of government and the structure of the public service. Further, it described the procedures, practices, policies and legislation relevant to the management and administration of public servants in PNG.

Methodologies utilised throughout the study was discussed in Chapter 4 of the thesis. It gave a graphical view and discussed the research process involving the two phases of methodology – qualitative and quantitative methods. The use of a pragmatist paradigm and a mixed methods approach were justified in this chapter. It described the triangulation of methods, participants and methods of data collection. The specific practical research design and approaches were also developed in this chapter. These included the interview procedure and questions followed by the survey questionnaire and the analytical framework. Finally, the limitations of qualitative and quantitative research and ethical considerations were discussed.

The analysis of the data collected in the first phase (qualitative interviews) was described in Chapter 5. It sought, identified and presented patterns in the combined data. The analysis of the field data collected from in-depth interviews was depicted using quotations, descriptions, tables and figures to compare, contrast, and substantiate the findings. Finally, a coding hierarchy or tree node was created consisting of themes and sub-themes based on the information gathered from the interviews.

The analysis of the data collected in the second phase (quantitative survey) was presented and described in Chapter 6. Results of the first qualitative phase were tested and evaluated through relevant tests, such as the paired sample t-test, the correlation test and the test of multiple linear stepwise regression.

This final chapter, Chapter 7, flows on from data analysis in Chapters 5 (qualitative interviews) and Chapter 6 (quantitative survey). Findings from the two phases of study will be discussed separately before the results are integrated. It is essential in this final chapter to explore the implications of the research findings for the ongoing development of executives in PNG public sector organisations. Practical suggestions for those stakeholders involved in the capacity building of the executives will be made throughout this chapter, alongside the theoretical perspectives, so that the findings of the study may provide useful insights to those involved in MD. The contributions of this research study to the expanding body of knowledge relating to MD effectiveness and the broader field of SHRD and capacity building
will also be outlined. Limitations of this research involving the two methods are discussed. Finally, the broad implications for potential further research will be discussed.

7.1.3 Structure of Chapter 7

This chapter is presented in eleven sections. Section 7.1 serves as an introduction and gives an overview to the chapter with a conceptual overview or map of the structure of the chapter. Section 7.2 discusses the results of the qualitative interviews while Section 7.3 discusses the results of the quantitative survey. Section 7.4 restates the research questions and hypotheses and discusses how the responses to the interviews and survey questions answered them. Section 7.5 discusses the conclusion for the research issue. Section 7.6 presents the outcome of the analysis. Section 7.7 discusses the implications for theory, policy and practice. It presents the contributions of the research and provides a summary of the recommendations for policy and practice. Section 7.8 discusses the limitations of this research. Then in Section 7.9 the implications for the two methodologies (qualitative and quantitative) are discussed. This is followed by the discussion of further research in Section 7.10. In Section 7.11, the summary of the conclusion chapter is presented.

A graphical view of the structure of Chapter 7 is thus presented in Fig. 7.1 below.
Fig. 7.1 Structure of Chapter 7
Source: Developed for this research
Chapter 7: Conclusion, Implications & Recommendations

The primary aim of this study was to investigate the MD interventions and their effectiveness in contributing to capacity building of executives in the PNGPS. In particular, this research investigated current training practices that build the capabilities of the executives to achieve their organisations’ strategic objectives, and whether these practices and methods can be improved. As a result of the findings of this study, it developed a MD effectiveness wheel (Figure 7.2, p. 235) and a checklist with a cycle on systematic approach to T & D (Figure 7.4, p. 238) on MD interventions that could be used in PNG public sector organisations to build the capacity of the executives and their organisations, leading to building the capacity of the PNGPS.

As outlined in the structure of this chapter, results of the two research phases whose methodologies which complemented one another, will be discussed separately. Phase I informed Phase 2. In Section 7.4, the findings will provide answers to the research questions which lead to answering the research issue. Linking the qualitative and quantitative components effectively was the basis for producing integrated findings that are greater than the sum of their parts. First, the results of the interviews will be discussed.

7.2: Qualitative Results

The interview scripts and questions were developed in three sections: general pre-program questions, post-program questions and suggestions or remarks for improvement and change. The findings will be presented in that order.

7.2.1 Pre-program and general questions

The interview analysis of the answers to the pre-program and general questions on the interventions that contribute to MD effectiveness disclosed an inconsistent picture with regard to the extent of the organisational support for MD. For instance, while most statutory authorities asserted that there were standardised MD programs, continuously upskilling executives, nurturing, coaching and mentoring of young potential ‘high flyer’ executives, all national departments admitted there were no standardised MD programs for executives but they said that they supported T & D programs for their executives. Three interviewees admitted that there was very little or no upskilling and nurturing of executives. Most executives were left to fend for themselves, and were expected to learn by observation and experience. The interviews also revealed that there was an absence of senior executives services (SES) in the organisations and an absence of a standard MD program which meant
Chapter 7: Conclusion, Implications & Recommendations

training was done on an adhoc basis, particularly in the national departments, HR policies were in place but in many cases were not adhered to and training was not linked to job requirements and organisational goals. The analysis revealed that there was support for MD in the organisations but not enough to meet the goals of MD. These goals are to attract and defend, develop and renew, and motivate and harvest (Boxall & Gilbert, 2007). The results also showed there was an absence of a policy framework for MD in the PNGPS to determine the objectives, composition and structure, operation, vertical and horizontal mobility, and management of the SES (PSWDI, 2006).

Effective MD can result in higher job satisfaction, lower turnover, less stress resulting from skill inadequacies and less difficulty in filling executive vacancies. It follows then that while effective MD results in increased knowledge and skills of participants, the organisation also benefits from higher productivity, lower absenteeism and better customer service (Jensen et al., 2001). For the public sector organisations, that equates to better service delivery for the nation’s citizens. Therefore, top management support is very important. Top management support is one of the key characteristics of SHRD as identified by Garavan (1991, 2007) who contends that the support and active participation of top management, as key stakeholders, are vital for the development of SHRD. The support of top management for SHRD is one of the most important factors for ensuring organisation learning success (McCracken & Wallace, 2000).

The efficient and effective achievement of government outcomes across the government jurisdictions depends on the capabilities of the people involved. Capabilities comprise not only the technical skills and knowledge people have, but also their attributes, attitudes and behaviour. All interviewees held the view that public sector executives must possess the required qualifications and capabilities as stipulated in their job descriptions. That is, a minimum of a bachelor’s degree specific to the field of specialty although a postgraduate qualification would be preferable. In terms of generic skills and capabilities, all interviewees emphasised that all executives must possess leadership and management skills including strategic thinking, resource management, communicational skills, and interpersonal skills. They also needed to have the right attitude towards their work. It was also found that where highly qualified and technical executives existed, some lacked leadership qualities and financial management skills and could not manage their subordinates and resources.

Other capabilities and requirements which were perceived to be important were a sound knowledge of the relevant government legislations, policies and procedures. The operations
and management of departments in the PNGPS are governed by two key legislations: the Public Service Management Act 1995 (PSMA) and the Public Finance Management Act 1995 (PMFA) and associated orders such as the Public Services General Orders 2003 (PSGO). The PSGO is the key document used for all HR issues. However, this study revealed that many executives did not have a good knowledge of these important legislations.

The analysis showed that, particularly in the national departments, job descriptions (JDs) were often outdated and needed reviews. They needed to provide clearly defined roles, positions and personal specifications that would enable the executives to evaluate their strengths, weaknesses and development for promotional purposes. Well defined JDs would also assist in recruitment and selection. Similar anomalies on JDs were also identified in a situational analysis and research document (PSWDI, 2005). It was found that the job descriptions needed review, and that some executives were not meeting the position and personal specifications as detailed in the job descriptions.

The capabilities and requirements identified by all interviewees as being important for public sector executives were consistent with those identified in previous studies and research such as Morley and Vilkinas’ (1997) 16 qualities for public sector executives in Australia and the potential competencies of SES in the PNGPS identified in situational analysis research on SES (PSWDI, 2006).

Although the capabilities, requirements and qualities perceived to be important were supported by previous research, there was still an absence of a capability framework across all sectors of the PNGPS. A capability framework can be developed across government jurisdictions that seek to establish a shared understanding of the critical success factors for performance in public sector leadership roles.

The third interview question sought to establish the current HR policies and effective practices that contributed to MD. As mentioned earlier, the key government document used for all HR issues is the PSGO. All other policies or guidelines such as the training plans and policies, equal employment opportunity policy, or succession plans used in the PS organisations were derived from this source document.

Almost all interviewees emphasised the need for an urgent review of the PSGO as it was outdated and no longer consistent with the changes in the government directions on PS reforms particularly on SHRD. All interviewees except two indicated they had training plans
and policies which needed to be reviewed annually or bi-annually. If these policies were already in existence, the question was not to do with their availability but whether they were effective and adhered to. The interviews disclosed that almost no national departments had a succession plan and exit policy to manage the career paths for existing and potential executives and for the administration of aging executives. Sections 9.37-39 of the PSGO and Section 16 of the PSGO, as well as the PS Redundancy Agreement outline the procedures for retirement and retrenchment of executives. This should therefore be the basis for organisations to develop their organisation-specific succession plans and exit policies. This study showed that the participating organisations either relied on the PSGO and other policies to manage their aging workforce or simply managed them on an ad hoc basis. The absence of such documents as succession plans or exit policies are rarely found in national departments and agencies.

HR plans and policies are one of the nine key characteristics of SHRD as proposed by Garavan (1991, 2007) and which feature as inputs in an organisational systems model (inputs-processes-outputs) proposed by McCracken and Wallace (2000, p. 287). Organisation learning engages in HRD policy and plan formulation because it acts not only as a source of information for all managers but also clearly sets out for employees the different types of education, learning and development activities that they can undertake to help develop their skills and knowledge, and, therefore, it complements career development activities (Garavan, 1991, 2007).

As with effective practices, there were similar perceptions on the effective practices shared by all interviewees. For instance, retreat training or workshops were perceived to be the way forward because their timing and location prevented distractions. This meant that there were no disturbances from telephone calls and unscheduled visits from clients and ‘wantoks’. The absence of distractions also enabled complete concentration when reflecting on current and past achievements and failures, and when developing new work plans. More logical and strategic thinking was possible when away from the work site, and brainstorming and networking with counterparts within the organisation was possible. The retreat workshops are short and therefore did not cause prolonged staff absences and the impact was immediate as the executives put into practice and implemented changes immediately upon return to work.
The retreat workshop as well as other in-house programs such as the Graduate Development Program (GDP) were seen to be among the more effective practices. The GDP was reintroduced in the PNGPS in 2008, but was not fully implemented in all organisations. It was revealed that the GDP prepared graduates to become better executives by providing them with on-the-job training thus giving them an advantage in understanding how the organisations and the public service functioned.

Systematic T & D was an effective practice for some organisations. They identified that a systematic approach to T & D was a crucial factor in that the right executives were identified for the right training. However, some shortcomings were reported such as: not conducting a thorough training and needs analysis prior to the selection of candidates for training, not selecting the right types of candidates for T & D, training not being linked to job requirements and organisational goals, and most of all, not evaluating the training program.

Other effective practices were having a learning organisation that supported the learning and development of its executives, having structures and systems in place for skill utilisation, and providing top management support.

The discussions on this question therefore revealed that MD policies and practices would fully develop management executives if there was compliance to HR policies, procedures and guidelines, if there was a policy framework on MD, and if there was a systematic T & D cycle which addressed the issues of: identification, selection, application, measurement and alignment.

Some of the effective practices identified by the interviewees are consistent with those identified in several other studies – for instance, Leskiw and Singh’s (2007) six best practices used in developing and assessing their leadership and MD strategies and programs, Garavan’s (1991, 2007) characteristics of SHRD. The findings of this study were also consistent with D’Netto, Bakas and Bordia’s (2008) predictors of MD effectiveness which included top management as one of its variables.

In sum, the pre-program interview data has revealed new insights to MD effectiveness for PNGPS. For instance, the predictors of MD effectiveness included such factors such as organisational support, HR policies and effective practices, capabilities and requirements of executives, and T & D. It also revealed the importance of having short-term development programs out of the work site, and the importance of having a blend of both short-term
development programs and long-term educational programs. The absence of certain HR policies such as Succession Plans and Equal Employment Policies is revealed perhaps because national departments are heavily dependent on the PSGO. It reveals that not all public sector organisations have a systematic learning and development regime in their organisations. It reveals that there are many who have yet to develop a truly comprehensive and systematic approach to MD

7.2.2 Post-program

The questions in this category sought to elicit information on what happens after training. First, the interviewees were asked to identify the types of MD learning programs they had adopted that developed and built the capacity of the executives. More specifically, they were asked to identify the programs they perceived to have had positive impacts on their executives and finally they were asked how these programs were evaluated.

There was a mixed response to questions about which types of T & D programs were supported and encouraged in their organisations. The two main responses were that they either supported or encouraged all forms of MD learning programs or that they only supported short-term programs. None of the participants supported long-term programs only. All indicated that MD was a critical area that needed much support from the top management.

For a blend of both short- and long-term educational programs, almost half of the interviewees said that executives needed to improve on specific competencies or sharpen their skills by way of short-term programs but still needed them to bring in new knowledge, skills and experiences gained from their long-term formal training, particularly at postgraduate level such as an MBA qualification. That is to say that the executives needed new skills and knowledge. The higher qualifications were needed as a prerequisite for promotion and to build their confidence. Those who opposed long-term training gave similar reasons for not supporting it. These included: a prolonged absence from duty caused manpower setbacks; the impact was not immediate as it took executives time to settle back at work by which time many forgot their new knowledge or skills; programs of study were not always relevant to the current jobs; and there was a high departure rate after gaining higher qualification.

As one interviewee said: “There is ‘brain drain’ in this organisation because many of our executives returning from long-term studies after gaining higher qualification and new knowledge are poached by our rivals or competitors mainly in the private sector, for greener
Chapter 7: Conclusion, Implications & Recommendations

An Analysis of Management Development Practices for Senior Executives in the PNG Public Service

Pastures. We cannot retain these officers unless we increase their remuneration packages akin to those in the private sector.”

Almost all of those that supported short-term programs gave similar reasons for their support. That is, the impacts were immediate; short-term T & D is more specific and relevant to a specific need or competency; and short-term programs did not require executives to be absent from duty for long periods which would cause staffing problems.

It was found that although long-term formal training is common, most senior officers preferred short-term interventions. About 70% of the interviewees obtained their postgraduate qualifications from overseas institutions through various scholarships but mostly under the ADS awards. However, they now had a different view of the merits of this intervention, partly because the PNGPS has evolved from a simple organisation to a more complex one. In the past, it was possible to send executives away for longer periods without having any major staffing setbacks, but it is impossible to do so now due to more complex work demands and other budgetary implications. Other modes of study such as flexible learning, external study through correspondence, and online study were recommended. In fact, four of the participants had obtained Australian postgraduate qualifications (MBAs) through distance study via offshore centres.

Almost all respondents expressed the view that there was not enough evaluation in the PNGPS to assess whether the MD interventions were effective. Post-program evaluation, particularly at impact or result level, is rarely done in the national departments and agencies. The PSGO Section 5 merely discusses evaluation at reaction and learning levels but does not go further to mention the behaviour, result and impact levels. The respondents added that the normal staff appraisal (SPA) was not enough assess whether the training was effective. Improvements in performance could be due to other factors and not on training. Moreover, when an officer had undertaken more than one type of MD program it was impossible to assess the merits of the individual programs by using the SPA process.

In sum, the post-program interview data indicated that although a blend of short-term development programs and long-term educational programs is common, there is a preference for short-term programs. This view is supported by previous studies such as Suutari and Viitala (2008) who found a dominance of short-term MD programs and activities, although they found that more longitudinal methods emphasising experience-based learning were reported to be more effective in supporting the development of senior managers. However,
Louma’s (2005) three-stage MD model, particularly at the integrative MD level, proposes that MD should benefit both individuals and the organisation, and to do so, a blend of development programs should develop the executives professionally (technical educational qualifications) and improve on their skills, competencies, behaviour and attitudes to specific job requirements (short-term programs).

The effectiveness of T & D is enhanced when training activities are preceded by comprehensive needs analysis. This permits the HR manager to demonstrate how T & D contribute to the organisation’s strategic business objectives (Stone 2005, p. 337). Post-program evaluation is briefly discussed under PSGO Section 5.51 (p. 11), where a training evaluation report is compiled on an evaluation form (Form 5.1) provided in the PSGO.

Garavan (1991, 2007) identifies evaluation as one of the key characteristics of SHRD, and evaluation is portrayed as an input in the organisation system model of McCracken and Wallace (2000, p. 287), and as an output, it emphasises individual productivity and participation. Furthermore, evaluation and measurement are identified as high performance work practices. Leskiw and Singh (2007), also find that an evaluation system is a key factor that is vital for effective leadership and MD.

If there is a lack of, or an absence of an evaluation system or process in the PNGPS, then how can the public sector organisations know that the training or learning programs have produced their desired changes in the executives’ knowledge, skills and behaviour? Moreover, how would they know where to improve training or learning and discover which training processes or strategies are successful in achieving their objectives? Program or training evaluation serves as a very important tool or mechanism for any training and learning activity. After all, evaluation of training is identified in the TNA process (Diagram 5.1, PSGO Section 5.29), yet it is not practised in many public sector organisations.

7.2.3 General Comments and Suggestions

Several issues were examined in the first question under this category which sought to elicit comments and suggestions on how MD could be improved to contribute to capacity building of the executives. Many of these have been discussed in the preceding sections.

The interviewees provided the following suggestions for improvement: merit-based appointments for all executives in the organisation, review and upgrade all job descriptions annually or bi-annually, continuous upskilling and nurturing of current and potential...
executives, all MD learning programs to be linked to job requirements and organisation goals, evaluation of MD programs and the Graduate Development Program to be reintroduced or supported.

Merit-based appointment of executives rather than the ‘wantok system’ was a must to ensure that the right cadre of talented officers with the right skills and knowledge is recruited into the organisation. Once recruited, they would be developed to assume higher responsibilities and roles. One of the strategies that could be adopted for attracting, developing, motivating and retaining potential high flier executives was through the Graduate Development Program. In the PNGPS, heads of national departments, agencies and provincial administrators are appointed according to the process laid down in the Constitution s.193 (1A) as amended and the PSMA s.31A(1). Details of the appointment process are provided in PSGO Section 8.15-8.17 (DPM, 2002), and the Statutory Instrument No. 5, Public Services Selection and Appointment of Departmental Heads and Provincial Administrators regulation 2002. For appointment of other SES personnel, the procedure follows a different route in that it is done internally or in-house through the Selection Committee.

The existence of SES could help attract, retain, develop and motivate the management services who would in return contribute meaningfully to the capacity building of the PS. As explained in Section 3.4.1, the governing legislation of the PNGPS, the PSMA, does not provide a working definition of SES personnel but there is some indicative description of the SES in Section 9 of the PSGO in which senior officers or executives are described. The PNGPS does not have a comprehensive framework on MD, let alone an SES.

The issue of T & D emerged, with certain respondents expressing the view that selecting the right candidates for the right programs must be emphasised. It brought up the issue of a systematic approach to T & D and the impact these programs had on the executives. The issues of identification, selection, application, measurement and alignment were emphasised. Again, all these relate to HR policies and practices.

While the first question in this category focused on micro issues, the second question under this category focused on macro issues – at the PS or national level. Several issues were raised: reviewing the merit-based appointment process and criteria for all public servants, a comprehensive policy framework for MD, reviewing terms and conditions for executives, developing a capability framework for executives, and reviewing the two key legislations
governing the management of public sector organisations and the public servants, the PSMA and the PSGO.

The need to review the processes and criteria for the appointment of executives in public sector organisations was raised. Almost all participating organisations representing the national departments and agencies indicated that a policy framework for MD is necessary, as it will determine the objects, composition and structure, operation, mobility and management of executives. The PSGO 9 (DPM, 2002) specifies the provision of executives and their appointments, (although it does not specify their development) denotes the important roles they play in the PNGPS. The PSGO derives its laws and provisions from the main legislation, the PSMA. Therefore, if there is an indicative description of executives in the PSGO, a policy framework should be drawn up to guide the PS organisations in managing MD. Because of the absence of such a coherent policy framework for MD, there is a lot of inconsistency in how the PS organisations manage their executives and MD interventions are done on an adhoc basis. Put simply, there are no policies or procedures for the nurturing and progression of executives.

The need to review terms and conditions was raised by almost all respondents from the national departments and agencies as well as other statutory bodies as having an impact on MD. The issue was also raised in discussions on other factors. Participants from the statutory bodies and authorities use this practice as well as awarding bonus to reward success, as statutory bodies and authorities have a different policy on terms and conditions and have the mandate to alter them, unlike the national departments and agencies where terms and conditions are standard and fixed. Concern was expressed about a brain drain and the poaching of current and potential skilled executives by competitors. Apart from well defined JDs, another aspect of MD that was discussed was the need to develop a capability framework and qualification framework for all executives in the public sector.

The last question in this category relates to whether a framework or checklist on MD can be developed that would contribute to capacity building of executives. Although no specific or direct interview questions were asked in relation to the last research question, inference from the findings and evidence of the current state of MD in the public sector organisations, suggest that a framework could be developed on MD interventions in the PNGPS which link to the goal of MD, and a T & D cycle could be drawn up to complement the existing TNA cycle in Section 5 of the PSGO (DPM, 2002, p. 30). The aim would be to guide the PS organisations to adopt a systematic approach to T & D which would then meet the goal of
MD. In addition, an MD effectiveness wheel and an integration of the interventions which are linked to MD goals could be developed to provide a graphical view of the interventions or factors that contribute to MD effectiveness.

In sum, the interviews revealed a rather consistent picture, in that most interviewees held the view that their respective organisations supported MD but there was an absence of a standard program for MD and the lack of an evaluation system in place to evaluate the effectiveness of MD learning programs, particularly at a micro level. It reflected the types of programs undertaken and whether they had an impact on the executives. Most participants supported short-term development programs such as seminars and workshops as the impacts were immediate, although others expressed the view that long-term educational programs were still important for acquiring new skills and knowledge. The practices that were found to be effective were not the same in the two levels of the public sector due mainly to variations in the terms and conditions of executives, and variations in policies and guidelines.

Other issues were revealed at the micro level. They included: the need to appoint executives based on merit and not through the wantok system or nepotism; reviewing of departmental training policies and plans and other related HR policies; selection of the right candidates for the right type of training programs; linking the programs to job requirements and organisational goals; nurturing, coaching and mentoring of potential executives; the generic capabilities and requirements of executives in the JDs which in many cases were irrelevant or outdated. Continuous support from the top management was considered vital because often the executives are put through some development programs and then left to fend for themselves.

At the macro level, one of the main concerns raised by the national departments was the lack of a clearly articulated framework for executive leaders and managers in the public sector to guide the development of executives. Furthermore, respondents reported there was a need to have proper HR policies and that there was an urgent need to review the current Public Service General Orders (PSGO) as the orders are deemed outdated. Almost all participants from the national departments called for a review of the terms and conditions for executives so they can be on par with those of their counterparts in statutory and private organisations. Poaching of potential public leaders by competitors was a common problem and respondents said it would continue if the terms and conditions of executives were not addressed. With all other factors discussed above, this raises the question of whether public sector organisations are meeting the goals of MD.
From the interview responses it was possible to identify the common themes that emerged to answer the research issue: *What are the interventions or factors to MD effectiveness? How do they contribute to capacity building of the executives in the PNG Public Service, and how could they be improved?*

There were similarities in the respondents’ perceptions and views on MD effectiveness and several distinct themes emerged from the summary of the responses. After subjecting these to content analysis, several distinct items emerged from the responses: *organisational support, capabilities and requirements of executives, HR policies and effective practices, and T & D.*

These interventions consist of antecedent components or pre-program components which are under the control of the organisation and the individual executive; or post-program components which the organisation must use in order to ensure that the new knowledge and skills acquired in MD programs are actually transferred to the workplace. Two of the interventions or factors relate specifically to SHRD: HR policies and effective practices, T & D. The other two interventions relate indirectly to SHRD. The first of these is organisational support, which includes intrinsic and extrinsic issues or compensation and motivation. The second is capability and requirements, which relates to recruitment and selection. These four interventions all relate to the goals of MD which is to attract and defend, develop and renew, and motivate and harvest (Boxall, P & Gilbert J, 2007). The four interventions have been explained in Section 5.5.2.

As was seen in Chapter 5, several distinct themes emerged from the respondents’ perceptions and views on MD effectiveness. Thereafter, a tree node or coding hierarchy (Appendix 16, p. 311) was developed. The themes are also represented graphically in Fig. 5.4.

The sequence of the themes in the coding hierarchy and the interventions in the MD effectiveness wheel appear in no particular order. They served as a guide to the researcher in developing the items for the quantitative survey questionnaire conducted in Phase II. As explained earlier, the quantitative phase of the study was designed so that it followed from (or connected to) the results of the first qualitative phase. Findings from Phase I and II complemented each other and were integrated to answer the research questions.
7.3: Quantitative Results

As this was the first comprehensive study to be conducted on MD in the PNGPS, it was the intention of the researcher to collect as much data as possible at the macro level in relation to SHRD, and more specifically on MD interventions. It sought to find out the profile of the respondents, to find out what happened before and after MD programs, and to collect suggestions and comments for improvements of policy and practice.

The statistical techniques utilised to measure the validity and reliability of the scales included correlation analysis, exploratory factor analysis, reliability analysis, principal components analysis (PCA), Cronbach’s alpha, Bartlett’s test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of adequacy. All six variables had very good to excellent validity and reliability.

7.3.1 Demographics

The first demographic characteristic to be considered was gender, which showed a greater participation of male than females. The gender imbalance was due mainly to the fact that in PNG, women are underrepresented in any form of paid employment. Males clearly outnumber females in public sector organisations and the disparity is more acute at the executive level.

The largest group of respondents (44.7%) were in the 41–50 age group, while the second largest group (28.0%) was in the 51–60 age group. In the PNGPS, the mandatory age for early retirement is 50–59 years, and 60 years for compulsory retirement. This is a clear indication of an aging workforce in PNG public sector organisations, particularly at the executive level and a lot depends on succession and exit plans as well as the administration of the older executives in the public sector organisations who must pave way for upcoming potential young executives.

The largest number of respondents (60.7%) were from national departments and agencies. This is because national departments or agencies outnumber statutory organisations in the PNGPS. Due to financial, logistic and practical constraints, the survey was only conducted in Port Moresby, the National Capital District and the government headquarters.

For position held, the largest number (56%) that responded were Assistant Secretaries/Deputy Directors or senior Managers. The second highest (49%) were First Assistant Secretaries/Directors or Executive Managers, while the third highest (17%) were
the Deputy Secretaries or Deputy CEOs. The response rates of potential respondents in different positions in the public service also reflects the manpower structures and ceilings of the organisations. That is, with a pyramid structure, the higher the position or rank, the lower the manpower ceiling for the top positions but the manpower ceiling increases at the lower levels. The deputy directors, assistant secretaries or managers belonged to the lowest category of the executives studied while the CEOs or departmental heads comprised the top level. Those categorised as ‘other’ were from other agencies such as the disciplinary forces or uniformed personnel as well as the statutory agencies which have different structures and use different titles for executive positions.

For length of time employed as executive, 41% had been in executive roles from 6-10 years, followed by 28% who had been in executive roles from 11-20 years, while 27% had been in executives roles from 3-5 years. If it is of any indication, it would appear that most surveyed respondents would have been recently appointed to executives roles.

As for time in organisation, the largest number (67%) of respondents had been in their organisations for more than 20 years, followed by the second highest number (39%) who had been in their organisations for 11-20 years, while 20% had been in their organisations for 6-10 years. Executives who have held the executive roles for much longer periods of time have also been in the organisations for much longer time compared to those who are new to their executive roles. Again, the question of an effective exit policy and succession plan comes up in this situation.

For highest level of education, at least 67.4% of the respondents possessed a basic university degree. Of these, 4% had a doctoral qualification, 26.7% possessed a master’s degree, while the remaining 38.0% possessed a bachelor’s degree as their highest education. The survey revealed that executives are equipped with the required qualifications – that is, a basic university degree. A minimum qualification requirement for all executive positions is a basic university degree relevant to the field in the executive role. A postgraduate qualification is preferable in more senior roles. The entry qualifications for most executive positions are therefore met. Efforts should be made to improve the basic qualifications of those who are yet to obtain a university degree. In most cases, these people would have been appointed to positions of authority based on experience, although there is still a question of whether appointments are merit-based or whether they are based on ‘wantoks’ or on nepotism.
The sets of capabilities and requirements of current positions were generic. Management and leadership skills, strong written and communication skills, and organisational skills were the three common capabilities or skills required in the executive roles. These are consistent with the qualities and capabilities identified in previous studies as explained above in Section 7.2.1 as well as those identified in Phase I interviews. However, other criteria such as having a proficient knowledge of the relevant government legislations were lowly rated. This can be explained by the fact that the statutory organisations have their own policies and legislations which are derived from the PS legislations, and therefore do not necessarily conform to the standard PS legislations. Those that fall under the category of ‘other’ (16%) are mainly capabilities and requirements which are different mainly due to the type of organisation such as the disciplined forces. They also include technical skills such as engineering.

The most popular type of MD learning program attended by the respondents was Seminars and Workshops (84.7%), while the least popular program was internet-based learning (9.3%). Two per cent indicated they had not attended any MD learning program, while 4.0% indicated they had attended types of MD learning programs not listed above. The type of organisation and the positions held determined the types of programs undertaken.

For types of MD program undertaken, the second-most frequently reported type was in-house development programs and long-term overseas educational programs. A small number had not attended any MD programs and this was primarily because they were new appointees. Other development programs such as internet-based learning, secondments, and attachments were not common. The levels of popularity of the types of MD programs reported in the survey were consistent with the views expressed by the heads of organisations in the interviews.

7.3.2 Pre-Program Information

Respondents assessed and rated their own skills, competencies and behaviour before attending any MD learning program. The highest-rated items were: attitude to work, having confidence in work and punctuality and attendance to work, while the lowest-rated items were: contributing to organisation’s ability to influence and inform policy decision by the government, computer skills, analysing and synthesising complex information, and drawing logical conclusions and providing reasonable alternatives. Respondents were again asked to assess and rate their own skills, competencies and behaviour after undertaking an MD program, using the same set of items. The objective of the self-assessment questions was to
establish if there was any significant difference or improvement after undertaking any MD learning programs.

For identification of training and selection procedures, there was an indication (72.7%) that organisations promoted sharing of information and knowledge to its employees specifically on information on availability of MD programs. Most executives (65.3%) had gone through the respective Training Committees to undertake any learning program and were nominated by their organisations (46.7%) to undertake training. However, it must be noted although the nominations and selection procedures are followed, the training cycle will not be completed if issues of application, measurement and alignment are not fulfilled. Moreover, training must be linked to the job requirements and organisation goals.

The PS General Orders (PSGO), although it is the main policy document that governs the administration and management of all public servants, was not always considered to be important by executives. This may have been because some public sector organisations, particularly statutory bodies and state entities, do not use this document. These organisations have their own policies and legislations and therefore do not conform to the PSGO as much as the national departments, although in many cases their policies are derived from the main government legislation. Training plans (69.3%) and policies (64.7%) were the two most common HR policies used in the organisations.

In relation to effective practices – the Graduate Development Program (18.9%) has not been introduced to many organisations. However, those organisations that did use it reported that it worked very well. Identification of training needs (89.3%) and participant selection linked to organisation strategy and policy (70%) were the two common effective practices.

The general comments and remarks highlighted some anomalies. For instance, although there were HR procedures such as training plans and policies in place, there was still an absence of other vital policies such as succession plans and equal employment policies. For the national departments and agencies, the main source document was the PSGO. However, almost all respondents stressed the need to review this important policy as there were many grey areas and many provisions were outdated. Furthermore, there is no policy framework for executive services in the organisations except for the statutory organisations who have policies in place for potential leaders.
7.3.3 Post-Program Information

The self-assessment of leadership skills and behaviour after MD programs brought to light several issues. Comparing the two mean differences indicated: 1) whether there had been improvement as a result of the MD learning programs; 2) the item with the biggest improvement after undertaking an MD learning program; and 3) the item with the least improvement after undertaking an MD learning program.

Clearly, it was evident that there had been improvement on all items as a result of the MD learning programs. *Attitude to work, having confidence in work and punctuality and attendance to work* had the highest means before and after MD. However, the rate of improvement for these items was found to be small as the increases in their means was small – that is, the impact of MD on these items was much less than for other items.

Skills and competencies such as: *Adapting to change and innovation, Strategic in my thinking..., managing and leading people and activities and contributing to organisation’s ability to influence and inform policy decision by the government* (which was rated the lowest in the pre-program evaluation) were shown to be more affected by MD programs.

The technique used in this question proved very reliable and useful for those in policy and practice. It showed the areas of improvement and where emphasis should be placed when considering learning and development programs for the executives.

It is evident from all questions relating to post-program evaluation that evaluation after training is poorly done in the public sector organisations.

In relation to impact of MD programs, seminars and workshops proved to be the type of training with the biggest impact. This is mainly because their duration was short and the impacts are immediate. However, there is a limit to how much executives can be expected to learn in the short time taken to undertake a seminars or workshop. The second-highest ranked training mode was long-term overseas educational programs which showed that professional development was required as important. The lowest-ranked programs were job rotation, internet-based learning and secondments. The findings were consistent with views shared by the heads of organisations in the interviews.

7.3.4 Comments and Suggestions

Section D of the survey instrument sought qualitative data in the form of individual respondents’ comments, remarks and suggestions for improvement at the micro and macro
levels. At the micro level, after subjecting the comments and suggestions to content analysis, several distinct items emerged. These were the need for merit-based appointment of executives, annual review of job descriptions, T & D programs linked to job requirements, coaching, mentoring and nurturing of executives, opportunities for skill utilisation after training, evaluation of MD programs, and GDP be introduced (see Table 6.33).

At the macro level, after subjecting the comments and suggestions to content analysis, several distinct items emerged from the responses. These were the need for review of merit-based appointment process and criteria, development of a policy framework for MD, review of terms and conditions for executives in the public sector, development of a capability framework for executives, and review of the Public Service Management Act and the PSGO (see Table 6.34).

The suggestions and comments for improvement in policy and practice at the micro and macro levels were similar to those identified in the interviews. Most respondents were of the view that executives must be appointed on merit in the organisations and that selection criteria must be strictly complied with. Many raised concerns about the lack of evaluation of MD learning programs to determine their effectiveness and the impact they had on executives. In addition, the need to link T & D programs to job requirements was expressed by many respondents. There were other concerns such as reviewing or updating of job descriptions, coaching and mentoring of potential executives, giving opportunities for executives to utilise their new skills and knowledge after training as well as the reintroduction of the Graduate Development Programs in the organisations.

Having discussed the findings from the qualitative and quantitative methodologies, the next step is to see how these findings have answered the research questions and to show the significance of the hypotheses developed from the interviews.

### 7.4: Conclusion on the Research Questions & Hypotheses

#### 7.4.1 The Research Questions

This section reports on how qualitative findings (interviews) and quantitative findings (survey) answered the research questions. In doing so, it also reveals how the qualitative and quantitative findings complemented each other. Table 7.1 shows the research questions,
together with the corresponding interview questions and survey questions. This shows the linkage between the research questions, the interview questions and survey questions.

**Table 7.1** Linking interview and survey questions to research questions

<table>
<thead>
<tr>
<th>Research Questions (RQ)</th>
<th>Interview Question/s (IQ)</th>
<th>Survey Questions (SQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are the capabilities and requirements of executives as articulated in the PNGPS?</td>
<td>1a, 2a</td>
<td>A5, A8</td>
</tr>
<tr>
<td>2. What are the current HR Policies and Effective Practices that contribute to MD?</td>
<td>3a, 3c</td>
<td>B6, B7</td>
</tr>
<tr>
<td>3. Do the current policies and practices fully develop management executives?</td>
<td>3b</td>
<td>B8</td>
</tr>
<tr>
<td>4. How are the MD interventions evaluated?</td>
<td>4c</td>
<td>B7.5, C3.1, C3.2, C3.3, C4.1, C4.2, C4.3</td>
</tr>
<tr>
<td>5. In what ways could MD be improved to contribute to capacity building in the PNGPS?</td>
<td>5a, 6a, 6b</td>
<td>D1, D2</td>
</tr>
<tr>
<td>6. What are the changes and suggestions that could be integrated into policies and practices?</td>
<td>6a, 6b</td>
<td>D1, D2</td>
</tr>
<tr>
<td>7. Can a framework on MD interventions and a checklist on T &amp; D be developed that contribute to capacity building of the executives in the PNGPS?</td>
<td>A framework on MD effectiveness and a checklist on T &amp; D can be developed based on the findings from interviews and survey.</td>
<td>D1, D2</td>
</tr>
</tbody>
</table>

Source: Developed for this research

As discussed throughout this project, this study employed a mixed methods research design, which utilised a sequential two-phase approach, including both qualitative and quantitative phases. The Phase I qualitative in-depth interview process, involving the heads of the organisations, had the objective of providing a micro-level exploration and explanation of MD interventions in the public sector organisations. The Phase II quantitative survey questionnaire, involving the senior executives, had the objective of providing macro-level exploration of MD interventions. Specifically, it aimed to collect statistical data that would complement the findings from Phase I.

**RQ1: What are the capabilities and requirements of executives as articulated in the PNG Public Sector?**

Relative to research question one, which sought to identify the capabilities and requirements, Phase I of the research was able to provide an understanding of the capabilities, requirements and qualities perceived to be important for public sector executives. Phase I elicited from the heads of the organisations their overview and perceptions of what they saw as the
contributing factors or interventions that contributed to MD effectiveness at the micro level. In doing so, they identified the capabilities and requirements or qualities required by public sector executives to enhance their performance in meeting organisational goals and objectives. Phase II of the research was able to provide statistical data from the executives on the capabilities and requirements specific to their executive roles. The results of Phase II followed from Phase I findings thus connected or linked to answer the research question.

Both phases identified the same personal behavioural capabilities (the intrinsic capabilities of an individual and their preferences in the way they naturally preferred to operate); skill and knowledge capabilities (personal behaviours and skills that can be learnt through experience and education and can be incorporated into individual’s work behaviours); and technical capabilities (formal technical capabilities required to undertake particular aspects of the job). Overall, leadership and management skills, communication skills, interpersonal skills, strategic thinking were found to be prevalent in specific roles (see Table 6.3, Section 6.3) which supports the literature on capabilities and qualities of public sector executives. Furthermore, Phase II statistical data confirmed that the minimum educational requirement of a basic university degree for public sector executives was met (see Table 6.2, Section 6.3).

**RQ2: What are the current HR policies and practices that contribute to MD?**

The second research question sought to identify the HR policies and effective practices that were used in MD. Data from Phase I revealed which types of HR policies and effective practices were used in developing public sector executives at the micro level. It further revealed the absence of other important policies. Phase II provided statistical data around which types of HR policies were being used in various organisations and the practices that were found to be contributing to MD.

Both phases showed that training policies and plans, as well as the PSGO, were the main or common source documents that contributed to MD. However, it also showed that other vital policies such as succession policies and equal employment opportunity policies were absent in many other organisations (see Table 6.6, Section 6.6). The effective practices that contributed to MD were: identification of training needs (systematic approach to T & D), training linked to organisational goals, and retreat workshops. Organisational support and infrastructures in place were the next common practices but post-program evaluation was not so common. However, an inconsistent picture on the effective practices was revealed by the two phases. For instance, retreat training and graduate development programs were highly
recommended by the heads of the organisations at the micro level but rated low in the survey at the macro level. One explanation could be that the effective practices for one organisation may not be the best or most effective in other organisations, or perhaps views from a focus group of HR managers who administered T & D could have been sought. Nevertheless, some of the practices identified were consistent with the literature.

**RQ3: Do the current policies and practices fully develop management executives?**

The third research question sought to establish if the current policies and practices fully developed management executives. Views and perceptions from Phase I were able to answer this question by critically expressing what was working and what was not working and why they were not working. In Phase II, open-ended questions were provided after the closed questions on HR Policies and effective practices (see Section 6.4 general comments on HR Policies and effective practices). These questions not only enabled the respondents to identify the policies and practices used but also enabled them to provide further comments on these policies and practices.

The overall finding from the two forms of data highlighted that the policies and practices were complied with. In most cases, they guided the organisations in developing the executives. However, the policies and practices were often outdated and needed review. For instance, the PSGO needed urgent review as it was outdated and the training plans and policies were often outdated and needed review annually or bi-annually.

**RQ4: How are the MD interventions evaluated?**

The fourth research question sought to establish how the MD interventions or programs were evaluated. Other related issues on MD learning programs were also considered before answering this question. For instance, respondents’ preferences on the types of MD learning programs were sought.

In Phase I interviews, participants were asked about which types of MD learning programs were deemed suitable for the executives. Then in Phase II, statistical data were generated to identify the most popular types of T & D programs.

Findings from the two data sets were consistent. In Phase I, a blend of short-term development programs and long-term overseas educational programs were recommended, although short-term programs were most preferred. In Phase II, this was confirmed in the
survey where most respondents preferred short-term development programs followed by long-term overseas educational programs (see Table 6.10, Section 6.5).

In their evaluation of MD programs, respondents to both phases confirmed there was a lack of or an absence of post-program evaluation in the public sector organisations (see Table 6.8, Section 6.5). Where post-program evaluation was conducted, it was not clear whether top management was informed of the results. This study showed that there is no post-program evaluation systems available in PNG public sector organisations and a reliance on the normal performance appraisal system which did not necessarily evaluate if the T & D programs are effective.

The respondents, in assessing their leadership skills and behaviour before and after training, revealed that training did bring about improvement. Further analysis on this item will be discussed in Section 7.4.2.

**RQ5: In what ways could MD be improved to contribute to the capacity of executives in public sector organisations?**

The fifth research question sought ways in which MD could be improved at the micro level. Both phases produced similar suggestions and comments. As discussed in Section 7.3.4, these were: merit-based appointment of executives; annual review of Job Descriptions; T & D programs linked to job requirements; coaching, mentoring and nurturing of executives; opportunities for skill utilisation after training; evaluation of MD programs; and Graduate Development Programs be introduced (see Table 6.33).

**RQ6: What are the changes and suggestions that could be integrated into policies and practices?**

The suggestions and comments for improvement in policy and practice at the macro level from the survey were similar to those identified in the interviews. These were: review merit-based appointment process and criteria; policy framework for MD; review terms and conditions for executives in the public sector; capability framework for executives; and review the Public Service Management Act and the Public Service General Orders (see Table 6.34).

**RQ7: Can a framework on MD interventions and a checklist on T & D be developed that contribute to capacity building of the PNGPS?**

Although no specific questions were developed in either phase of the research design to directly address this question, a framework on MD effectiveness (see Figure 7.2) was
developed followed by a framework showing the integration of these interventions (see Figure 7.3) based on qualitative and quantitative findings as well as the policy reports and government documents. In addition, a checklist for a systematic approach to T & D, a T/D cycle (see Figure 7.4) has been developed to complement the existing training needs analysis process in PSGO Section 5 which will guide the HR practitioners and other stakeholders as well as development partners and senior executives in developing their executives.

7.4.2 Hypotheses

On the basis of the four common themes identified from the interviews, as well as on the impact of T & D on SHRD of executives, six hypotheses were developed and were tested in the Phase II survey data collection and analysis. The aim of the Phase II quantitative data collection and analysis was to test the four interventions by using multiple linear stepwise regression to find the best predictors of MD effectiveness from the four interventions, and to test if there were any significant differences in leadership skills and behaviour as a result of MD programs.

7.4.2.1 Pre- and post-program leadership skills and behaviour

The first two hypotheses concerned leadership skills and behaviour. The aim of self-assessment of leadership skills and behaviour, although not related to a particular program, was to establish if there were any significant differences before and after undertaking MD learning programs. In other words, the aim was to assess the impact of MD programs. As the analysis progressed beyond the descriptive stage, other tools of inferential statistics such as paired sample t-tests was used to test Hypothesis 1 (leadership skills) and Hypothesis 2 (behaviour). The aim was to test to assess the statistical significance of the difference between two sample means for a single dependent variable (MD Effectiveness). These two hypotheses are restated below:

\[ H_1: \quad \text{There is a significant difference between Pre and Post-Program Leadership skills and competencies.} \]

\[ H_2: \quad \text{There is a significant difference between Pre and Post-Program Behaviour and attitude.} \]

After running the paired sample t-test, it was concluded that there was significant difference in leadership skills and behaviour after MD programs. Therefore, there was change or improvement as a result of the MD program.
7.4.2.2 Interventions to MD effectiveness

For Hypotheses 3–6, a stepwise multiple linear regression was employed to identify the most parsimonious set of predictors of MD Effectiveness, using a set of four predictors. The potential predictors (independent variables) comprised: Organisational Support (OrgSupport), Capabilities and Requirements (CapReq), HR Policies, Effective Practices (HRPEP), and Training and Development (TD1).

At the final step (Step 2) of the analysis, there was significant regression coefficient for HRPEF ($t = 3.621, p < .05$), and a significant regression coefficient for TD1 ($t = 2.208, p < .05$).

It was therefore concluded that of the four independent variables, the most parsimonious sets of independent variable predictors closely related to MD effectiveness were HR Policy and Training and Development. The other two independent variables, Organisational Support and Capabilities and Requirements were weak and had no positive relationship with the dependent variable, MD effectiveness.

The four hypotheses are restated below:

$H_3$: There is a significant positive relationship between Organisational Support and MD Effectiveness.

$H_4$: There is a significant positive relationship between Capability and Requirements of the executives and MD Effectiveness.

$H_5$: There is a significant positive relationship between HR Policies, Effective Practices and MD Effectiveness.

$H_6$: There is a significant positive relationship between Training and Development and MD Effectiveness.

In sum, it was found that interventions HR Policy and Effective Practices as well as Training and Development were significant predictors of MD effectiveness. It was also found that there was a significant difference or improvement in leadership skills and behaviour before and after taking MD learning programs. The findings for the hypotheses are restated below.
Table 7.2  Significance of the hypotheses

<table>
<thead>
<tr>
<th>HYPOTHESES</th>
<th>SIGNIFICANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₁: There is a significant difference between Pre and Post-Program Leadership skills and competencies.</td>
<td>Yes</td>
</tr>
<tr>
<td>H₂: There is a significant difference between Pre and Post-Program Behaviour and attitude.</td>
<td>Yes</td>
</tr>
<tr>
<td>H₃: There is a significant positive relationship between Organisational Support and MD Effectiveness.</td>
<td>No</td>
</tr>
<tr>
<td>H₄: There is a significant positive relationship between Capability and Requirements of the executives and MD Effectiveness.</td>
<td>No</td>
</tr>
<tr>
<td>H₅: There is a significant positive relationship between HR Policies and Effective Practices and MD Effectiveness.</td>
<td>Yes</td>
</tr>
<tr>
<td>H₆: There is a significant positive relationship between Training and Development and MD Effectiveness.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Developed for this research

7.5: Conclusion about the Research Issue

There is a large body of literature in relation to SHRM and SHRD, but there is a much smaller body of work that relates specifically to MD effectiveness in public sector organisations, particularly with respect to the smaller developing countries such as PNG. Moreover, there is a gap in the literature on SHRD of public sector executives.

Capacity building has come to dominate the public sector reform movement in PNG. Reforming and reconditioning the people and the system in the public domain is one of the greatest challenges for PNG. However, there is limited or mixed understanding of the notion of capacity building. Interventions to MD effectiveness and SHRD of public sector executives in the PNG Public Service are not well documented. This is the first comprehensive study to be conducted on SHRD of executives in the PNGPS, more specifically on MD effectiveness. Thus, this study attempted to embrace a broader perspective of MD in the PNGPS at different units of analysis, at micro, meso and macro levels by adopting a sequential exploratory mixed methods approach. Linking the qualitative and quantitative components effectively was the basis for producing integrated findings that are greater than the sum of their parts. Although there is a gap in the literature on MD effectiveness in public sector organisations, efforts were made to review literature on similar studies particularly in relation to SHRD of managers in private organisations, T & D of
managers, capacity building, the best or effective practices of SHRD in other countries, and the policies and practices and models as they relate to MD. This section will now consider the research issue that was posed in Chapter 1. The research issue that has been addressed through the literature review and answered through the research is:

“What are the interventions to MD effectiveness? How do they contribute to capacity building of the executives in the PNGPS, and how could these be improved?”

Effective MD can result in higher job satisfaction, lower turnover, less stress resulting from skill inadequacies and less difficulty in filling executive vacancies. It follows then that while effective MD results in increased knowledge and skills of participants, the organisation also benefits from higher productivity, lower absenteeism and better customer service. For public sector organisations, this means better service delivery for citizens.

MD strategies can be linked to a systems approach. If management skills and activities are conceptualised to be situation specific and embedded in the organisations in which they are practised, then the question arises: what is the best way to prepare managers for the complexity, uncertainty, uniqueness and value conflicts which characterise organisational environments. MD strategies have received considerable attention. MD is now viewed as one of the key organisational processes aimed at delivering successful organisational adaptation and renewal but success will only occur if MD strategies are adapted and implemented in ways that are congruent with the changing needs and expectations of the new organisation.

As revealed in the literature survey, a number of challenges still remain in public sector organisations despite efforts to improve HRD function in the context of ongoing reforms and these include: the lack of a systematic approach and very fragmented and reactive nature of the T & D function, poor alignment of T & D with institutional strategies and performance appraisal systems, and the inability of HRD specialists to assume a strategic role in addressing organisational problems (Hockey, Kakabadse et al., 2005; Maor, 2000; Gibb, 2002). This indicates that current approaches to HRD are insufficient to ensure the development of a new set of competencies among public sector executives, and to create an enabling environment within government institutions that enhances the organisation’s capacity to take on large-scale learning processes associated with major cultural and procedural change brought on by public management reforms (Koch, 1999).
Despite the challenges identified in the literature, effective continuing education and training must continue as it is critical to sustaining the kind of skills-based government workforce required to meet the government’s current and future needs. If done wisely, an investment in education and development will not just affect individual employee performance and productivity on the job but it will also have an impact on employee alignment, engagement, and overall performance.

There is still a question of whether government agencies have systematic learning and development regimes in their organisations. Ice (2009) argues that there are many who have yet to develop a truly comprehensive and systematic approach to employee education, T & D and develops five guidelines that can be employed when designing education, training and development, and performance improvement initiatives for government workers. These guidelines involve: considering all strategies or methods in incorporating continuing education and training into the employee lifecycle; conducting frequent training needs analysis to determine training needs and knowledge gaps; ensuring that there is a strong succession plan in place and to begin development future managers and leaders now; considering different learning styles and preferences for employees; and using education and training as a way to create a strong learning culture in the organisation.

Bhatta (2002) identifies five problems in T & D function that need to be addressed in order for right executives to be developed: identification, selection, application, measurement and alignment. However, while all are important in their own right, the concern is with the first one since that determines the nature and orientation of the T & D interventions. That is, if organisations get the identification wrong, they are targeting the wrong people and/or the wrong skills gap.

7.6: Outcome of the analysis

Results of qualitative and quantitative data have been discussed. As informed by analysis of data, the following were developed which answers the last research question: 1) a framework of PNGPS SES Development Effectiveness wheel; 2) an Integrated interventions to MD Effectiveness in PNGPS; and 3) a checklist on T & D.
7.6.1 A framework of PNGPS SES Development Effectiveness Wheel

The focus on this research was initially on learning and development interventions. However, the interview data revealed a number of factors identified by participants as very important. These factors informed the need for development of the MD Effectiveness Wheel. The need for the framework includes more than the specific learning and development interventions.

This research developed a framework on MD effectiveness (the MD Effectiveness Wheel as shown in Figure 7.2) based on the findings from Phase I of the research design. The framework consisted of interventions that contributed to MD effectiveness: Organisational Support, Capabilities and Requirements of executives, HR Policies and Effective Practices, and Training and Development. The four interventions are explained and discussed in Section 5.5.2 and Section 7.6.2 below.

Interventions are the act of intervening, especially to influence or alter a situation in some way. When the four interventions were tested by using multiple linear stepwise regression to identify the most parsimonious set of predictors of MD effectiveness, HR Policy and Effective Practices as well as Training and Development were found to be best predictors of MD effectiveness. While the best predictors of MD effectiveness may not be consistent with those identified in previous studies of MD effectiveness, they are consistent with Garavan’s (1991, 2007) key characteristics of SHRD, which has HR Policies as a key component.

![An MD Effectiveness Wheel](image)

**Figure 7.2** An MD Effectiveness Wheel

*Source:* Developed for this research
## 7.6.2 Integrated interventions to MD Effectiveness

The study found that all four interventions influenced or contributed to the effectiveness of MD in the PNGPS. Although the two most parsimonious sets of independent variable predictors closely related to MD effectiveness were HR Policy and Effective Practices and Training and Development, the four interventions can be integrated. The PNGPS organisations must seek to attract and nurture management talent while simultaneously needing to exploit and renew it. They cannot simply rely on ‘soft’ (humanist, developmental) HRM, at the expense of ‘hard’ (rational, calculative) HRM, but need a suitable blend of soft and hard HR practices (Boxall & Gilbert, 2007, p 295). Accordingly, the interventions could be categorised four-dimensionally as illustrated below in Figure 7.3. The integration of the four interventions begin with the two strongest predictors of MD effectiveness. Figure 7.3 links the goal of MD to the four interventions. It shows that in order for MD to be effective, all four interventions must be integrated which ultimately depend on each other. A brief explanation of the integration of the interventions is given below.

**HR Policies and effective practices** - the organisations engage in HR policy and plan formulation because it acts not only as a source of information for all managers but also clearly sets out for executives the different types of education, learning and development activities that they can undertake to help develop their skills and knowledge, and, therefore, it complements career development activities. The policies set out the procedures, systems and practices which they use as their effective practices. For instance, all T & D are planned systematically.

**Training and Development** – once the policies and plans are formulated, the organisations facilitate in providing or selecting appropriate type of programs for the executives. This is linked to their job requirements and organisation goals and objectives. Type of learning program match the skills gap identified in training needs analysis

**Capabilities and requirements** – these are important and specified clearly in the JDs as articulated in the PNGPS. These skills or qualities match the job roles. The JDs are used for recruiting and selection of right cadre of executives into the organisation and to evaluate their weaknesses and strengths. The current capabilities and requirements of executives determine where development is needed.

**Organisational Support** – equally an important factor because for any intervention to be implemented, it needs top management support. The top management must be willing to
allocate valuable organisational resources which is vital to development program continuance and success.

Figure 7.3: Integrated interventions to MD Effectiveness in PNGPS
Source: Developed for this research

7.6.3 Checklist on Training and Development

The outcome of the analysis further led to development of a T & D cycle and a checklist on T & D. It complements the existing process on training needs analysis (PSGO 5, DPM, 2002)
and would guide the HR practitioners in PNG Public Sector organisations in developing the executives.

The T/D cycle has five stages: identification, selection, application, measurement and alignment. For T & D activity to be effective, all five stages should be accomplished in the order depicted in Figure 7.4.

- **Identification**: identify and target the right people and skills gap, in consultation with the organisation-specific training plan and policy, the Corporate Plan and the PSGO.

- **Selection**: select and broker right or suitable development interventions which must be linked to current or future job requirements and organisational goals.

- **Application**: provide or facilitate T & D.

- **Measurement**: assess or evaluate skills or development attained to see if there is any impact after T & D program, and to see if training worked.

- **Alignment**: harmonise new skills with old responsibility by allowing opportunities for skill utilisation, and the enabling structures and systems are in place for skill utilisation.

![Figure 7.4: A cycle on systematic approach to Training and Development](source: Expanding on Bhatta, G. (2002 Figure 1), and modified for this research.)

Other pre- and post-program components identified in this research, produced a checklist for a systematic approach to T &D as shown above in Figure 7.4. These are consistent or supported in the literature by studies such as Bhatta’s (2002) process of T & D and Ice’s (2009) guidelines on systematic learning within the governmental workforce. As can be seen,
some results from this research are in line with previous studies from Western contexts. This indicates that there are similarities in the area of SHRD between Western and PNG contexts.

7.7: Implications for Theory, Policy and Practice

This section outlines the theoretical contributions of this research and its implications for policy and practice. Recommendations for policy and practice are also discussed.

7.7.1 Contributions to Knowledge and Theory

It is important to consider the contributions made by this study to the body of research that relates to strategic human resource development of senior executives and, more specifically, management development in the public sector organisations. This is arguably the first comprehensive study on SHRD of executives in the PNGPS, more specifically on MD interventions. Moreover, it contributes to a previous scoping study on executive development (ED), primarily to report on the existing SES and the current system of appointing and managing departmental heads in PNGPS (PSWDI, 2006).

The study has made several significant contributions:

- It fills in the knowledge gap about MD in PNGPS.

- An extensive review of the literature for this study revealed that this is the first time in the smaller Pacific Island nations, possibly in smaller developing nations, that MD in the Public Sector organisations has been studied. One of the primary rationale for undertaking the study was the lack of empirical data pertaining to MD in the public sector.

- Although some of the issues are not entirely new, the study adds additional support, new emphasis to similar findings in other studies, and strengthens existing literature, by providing empirical evidence of best practices in MD.

- The study also adds additional support to similar findings in other studies on challenges faced by public sector organisations on the lack of systematic approach and the very fragmented and reactive nature of the Training and Development function. In particular, where training is more supply driven rather than demand driven, and the lack of post-program evaluation at impact level.
Chapter 7: Conclusion, Implications & Recommendations

- The pre and post program assessment of behaviour and attitude as well as leadership skills and competencies identifies areas of improvement and where emphasis should be when considering learning programs. It shows the impact of training and development programs.

- It adds additional support to similar findings in other studies on the most preferred type of management development or leadership programs by senior executives.

- There is a shortage of literature on this subject. MD in the public sector organisations has largely been unattended to in the literature. Previous studies on MD have been focused on private organisations, firms and businesses.

- The study has revealed important suggestions for improvement in policy and practice at micro and macro level in the PNGPS, the hard and soft capacities, recruitment policies and practices, motivational incentives to retain senior executives in the PNGPS, post-program evaluation at impact level.

- Furthermore, contributions to knowledge and theory have included development of a MD Effectiveness Wheel consisting of the four intervention, a framework on integration of these interventions, and a checklist with a T/D cycle on systematic approach to training, learning and development.

Therefore, this research provides a unique perspective on MD and serves as a basis for defining an emerging field of study. Moreover, the study adds to the body of knowledge meaningful references for future research initiatives.

7.7.2 Recommendations for Policy and Practice

Contributions to knowledge and theory have been discussed above. The following recommendations for HR practitioners, top management in PNG public sector organisations, other stakeholders and funders of capacity building activities make a contribution to policy and practice.

- Develop a policy framework for MD at macro level to determine the objects, composition and structure, operation, mobility and management of the executives.

- As explained above, the four interventions identified in Phase I of the research design and thus the development of the MD Effectiveness Wheel as shown in Figure 7.2 and linking
of the interventions to MD goal as shown Figure 7.3, be used as a basis for the development of a policy framework on MD in the PNGPS.

- The HR practitioners in public sector organisations to use the systematic approach to T & D shown in Figure 7.4 as a guide when developing HR plans and policies. Any attempt to develop the executives be systematically planned to enhance maximum performance.

- Develop a standardised MD program for public sector executives and use across all the sectors of the public service.

- Develop Capability Frameworks across public sector organisations that seek to establish a shared understanding of the critical success factors for performance in public sector leadership roles. The content to include clusters of behaviours that a person demonstrates to be successful in a job, role or function. The agency-specific criteria, such as particular qualifications or mobility requirements, be added to the framework to meet agency requirements.

- All public sector organisations to develop their own Succession Plans which not only facilitate in career paths for executives but it also assists in manpower planning and exit of aging executives.

- Review relevant HR policies such as Training Plans and Policies annually or bi-annually.

- Link all training to job requirements and organisation goals and objectives.

- Develop and conduct a standardised post-program evaluation method or system to establish the impact of the learning programs on the executives.

- Focus more on post-program evaluation at impact level and not on reaction level. This is to show if there is any improvement as a result of the training and if the training has worked.

- Develop and conduct a similar assessment system on leadership skills and behaviour with components and constructs such as that used in this study, to see where training is needed most. This will identify the areas of improvement and where emphasis should be when considering learning programs.

- Review and update Job Descriptions periodically.
7.8: Limitations of this Research

As with any research, some limitations of the scope have been identified and are discussed below. Section 1.8 outlined the delimitations of this study. They are restated here and discussed with other limitations that have emerged.

First, reliance on respondents from public sector organisations at the administrative headquarters only, without the provincial executives who represent the majority of the rural population, renders the research findings and conclusions less generalisable. Due to financial, timing and other logistic constraints, both phases of the research design were conducted in Port Moresby, the government headquarters and the nation’s capital.

Second, the absence of input from HR managers as the group at the forefront of SHRD, particularly with respect to MD, did not enhance the validity of the findings and conclusions drawn from the research. The in-depth interviews were only focused on the senior executives in the top hierarchy of the PNG public sector organisations.

Third, more insights may have been gained if a comparative study had been undertaken between the national departments, statutory authorities or entities and provincial administrations, or better between the smaller Pacific island nations.

The fourth limitation concerns the kind of interventions focused on. This study did not do a 360° feedback or similar to research how subordinates or peers considered the effectiveness of the interventions on their bosses or superiors. It only reported perceptions from the heads of the organisations and have not triangulated other data such as measures of the executives’ effectiveness.

It is argued that the findings and conclusions that were reached must be seen in the context of the particular and peculiar circumstances of PNG society. While this means that the conclusions may not be generalised in the traditional natural scientific fashion, they, nevertheless, provide valuable insights for similar societal settings, especially in other developing countries such as the smaller Pacific island countries.

This research duly acknowledges these limitations, but they do not detract from the significance of the findings. Hence, the limitations provide platforms for future research which will be discussed in Section 7.10.
7.9: Implications for Methodologies

This research was accomplished by using a two-phase sequential exploratory mixed methods approach involving qualitative in-depth interviews in Phase I, and a quantitative survey questionnaire in Phase II. The interview methodology was based on the literature, policy documents and the researcher’s hands-on-experience, and the survey methodology was based on the findings of the interviews and was therefore methodologically sound. It is nevertheless appropriate to briefly discuss their limitations and how these limitations were overcome in this research.

7.9.1 Qualitative Interviews

The interview protocol was rigorous enough to ensure validity while also facilitating flexibility and encouraging respondent interaction (Patton, 2002). The review of literature on SHRD, and more specifically on MD, helped inform the development of the interview questions which were reviewed by an expert panel of methodologists. The interview questions were designed in such a way as to help the interviewees express their views, as heads of the organisations, on MD. To avoid any criticism that the findings would be subjective, all interviews were conducted by the same researcher and the same interview questions were asked in a semi-structured conversation.

7.9.2 Quantitative Survey

The quantitative research phase was theoretically conceptualised to ensure that the survey instrument was valid, reliable and inextricably linked to the research objectives (Morse, 1997). The survey questionnaire was developed from the findings of the interviews in Phase I, reviewed by an expert panel of methodologists, and pilot-tested to overcome the inherent weaknesses related to variations in the respondents’ interpretations of the questions.

7.10: Suggestions for Further Research

As explained in Section 7.8, limitations have been identified in this study. Nevertheless, the limitations have provided opportunities for further research.

First of all, this study was conducted on executives in the public sector organisations at the administrative headquarters only, without the involvement of provincial executives who represent the majority of the rural population. This limits the ability to generalise over much
from the findings. Further research could focus on provincial executives to gain insights on policies and practices in MD effectiveness. It could adopt the same research design at the micro and macro levels. However, due to logistic and financial constraints in reaching the public sector executives in the 20 provinces due to the expense of domestic travel, a case study research design focused on the four regional headquarters would be more appropriate.

Secondly, the in-depth interview involved only the heads of organisations, the most senior managers or their nominees to gain their perceptions on MD effectiveness in their organisations. Further research with HR managers as the group at the forefront of SHRD, particularly with respect to MD, would enhance the validity of the findings and conclusions and triangulate current data drawn from the research. This could triangulate their perceptions in relation to the contribution of MD to the factors identified by Leskiw and Singh (2007) as vital to effective leadership and MD and to broader organisational effectiveness and capacity building.

Thirdly, this was the first comprehensive study to be conducted on SHRD of public sector executives, and involved different levels of the PS. Therefore, further comparative research could be conducted between the different levels of the PS, between public and private organisations in PNG.

Fourthly, an international comparative study between the SES of Public Sector organisations of other Pacific island nations such as Fiji, the Solomon Islands, Vanuatu or Samoa who share similar characteristics to gain more insights to the policies and practices on MD effectiveness in different contexts.

Fifthly, another possibility for further research may be the undertaking of broader studies using a case study approach on selected PS organisations either at national or provincial level, by applying $360^0$ feedback or similar to research how subordinates (those at supervisory level and frontline managers) or peers consider the effectiveness of the interventions on their bosses or superiors.

Sixthly, further studies may want to better evaluate the effectiveness or impact of different types of learning programs by using the same or similar type of self-assessment questions used in this study. Any such empirical investigation will add to the adoption of most appropriate, relevant or preferred type of learning programs for the senior executives by PNGPS organisations as well as funders of MD activities.
Finally, within the confines of this dissertation, the notion of MD was explored. Further research could explore the leadership styles of PNG public sector executives, or explore the factors affecting the retention of executives in the PNGPS. One other main research interest could be to do a study on women in executive roles in the PNGPS as we have now have more women excelling in senior executive roles in the PNGPS such as the post of Chief Secretary to the Government, CEOs of various levels of government organisations and institutions and heads of diplomatic missions.

7.11: Summary

This study assessed the current state of MD in PNG public sector organisations. It is the first comprehensive study to be conducted on the SHRD of public sector executives. It sought to identify interventions associated with MD effectiveness.

This research adopted a two-phase sequential, exploratory mixed methods approach wherein the results of the first method (qualitative interviews at the micro level) helped develop or inform the second method (quantitative survey at the macro level). The quantitative phase of the study was designed so that it followed from (or connected to) the results of the first qualitative phase. Therefore, the research was undertaken in two sequential phases of empirical investigation. Linking the qualitative and quantitative components effectively was the basis for producing integrated findings that are greater than the sum of their parts.

The target group for the in-depth interviews for Phase 1 were those at the top executive level in the organisational hierarchy such as departmental heads or secretaries as they are also referred to in the public service institutions (or their nominees), as well as the chief executives officers (or their nominees) of the statutory bodies. The target group for the Phase II survey were other executives in the top management structure. All participants represented PNG public sector organisations across different sectors of the government such as: administration, economic, social, law and order, infrastructure.

In the first phase, 21 interviewees suggested four interventions that contribute to MD effectiveness: organisational support, capabilities and requirements of executives, HR policies and effective practices, and T & D. Two other additional measures (pre- and post-program leaderships and behaviour), hypothesised as being related to MD effectiveness, were included. The second phase involved analysis of a survey of 150 executives that appeared to validate the influence of the six variables.
Paired sample \(t\)-test results revealed that there is a significant difference between pre- and post-program leaderships skills, and between pre- and post-program behaviour. For this study, the aim was to connect and analyse the findings (constructs) from the qualitative interviews – to see what the best predictor/s are for the dependent variable \(MD\) Effectiveness. Multiple linear stepwise regression analysis was conducted to examine the relationships between the four constructs or independent variables and the dependent variable. In this approach, a number of predictors (independent variables) were entered and the goal of the analysis was to find the best sub-set of predictors. The results revealed that of the four independent variables (MD interventions – Organisational Support, Capabilities and Requirements, HR Policy & Effective Practices, and Training and Development), the most parsimonious sets of independent variable predictors closely related to MD effectiveness were HR Policy and effective practices, and Training and Development. The other two independent variables, Organisational support and Capabilities and Requirements were weak and had no positive relationship with the dependent variable, MD Effectiveness.

This study had some limitations: for example, the omission of provincial executives from the study and HR practitioners as focus groups to gain more insights into policies and practices on strategic HRD of executives in the PNGPS. However, they did not detract from the significance of the findings.

This research provides many contributions and implications for theory, policy and practice and provides recommendations for HR practitioners, top management and other stakeholders such as funders of capacity building activities. It does so by providing a framework on MD Effectiveness and a process or cycle on Training and Development. These far outweigh the study’s limitations.

Based on the findings from the two phases of the research design, a framework named the MD Effectiveness Wheel has been developed to serve as the basis for a comprehensive policy framework on MD which has not previously been available to the PNGPS. It further developed a process with a checklist for a systematic approach to T & D in the PNGPS to complement the current TNA process. Most of the findings from the two phases of the research design are consistent with the literature.

It is important to note that developing executive competence is one thing, but if the enabling micro and macro environments do not support it, all will be lost and efforts invested in it cannot be sustained and nurtured in the long term. Where public sector executives are
already trained, the issue is not one of lack of capacity; rather it is one of harnessing that capacity. There must be continuous upskilling, coaching and mentoring and every opportunity must be given for skill utilisation after training. All four interventions found in this study need to be integrated to systematically develop the executives. Public Sector organisations need to attract and nurture management talent while simultaneously needing to exploit and renew it.

In conclusion, the study developed the following main findings: the capabilities and requirements of executives are met as most surveyed respondents possess a basic university degree, with many attaining a postgraduate qualification at masters level and a few with doctoral qualifications. Most senior executives are found to have adequate work experience on executive roles, many of whom have been on their roles for over 20 years which poses the issue of aging workforce. Although relevant HR policies such as Training Plans and Policies are available in almost every organisation, there is an absence of Succession Plans and Exit Policies in almost all national departments except for some statutory bodies. There is no Policy Framework on Management Development in the PNGPS and the current PS General Order is outdated. The study revealed that there is no standardised evaluation method or system in which to evaluate MD programs although the PS General Orders specify the need for training evaluation. If there is any, evaluation is normally conducted at reactions level but not at impact level. Therefore, there is a lack of systematic approach to T & D, with a fragmented and reactive nature of the Training and Development function in almost all surveyed organisations. The study also revealed that there is significant difference or change after learning programs with the biggest impact being on certain leadership skills such as Adapting to change and innovation while the least improved were Attitude to Work, Attendance and Punctuality to work. The most preferred types of learning programs were short-term management and leadership courses and long-term postgraduate courses. Finally, the study identified that main interventions contributing to the effectiveness of MD were HR Policies and Effective Practices, Training and Development, Organisational Support and Capabilities and Requirements of the executives. The findings from the survey questionnaire (Phase II) confirmed and connected to the findings from the qualitative interviews (Phase I).
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Appendix 1: A summary of research problem, questions, objectives and propositions

"What are the interventions to MD Effectiveness? How do they contribute to capacity building of the executives in the PNG Public Service and how could these be improved?"

1. What are the capabilities and requirements of executives as articulated in the PNGPS?
2. What are the current HR Policies and Practices that contribute to management development?
3. Do the current policies and practices fully develop management executives?
4. How are the MD strategies evaluated?
5. In what ways could MD be improved to contribute to capacity building of executives in the PNGPS?
6. What are the changes and suggestions that could be integrated into policies and practices?
7. Can a framework on MD interventions and a checklist on T & D be developed that contribute to capacity building of executives in the PNGPS?

1. To identify the capabilities and requirements of executives as articulated in the PNGPS.
2. To analyse the current HR Policies and Practices that contribute to management development.
3. To determine the current policies and practices that fully develop management executives.
4. To determine and analyse the methods and techniques for evaluating management development strategies.
5. To identify ways on how MD can be improved to contribute to capacity building of executives in the PNGPS.
6. To identify the changes and suggestions that can be integrated into policies and practices.
7. To develop a framework on MD interventions and a checklist on T & D be developed that contribute to capacity building of executives in the PNGPS.

1. The PNGPS has capabilities and requirements of its executives.
2. There are current HR Policies and Practices that contribute to management development.
3. The current policies and practices fully develop management executives.
4. Management Development strategies are evaluated.
5. MD can be improved to contribute to capacity building of executives in the PNGPS.
6. Changes and suggestions are integrated into policies and practices.
7. A framework on MD interventions and a checklist on T & D can be developed to contribute to capacity building of the executives in the PNGPS.

Source: Developed for this research
Appendix 2: 10 Default Principles for Capacity Development

1. Don’t rush.
   ...builds upon respect and self-esteem.

2. Respect the value system and foster self-esteem.
   ...is context-specific.

3. Scan locally and globally: reinvent locally.
   ...requires an enabling dynamic.

4. Challenge mindsets and power differentials.
   ...needs attention and leadership.

5. Think and act in terms of sustainable capacity outcomes.
   ...can be encouraged with conducive incentives.

6. Establish positive incentives.
   ...is premised on ownership.

7. Integrate support into national priorities, processes and systems.
   ...grows from existing capacities rather than creating new ones.

8. Build on existing capacities rather than creating new ones.
   ...is most needed where weakest.

Appendix 3: Capacity Pyramid

Source: Potter, C. & Brough, R. (2004): 340, Fig. 1)
Appendix 4: Nine component elements of systematic capacity building

- **Performance capacity**: Are the tools, money, equipment, consumables, etc. available to do the job? A doctor, however well trained, without diagnostic instruments, drugs or therapeutic consumables is of very limited use.
- **Personal capacity**: Are the staff sufficiently knowledgeable, skilled and confident to perform properly? Are they deficient in technical skills, managerial skills, interpersonal skills, gender-sensitivity skills, or specific role-related skills?
- **Workload capacity**: Are there enough staff with broad enough skills to cope with the workload? Are job descriptions practicable? Is skill mix appropriate?
- **Supervisory capacity**: Are there reporting and monitoring systems in place? Are there clear lines of accountability? Can supervisors physically monitor the staff under them? Are there effective incentives and sanctions available?
- **Facility capacity**: Are training centres big enough, with the right staff in sufficient numbers? Are clinics and hospitals of a size to cope with the patient workload? Are staff residences sufficiently large? Are there enough offices, workshops and warehouses to support the workload?
- **Support service capacity**: Are there laboratories, training institutions, bio-medical engineering services, supply organizations, building services, administrative staff, laundries, research facilities, quality control services? They may be provided by the private sector, but they are required.
- **Systems capacity**: Do the flows of information, money and managerial decisions function in a timely and effective manner? Can purchases be made without lengthy delays for authorization? Are proper filing and information systems in use? Are staff transferred without reference to local managers’ wishes? Can private sector services be contracted as required? Is there good communication with the community? Are there sufficient links with NGOs?
- **Structural capacity**: Are there decision-making forums where inter-sectoral discussion may occur and corporate decisions made, records kept and individual called to account for non-performance?
- **Role capacity**: This applies to individuals, to teams and to structure such as committees. Have they been given the authority and responsibility to make the decisions essential to effective performance, whether regarding schedules, money, staff appointments, etc.?

Appendix 5: The Vicious Cycle of Disempowerment (Donors)

Source: Lopez and Thorsen (2003: 41, Fig. 1.5.1)
Appendix 6: The Virtuous Cycle of Disempowerment (Recipients)

Source: Lopez and Thiemann (2003: 41, Fig. 8.4.3)
Appendix 7: Interview Script for Researcher interviewing CEOs & Departmental Heads

SECTION A: PRE-PROGRAMME & GENERAL QUESTIONS

Q1. General view on the effectiveness of management development (MD) in the organisation and the Papua New Guinea Public Service:

1a) What is your view on the effectiveness of Management Development in the PNG Public Service?

Q2. Capabilities and requirements of executives as articulated in the PNG Public Service:

For executive positions, there are set criterias and requirements (position and person specifications) for appointment of officers to those positions, such as qualification, work experience, skills and competency levels etc.

2a) What are the generic capabilities and requirements of executives as articulated in the PNG Public Service?

Q3. HR Policies and Effective Practices used in strategic HR development of executives

HR Policies

3a) What are some of the HR Policies that your organization uses in administration, coordination and monitoring of strategic development of your executives?

3b) How effective or sound are these policies in developing the management executives?

Effective Practices

3c) What would be your Effective Practices that work well for your organization in developing your management executives? Please explain how these are used to develop your management executives.
Q4. Evaluation of MD interventions

4a) What are the types of MD learning programmes or interventions your organization adopts to develop and build the capacity of your executives?

4b) Which of these programmes have impacted more positively on the executives, and how?

4c) Does your organization evaluate MD interventions to determine their effectiveness or the impact they have on the executives, their respective divisions/branches, the organization and the Public Service as a whole?

If ‘yes’, how are these evaluated in terms of the evaluation system or procedures used?

If ‘no’, explain why these are not evaluated.

Q5. Further comments (if any)

5a) Do you have any further comments (if any) you would like to make about the effectiveness of MD interventions that contribute to capacity building of executives in your organization, and how this impacts on the building of the capacity of your organization and the Public Service as a whole.

Q6. Changes and Suggestions on improvement in policy and practice on strategic management development

6a) Do you think there is room for improvement in management development that could lead to capacity building in the PNGPS? If so, please identify where and in what ways improvement is needed.

6b) Finally, do you have any further comments, suggestions or changes that could be integrated into policy and practice on strategic human resource development for executives in the PNG Public Service?

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>> END OF INTERVIEW >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

Thank you for taking the time to assist in this evaluation research which aims to determine what impact MD interventions are having on the individual executives, agencies/organisations and on the PNG Public Service.
Appendix 8: Executive Survey Questionnaire

FOR RESEARCHER USE ONLY

A SURVEY ON STRATEGIC HUMAN RESOURCE DEVELOPMENT OF EXECUTIVES IN THE PNG PUBLIC SERVICE

This questionnaire is intended to assess and evaluate the effectiveness of management development interventions undertaken by executives in the PNGPS organisations. In particular, how they contribute to capacity building of the individual, the public service organisations which ultimately builds the capacity of the PNGPS, and how these can be improved.

Please note that your responses and any information provided herein will be held in strict confidence and will remain anonymous, only to be used by the researcher for research purposes.

Instructions:

The questionnaire consists of four main sections: Section A - participant background information, Section B - Pre-Program Information, Section C - Post-Program Information and Section D - General Comments/Remarks. There are no right or wrong answers, therefore please respond to all questions. Please tick the boxes where appropriate. You may tick or select more than one box/answer. This questionnaire will take approximately 20-40 minutes to complete.
SECTION A: PARTICIPANT BACKGROUND INFORMATION

A1: Are you male or female?

A1.1 □ Male  A1.2 □ Female

A2: What is your age?

A2.1 □ Under 30 years  A2.2 □ 31 to 40 years  A2.3 □ 41 to 50 years
A2.4 □ 51 to 60 years  A2.5 □ Over 60 years

A3: Type of public sector organisation/entity.

A3.1 □ National Department  A3.2 □ Provincial/District Administration.
A3.3 □ Statutory Body/Authority/agency or entity
A3.4 □ Other (please specify) __________________________

A4: Your current position

A4.1 □ Departmental Head/Secretary/CEO
A4.2 □ Deputy Secretary/Deputy CEO
A4.3 □ Director/First Assistant Secretary/Executive Management
A4.4 □ Deputy Director/Assistant Secretary/Manager
A4.5 □ Provincial Administrator
A4.6 □ District Administrator
A4.7 □ Other (please specify) __________________________

A5: Capabilities and requirements of your current position.

Please place a tick on those capabilities and requirements that match your current position as articulated in the PNG Public Service or your organisation. You may tick more than one box.

A5.1 □ Possess Management and Leadership skills
A5.2 □ Have Strong analytical and research skills
A5.3 □ Have Strong Written and Oral communication skills
A5.4 □ Demonstrate Public Relation and Inter-personal relations skills
A5.5 □ Demonstrate Organizational skills – Team Player
A5.6 □ Computer Literate
A5.7 □ Possess proficient level of general accounting principles and practices.
A5.8 □ Possess proficient level of Financial Management policies, procedures and systems.
A5.9 □ Possess proficient level of Public Finance (Management) Act.
A5.10 □ Possess proficient level of Public Service (Management) Act, Public Service General Orders.
A5.11 □ Possess proficient level of Organic Law on Provincial & Local Level Govern.
A5.12 □ Other – not listed above (please specify)

A6: Length of time/years in your capacity as an executive in your organisation.

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<tr>
<th>Option</th>
<th>Years</th>
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<tr>
<td>A6.1</td>
<td>Less than 1 year</td>
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<td>A6.2</td>
<td>1-2 years</td>
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<td>A6.3</td>
<td>3-5 years</td>
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<tr>
<td>A6.4</td>
<td>6-10 years</td>
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<tr>
<td>A6.5</td>
<td>11-20 years</td>
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<td>A6.6</td>
<td>More than 20 years</td>
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A7: Length of service in your organisation.

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<th>Option</th>
<th>Years</th>
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<td>A7.1</td>
<td>Less than 1 year</td>
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<td>A7.2</td>
<td>1-2 years</td>
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<td>A7.3</td>
<td>3-5 years</td>
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<td>A7.4</td>
<td>6-10 years</td>
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<tr>
<td>A7.5</td>
<td>11-20 years</td>
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<td>A7.6</td>
<td>More than 20 years</td>
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A8: Highest level of education achieved

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<tr>
<th>Option</th>
<th>Level</th>
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<tr>
<td>A8.1</td>
<td>High School Certificate (Gr. 10)</td>
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<td>A8.2</td>
<td>Higher School Certificate (Gr. 12)</td>
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<tr>
<td>A8.3</td>
<td>Diploma</td>
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<td>A8.4</td>
<td>Bachelor’s degree</td>
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<td>A8.5</td>
<td>Graduate Diploma</td>
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<td>A8.6</td>
<td>Master’s degree</td>
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<td>A8.7</td>
<td>Doctorate</td>
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<td>A8.8</td>
<td>Other (please specify)_________</td>
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</table>

Listed below are some of the most common programs for management development. Please tick whichever that you have undertaken in the last 10 years. Note that more than one box can be ticked.

A9: Types of Management Development programs undertaken in the last 10 years.

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<tr>
<th>Option</th>
<th>Program</th>
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<tbody>
<tr>
<td>A9.1</td>
<td>In-house development programs (including Graduate Development Program)</td>
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<td>A9.2</td>
<td>External management programs</td>
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<td>A9.3</td>
<td>Long-term overseas educational programs</td>
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<td>A9.4</td>
<td>Long-term in-country educational programs</td>
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<td>A9.5</td>
<td>Overseas assignments/attachments</td>
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<td>A9.6</td>
<td>Coaching &amp; Mentoring</td>
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<td>A9.7</td>
<td>Task force/projects</td>
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<td>A9.8</td>
<td>Seminars/Workshops</td>
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<td>A9.9</td>
<td>Secondments</td>
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<td>A9.10</td>
<td>Internet-based learning</td>
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<td>A9.11</td>
<td>Job Rotation</td>
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<td>A9.12</td>
<td>Have not attended any</td>
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<td>A9.13</td>
<td>Other (please specify)</td>
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</table>
# SECTION B: PRE-PROGRAM INFORMATION

**Self-Assessment of skills and competencies ‘before’ undertaking Management Development programs.**

B1: The following question requires you to evaluate your skills and competencies ‘before’ undertaking the MD programs you have listed in A9 above.

For each statement, place an ‘X’ on the response scale which best indicates your beliefs about the statement in so far as your skills and competencies ‘before’ undertaking the MD programs.

(The response scales are numbered from ‘1 – Very Low’ to ‘7 – Very High’)

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<tr>
<td>I would rate my skills, competencies and behaviour ‘before’ undertaking MD programs as follows:</td>
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<td>2. Adapting to change and innovation.</td>
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<td>3. Analysing and synthesizing complex information, drawing logical conclusions and providing reasonable alternatives.</td>
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<td>4. Utilizing different ways to approach work problems.</td>
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<td>5. Written and Oral communication skills.</td>
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<td>6. Communicating with networks within my field of expertise.</td>
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<td>8. Establishing relationships with stakeholders to assist in achieving the organisation’s goals and objectives.</td>
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<td>9. Interpersonal skills and using different techniques to establish good working relationships with people within and outside the organisation.</td>
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<td>10. Developing a cooperative unit and the organisation to achieve the optimal contribution of all staff members.</td>
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<td>11. Motivating staff towards achieving quality results.</td>
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<td>12. Contributing to delivery of public services to our clients.</td>
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<td>13. Influencing towards positive attitudinal change of our clients</td>
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<td>14. Contributing to organisation’s ability to influence and inform policy decision by the Government.</td>
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<td>15. Strategic in my thinking to longer term forward planning to achieve Government objectives and departmental goals.</td>
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<td>16. Managing budget and finances within my unit and organisation to achieve results within available funding.</td>
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<td>17. Managing physical assets in my division and organisation to contribute to results while protecting their value.</td>
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<td>18. Having confidence in my work.</td>
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<td>19. Punctuality and attendance to work.</td>
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<td>20. Attitude to work.</td>
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Identification of Training and Selection Procedures

B2: How did you obtain information about the availability of executive programs? You may tick more than one box.

- B2.1 □ Employing Organisation
- B2.2 □ Internet
- B2.3 □ Newspaper
- B2.4 □ Word of mouth
- B2.5 □ Education Roadshows
- B2.6 □ Other (please specify)

B3: Overall, were you nominated by your employing organisation through the Training Committee/Board for MD programs undertaken?

- B3.1 □ Yes
- B3.2 □ No
- B3.3 □ Not sure

B4: If ‘No’, how were you nominated?

- B4.1 □ Nominated by self
- B4.2 □ Nominated by a colleague

B5: Why did you choose your particular program of learning/development? You may tick more than one box.

- B5.1 □ It was a requirement of the employing organisation that I nominate the program.
- B5.2 □ Employing organisation recommended that I nominate the program.
- B5.3 □ A friend or workmate advised me on the program.
- B5.4 □ I decided myself, after considering alternatives, that it was the most appropriate program/course.
- B5.5 □ This was the only program that I knew about.
- B5.6 □ A staff member at a PNG educational institution advised me
- B5.7 □ Overseas education/training institutions provided information that influenced me.
- B5.8 □ I “ended up” in this program/course when I was unsuccessful in gaining entry into the program/courses that were my first choice.
- B5.9 □ Other (please specify): __________________________________________________________________________________________

________________________________________________________________________________________
**HR Policies & Effective Practices**

**B6:** Please identify from the list below, the current HR Policies that your organisation uses in contributing to MD. You may tick more than one box.

- [ ] B6.1 Public Services General Orders
- [ ] B6.2 Training Policy
- [ ] B6.3 Training Plan
- [ ] B6.4 Succession Plan
- [ ] B6.5 Equal Employment Opportunity Policy
- [ ] B6.6 Other (please specify)

**B7:** There are differing models and perspectives regarding the constituents of ‘effective practices’ in management development. However, listed below are some common constituents of ‘effective practices’ found in both public and private sector organisations. Please place a tick/ticks next to the common constituents that are practised in your organisation that have contributed to strategic management development. Note that you may select more than one constituent.

- [ ] B7.1 Identification of Training Needs
- [ ] B7.2 Participant selection linked to organisation strategy and policy
- [ ] B7.3 Top management support and supporting infrastructure in place
- [ ] B7.4 Organization learning culture (support for all forms of MD)
- [ ] B7.5 Evaluation of program effectiveness
- [ ] B7.6 Rewarding success and improving on deficiencies
- [ ] B7.7 Having regular Retreat Workshops/Training
- [ ] B7.8 Opportunity for skill utilization
- [ ] B7.9 MD through the Graduate Development Scheme
- [ ] B7.10 Other (please specify)

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**SECTION C: POST-PROGRAM INFORMATION**

*Self-Assessment of skills and competencies ‘after’ undertaking Management Development programs.*

**C1:** The following question requires you to evaluate your skills and competencies ‘after’ undertaking the Management Development (MD) programs you have listed in A9 above.

For each statement, place an ‘X’ on the response scale which best indicates your beliefs about the statement in so far as your skills and competencies ‘after’ undertaking the MD intervention.
Appendices

An Analysis of Management Development Practices for Senior Executives in the PNG Public Service  

(The response scales are numbered from ‘1 – Very Low’ to ‘7 – Very High’)

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<tr>
<td>15. After the MD interventions, I am now more strategic in my thinking to longer term forward planning to achieve Government objectives and departmental goals.</td>
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<tr>
<td>16. Managing budget and finances within my unit and organisation to achieve results within available funding.</td>
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<tr>
<td>17. Managing physical assets in my division and organisation to contribute to results while protecting their value.</td>
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<td>18. Having confidence in my work.</td>
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<tr>
<td>19. Punctuality and attendance to work.</td>
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<tr>
<td>20. Attitude to work.</td>
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</tbody>
</table>

**Interventions to Management Development Effectiveness**

The goal of Management Development is to recruit and retain, or attract and defend, suitable managers in a competitive labour market. Effective management development can result in higher job satisfaction, lower turnover, less stress resulting from skill inadequacies and less difficulty in filling executive vacancies. It follows then that while effective management development results in increased knowledge and skills of executives, the organisation also benefits from higher productivity, lower absenteeism and better customer service.

C2: Please ‘circle’ on the table below how strongly you agree or disagree on the statements below according to the number on the response scale. The statements represent the factors that contribute to Management Development effectiveness.
The number represents a response scale of ‘1 – *Strongly Disagree*’ to ‘7 – *Strongly Agree*’. 

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. There is increased investment on MD programs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. The organisation has all the relevant HR Policies such as PSGO, PSMA, Training Plan and Policy, and Equal Employment Policy available that are used in development of executives.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. Capabilities and requirements of executives are clearly defined in the Job Descriptions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. The laws, policies and criteria in HR Policies are strictly adhered to in MD.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. All forms of MD programs are supported by the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6. The short-term in-country development programs have a more positive impact on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7. The short-term in-country development programs have a more positive impact on my division/unit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. The short-term in-country development programs have a more positive impact on my organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. All MD programs are linked to organisation goals and objectives.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10. Evaluation is conducted at post-program stage to determine the impact of the MD program on the individual.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
<tr>
<td>11. Evaluation is conducted at post-program stage to determine the impact of the MD program on the division/unit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>7</td>
</tr>
<tr>
<td>12. Evaluation is conducted at post-program stage to determine the impact of the MD program on the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13. Enabling environment such as structures, systems and facilities is conducive to transfer of learning for MD.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
<tr>
<td>14. Capabilities in my Job Description consist of personal behavioural capabilities, knowledge or skill capabilities and technical capabilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>15. An appropriate selection process is used in selecting executives to undertake MD programs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16. There is opportunity for skill utilization.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
<td>7</td>
</tr>
<tr>
<td>17. The long-term overseas educational programs have a more positive impact on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
<tr>
<td>18. The long-term overseas educational programs have a more positive impact on my division/unit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>19. The long-term overseas educational programs have a more positive impact on my organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>20. The capabilities and requirements in my Job Description help me to evaluate my own weaknesses.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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</tr>
<tr>
<td>21. The capabilities and requirements in my Job Description help me to evaluate my own developmental opportunities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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</tr>
<tr>
<td>22. The capabilities and requirements as specified in the Job Descriptions are refined over time to align with internal and external changes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>23. There is continuous mentoring, coaching and upskilling from the top management after training.</td>
<td>1</td>
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</tr>
</tbody>
</table>
### Statement

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Attending short workshops and seminars have a positive impact on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>25. Attending short workshops and seminars have a positive impact on my division/unit.</td>
<td>1</td>
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<td>3</td>
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</tr>
<tr>
<td>26. Attending short workshops and seminars have a positive impact on my organisation.</td>
<td>1</td>
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</tr>
<tr>
<td>27. The capabilities and requirements in my Job Description help me to evaluate my own ability.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</tr>
<tr>
<td>28. HR Policies and Plans are reviewed annually and modified.</td>
<td>1</td>
<td>2</td>
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</tr>
<tr>
<td>29. MD programs are linked to executives’ job requirements.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
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</tr>
<tr>
<td>30. The long-term in-country educational programs have a more positive impact on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>31. The long-term in-country educational programs have a more positive impact on my division/unit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>32. The long-term in-country educational programs have a more positive impact on my organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
<tr>
<td>33. The capabilities in my Job Description serve as a benchmark against which I am evaluated for recruitment and selection, succession planning or promotion.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
<tr>
<td>34. The developmental activities such as coaching, mentoring and job attachments have a more positive impact on me.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
<tr>
<td>35. The developmental activities such as coaching, mentoring and job attachments have a more positive impact on my division/unit.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>7</td>
</tr>
<tr>
<td>36. The developmental activities such as coaching, mentoring and job attachments have a more positive impact on my organisation.</td>
<td>1</td>
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<td>4</td>
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<td>7</td>
</tr>
<tr>
<td>37. The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
<tr>
<td>38. The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on my division/unit.</td>
<td>1</td>
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<td>3</td>
<td>4</td>
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<td>7</td>
</tr>
<tr>
<td>39. The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on my organisation.</td>
<td>1</td>
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</table>

### Evaluation of the Management Development Programs

**C3:** Upon completion of the management development program(s), were you evaluated to determine the impact of these interventions on you, your division/unit and your organisation?

- C3.1 Yes
- C3.2 No
- C3.3 Not sure
C4: If evaluated, were the results of the evaluation reported to the top management of your organisation for further actioning?

C4.1 □ Yes    C4.2 □ No    C4.3 □ Not Sure

Impact of the MD programs

C5: Which of the following types of MD programs have positively impacted on you as an individual executive? Please choose five (5) and number them 1 to 5, by placing the number in the relevant boxes in terms of their impact with ‘1’ being the biggest impact.

C5.1 □ In-house management programs (including Graduate Development Program)
C5.2 □ External management programs
C5.3 □ Long-term overseas educational programs
C5.4 □ Long-term in-country educational programs
C5.5 □ Overseas assignments/attachments
C5.6 □ Coaching & Mentoring
C5.7 □ Task force/projects
C5.8 □ Seminars/Workshops
C5.9 □ Secondments
C5.10 □ Internet-based learning
C5.11 □ Job Rotation
C5.12 □ Other (please specify) ______________________________________________________________________

SECTION D: GENERAL COMMENTS/REMARKS

D1: Any further or general comments, suggestions or changes (if any) you may have on the impact the MD programs have in your organisation, are welcomed. More specifically, on ways management development could be improved in your organisation to contribute to capacity building of the executives, and your organisation.

_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________
_______________________________________________________________________________
D2: Finally, do you have any suggestions on changes that could be integrated into current policies and practices on strategic human resource development for executives in the PNG Public Service?

END OF THE QUESTIONNAIRE

After completing the questionnaire, please place it in the self-addressed envelope provided and have it sealed, put your signature on the front bottom left-hand corner of the envelope then drop it in the box provided at your Executive Branch. Please do not return by postage mail or fax.

Thank you for your time and assistance in completing this questionnaire!
Appendix 9: Information Sheet for Chief Executive Officers (CEOs) and Department Heads (permission to participate in this duty)

Name of Project: An Analysis of the type and effectiveness of Management Development interventions for Senior Executive personnel in the PNG Public Service

Dear __________________

Your organization is invited to participate in a study being conducted that seeks to investigate the effectiveness of executive development interventions and how they contribute to capacity building of the PNG Public Service. This research forms part of Doctor of Business Administration programme being conducted by Mrs Nama A Polum and supervised by Associate Professor Michelle Wallace.

As a doctoral candidate, it is essential to conduct a research project that examines an issue in the workplace. I am a staff of the National Department of Treasury, Waigani, Port Moresby in the area of human resource management/development but am currently on study leave. Hence, the focus of my research is related to an issue of strategic human resource development of executives in the PNG Public Service.

I would appreciate your assistance and cooperation in this research to allow me to conduct a survey in your agency/department with your executives in the top management. Those classified as executives in this study would include: Deputy Secretaries/Deputy CEOs, First Assistant Secretaries/Directors, Assistant Secretaries/Senior Managers, Branch Heads, Provincial and District Administrators or their equivalent.

It is necessary that you sign the attached consent form to enable your agency/department to participate. I would be grateful if you could identify the number of executives in your organization. This would facilitate in sending you the correct number of survey questionnaires for your executives to complete. The signed consent form can be scanned and returned to me via email to the address used here or my other email address which is: nama_polum@treasury.gov.pg. Alternatively, if you do not have access to email services, you may send the completed consent form in the enclosed postage-paid, self addressed envelope to my Port Moresby address. All signed consent forms will be held in safe storage at the University for a period of five (5) years before being destroyed. Participation is voluntary and therefore the selected participants can withdraw or discontinue participation at any time. The researcher assures that anonymity and confidentiality of the data will be highly protected. Once consent is received from you, copies of the questionnaire will be sent to your office for your perusal and for distribution to the executives.
It is hoped the survey will take up to three (3) weeks or less to complete. Once the questionnaires are completed by the executives, they can be placed in the pre-paid self-addressed envelope (to be enclosed), and sent back to me on my Port Moresby address as given below and as affixed on the pre-paid envelope. The researcher anticipates receiving them within this timeframe. The survey will take approximately 20-30 minutes to complete.

Participation is purely voluntary and no financial remuneration or incentive will be offered for taking part in this research. There are no travel expenses, nor are there any costs associated with participation in this research. There is no cost to the participants apart from their time. There is no ongoing commitment to any other research project by participants who complete the survey i.e. this survey is a stand-alone tool to collect data.

The aggregate findings will be sent to you for your information and in appreciation of allowing me to conduct research in your agency/department. The research findings may also be submitted for publication.

This form is yours to keep for future reference. If you have any additional questions with regards to this study, please communicate with us at any time by contacting the following:

**Researcher**
Nama A Polum  
Graduate College of Management  
Southern Cross University  
Tweed/Gold Coast Campus  
PO Box 42  
**TWEED HEADS NSW 2485**  
Email: npolum10@scu.edu.au  
Phone: (05 617) 5599 3168

**Supervisor**
Associate Professor Michelle Wallace  
Graduate College of Management  
Southern Cross University  
Tweed/Gold Coast Campus  
PO Box 42  
**TWEED HEADS NSW 2485**  
Email: michelle.wallace@scu.edu.au  
Phone: (05 617) 5506 9366

**My contact address and telephone numbers in Port Moresby, PNG:**

PO Box 777, GORDONS  NCD  
Telephone: (675) 344 2750  
Mobile: (675) 6700716/72526055

The ethical aspects of this study have been approved by the Southern Cross University Human Research Ethics Committee. The Approval Number is ECN-08-156. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Ethics Complaints Officer:

Ms Sue Kelly  
Ethics Complaints Officer and Secretary  
HREC  
Southern Cross University  
PO Box 157  
Lismore, NSW, 2480  
Telephone (02) 6626-9139 or fax (02) 6626-9145  
Email: sue.kelly@scu.edu.au
All complaints, in the first instance, should be in writing to the above address. All complaints are investigated fully and according to due process under the National Statement and this University. Any complaint you make will be treated in confidence and you will be informed of the outcome.

Yours sincerely

Mrs Nama A Polum  
Candidate: Doctor of Business Administration  
Southern Cross University  
Australia

Attach: (1)
Appendix 10: Informed Consent Form for Chief Executive Officers & Department Heads

NAME OF PROJECT: An Analysis of the type and effectiveness of Management Development interventions for Senior Executive personnel in the PNG Public Service

Project Supervisor
Associate Professor Michelle Wallace
Email: michelle.wallace@scu.edu.au
Phone: (05 61 7) 5506-9366

Project Researcher:
Nama A Polum
Email: npolum10@scu.edu.au
Phone: (05 61 7) 5599 3168

Or if you have any problems about any ethical aspect of your participation in this research, you may contact the Committee through the Ethics Complaints Officer:

Ms Sue Kelly
Ethics Complaints Officer and Secretary
Email: sue.kelly@scu.edu.au
Phone: (05 61 2) 6626-9139 or
Fax: (05 61 2) 6626-9145

Please tick the boxes where appropriate to the statements below. You may tick more than one box:

☐ I have been provided with information at my level of comprehension about the research purpose, demands, and possible outcomes of this research (including any form of publication of results).

☐ I agree that my organization can participate in the above research project. I have read and understood the details contained in the Information Sheet. I have had the opportunity to ask questions about the study and I am satisfied with the answers received. I also agree to an interview if selected, and to my interview being recorded on a tape recorder.

☐ I understand that I will receive the questionnaire surveys and distribute them to the executives in my agency/department. The survey takes up one month to complete and I will ensure that all completed questionnaires are placed in sealed envelopes with signatures of the respective executives on the envelope and dropped in a box provided at the Executive Branch. Due to confidentiality of the research, no other staff of the organization are to look at the responses of the survey.
☐ I understand that participation in this research by me and my staff will be anonymous and confidential and that participants can withdraw or discontinue participation at any time.

☐ I understand that all information gathered in this research is confidential. It is kept securely and confidentially for 5 years, at the University.

☐ I have read the information above and agree for my agency/department to participate in this study, I am over the age of 18 years.

Name of CEO/Depart. Head: ______________________________________________

Position: ______________________________________________________________

Name of Organization: ___________________________________________________

Number of executives in the Organization: _________________________________

Signature: ___________________________ Date: ____________________________
Appendix 11: Information Sheet & Letter to Chief Executive Officers and Department Heads for Interview

Name of Project: An Analysis of the type and effectiveness of Management Development interventions for Senior Executive personnel in the PNG Public Service

Dear ________________

As explained in Appendix 9 of the Information Sheet forwarded to your department, I am a staff member of the national Department of Treasury currently on study leave in Australia, undertaking a doctoral programme in Doctor of Business Administration. My area of responsibility at Treasury Department prior to my departure for studies, involved human resource management/development and administration.

This research forms part of Doctor of Business Administration programme being conducted by me and supervised by Associate Professor Michelle Wallace. As a doctoral candidate, it is essential to conduct a research project that examines an issue in the workplace. Hence, the focus of my research is related to an issue of strategic human resource development of executives in the PNG Public Service.

The main purpose of this letter, therefore, is to seek your assistance with my research programme in discussing your perspectives on the policy and practice of strategic human resource development of executives in your agencies/departments and organisational impact of management development (MD) interventions or strategies in your Department and the whole of PNG Public Service. Your permission is also sought for the use of a tape recorder to record the interview.

I will be in Port Moresby to carry out a number of research activities in connection with my thesis. My data collection commenced in _____ and continues on to _____, that includes data confirmation on key selected agencies. For this reason, I will return to PNG briefly in May to confirm data. One such activity will involve conducting interviews with top executives like yourself who are intimately involved with the above study topic. In this regard, I shall be grateful for an opportunity to solicit your perception on an issue which is very important to the development of our executives and hence the Public Service.

I do understand that you have a very busy schedule as the top chief executive officer for your organization. In the event that you are not available for an interview, I would be more than happy to speak with your nominee(s). If you could spare me an hour, this would be much appreciated. As stated above, I will return to PNG in mid ____ and will leave for Australia on _______. I would be grateful if by _________, you could confirm your availability, or your nominee’s, for an interview around the dates stated above. My contact numbers/email address in Port Moresby is:
Alternatively, you could also indicate your preferred date and time of interview convenient to you on the Informed Consent Form which is also attached. This will be much appreciated.

I should also point out that any information made available during the interview will be held in strict confidence, and used in such a manner as to respect the confidentiality of the source.

This letter is yours to keep for future reference. If you have any additional questions with regards to this study, please communicate with us at any time by contacting the following:

**Researcher**  
Nama A Polum  
Graduate College of Management  
Southern Cross University  
Tweed/Gold Coast Campus  
PO Box 42  
TWEED HEADS NSW 2485  
Email: npolum10@scu.edu.au  
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*The ethical aspects of this study have been approved by the Southern Cross University Human Research Ethics Committee. The Approval Number is 08-156. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Ethics Complaints Officer:*

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HREC  
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Lismore, NSW, 2480  
Telephone (02) 6626-9139 or fax (02) 6626-9145  
Email: sue.kelly@scu.edu.au

*All complaints, in the first instance, should be in writing to the above address. All complaints are investigated fully and according to due process under the National Statement and this University. Any complaint you make will be treated in confidence and you will be informed of the outcome.*

I look forward very much to meeting you in Port Moresby.

Yours sincerely

Mrs Nama A Polum  
Candidate: Doctor of Business Administration  
Southern Cross University  
Australia
Appendix 12: Information Sheet & Letter to Pilot Study Participants

Name of Project: An Analysis of the type and effectiveness of Management Development interventions for Senior Executive personnel in the PNG Public Service

Dear ___________________

SUBJECT: SURVEY QUESTIONNAIRE ON STRATEGIC HUMAN RESOURCE DEVELOPMENT OF EXECUTIVES IN THE PNG PUBLIC SERVICE

You are invited to participate as pilot study participant of the expert reference group, for the survey questionnaire in a study being conducted that seeks to investigate the effectiveness of management development interventions and how they contribute to capacity building of the PNG Public Service. This research forms part of Doctor of Business Administration programme being conducted by me and supervised by Associate Professor Michelle Wallace.

As a doctoral candidate, it is essential to conduct a research project that examines an issue in the workplace. I am a staff of the National Department of Treasury, Waigani, Port Moresby in the area of Human Resource Management/Development. Hence, the focus of my research is related to an issue of strategic human resource development of executives in the PNG Public Service.

I would be much obliged if you could spare 30 minutes or so of your time to fill out this attached questionnaire with the objective of taking note of any ambiguous areas of unclear questions that you may come across in the process of filling out this questionnaire. More specifically, I would appreciate your comments and feedback on the following: the length, type of questions, repetition of questions, relevance, and gaps or questions I should have asked. Your feedback is needed to re-draft this questionnaire to ensure that executives in the PNG Public Service are able to understand the questions asked. Please note that space (in a shaded box) is made available at the end of each section for your comments and feedback on that particular section.

Respondents to this survey are only confined to executives in the top management of the PNG Public Service organizations. Those classified as executives in this study would include: Deputy Secretaries/Deputy Chief Executive Officers, Deputy Managing Directors, First Assistant Secretaries/Directors, Executive Managers, Assistant Secretaries/Senior Managers, Branch Heads and Provincial and District Administrators or their equivalent.

Upon completion, please save the document under file name: SQPS.1. Please return the completed questionnaire with your comments and feedback to my supervisor, Associate Professor Michelle Wallace, on email address: michelle.wallace@scu.edu.au at your earliest convenience time, as I need your feedback urgently to rectify any flaws before sending them out to the participants under study.
would appreciate if you can return the completed questionnaire before _______. The return of your completed survey response form will imply your consent in this research project.

This letter is yours to keep for future reference. If you have any additional questions with regards to this study, please communicate with us at any time by contacting the following:

**Researcher**
Nama A Polum  
Graduate College of Management  
Southern Cross University  
Tweed/Gold Coast Campus  
PO Box 42  
**TWEED HEADS NSW 2485**  
Email: npolum10@scu.edu.au  
Phone: (05 617) 5599 3168

**Supervisor**
Associate Professor Michelle Wallace  
Graduate College of Management  
Southern Cross University  
Tweed/Gold Coast Campus  
PO Box 42  
**TWEED HEADS NSW 2485**  
Email: miche..wallace@scu.edu.au  
Phone: (05 617) 5506 9366

My contact details in Port Moresby:  
PO Box 777, GORDONS, NCD  
Telephone: (675) 344 2750  
Mobile: (675) 6700716/72526055  
Email: nama_polum@treasury.gov.pg

The ethical aspects of this study have been approved by the Southern Cross University Human Research Ethics Committee. The Approval Number is ECN-08-156. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Ethics Complaints Officer:

Ms Sue Kelly  
Ethics Complaints Officer and Secretary  
HREC  
Southern Cross University  
PO Box 157  
Lismore, NSW, 2480  
Telephone (02) 6626-9139 or fax (02) 6626-9145  
Email: sue.kelly@scu.edu.au

All complaints, in the first instance, should be in writing to the above address. All complaints are investigated fully and according to due process under the National Statement and this University. Any complaint you make will be treated in confidence and you will be informed of the outcome.

Your advice and comments would be highly appreciated. Thank you for your support and cooperation.

Yours sincerely

Nama A Polum  
Candidate: Doctor of Business Administration  
Southern Cross University  
Australia
Appendix 13: Pilot Executive Survey Questionnaire

FOR RESEARCHER USE ONLY

A SURVEY ON STRATEGIC HUMAN RESOURCE DEVELOPMENT OF EXECUTIVES IN THE PNG PUBLIC SERVICE (PNGPS)

This questionnaire is intended to assess and evaluate the effectiveness of management development interventions undertaken by executives in the PNGPS organisations. In particular, how they contribute to capacity building of the individual, the public service organisations which ultimately builds the capacity of the PNGPS, and how these can be improved. Please note that your responses and any information provided herein will be held in strict confidence and will remain anonymous, only to be used by the researcher for research purposes.

Instructions:

The questionnaire consists of four main sections namely: (A) participant background information, (B) Pre-Programme Information, (C) Post-Programme Information and (D) General Comments/Remarks. There are no right or wrong answers, therefore please answer all questions. Please tick the boxes where appropriate. For some questions, you may tick or select more than one box/answer. When completing the questionnaire on the computer: to tick or insert numbers in boxes, you may select the appropriate boxes by highlighting them, click on Insert, click on symbols, select ☑ or select a number. Ruled lines are provided as a guide to insert answers, however you may wish to delete but rather insert your answers without the lines.

SECTION A: PARTICIPANT BACKGROUND INFORMATION

A1: Are you male or female?

A1.1 ☐ Male A1.2 ☐ Female

A2: What is your age?

A2.1 ☐ Under 30 years A2.2 ☐ 31 to 40 years A2.3 ☐ 41 to 50 years
A2.4 ☐ 51 to 60 years A2.5 ☐ Over 60 years

A3: Type of current employment government organisation/agency

A3.1 ☐ National Department A3.2 ☐ Provincial Administration
A3.3 ☐ Statutory Body/Authority A3.3 ☐ District Administration
A3.4 ☐ Other (please specify) _______________________________________________

A4: Your current position

A4.1 ☐ Deputy Secretary A4.2 ☐ Deputy/Assistant CEO
A4.3 ☐ Director A4.4 ☐ Assistant/Deputy Director
Appendices

A4.5 □ First Assistant Secretary       A4.6 □ Assistant Secretary
A4.7 □ Provincial Administrator      A4.8 □ District Administrator
A4.9 □ Executive Manager             A4.10 □ Other (please specify_______________

A5: Capabilities and requirements of your current position.

Please identify by placing a tick on those capabilities and requirements that match your current position as articulated in the PNG Public Service. You may tick more than one box.

A5.3 □ Possess Management and Leadership skills
A5.4 □ Have Strong analytical and research skills
A5.5 □ Have Strong Written and Oral communication skills
A5.6 □ Demonstrate Public Relation and Inter-personal relations skills
A5.7 □ Demonstrate Organisational skills – Team Player
A5.8 □ Be Computer Literate
A5.9 □ Possess proficient level of general accounting principles and practices.
A5.10 □ Possess proficient level of Financial Management policies, procedures and systems.
A5.11 □ Possess proficient level of Public Finance (Management) Act.
A5.12 □ Possess proficient level of Public Service (Management) Act, Public Service General Orders.
A5.13 □ Possess proficient level of Organic Law on Provincial & Local Level Govern.
A5.14 □ Other – not listed above (please specify)

A6: Length of time/years in your capacity as an executive in the Public Service.

A6.1 □ Less than 1 year       A6.2 □ 1-2 years       A6.3 □ 3-5 years
A6.4 □ 6-10 years           A6.5 □ 11-20 years      A6.6 □ More than 20 years

A7: Length of service in the PNG Public Service

A7.1 □ Less than 1 year       A7.2 □ 1-2 years       A7.3 □ 3-5 years
A7.4 □ 6-10 years           A7.5 □ 11-20 years      A7.6 □ More than 20 years

A8: Highest level of education achieved

A8.1 □ High School Certificate (Gr. 10)       A8.2 □ Higher School Certificate (Gr. 12)
A8.3 □ Diploma                         A8.4 □ Bachelor’s degree
A8.5 □ Graduate Diploma               A8.6 □ Master’s degree
A8.7 □ Doctorate                      A8.8 □ Other (please specify)________________

Listed below are some of the most common programs to management development. Please tick whichever that you have undertaken in the last 10 years. Note that more than one box can be ticked.

A9: Types of Management Development programs undertaken in the last 10 years.

A9.1 □ In-house development programs   A9.2 □ External management programs
### Appendix A: Management Development Practices

| A9.3 | ☐ | Long-term overseas educational programs |
| A9.5 | ☐ | Overseas assignments/attachments |
| A9.7 | ☐ | Task force/projects |
| A9.9 | ☐ | Secondments |
| A9.11 | ☐ | Graduate Development Programme |
| A9.13 | ☐ | Have not attended any. |
| A9.4 | ☐ | Long-term in-country educational programs |
| A9.6 | ☐ | Coaching & Mentoring |
| A9.8 | ☐ | Seminars/Workshops |
| A9.10 | ☐ | Internet-based learning |
| A9.12 | ☐ | Job Rotation |
| A9.14 | ☐ | Other (please specify ________)

### Comments & Feedback on Section A:

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
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__________________________________________________________________________

### SECTION B: PRE-PROGRAMME INFORMATION

**Self-Assessment of skills and competencies ‘before’ undertaking MD programs.**

**B1:** The following question requires you to evaluate your skills and competencies ‘before’ undertaking the MD programs you have listed in A9 above.

For each statement, place an ‘X’ on the response scale which best indicates your beliefs about the statement in so far as your skills and competencies ‘before’ undertaking the MD programs.
(The response scales are numbered from ‘1 – Very High’ to ‘7 – Very Low’)

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<td>I would rate my skills, competencies and behaviour ‘before’ undertaking MD programs as follows:</td>
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<td>B1.5 Written and Oral communication skills.</td>
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<td>B1.8 Establishing relationships with stakeholders to assist in achieving the organisation’s goals and objectives.</td>
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<td>B1.9 Interpersonal skills and using different techniques to establish good working relationships with people within and outside the organisation.</td>
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<td>B1.10 Developing a cooperative unit and the organisation to achieve the optimal contribution of all staff members.</td>
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<td>B1.12 Contributing to delivery of public services to our clients.</td>
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<td>B1.15 Strategic in my thinking to longer term forward planning to achieve Government objectives and departmental goals.</td>
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<td>B1.16 Managing budget and finances within my unit and organisation to achieve results within available funding.</td>
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<td>B1.17 Managing physical assets in my division and organisation to contribute to results while protecting their value.</td>
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<td>B1.18 Having confidence in my work.</td>
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<td>B1.20 Attitude to work.</td>
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**Identification of Training and Selection Procedures**

B2: How did you obtain information about the availability of executive programs? You may tick more than one box.

- [ ] B2.1 Employing Organisation
- [ ] B2.2 Internet
- [ ] B2.3 Newspaper
- [ ] B2.4 Word of mouth
- [ ] B2.5 Education Roadshows
- [ ] B2.6 Other (please specify) 

B3: Were you nominated by your employing organisation for MD programs?

- [ ] B3.1 Yes
- [ ] B3.2 No

B4: If ‘No’, how were you nominated?

- [ ] B4.1 Nominated by self
- [ ] B4.2 Nominated by a colleague
B5: Why did you choose your particular program of learning/development? You may tick more than one box.

B5.1 ☐ It was a requirement of the employing organisation that I nominate the program.
B5.2 ☐ Employing organisation recommended that I nominate the program.
B5.3 ☐ A friend or workmate advised me on the program.
B5.4 ☐ I decided myself, after considering alternatives, that it was the most appropriate program/course.
B5.5 ☐ This was the only program that I knew about.
B5.6 ☐ A staff member at a PNG educational institution advised me.
B5.7 ☐ Overseas education/training institutions provided information that influenced me.
B5.8 ☐ I “ended up” in this program/course when I was unsuccessful in gaining entry into the program/courses that were my first choice.
B5.9 ☐ Other (please specify): ________________________________________________

**HR Policies & Effective Practices**

B6: Please identify from the list below, the current HR Policies that your organisation uses in contributing to management development. You may tick more than one box.

B6.1 ☐ Public Services General Orders  B6.2 ☐ Training Policy
B6.3 ☐ Training Plan  B6.4 ☐ Succession Plan
B6.5 ☐ Equal Employment Opportunity Policy  B6.6 ☐ Other (please specify)

B7: There are differing models and perspectives regarding the constituents of ‘effective practices’ in management development. However, listed below are some common constituents of ‘effective practices’ found in both public and private sector organisations. Please place a tick/ticks next to the common constituents that are practised in your organisation that have contributed to strategic management development. Note that you may select more than one constituent.

B7.1 ☐ Identification of Training Needs
B7.2 ☐ Participant selection linked to organisation strategy and policy
B7.3 ☐ Top management support and supporting infrastructure in place
B7.4 ☐ Organisation learning culture (support for all forms of MD)
B7.5 ☐ Evaluation of program effectiveness
B7.6 ☐ Rewarding success and improving on deficiencies
B7.7 ☐ Having regular Retreat Workshops/Training
B7.8 ☐ Opportunity for skill utilization
B7.9 ☐ MD through the Graduate Development Scheme
B7.10 ☐ Other (please specify)

________________________________________________________________________
Appendices

An Analysis of Management Development Practices for Senior Executives in the PNG Public Service 301

Comments & Feedback on Section B:

__________________________________________________________________________
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SECTION C: POST-PROGRAMME INFORMATION

Self-Assessment of skills and competencies ‘after’ undertaking MD programs.

C1: The following question requires you to evaluate your skills and competencies ‘after’ undertaking the MD programs you have listed in A9 above.

For each statement, place an ‘X’ on the response scale which best indicates your beliefs about the statement in so far as your skills and competencies ‘after’ undertaking the MD intervention.

(The response scales are numbered from ‘ 1 – Very High’ to ‘7 – Very Low’)

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An Analysis of Management Development Practices for Senior Executives in the PNG Public Service 301
Appendices

An Analysis of Management Development Practices for Senior Executives in the PNG Public Service  

I would rate my skills, competencies and behaviour ‘after’ undertaking MD programs as follows:

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<td>C1.15 After the MD interventions, I am now more strategic in my thinking to longer term forward planning to achieve Government objectives and departmental goals.</td>
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Management Development Effectiveness

The goal of MD is to recruit and retain, or attract and defend, suitable managers in a competitive labour market. Effective management development can result in higher job satisfaction, lower turnover, less stress resulting from skill inadequacies and less difficulty in filling executive vacancies. It follows then that while effective management development results in increased knowledge and skills of executives, the organisation also benefits from higher productivity, lower absenteeism and better customer service.

C2: Please ‘circle’ how strongly you agree or disagree on the statements below according to the number on the response scale. The statements represent the factors that contribute to MD effectiveness.

The number represents a response scale of ‘1 – Strongly Disagree’ to ‘7 – Strongly Agree’.

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<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree Nor Disagree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tr>
<td>C2.1 There is increased investment on MD programs.</td>
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<td>C2.2 The organisation has all the relevant HR Policies such as PSGO, PSMA, Training Plan and Policy, and Equal Employment Policy available that are used in development of executives.</td>
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<td>C2.3 Capabilities and requirements of executives are clearly defined in the Job Descriptions.</td>
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<tr>
<td>Statement</td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Slightly Agree</td>
<td>Agree</td>
<td>Strongly Agree</td>
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<tr>
<td>C2.4 The laws, policies and criteria in HR Policies are strictly adhered to in MD.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
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<td>7</td>
</tr>
<tr>
<td>C2.5 All forms of MD programs are supported by the organisation.</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>C2.6 The short-term in-country development programs have a more positive impact on me.</td>
<td>1</td>
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<tr>
<td>C2.7 The short-term in-country development programs have a more positive impact on my division/unit.</td>
<td>1</td>
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<tr>
<td>C2.8 The short-term in-country development programs have a more positive impact on my organisation.</td>
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<tr>
<td>C2.9 All MD programs are linked to organisation goals and objectives.</td>
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<tr>
<td>C2.10 Evaluation is conducted at post-program stage to determine the impact of the MD program on the individual.</td>
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<tr>
<td>C2.11 Evaluation is conducted at post-program stage to determine the impact of the MD program on the division/unit.</td>
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</tr>
<tr>
<td>C2.12 Evaluation is conducted at post-program stage to determine the impact of the MD program on the organisation.</td>
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<tr>
<td>C2.13 Enabling environment such as structures, systems and facilities is conducive to transfer of learning for MD.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>C2.14 Capabilities in my Job Description consist of personal behavioural capabilities, knowledge or skill capabilities and technical capabilities.</td>
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<tr>
<td>C2.15 An appropriate selection process is used in selecting executives to undertake MD programs.</td>
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<tr>
<td>C2.16 There is opportunity for skill utilization.</td>
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<td>3</td>
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<tr>
<td>C2.17 The long-term overseas educational programs have a more positive impact on me.</td>
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<tr>
<td>C2.18 The long-term overseas educational programs have a more positive impact on my division/unit.</td>
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<tr>
<td>C2.19 The long-term overseas educational programs have a more positive impact on my organisation.</td>
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<td>4</td>
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<tr>
<td>C2.20 The capabilities and requirements in my Job Description help me to evaluate my own weaknesses.</td>
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<td>4</td>
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<tr>
<td>C2.21 The capabilities and requirements in my Job Description help me to evaluate my own developmental opportunities.</td>
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<tr>
<td>C2.22 The capabilities and requirements as specified in the Job Descriptions are refined over time to align with internal and external changes.</td>
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<tr>
<td>C2.23 There is continuous mentoring, coaching and upskilling from the top management after training.</td>
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<tr>
<td>C2.24 Attending short workshops and seminars have a positive impact on me.</td>
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<tr>
<td>C2.25 Attending short workshops and seminars have a positive impact on my division/unit.</td>
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<td>4</td>
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<tr>
<td>C2.26 Attending short workshops and seminars have a positive impact on my organisation.</td>
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<tr>
<td>C2.27 The capabilities and requirements in my Job Description help me to evaluate my own ability.</td>
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### Statement

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<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly Disagree</th>
<th>Neither Agree</th>
<th>Slightly Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tr>
<td>C2.28 HR Policies and Plans are reviewed annually and modified.</td>
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<td>C2.29 MD programs are linked to executives’ job requirements.</td>
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<td>C2.30 The long-term in-country educational programs have a more positive impact on me.</td>
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<td>C2.31 The long-term in-country educational programs have a more positive impact on my division/unit.</td>
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<td>C2.32 The long-term in-country educational programs have a more positive impact on my organisation.</td>
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<tr>
<td>C2.33 The capabilities in my Job Description serve as a benchmark against which I am evaluated for recruitment and selection, succession planning or promotion.</td>
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<td>2</td>
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<tr>
<td>C2.34 The developmental activities such as coaching, mentoring and job attachments have a more positive impact on me.</td>
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<tr>
<td>C2.35 The developmental activities such as coaching, mentoring and job attachments have a more positive impact on my division/unit.</td>
<td>1</td>
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</tr>
<tr>
<td>C2.36 The developmental activities such as coaching, mentoring and job attachments have a more positive impact on my organisation.</td>
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<tr>
<td>C2.37 The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on me.</td>
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<tr>
<td>C2.38 The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on my division/unit.</td>
<td>1</td>
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<td>3</td>
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<tr>
<td>C2.39 The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on my organisation.</td>
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</tbody>
</table>

### Evaluation of the Management Development Programs

C3: Upon completion of the management development program(s), were you evaluated to determine the impact these interventions had on you, your division/unit and your organisation?

- C3.1 □ Yes
- C3.2 □ No
- C3.3 □ Not sure

C4: If evaluated, are the results of the evaluation reported to the top management for further actioning?

- C4.1 □ Yes
- C4.2 □ No
- C4.3 □ Not Sure
### Impact of the MD programs

**C5: Which of the following types of MD programs have positively impacted on you as an individual executive?** Please choose five (5) and number them 1 to 5, by placing the number in the relevant boxes in terms of their impact with ‘1’ being the biggest impact.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
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<td>C5.1</td>
<td>☐</td>
<td>In-house management programs</td>
<td>C5.2</td>
<td>☐</td>
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<tr>
<td>C5.3</td>
<td>☐</td>
<td>Long-term overseas educational programs</td>
<td>C5.4</td>
<td>☐</td>
</tr>
<tr>
<td>C5.5</td>
<td>☐</td>
<td>Overseas assignments/attachments</td>
<td>C5.6</td>
<td>☐</td>
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<tr>
<td>C5.7</td>
<td>☐</td>
<td>Task force/projects</td>
<td>C5.8</td>
<td>☐</td>
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<tr>
<td>C5.9</td>
<td>☐</td>
<td>Secondments</td>
<td>C5.10</td>
<td>☐</td>
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<td>☐</td>
<td>Graduate Development Programme</td>
<td>C5.12</td>
<td>☐</td>
</tr>
<tr>
<td>C5.13</td>
<td>☐</td>
<td>Other (please specify) _____________</td>
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</table>

**Comments & Feedback on Section C:**

_____________________________________________________________________________
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D1: Any further or general comments (if any) you may have on the impact the MD programs have on Public Service executives, are welcomed. More specifically, on ways management development could be improved to contribute to capacity building in the Public Service.

________________________________________________________________________________

D2: Finally, do you have any suggestions on changes that could be integrated into policy and practice on strategic human resource development for executives in the PNG Public Service?

________________________________________________________________________________

Comments & Feedback on Section D:

________________________________________________________________________________

************************************************************************** END OF THE QUESTIONNAIRE *********************************************************

Please complete the questionnaire and return it to my supervisor, Associate Professor Michelle Wallace, on email: michelle.wallace@scu.edu.au with your comments and feedback. She will move the completed questionnaire into a folder and delete your email for anonymity and confidentiality. Please do not return by postage mail or fax.

Thank you for your time and assistance in completing this questionnaire, and for your comments and feedback!
Appendix 14: Information Sheet for Participants (Executives - survey)

Name of Project: An Analysis of the type and effectiveness of Management Development interventions for Senior Executive personnel in the PNG Public Service

Dear Participants,

You are invited to participate in a study being conducted that seeks to investigate the effectiveness of management development interventions and how they contribute to capacity building of the PNG Public Service. This research forms part of Doctor of Business Administration program being conducted by Mrs Nama A Polum and supervised by Associate Professor Michelle Wallace.

As a doctoral candidate, it is essential to conduct a research project that examines an issue in the workplace. Hence, the focus of my research is related to an issue of strategic human resource development of executives in the PNG Public Service. Those classified as executives in this study includes: CEOs, Departmental Heads/Secretaries, Deputy Secretaries/Deputy CEOs, First Assistant Secretaries/Directors, Assistant Secretaries/Senior Managers, Branch Heads or their equivalent.

 Procedures to be followed

The self-completion survey questionnaire should take approximately 20-40 minutes or less to complete. Limited demographic information will be collected. This will consist of your age/gender/role/employment status/qualifications attained etc. general information as it is necessary to provide group related statistics. No other personal names or information will be collected by the researcher.

Participation is purely voluntary and will not impact on your ability to work at your organisation. No financial remuneration or incentive will be offered for taking part in this research. There are no travel expenses, nor are there any costs associated with participation in this research. There is no ongoing commitment to any other research project by participants who complete the survey i.e. this survey is a stand-alone tool to collect data. There is no cost to you apart from your time.

The questions are preceded with instructions on how to answer them. Please read the instructions and make your selections as requested. Please complete all sections where required. The survey is confidential, names are not requested, nor are they required. When you have completed the survey, please put it in an enclosed self-addressed envelope, seal the envelope and put your signature on the front, bottom left-hand corner of the envelope before dropping them in a box made available at the Corporate Services Division (CSD).

It is hoped the survey will take 2-3 weeks or less, to complete and the researcher will collect them personally within this timeframe from CSD.

Possible Discomforts and Risks

There are no foreseeable risks or discomforts above those associated with general completion of forms. The data will be stored in and analysed by a computer package and hence your specific responses will not be distinguishable.
Responsibilities of the Researcher

It is our duty to make sure that any information given by you is protected. Your name is not required. Any other identifying information will not be attached to data collected.

The information will be presented as overall data. The research findings may be submitted for publication. Feedback on research results will be made available at the Southern Cross University Library at a later stage.

Responsibilities of the Participant

If there is anything that might impact upon your participation in this research such as problems with your eyesight, hand, wrist or arm, you are asked not to participate.

Freedom of Consent

The return of your completed survey response form will imply your consent in this research project. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time by not returning the completed survey form.

Inquiries

This form is yours to keep for future reference. If you have any questions, we expect you to ask us. If you have any additional questions at any time please ask:

Researcher
Nama A Polum
Graduate College of Management
Southern Cross University
Tweed/Gold Coast Campus
PO Box 42
TWEED HEADS NSW 2485
Email: npolum10@scu.edu.au
Phone: (05 617) 5599 3168

Supervisor
Associate Professor Michelle Wallace
Graduate College of Management
Southern Cross University
Tweed/Gold Coast Campus
PO Box 42
TWEED HEADS NSW 2485
Email: michelle.wallace@scu.edu.au
Phone: (05 617) 5506 9366

Researcher’s contact details in Port Moresby:

PO Box 777, GORDONS NCD
Phone: (675) 3442750 (home)
(675) 3128705/312 8817
Mobile: (675) 6700 716/72526055
Email: nama_polum@treasury.gov.pg

The ethical aspects of this study have been approved by the Southern Cross University Human Research Ethics Committee. The Approval Number is ECN-08-156. If you have any complaints or reservations about any ethical aspect of your participation in this research, you may contact the Committee through the Ethics Complaints Officer:
Ms Sue Kelly  
Ethics Complaints Officer and Secretary  
HREC  
Southern Cross University  
PO Box 157  
Lismore, NSW, 2480  
Telephone (02) 6626-9139 or fax (02) 6626-9145  
Email: sue.kelly@scu.edu.au

All complaints, in the first instance, should be in writing to the above address. All complaints are investigated fully and according to due process under the National Statement and this University. Any complaint you make will be treated in confidence and you will be informed of the outcome.
Appendix 15: Schedule of interviews

<table>
<thead>
<tr>
<th>INTERVIEW NO.</th>
<th>ORGANIZATION CODE NAME</th>
<th>DATE &amp; TIME OF INTERVIEW</th>
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<td>6</td>
<td>“F”</td>
<td>Mon. 9 Feb. 09, 10 am</td>
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<td>7</td>
<td>“G”</td>
<td>Tues. 10 Feb. 09, 1 pm</td>
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<td>“H”</td>
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<td>Mon. 16 Feb. 09, 11 am</td>
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<td>10</td>
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<td>Wed. 18 Feb. 09</td>
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<td>12</td>
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<td>Mon. 23 Feb. 09, 10 am</td>
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<td>“M”</td>
<td>Thurs. 26 Feb. 09, 10 am</td>
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<td>14</td>
<td>“N”</td>
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Source: Developed for this research
Appendix 16: Coding Hierarchy of themes and sub-themes

CODING HIERARCHY OF THEMES THAT EMERGMD FROM THE INDEPTH INTERVIEWS

ORGANISATIONAL SUPPORT FOR MANAGEMENT DEVELOPMENT INTERVENTIONS (LEARNING ORGANISATION CULTURE)

- Systematic support for capacity building of executives
  - Tools, facilities
  - Skills
  - Staff and infrastructure
  - Structures, systems and roles
  - A standard MD program

- Type of support for interventions
  - For all forms of MD interventions
  - For short-term interventions only
  - For long-term interventions only

- Types of MD interventions undertaken
  - Long term formal training (overseas and in-country)
    - Undergraduate
    - Postgraduate
    - Diploma
    - Certificate
  - Short term developmental activities
    - Coaching and mentoring
    - Job Attachment
    - Overseas assignment or secondment
    - Seminars, workshops, symposiums etc.
    - Short programs on related fields
    - Job rotation
**Self-help activities**
- Reading books, journals, etc.
- Viewing videos/CDs on related fields
- Using interactive computer programs

**Support reasons**
*All forms of MD interventions*
- A blend of all interventions required (competencies & new knowledge)
- Additional qualification at postgraduate level (MBA or equivalent)

*Short-term interventions (developmental skills/self-help activities)*
- Impact immediate
- Intervention more specific and tailor made to competency
- No manpower absence or setbacks

*Long-term interventions (formal training overseas and in-country)*
- New skills and knowledge
- Higher qualification a prerequisite for promotion (e.g. MBA)
- Build confidence

**Non-support reasons**
*Long-term/formal studies*
- Prolonged absence causing manpower setbacks
- Impact not immediate
- Program of study not relevant to current job
- High attrition rate after gaining higher qualification

**Capacity building activities by development partners**
*Capacity building activities taking place in the organization*
*No capacity building activities taking place*
*Currently in the process of negotiation with development partners for capacity building activities.*
Input by recipient organizations
- Has some input on capacity building activities to a certain extent except evaluation state.
- Has total control in setting conditions for the capacity building activities.
- Has no input on capacity building activities – donors dominate.
- Prefer to accept what is given or offered with no conditions to set.

CAPABILITIES & REQUIREMENTS OF EXECUTIVES
- Management and leadership skills
- Relevant work experience in related field and at managerial level
- Technical skills in their specialty fields
- University Degree in related field
- Computer skills
- Interpersonal & communication skills
- Sound knowledge and understanding of all government legislations, policies, laws etc. and procedures
- Positive attitude to work

HR POLICIES AND EFFECTIVE PRACTICES
- HR Policies
  - The Public Services General Orders
  - Organisational Training Policy
  - Organisational Training Plan
  - Succession Plan
  - Organisational Disciplinary Policy
  - Manual of HR Procedures
  - Organisational Pay Policy
  - Organisational Recruitment Policy
  - Equal Employment Opportunity Policy
  - HIV and AIDS Workplace Policy
Effective Practices

- Retreat Training/Workshop
- Job attachments overseas
- Graduate Development Scheme
- Stringent selection process and criteria for training
- Review of terms and conditions to retain executives
- Supporting infrastructure in place
- An Evaluation system to evaluate effectiveness of MD interventions

Identification of Training Needs for MDI

Training Needs Analysis (TNA) or Skills Gap Analysis (SGA)

- Annual TNA
- 6-monthly TNA
- TNA not conducted in organization
- One-on-one interview between HR Personnel and Divisional Heads to identify training for staff
- Recommendations submitted to Staff Development and Training Committee/Board for approval

Staff Performance Appraisal (SPA)

- Annual Performance Appraisal Review
- 6-monthly SPA
- One-on-one interview with staff to discuss training needs
- PAR not conducted in organization

Individual Initiative

- Executive find own intervention through:
  - Newspaper
  - Website (internet)
  - Education Roadshows
  - Word of mouth by friends
The Selection Committee, Process and Procedures

The Selection Committee

- Staff Development and Training Committee/Board not in existence
- Staff Development and Training Committee/Board chaired by DH/CEOs
- Staff Development and Training Committee/Board chaired by others
- The SDTC/SDTB meetings annually
- The SDTC/SDTB meets every 3 – 6 months

The process and procedures

- Recommendations received from respective divisions
- Training requests received from directly from individual executives
- The committee only acts on and screen those recommended by superiors
- The committee allows to act on and screen training requests from those not recommended by superiors

The selection criteria

- Training aligned with current job requirements
- Training aligned with corporate strategy
- Age factor considered for future employability in the organization
- Manpower requirements considered

Evaluation on effectiveness of MD interventions

Evaluation system in place in to evaluate effectiveness of MD interventions

No evaluation system in place

Use normal Staff Performance Appraisal (SPA) to evaluate performance to see that there is any change.

IMPACT AS A RESULT OF MD INTERVENTIONS

- No impact as a result of all forms of MD interventions.
- There is impact as a result of all forms of MD interventions.
- Impact only from short-term interventions
- Impact only from long-term interventions
- Not sure if there is impact as a result of MD interventions.
Impact depends on each individual executives with different attitude to work or work culture.

Type of Impact on individual, organization & PNGPS

- Improved service delivery to clients
- Improved management and leadership skills
- Influence on policy making and decision by Government
- Improved executive morale
- Improved attitude to work or work habits
- Improved output of work/productivity

COMMENTS AND SUGGESTIONS ON IMPROVEMENT IN POLICY AND PRACTICE ON STRATEGIC HUMAN RESOURCE DEVELOPMENT OF EXECUTIVES

- Develop a Learning Organisation or System: All PS organizations to instill learning cultures ie to be learning organizations (Pre and Post Program).
  - Top management and line management support on management development (Pre and Post Program).
  - A stringent, transparent and thorough selection process and criteria on the appointment of executives (Pre and Post Program).
  - A stringent, transparent and thorough training and development selection process and criteria for executives.
  - Opportunities for skill utilization
  - A sound and effective Post-Program evaluation system

- A unified framework and policy on management development to guide development of executive and managers in all Public Sector organizations for consistency and conforming to requirements of the Public Service General Orders and Public Service Management Act, or any other related legislations for that matter (Post and Pre Program).

- Executive Assessment Program (previously used by the Department of Education) be reintroduced.

- All Public Sector organizations to adopt the Graduate Development Scheme.

- Strengthen local institutions to conduct courses in-country than abroad or bring in experts/facilitators from overseas to conduct courses in our local institutions.
### Appendix 17: Ranking of mean averages on pre-program leadership skills and behaviour

<table>
<thead>
<tr>
<th>RANKING ORDER</th>
<th>ITEM</th>
<th>FREQUENCY (n=150)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attitude to work.</td>
<td>150</td>
<td>5.94</td>
</tr>
<tr>
<td>2</td>
<td>Having confidence in my work.</td>
<td>150</td>
<td>5.70</td>
</tr>
<tr>
<td>3</td>
<td>Punctuality and attendance to work.</td>
<td>150</td>
<td>5.65</td>
</tr>
<tr>
<td>4</td>
<td>Written and Oral communication skills.</td>
<td>150</td>
<td>5.38</td>
</tr>
<tr>
<td>5</td>
<td>Communicating with networks within my field of expertise.</td>
<td>150</td>
<td>5.20</td>
</tr>
<tr>
<td>6</td>
<td>Interpersonal skills and using different techniques to establish good working relationships with people within and outside the organisation.</td>
<td>150</td>
<td>5.13</td>
</tr>
<tr>
<td>7</td>
<td>Contributing to delivery of public services to our clients.</td>
<td>150</td>
<td>5.12</td>
</tr>
<tr>
<td>8</td>
<td>Motivating staff towards achieving quality results.</td>
<td>150</td>
<td>5.03</td>
</tr>
<tr>
<td>9</td>
<td>Establishing relationships with stakeholders to assist in achieving the organisation’s goals and objectives.</td>
<td>150</td>
<td>4.96</td>
</tr>
<tr>
<td>10</td>
<td>Influence towards positive attitudinal change of our clients.</td>
<td>150</td>
<td>4.95</td>
</tr>
<tr>
<td>11</td>
<td>Managing and leading people and activities.</td>
<td>150</td>
<td>4.91</td>
</tr>
<tr>
<td>12</td>
<td>Adapting to change and innovation.</td>
<td>150</td>
<td>4.89</td>
</tr>
<tr>
<td>12</td>
<td>Developing a cooperative unit and the organisation to achieve the optimal contribution of all staff members.</td>
<td>150</td>
<td>4.89</td>
</tr>
<tr>
<td>13</td>
<td>Strategic in my thinking to longer term forward planning to achieve Government objectives and departmental goals.</td>
<td>150</td>
<td>4.87</td>
</tr>
<tr>
<td>13</td>
<td>Managing physical assets in my division and organisation to contribute to results while protecting their value.</td>
<td>150</td>
<td>4.87</td>
</tr>
<tr>
<td>14</td>
<td>Managing budget and finances within my unit and organisation to achieve results within available funding.</td>
<td>150</td>
<td>4.86</td>
</tr>
<tr>
<td>15</td>
<td>Utilising different ways to approach work problems.</td>
<td>150</td>
<td>4.84</td>
</tr>
<tr>
<td>16</td>
<td>Analysing and synthesising complex information, drawing logical conclusions and providing reasonable alternatives.</td>
<td>150</td>
<td>4.79</td>
</tr>
<tr>
<td>17</td>
<td>Computer skills.</td>
<td>150</td>
<td>4.76</td>
</tr>
<tr>
<td>18</td>
<td>Contributing to organisation’s ability to influence and inform policy decision by the government.</td>
<td>150</td>
<td>4.67</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*
### Appendix 18: Identification of training and selection procedures

<table>
<thead>
<tr>
<th>DEMOGRAPHIC</th>
<th>CATEGORY</th>
<th>FREQUENCY (n=150)</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of Information on availability of MD Programs</td>
<td>Employing Organisation</td>
<td>109</td>
<td>72.7%</td>
</tr>
<tr>
<td>Source of Information on availability of MD Programs</td>
<td>Internet</td>
<td>35</td>
<td>23.3%</td>
</tr>
<tr>
<td>Source of Information on availability of MD Programs</td>
<td>Newspaper</td>
<td>47</td>
<td>31.3%</td>
</tr>
<tr>
<td>Source of Information on availability of MD Programs</td>
<td>Word of Mouth</td>
<td>47</td>
<td>31.3%</td>
</tr>
<tr>
<td>Source of Information on availability of MD Programs</td>
<td>Education Roadshows</td>
<td>21</td>
<td>14.0%</td>
</tr>
<tr>
<td>Source of Information on availability of MD Programs</td>
<td>Other</td>
<td>14</td>
<td>9.3%</td>
</tr>
<tr>
<td>Nomination for MD Programs through training committee</td>
<td>Yes</td>
<td>98</td>
<td>65.3%</td>
</tr>
<tr>
<td>Nomination for MD Programs through training committee</td>
<td>No</td>
<td>29</td>
<td>19.3%</td>
</tr>
<tr>
<td>Nomination for MD Programs through training committee</td>
<td>Not Sure</td>
<td>17</td>
<td>11.3%</td>
</tr>
<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Requirement of the employing organisation to nominate the program</td>
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<td>42.0%</td>
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<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Employing organisation recommended to nominate the program</td>
<td>70</td>
<td>46.7%</td>
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<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Advise and influence from a friend or workmate</td>
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<td>14.0%</td>
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<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Individual decision after considering alternatives on most appropriate programs</td>
<td>61</td>
<td>40.7%</td>
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<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>The only program known about or aware of</td>
<td>2</td>
<td>1.3%</td>
</tr>
<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Advice from a staff at PNG educational institution</td>
<td>5</td>
<td>3.3%</td>
</tr>
<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Information from overseas education/training institution</td>
<td>24</td>
<td>16.0%</td>
</tr>
<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Chose the program after being unsuccessful in gaining entry to programs of first choice</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Reasons for choosing a particular program of learning</td>
<td>Other</td>
<td>14</td>
<td>9.3%</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*
### Appendix 19: HR policies and effective practices

<table>
<thead>
<tr>
<th>DEMOGRAPHIC</th>
<th>CATEGORY</th>
<th>FREQUENCY (n=150)</th>
<th>PERCENTAGE</th>
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</thead>
<tbody>
<tr>
<td>HR Policies</td>
<td>PSGO</td>
<td>88</td>
<td>58.7%</td>
</tr>
<tr>
<td></td>
<td>Training Policy</td>
<td>97</td>
<td>64.7%</td>
</tr>
<tr>
<td></td>
<td>Training Plan</td>
<td>104</td>
<td>69.3%</td>
</tr>
<tr>
<td></td>
<td>Succession Plan</td>
<td>44</td>
<td>29.3%</td>
</tr>
<tr>
<td></td>
<td>Equal Employment Opportunity Policy</td>
<td>33</td>
<td>22.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>13</td>
<td>8.7%</td>
</tr>
<tr>
<td>Effective Practices</td>
<td>Identification of Training Needs (TNA)</td>
<td>134</td>
<td>89.3%</td>
</tr>
<tr>
<td></td>
<td>Participant selection linked to organisation strategy and policy</td>
<td>106</td>
<td>70.7%</td>
</tr>
<tr>
<td></td>
<td>Top management support and supporting infrastructure in place</td>
<td>69</td>
<td>46.0%</td>
</tr>
<tr>
<td></td>
<td>Organisation learning culture (support for all forms of MDP)</td>
<td>50</td>
<td>33.3%</td>
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<tr>
<td></td>
<td>Evaluation of program effectiveness (Post-Program evaluation)</td>
<td>46</td>
<td>30.7%</td>
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<tr>
<td></td>
<td>Rewarding successes and improving on deficiencies</td>
<td>39</td>
<td>26.0%</td>
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<tr>
<td></td>
<td>Regular Retreat Workshops/Training out of office</td>
<td>50</td>
<td>33.3%</td>
</tr>
<tr>
<td></td>
<td>Opportunity for skill utilisation</td>
<td>41</td>
<td>27.3%</td>
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<tr>
<td></td>
<td>Graduate Development Scheme</td>
<td>27</td>
<td>18.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

**Source:** Analysis of survey data
Appendices

Appendix 20: Ranking of mean averages on post-program leadership skills and behaviour

<table>
<thead>
<tr>
<th>RANKING ORDER</th>
<th>ITEM</th>
<th>FREQUENCY (n=150)</th>
<th>MEAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Attitude to work.</td>
<td>150</td>
<td>6.35</td>
</tr>
<tr>
<td>2</td>
<td>Having confidence in my work.</td>
<td>150</td>
<td>6.23</td>
</tr>
<tr>
<td>3</td>
<td>Punctuality and attendance to work.</td>
<td>150</td>
<td>6.09</td>
</tr>
<tr>
<td>4</td>
<td>Written and Oral communication skills.</td>
<td>150</td>
<td>5.95</td>
</tr>
<tr>
<td>5</td>
<td>Adapting to change and innovation.</td>
<td>150</td>
<td>5.94</td>
</tr>
<tr>
<td>6</td>
<td>Interpersonal skills and using different techniques to establish good working relationships with people within and outside the organisation.</td>
<td>150</td>
<td>5.84</td>
</tr>
<tr>
<td>7</td>
<td>Motivating staff towards achieving quality results.</td>
<td>150</td>
<td>5.81</td>
</tr>
<tr>
<td>8</td>
<td>Contributing to delivery of public services to our clients.</td>
<td>150</td>
<td>5.80</td>
</tr>
<tr>
<td>9</td>
<td>Establishing relationships with stakeholders to assist in achieving the organisation’s goals and objectives.</td>
<td>150</td>
<td>5.78</td>
</tr>
<tr>
<td>10</td>
<td>Managing and leading people and activities.</td>
<td>150</td>
<td>5.77</td>
</tr>
<tr>
<td>10</td>
<td>Strategic in my thinking to longer term forward planning to achieve Government objectives and departmental goals.</td>
<td>150</td>
<td>5.77</td>
</tr>
<tr>
<td>11</td>
<td>Communicating with networks within my field of expertise.</td>
<td>150</td>
<td>5.73</td>
</tr>
<tr>
<td>12</td>
<td>Influence towards positive attitudinal change of our clients.</td>
<td>150</td>
<td>5.69</td>
</tr>
<tr>
<td>12</td>
<td>Managing physical assets in my division and organisation to contribute to results while protecting their value.</td>
<td>150</td>
<td>5.69</td>
</tr>
<tr>
<td>13</td>
<td>Managing budget and finances within my unit and organisation to achieve results within available funding.</td>
<td>150</td>
<td>5.68</td>
</tr>
<tr>
<td>14</td>
<td>Utilising different ways to approach work problems.</td>
<td>150</td>
<td>5.67</td>
</tr>
<tr>
<td>14</td>
<td>Developing a cooperative unit and the organisation to achieve the optimal contribution of all staff members.</td>
<td>150</td>
<td>5.67</td>
</tr>
<tr>
<td>15</td>
<td>Analysing and synthesising complex information, drawing logical conclusions and providing reasonable alternatives.</td>
<td>150</td>
<td>5.57</td>
</tr>
<tr>
<td>16</td>
<td>Contributing to organisation’s ability to influence and inform policy decision by the government.</td>
<td>150</td>
<td>5.53</td>
</tr>
<tr>
<td>17</td>
<td>Computer skills.</td>
<td>150</td>
<td>5.51</td>
</tr>
</tbody>
</table>

Source: Analysis of survey data
### Appendix 21: Ranking of the mean differences on pre and post-program leadership skills and behaviour.

<table>
<thead>
<tr>
<th>RANKING ORDER</th>
<th>ITEM</th>
<th>PRE-PROGRAM MEAN</th>
<th>POST-PROGRAM MEAN</th>
<th>MEAN DIFFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Adapting to change and innovation.</td>
<td>4.89</td>
<td>5.94</td>
<td>1.05</td>
</tr>
<tr>
<td>2</td>
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<tr>
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<td>Managing and leading people and activities.</td>
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<td>5.77</td>
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<td>3</td>
<td>Contributing to organisation’s ability to influence and inform policy decision by the government.</td>
<td>4.67</td>
<td>5.53</td>
<td>0.86</td>
</tr>
<tr>
<td>4</td>
<td>Utilising different ways to approach work problems.</td>
<td>4.84</td>
<td>5.67</td>
<td>0.83</td>
</tr>
<tr>
<td>5</td>
<td>Establishing relationships with stakeholders to assist in achieving the organisation’s goals and objectives.</td>
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<td>5.78</td>
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</tr>
<tr>
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<td>Managing budget and finances within my unit and organisation to achieve results within available funding.</td>
<td>4.86</td>
<td>5.68</td>
<td>0.82</td>
</tr>
<tr>
<td>5</td>
<td>Managing physical assets in my division and organisation to contribute to results while protecting their value.</td>
<td>4.87</td>
<td>5.69</td>
<td>0.82</td>
</tr>
<tr>
<td>6</td>
<td>Analysing and synthesising complex information, drawing logical conclusions and providing reasonable alternatives.</td>
<td>4.79</td>
<td>5.57</td>
<td>0.78</td>
</tr>
<tr>
<td>6</td>
<td>Developing a cooperative unit and the organisation to achieve the optimal contribution of all staff members.</td>
<td>4.89</td>
<td>5.67</td>
<td>0.78</td>
</tr>
<tr>
<td>6</td>
<td>Motivating staff towards achieving quality results.</td>
<td>5.03</td>
<td>5.81</td>
<td>0.78</td>
</tr>
<tr>
<td>7</td>
<td>Computer skills.</td>
<td>4.76</td>
<td>5.51</td>
<td>0.75</td>
</tr>
<tr>
<td>8</td>
<td>Influence towards positive attitudinal change of our clients.</td>
<td>4.95</td>
<td>5.69</td>
<td>0.74</td>
</tr>
<tr>
<td>9</td>
<td>Interpersonal skills and using different techniques to establish good working relationships with people within and outside the organisation.</td>
<td>5.13</td>
<td>5.84</td>
<td>0.71</td>
</tr>
<tr>
<td>10</td>
<td>Contributing to delivery of public services to our clients.</td>
<td>5.12</td>
<td>5.80</td>
<td>0.68</td>
</tr>
<tr>
<td>11</td>
<td>Written and Oral communication skills.</td>
<td>5.38</td>
<td>5.95</td>
<td>0.57</td>
</tr>
<tr>
<td>12</td>
<td>Communicating with networks within my field of expertise.</td>
<td>5.20</td>
<td>5.73</td>
<td>0.53</td>
</tr>
<tr>
<td>12</td>
<td>Having confidence in my work.</td>
<td>5.70</td>
<td>6.23</td>
<td>0.53</td>
</tr>
<tr>
<td>13</td>
<td>Punctuality and attendance to work.</td>
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<td>14</td>
<td>Attitude to work.</td>
<td>5.94</td>
<td>6.35</td>
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*Source: Analysis of survey data*
### Appendix 22: FACTORS AND THEIR ITEMS

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<tr>
<th>FACTOR</th>
<th>ITEM NO.</th>
<th>ITEMS</th>
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<td>Managing and leading people and activities.</td>
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</tr>
<tr>
<td>SAB/SAC1.2</td>
<td>Adapting to change and innovation.</td>
<td></td>
</tr>
<tr>
<td>SAB/SAC1.3</td>
<td>Analysing and synthesizing complex information, drawing logical conclusions and providing reasonable alternatives.</td>
<td></td>
</tr>
<tr>
<td>SAB/SAC1.4</td>
<td>Utilising different ways to approach work problems.</td>
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</tr>
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<td>SAB/SAC1.5</td>
<td>Written and oral communication skills.</td>
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<td>SAB/SAC1.7</td>
<td>Computer skills.</td>
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<td>SAB/SAC1.8</td>
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<td>SAB/SAC1.9</td>
<td>Interpersonal skills and using different techniques to establish good working relationships with people within and outside the organisation.</td>
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<td>SAB/SAC1.10</td>
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<td>SAB/SAC1.11</td>
<td>Motivating staff towards achieving quality results.</td>
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<td>SAB/SAC1.12</td>
<td>Contributing to delivery of public services to our clients.</td>
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</tr>
<tr>
<td>SAB/SAC1.13</td>
<td>Influence towards positive attitudinal change of our clients.</td>
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</tr>
<tr>
<td>SAB/SAC1.14</td>
<td>Contributing to organisation’s ability to influence and inform policy decision by the Government.</td>
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<tr>
<td>SAB/SAC1.15</td>
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<td>SAB/SAC1.16</td>
<td>Managing budget and finances within my unit and organisation to achieve results within available funding.</td>
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</tbody>
</table>

*Pre and Post Program (self-assessment of skills, competencies, behaviour before and after undertaking MD programs)*
## Appendixes

### An Analysis of Management Development Practices for Senior Executives in the PNG Public Service

<table>
<thead>
<tr>
<th>SAB/SAC1.17</th>
<th>Managing physical assets in my division and organisation to contribute to results while protecting their value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAB/SAC1.18</td>
<td>Having confidence in my work.</td>
</tr>
<tr>
<td>SAB/SAC1.19</td>
<td>Punctuality and attendance to work.</td>
</tr>
<tr>
<td>SAB/SAC1.20</td>
<td>Attitude to work.</td>
</tr>
<tr>
<td><strong>Organisation Support</strong></td>
<td></td>
</tr>
<tr>
<td>OSC4.1</td>
<td>There is increased investment on Management Development (MD) programs.</td>
</tr>
<tr>
<td>OSC4.5</td>
<td>All forms of MD programs are supported by the organisation.</td>
</tr>
<tr>
<td>OSC4.13</td>
<td>Enabling environment such as structures, systems and facilities is conducive to transfer of learning for MD.</td>
</tr>
<tr>
<td>OSC4.16</td>
<td>There is opportunity for skill utilisation.</td>
</tr>
<tr>
<td>OSC4.23</td>
<td>There is continuous mentoring, coaching and upskilling from the top management after training.</td>
</tr>
<tr>
<td><strong>Capabilities and Requirements of Executives</strong></td>
<td></td>
</tr>
<tr>
<td>CRC4.3</td>
<td>Capabilities and requirements of executives are clearly defined in the job descriptions (JDs).</td>
</tr>
<tr>
<td>CRC4.14</td>
<td>Capabilities in my JD consist of personal behavioural capabilities, knowledge or skill capabilities and technical capabilities.</td>
</tr>
<tr>
<td>CRC4.20</td>
<td>The capabilities and requirements in my JD help me to evaluate my own weaknesses.</td>
</tr>
<tr>
<td>CRC4.21</td>
<td>The capabilities and requirements in my JD help me to evaluate my own developmental opportunities.</td>
</tr>
<tr>
<td>CRC4.22</td>
<td>The capabilities and requirements as specified in the JD are refined over time to align with internal and external changes.</td>
</tr>
<tr>
<td>CRC4.27</td>
<td>The capabilities and requirements in my JD help me to evaluate my own ability.</td>
</tr>
<tr>
<td>CRC4.33</td>
<td>The capabilities in my JD serve as benchmark against which I am evaluated for recruitment and selection, succession planning or promotion.</td>
</tr>
</tbody>
</table>
### HR Policies and Effective Practices

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRC4.2</td>
<td>The organisation has all the relevant HR Policies such as the Public Services General Orders (PSGO), the Public Services Management Act (PSMA), Training Plan and Policy, and Equal Employment Policy available that are used in development of executives.</td>
</tr>
<tr>
<td>HRC4.4</td>
<td>The laws, policies and criteria in HR Policies are strictly adhered to in MD.</td>
</tr>
<tr>
<td>HRC4.9</td>
<td>All MD programs are linked to organisation goals and objectives.</td>
</tr>
<tr>
<td>HRC4.10</td>
<td>Evaluation is conducted at post-program stage to determine the impact of the MD program on the individual.</td>
</tr>
<tr>
<td>HRC4.11</td>
<td>Evaluation is conducted at post-program stage to determine the impact of the MD program on the division/unit.</td>
</tr>
<tr>
<td>HRC4.12</td>
<td>Evaluation is conducted at post-program stage to determine the impact of the MD program on the organisation.</td>
</tr>
<tr>
<td>HRC4.15</td>
<td>An appropriate selection process is used in selecting executives to undertake MD programs.</td>
</tr>
<tr>
<td>HRC4.28</td>
<td>HR Policies and Plans are reviewed annually and modified.</td>
</tr>
<tr>
<td>HRC4.29</td>
<td>MD programs are linked to executives’ job requirements.</td>
</tr>
</tbody>
</table>

### Training and Development

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDC4.6</td>
<td>The short-term in-country development programs have a more positive impact on me.</td>
</tr>
<tr>
<td>TDC4.7</td>
<td>The short-term in-country development programs have a more positive impact on my division/unit.</td>
</tr>
<tr>
<td>TDC4.8</td>
<td>The short-term in-country development programs have a more positive impact on my organisation.</td>
</tr>
<tr>
<td>TDC4.17</td>
<td>The long-term overseas educational programs have a more positive impact on me.</td>
</tr>
<tr>
<td>TDC4.18</td>
<td>The long-term overseas educational programs have a more positive impact on my division/unit.</td>
</tr>
<tr>
<td>TDC4.19</td>
<td>The long-term overseas educational programs have a more positive impact on my organisation.</td>
</tr>
<tr>
<td>TDC4.24</td>
<td>Attending short workshops and seminars have a positive impact on me.</td>
</tr>
<tr>
<td>TDC425</td>
<td>Attending short workshops and seminars have a positive impact on my division/unit.</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>TDC4.26</td>
<td>Attending short workshops and seminars have a positive impact on my organisation.</td>
</tr>
<tr>
<td>TDC4.30</td>
<td>The long-term in-country educational programs have a more positive impact on me.</td>
</tr>
<tr>
<td>TDC4.31</td>
<td>The long-term in-country educational programs have a more positive impact on my division/unit.</td>
</tr>
<tr>
<td>TDC4.32</td>
<td>The long-term in-country educational programs have a more positive impact on my organisation.</td>
</tr>
<tr>
<td>TDC4.34</td>
<td>The developmental activities such as coaching, mentoring and job attachments have a more positive impact on me.</td>
</tr>
<tr>
<td>TDC4.35</td>
<td>The developmental activities such as coaching, mentoring and job attachments have a more positive impact on my division/unit.</td>
</tr>
<tr>
<td>TDC4.36</td>
<td>The developmental activities such as coaching, mentoring and job attachments have a more positive impact on my organisation.</td>
</tr>
<tr>
<td>TDC4.37</td>
<td>The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on me.</td>
</tr>
<tr>
<td>TDC4.38</td>
<td>The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on my division/unit.</td>
</tr>
<tr>
<td>TDC4.39</td>
<td>The self-help activities such as interactive computer programs, reading of books and journals, and viewing of videos have a positive impact on my organisation.</td>
</tr>
</tbody>
</table>

*Source: Analysis of survey data*
### Appendix 23: The process of calculations of test for normality – Skewness & Kurtosis

<table>
<thead>
<tr>
<th>Variables</th>
<th>The process of calculations of test for Normality: Skewness</th>
<th>Results</th>
<th>The process of calculations of test for Normality: Kurtosis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreLeadership 2</td>
<td>[-.544/.198] = 2.75&gt;2.58</td>
<td>Sig. skew</td>
<td>[-.086/.394] = 0.22 &lt; 2.58</td>
<td>No sig. skew</td>
</tr>
<tr>
<td>PreBehaviour 2</td>
<td>[-.890/.198] = 4.49&gt;2.58</td>
<td>Sig. skew</td>
<td>[.547/.394] = 1.33 &lt; 2.58</td>
<td>No sig. skew</td>
</tr>
<tr>
<td>PostLeadership 2</td>
<td>[-.565/.198] = 2.85&gt;2.58</td>
<td>Sig. skew</td>
<td>[.054/.394] = 0.14 &lt; 2.58</td>
<td>No sig. skew</td>
</tr>
<tr>
<td>PostBehaviour 2</td>
<td>[-1.388/.198] = 7.01&gt;2.58</td>
<td>Sig. skew</td>
<td>[1.770/.394] = 4.50 &gt; 2.58</td>
<td>Sig. skew</td>
</tr>
<tr>
<td>OrgSupport 2</td>
<td>[-.224/.198] = 1.13 &lt; 2.58</td>
<td>No sig. skew</td>
<td>[-.383/.394] = 0.98 &lt; 2.58</td>
<td>No sig. skew</td>
</tr>
<tr>
<td>CapabReq</td>
<td>[-.503/.198] = 2.54 &lt; 2.58</td>
<td>No sig. skew</td>
<td>[-.223/.394] = 0.57 &lt; 2.58</td>
<td>No sig. skew</td>
</tr>
<tr>
<td>HRPOL</td>
<td>[-.113/.198] = 0.57 &lt; 2.58</td>
<td>No sig. skew</td>
<td>[-.144/.394] = 0.37 &lt; 2.58</td>
<td>No sig. skew</td>
</tr>
<tr>
<td>TD1</td>
<td>[-.168/.198] = 0.85 &lt; 2.58</td>
<td>No sig. skew</td>
<td>[-.674/.394] = 1.71 &lt; 2.58</td>
<td>No sig. skew</td>
</tr>
</tbody>
</table>

*Source:* Analysis of survey data