

**THE NATURE OF LEADERSHIP DILEMMAS IN TECHNICAL  
VOCATIONAL EDUCATION AND TRAINING IN PAPUA NEW GUINEA.**

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A thesis submitted in partial fulfilment of the  
requirements for the degree  
of  
Master of Educational Leadership and Management  
Unitec Institute of Technology  
2017



## DECLARATION

**Name of candidate: Markus Demi (Mr)**

This thesis entitled: “The Nature of Leadership Dilemmas in Technical Vocational Education and Training in Papua New Guinea” is submitted in partial fulfilment for the requirements for the Unitec degree of Master of Educational Leadership and Management.

### CANDIDATE’S DECLARATION

I confirm that:

- This Thesis presents my own work;
- The contribution of supervisors and others to this work was consistent with the Unitec regulations and policies.
- Research for this work has been conducted in accordance with the Unitec Research Ethics Committee Policy and Procedures, and has fulfilled any requirements set for this project by the Unitec Research Ethics Committee.

Research Ethics Committee Approval Number: **2016-1067**

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## ABSTRACT

Effective leadership is essential in securing the highest possible quality for Technical Vocational Education and Training in Papua New Guinea (TVET-PNG). In this education sector, senior managers and officers are challenged with finding solutions to educational problems that stand in the way of high student achievement and find this expectation very challenging. The body of knowledge related to problem-solving that was reviewed for this research confirms a view that the effectiveness of leaders is contingent upon their capability to resolve complex problems, and specifically those problems that have the characteristics of a leadership dilemma. These dilemmas reflect a tension between the needs of the organisation and the needs of the individual and create the most challenging problems for leaders. This study further investigated the nature of these dilemmas and challenges for senior managers and officers in resolving them in the context of TVET-PNG.

An interpretive approach was adopted for this qualitative study involving the in-depth investigation of the experiences and practices of senior managers and senior officers of TVET education in PNG. The study involved the use of two research methods. Firstly, semi-structured interviews were used to explore perceptions from the senior managers' perspective. Secondly, questionnaires were used to obtain the perspectives of the senior officers.

The data was analysed thematically and findings revealed that leadership dilemmas were seen as problems that had not been effectively addressed in the past and hence persisted. These were indeed challenging problems because the senior leaders were not clear about the nature of the problem themselves. Thus, these problems were either avoided, referred or deferred. The study further suggests the need for senior managers and senior officers of TVET education in PNG to engage in management development in order to identify the existence of leadership dilemmas in the workplace and come up with possible context relevant solutions to address them in a more appropriate way.

## ACKNOWLEDGEMENTS

This thesis would not have been possible without the support and guidance of some important people.

First and most importantly, I would like to thank my principal supervisor Professor Carol Cardno for her interest and sympathy throughout the writing process of my thesis. The unwavering belief in my ability, continual reassurance and constructive feedback she provided has been invaluable to me. I would also like to thank and acknowledge my associate supervisor, Martin Bassett for his helpful contribution to the final draft of my thesis.

Next, I would like to thank the MEdLM team, especially all the lecturers and professors for their advice and assistance. They have been a great part of my success as an international student. I really feel encouraged and motivated by them emotionally and intellectually – throughout my learning journey at Unitec. I also remember and acknowledge the senior TVET Team for their cooperation and participation in the research and the human Resources Management Division for their continual support during the course of my studies.

Then, I would like to thank the New Zealand Government for providing scholarships to Papua New Guinean students, so that we have the opportunity to enhance and develop our knowledge, skills and ability to contribute to the development of our home country.

Lastly my sincere thanks and gratitude to my family for their endless encouragement and love. I would like to particularly acknowledge my dearly beloved wife for always caring about me and my study and for her being sincere and committed in supporting and encouraging me both physically and emotionally.

## LIST OF ABBREVIATIONS

FAS	First Assistant Secretary
HBS	Harvard Business School
MEdLM	Master of Educational Leadership and Management
NDoE	National Department of Education
PNG	Papua New Guinea
SM	Senior Manager
SO	Senior Officer
TSC	Teaching Service Commission
TVET	Technical Vocational Education and Training
UREC	Unitec Research Ethics Committee

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# CHAPTER ONE

## INTRODUCTION

### **Background**

My research topic is “The Nature of Leadership Dilemmas in Technical Vocational Education and Training (TVET) in Papua New Guinea (PNG)”. I am an educator in the PNG education system working in a leadership role within the TVET sector and my recent masters studies have made me aware of some sorts of problems that arise for myself and others as we do our work within the Technical Vocational Education and Training sector.

The nation of Papua New Guinea (PNG) is the largest pacific island country in the world with a land mass of 473,189sq.km and has a population of 7.8 million people. The PNG education system has a qualification framework for technical education which is slightly different but similar to that of Australia, New Zealand and other pacific island countries. TVET is one of the many branches that come under the Ministry of Education in PNG. This branch takes care of six technical colleges, five polytechnics and 136 vocational schools within the country. My research will focus on leadership dilemmas (complex problems) faced by senior managers of TVET within the education department, because I have a hunch that many senior managers and officers are challenged by major complex problems. These problems are often avoided and stop people from being effective. I myself have experienced such a problem and I have recently learned that these problems may actually be leadership dilemmas so I want to examine whether these problems exist in PNG settings.

### **Rationale**

My interest for this research comes from experiences that I have faced and seen as a senior education officer in the TVET Division of the Education Department of PNG. Within the TVET division, the senior managers are faced with different

kinds of challenging problems which they find it difficult to resolve. One typical example of a problem of this type is the need to manage performance of staff and solve problems of practice that impact on the organisation. These issues are really difficult because they are problems involving people and they make the managers feel anxious in dealing with people they know. This creates a considerable pressure for senior leaders when they try to perform effectively. This is supported by the work of Cardno (2012) who stated that there are many types of problem complexity that pose challenges for leaders who set out to solve such issues and feel accountable to achieve good outcomes to reduce negative consequences for the organisation. Murphy (2007) is also of the opinion that leaders are challenged with problems of complexity relating to emotions engaged when dilemma situations are encountered.

The main reason why this study is important is that many senior managers working together with me in the department are likely to be challenged by major complex problems particularly those of the type described above. These problems are often avoided because they appear too difficult to resolve and because they are not dealt with they stop people from being effective. I myself have experienced such a problem and I have recently learned that these problems may actually be a specific type of problem that Cardno (2012) has named a 'leadership dilemma' so I want to examine whether these problems exist in PNG settings. As Cardno (2012) further explains that "leaders typically adopt a stance associated with the most common belief that it is not possible to engage in "solving dilemmas that are irresolvable and consequently they avoid having to deal with them" (p. 62).

This research will firstly examine the various types of complex problems experienced by senior managers of TVET in PNG. Cardno (2007) says that it is important in decision making to understand the nature of the problems in order to distinguish simple problems from those that are complex. Another purpose is to analyse these complex problems to see if they contain the characteristics of

real leadership dilemmas as described in the literature. Murphy (2007) mentions that, “dilemmas are tense and difficult situations because of how they are experienced by the individuals concerned” (p.10). The final purpose is to investigate challenges in resolving these leadership dilemmas. Cuban (2001) says that, it is impossible to solve a dilemma even though it might be managed. Cardno (2012) maintains that, a leadership dilemma can and must be resolved so that it will not resurface.

I am making an assumption that senior leaders of TVET in PNG want to solve these problems (leadership dilemmas) but cannot due to the complexity of these problems. If such problems are left unsolved, the capacity of the organisation to sustain quality management of staff and to achieve targeted organisational goals is undermined. These sorts of leadership dilemmas concerning performance appraisal issues are also encountered in other educational settings. For example, the research by Cardno and Reynolds (2009) in early childhood education indicated that similar dilemmas existed in these early childhood settings. These authors stated that that the demand for leaders to manage the performance of staff and solve problems of practice which had the characteristics of a dilemma was not well addressed.

I believe that the knowledge that will be gained from this study will inform future leaders in my country to understand why it is difficult to address dilemmas that arise within the TVET sector. If these dilemmas exist and I can discover the complexities within them then I may be able to also uncover the development that senior managers need to give them the confidence to resolve them. If understanding and resolving dilemmas is an expectation of effective leadership then what is problematic in my country now is that not enough is known about dilemmas or about the efforts of leaders to resolve such dilemmas. Cuban (2001) asserted that leaders require some knowledge about the continuous struggle and competing values in complex problems in order to lead and confront dilemmas; not let them to multiply.

## **Research Aims and Questions**

### *Research Aims*

1. To establish the nature of the complex problems experienced by senior managers in Technical Vocational Education and Training (TVET) settings in PNG
2. To analyse leadership dilemmas in the TVET contexts
3. To investigate challenges for senior managers in resolving leadership dilemmas.

### *Research Questions*

The research questions which are for guiding the investigation into the nature of leadership dilemmas in Technical Vocational Education and Training (TVET) in Papua New Guinea (PNG) fitted comfortably within a qualitative methodology. This has allowed an understanding of the happenings that “shape action (or inaction)” (Guba & Lincoln, 2005, p. 197). To address the first research question, the vast international literature was critiqued to examine the sort of complex problems experienced by senior managers of TVET education. This guided me to examine the various types of complex problems experienced by senior managers of TVET. The second research question helped me to identify if these complex problems are real leadership dilemmas. The third question guided me to investigate challenges in resolving leadership dilemmas.

The questions of my research are: What sorts of complex problems are experienced by Technical Vocational Education and Training (TVET) senior managers? Can these problems be identified as leadership dilemmas? How are senior managers challenged when they attempt to resolve these issues?

## **Thesis Outline**

The thesis is organised into five chapters.

*Chapter One* - provides the background, rationale, research aims and questions that shape this thesis.

*Chapter Two* – provides a critical review of a wide range of international literature associated with the nature of complex problems, managing performance problems and the nature of dilemmas and their resolution.

*Chapter Three* - outlines the research methodology and methods. Research sampling is discussed in relation to the research methods. The research methods, the semi-structured interview and the questionnaire are explained. Finally, the validity of data results and ethical considerations are discussed.

*Chapter Four* - provides the findings collected from the semi-structured interview with senior managers of TVET PNG and the questionnaire with senior officers. The findings are organised and presented with the research questions used as headings.

*Chapter Five* - presents the discussion of key findings from the research and integrates these with the literature. The themes that emerged from data analysis are discussed in relation to the research questions. Conclusions are reached that are relevant to each research theme. Limitations of the study are commented on and recommendations for future practice and for further research are made.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **Introduction**

In this chapter I have used a range of international literature to critically review and discuss the nature of complex problems and dilemmas. The limitation was the unavailability of the local literature to the topic of my research. However, there was more than enough international literature reviewed and used in this study as the issues raised were similar to the context of education system in PNG. The major themes emerging from the literature include: the need to solve educational problems; complex problems; managing performance problems; dilemmas and their resolution.

#### **The Need to Solve Educational Problems**

Leaders in educational settings are expected to solve educational problems so that the educational outcomes for students are successful. Some of the most difficult problems for leaders to solve arise in relation to the performance of staff because this performance impacts on student learning (Forrester, 2001). Some authors (see for example, Cardno, 2007) assert that “educational leaders today cannot ignore the expectation that the focus of their influence must be directed towards improving the achievement of students” (p. 33). When staff performance issues get in the way of student achievement or when there are difficult issues that are hard to resolve, it is then that leaders have to make extra efforts to solve such problems. This idea is emphasised by Bottery (2004) when he says that “school leaders are viewed as holding the key to resolving a number of problems currently facing schools” (p. 1). Although Cardno’s research refers to New Zealand and Bottery is writing about the United Kingdom, educational problems are a universal trend. In my education setting in the Technical Vocational Education and Training sector in the Papua New Guinea education system, educational problems are present. If my Government wants better educational outcomes for students, then problems that lie in the way of this goal

must be addressed. This is why the literature about problem-solving is relevant to my study.

In order to be able to solve practical educational problems, leaders, according to Leithwood, Seashore Louis, Anderson and Wahlstrom (2004), must be capable of expert problem solving and need to develop a “repertoire of problem-relevant knowledge. Such knowledge is about what actions to take to solve the problem as well as the social and physical context in which the problem is embedded” (p. 68). Furthermore, such learning is effective when it is situated in the problem context and is therefore authentic. One of the key learning challenges for leaders who are accountable for solving educational problems is developing an understanding of the nature of these problems. Robinson (1995) refers to problems as a gap between what exists and what the organisation wants to achieve and states that “attempts to solve such problems are usually based on previous efforts which have become embedded in the memory of the organisation” (p. 71). Not all of these problem-solving efforts are successful because leaders are often not aware of the nature of the problem themselves. When problems are complex or when they are dilemmas they challenge leaders and often remain unsolved (Cardno, 2012; de Haan & de Heer, 2015).

### **Complex Problems**

At the heart of my research is the need to understand the nature of the problems that educational leaders in my country are encountering and are unable to resolve. These problems are a major challenge because of their complexity. Complex problems are issues that do not have a “single solution due to the level of its complexity” (de Haan & de Heer 2015, p. 28). As Robinson (1993) explained a problem is a “gap between an existing and a desired state of affairs and their understanding and resolution requires a more sophisticated account of their properties” (p. 23). A definition of a complex problem is that it is a situation in which a gap is found between what is and what ought to be. To close the gap obstacles must be overcome (Cuban, 2001). Another definition by Jonassen

(1997) is that, “a complex problem is an unknown that results from any situation in which a person seeks to fulfil a need or accomplish a goal” (p.66). He further mentioned that, complex problems may not have pre-identified outcomes but rather a vague goal-level description of the desired end-result without a clear pathway of how to get there. Owens (2004) is of the view that, complex problems possess the elements of ambiguity, uncertainty and not quantifiable because such problems are intertwined and difficult to separate. He further mentioned that some of these problems are quite different, “the elements of the problem are so dynamically intertwined and difficult to separate on the bases of the objective criteria. The solution to the problem requires the continued coordination and interaction of a number of people” (p. 311). He called such problems *emergent*.

Problems emerge in different ways and take various forms. Cardno (2012) asserted that in a classical complex problem finding a quick solution is not always the best answer. She claims that there are “many shades of problem complexity that pose challenges for leaders who set out to resolve such problems and feel accountable to achieve long term resolution in order to reduce negative consequences for the organisation” (p. 41). According to Owens (2004) the most important step in making a decision is to define the problem by “whoever literally controls the decision making process” (p.311). Similarly, Cardno (2012) explains that in the decision-making process, it is important to understand the nature of the problem in order to distinguish complex problems from simple problems (Cardno, 2012).

According to Drucker (1966), the most challenging problems that require creative decisions are unique problems. There is a distinction between routine and unique problems. Unique problems are those problems that possess a complex nature and are difficult to resolve. The simple routine problems that need a form of generic decision making are those problems that occur frequently in organisations and can normally be handled by applying the appropriate rule or policy. By distinguishing between routine and unique problems managers can

avoid mistakes. One mistake is to treat a routine situation as if it were a unique event. Another challenge is to treat a new event as if it were just an old problem to which old procedures could be applied (Drucker, 1966). Cunningham and Cordeiro (2006) were of the view that some problems are fairly well structured; others are ill structured, messy, complex and multifaceted and in identifying and stating the problem concisely possess a challenge for most leaders. In distinguishing well-structured problems from ill-structured problems, Simon (1973) explained that well-structured problems have clear solution criteria, specific information requirements and straight forward procedures for reaching a solution. Those problems that have “no procedural path to solve it and have many different solutions are regarded as ill-structured problems” (p.113). It is important to understand both types of problems.

### *Simple problems*

Not all the problems are complex problems. According to de Haan and de Heer (2015) most problems are simple which means they can be resolved by a few people (like a car manufacture, making a clean car or a government deciding to build more roads). In some instances, problems that leaders encounter in their organisations are classified as simple problems which are clear-cut, predictable and having a direct pathway to a resolution (Jonassen, 1997). In the words of Cardno (2012) “simple problems are straight forward problems and may lead themselves to solutions being guided by rational problem solving behaviour whereas complex problems have several facets and are often hard to define” (p.113). A further explanation by Owens (2004) is that, simple problems are relatively unambiguous, clear-cut and often quantifiable. They are readily “separable and the solution to the problems requires a logical sequence of acts that may be readily performed by one person and the boundaries of the whole problem are easy to discern” (p. 311). He called these types of problems “*discrete*, because they may be solved best by an expert individual” (p. 311).

Argyris and Schon (1996) distinguished wicked problems from tame problems, “tame problems” were familiar issues and were frequently recurring situations in which routine procedures and solutions can be applied. Wicked problems on the other hand as defined by Cuban (2001) are “ill-defined, ambiguous, complex, and interconnected situations packed with potential conflict” (p.10). Referring to educational leadership, Leithwood and Steinbach (1995) were of the opinion that problems confronting educational leaders were of two types. One is referred to as *high ground problems* and the other is *swampy problems*. “High ground problems are those of a more technical nature, a well-rehearsed procedure for solving is available whereas swampy problems are complex and ill-structured” (p.53).

It is very important for me to review the literature on complex and simple problems and how to tell one from the other because my research aim is to investigate the sort of problems that officers face in my home context and see if these are simple or complex problems according to what the literature says.

### *Dealing with complex problems*

There are many types of complex problems that pose challenges for leaders who set out to resolve such problems. Some problems are easy to address while others are complex and difficult to deal with. In relation to educational leadership, major challenges arise from situations where values and ethics are contested (Duignan & Collins, 2003). These problems cannot be resolved overnight, and for almost all of them, there is not one solution but many. With the ever present existence of complex problems in organisations, leaders are challenged to find ways and means to address the uncertainty and ambiguity of these problems (de, Haan & de, Heer 2015). Owens (2004) stated that, participative decision making produced better quality decisions than those reached by even high capable individuals that some problems are best solved by expert individuals, whereas other kinds of problems are best solved by groups. He further explained that, “high quality solutions to emergent problems are likely to come from a group of people who are in the best position to possess among them the knowledge

necessary to solve the problem and will be involved in implementing the decision” (p. 312). Robinson (1995) is of the opinion that when routine solutions do not produce satisfactory results it becomes important for an organisation to search for the sources of complex problems. According to Cardno (2012), the need to approach complex problems in productive ways require a fundamental understanding of the concept of organisational learning. The author explains that “organisational learning contributes to the positive and long lasting resolution of problems of practice and people can model this learning in everyday problem solving or they can block learning when the organisation has to solve complex problems” (p. 37).

In an organisational culture where collaborative decision-making is the norm there is likely to be a high level of trust in leaders and greater possibility for complex problems like leadership dilemmas to be managed through productive dialogue between the parties concerned. Cardno (2007) explains that complex problems trigger fear, nervousness, discomfort and lack of confidence in the leaders own ability to tackle these hot problems. The author described the single-loop learning as a change in behaviour to solve a problem, but existing organisational goals and policies remain unchallenged. Sun and Scott (2003) pointed out that, there will be only a modification of existing practices in single-loop learning. This strategy refers to work produced by Senge (1990) who explains that single-loop learning is adaptive learning, in which the learning process is cumulative and involves low risk-taking and a short time in problem solution. This triggers double loop learning. In double loop learning a “new learning loop is evident which requires leaders to re-examine the foundation values in which believes about effectiveness are grounded” (Cardno 2012, p. 46). Senge (2006) reminds us that this practice has a likelihood that some problems may recur because it examines a problem at a high-risk level.

## **Managing Performance Problems**

Performance management is a holistic process that forms part of the overall approach to managing people and learning by staff at various levels. This happens when staff are constantly reviewing and changing their goals and culture (Foskett & Lumby, 2003). According to Oldroyd's (2005) "performance management is about agreeing goals or targets for individuals, teams, organisations and even countries by using monitoring and reviewing processes, incentives and development activities to achieve and measure progress towards these targets" (p.192). The term performance management has several meanings including performance appraisal (Macky & Johnson, 2003). Rudman (2002) describes performance management as the effectiveness of focused behaviour that is focused on doing a job that is specific to organisational objectives. A further definition by Bacal (1999) described performance management as an ongoing communication process undertaken in partnership with an employee and his or her immediate supervisor that "involves establishing clear expectations and understanding" (p.35). According to Harvard Business School (2006), performance management is a method used to measure and improve the effectiveness of people in the workplace. According to Bacal (1999) "performance management also entails the employer to set organisational goals and how the employee's job performance contributes to the goals of the organisation" p.35).

Fitzgerald (2009) is of the view that, when people are involved in working with and through others this can be a complex and messy situation because the most difficult problems are generated by people. These people are students, parents or colleagues who are studying, being guardians and those working in an educational environment. To deal with such messy and complex problems leaders in an organisation must maintain a cordial relationship between the various stakeholders (Dick & Dalmau, 1999). Other educational leaders have a different experience. When problems are not dealt with effectively as they arise, they recur and become "crucial long-term problems that mitigate effectiveness" (Cardno, 2007, p.33).

Performance management requires five fundamental activities: “role definition; performance management; personal development plan; managing performance and performance review” (Armstrong (2000, p.17). He also mentioned that some of the common performance problems faced by leaders today are: issues of performance appraisals, professional development issues, and leadership development issues. Regarding performance appraisals, Armstrong (2000) explains that the terms performance management and performance appraisal are sometimes used synonymously but they are different. Performance management is a comprehensive continuous and flexible approach to the management of the organisation’s teams and individuals which involves maximum amount of dialogue between those concerned. According to Harvard Business School (2006) performance appraisal is a formal method of assessing how well an individual employee is doing with respect to assigned goals. Its ultimate purpose is to “communicate personal goals, motivate good performance, provide constructive feedback and set the stage for an effective feedback” (p. 78).

### *Challenges of performance management*

Performance management has many challenges. Forrester (2001) supports this notion stating that “performance management in education with development is a heavy burden” (p.7). For example, it increases bureaucracy, intensifies surveillance and monitoring of staff performance. As a result, it erodes working relationships between staff and management. Today’s leaders are under considerable pressure to perform effectively when dealing with performance issues (Cardno & Reynolds 2009). The demand for leaders to manage the performance of staff and solve problems in practice is a challenge not well addressed and finding quick solutions to such problems is not always the best answer.

One of the biggest performance management challenges for leaders is implementing an appraisal system. King (1989) asserts that performance appraisal makes managers worry about the responses they would get when they

provide feedback. They will have in mind whether the person will get angry and shout or will the person start to cry. Managers already imagine the outcome of the appraisal meeting and consider it to be an unattractive situation. Oldroyd (2005) is of the view that leaders are under intense pressure when providing feedback for appraisals. It becomes so stressful when it is not done skilfully and sensibly. One view of performance appraisal is the creation of a climate of fear in which any attempt to influence performance appraisals may be considered threatening because it is directly relating to promotion and pay increase. Cardno (2012) is of the opinion that people become so defensive when dealing with appraisal because they do not want others to know their weaknesses and to prevent unpleasantness. To avoid problems, people who are involved in appraisal process tend to avoid threat and conflict to secure a relationship. Middlewood and Cardno (2001) mentioned that appraisals challenge people in two different levels namely the organisational level, with the purpose of improving organisational performance, and individual level with the purpose of improving individual performance while maintaining a personal relationship and individual well-being. Piggot-Irvine and Cardno (2005) mentioned that ‘appraisal is a very threatening activity because it focuses on what we do and involves making judgement’ (p.66).

Another challenge for performance appraisal is that if appraisals are to be effective mechanisms for improving learning and teaching and achieving both accountability and development purposes, they require leadership attention to what the system demands, how it works in practice and whether it is meeting its stated purposes (Cardno & Piggot-Irvine, 1997). Educational leaders are challenged with the responsibility to establishing learning conditions that make such changes possible through professional development practices that engages all participants in the appraisal process. This process can build a productive relationship (Cardno, 2007). Research carried out by King (1989) found that managers face difficulties in appraising staff performance. One of the difficulties faced by managers is when they have to evaluate employees face to face. It

makes people uncomfortable to sit in the judgement of others and managers worry about the responses they would get. The author also mentioned that performance appraisals require managers to think, to analyse, to make difficult decisions and talking to low performers can be embarrassing (King, 1989). In schools where poor performance is a problem the issue of accountability and quality leadership arise. Many leaders are frustrated by their supervisors' reluctance to deal with poor performance because of the difficulties with legal and industrial issues. For example, a principal will not improve the performance of poor performing teachers, because in his view "the union mostly supports teachers, and as a result the principal is emotionally stressed besides dealing with the facts of the situation" (Duignan, 2006, p.35).

Performance appraisal does not serve a single purpose or activity. According to Wilson (2002) performance appraisal is very unlikely to be able to serve the dual purposes of it because it is naïve for appraisers to act as a judge while at the same time trying to be a helpful counsellor. She argued that such ideas create dilemmas. She concurred the need to determine the purpose of appraisal from the very beginning whether it is for development or accountability. The author further argues that political nature and bias are inherent in appraisal because it requires judgment and power control over the appraised.

Performance appraisal is a complex process which involves multiple purposes, processes and activities that are integrated in an organisation to benefit the individual as well as the organisation. A study by Duignan (2006) confirms that, performance appraisal gives rise to many complex problems with competing requirements in need of quality solutions. It focuses its attention on specifying the requirements for a quality solution to the problem rather than satisfying the requirements of a particular interest group. In the final analysis Cardno (2012) states that "performance appraisal at its best can be one of the most satisfying, supportive and beneficial experiences for those engaged in it, at its worse it can be a threatening and even destructive tool for control and compliance" (p.93).

## **Dilemmas and their Resolution**

### *Problems as dilemmas*

Complex problems are considered dilemmas. According to Robinson (1993) dilemmas are problems that are fraught with conflict and may be subject to multiple interpretations and solutions. In the broadest sense, dilemmas are ever present; “a dilemma arises when one is confronted with decision alternatives in which any choice sacrifice some valued objective in the interest of other objectives” (Hoy & Miskel 2005, p.421). Cardno and Reynolds (2009) assert that, there are different types of dilemmas, for example, organisational dilemmas, ethical dilemmas and leadership dilemmas. Ethical dilemmas are about value clashes that leaders are confronted with in situations where they may not be able to satisfy the conflicting needs of the parties (Cranston & Ehrich, 2009). The underpinning issue for decision makers under such a situation is making a choice between two or more solutions that could be equally constructed as right (Dempster & Berry, 2003).

Organisational dilemmas are ever present and these are intertwined in complex situations that leaders encounter constantly because it contains tensions between what serves the organisation best and what is best for their relationship with the individual involved (Cuban, 2001; Dimmock, 1999). In other words, decision-makers are torn between making decisions that benefit the organisation and that of an individual (Cardno, 2012). Faced with such a daunting task, leaders would adopt a stance that dilemmas “are irresolvable and consequently they avoid having to deal with them” (Cardno, 2007, p.33). According to Cardno (2007; 2012) a leadership dilemma exists when there is a tension between the needs of an organisation and the need to maintain a cordial relationship between the leader and the individual. These dilemmas are full of conflict and Fullan (2001) supports Cardno’s research by suggesting that avoidance is one of the most dangerous ways of dealing with conflict because it is a sure way of diminishing trust and no learning can take place.

### *Resolving Dilemmas*

One of the main challenges faced by leaders is managing dilemmas in organisations. Leaders must first recognise the problem as a leadership dilemma and confront it even though people are concerned that they might upset others. They must make a “conscious choice to deal with both the organisational and relational horns of the dilemma simultaneously” (Cardno, 2007, p.34). As discussed earlier, tensions between organisational goals and individual goals can manifest “as tensions between a leader’s concerns to do what is best for the organisation whilst at the same time maintaining a positive working relationship with a colleague” (Cardno, 2007, p.34). This is a common tension that leaders experience because if leaders attend to only one aspect of the problem they are sacrificing the other aspect of the dilemma and thus the dilemma is avoided. If people continue to avoid conflict they can wreak havoc within an organisation (Piggot-Irvine, 2003). Dilemmas handled in this way are not solved.

Murphy (2007) suggested that problems can be resolved but dilemmas cannot. Furthermore, Dimmock (1999) is of the opinion that individuals can solve a problem but they cannot solve a dilemma because choosing one element will leave the other elements unresolved. Cuban (2001) is of the view that dilemmas cannot be solved although he believes they can be managed. He conceptualises this management of dilemmas as a form of satisfying one but not the other “which requires compromise and helps one to cope with the debris of disappointment” (p.16). He claimed that dilemmas arise when “people compete for limited resources, hold conflicting values and wrestle with diverse expectations held by others” (p10). However, Cardno (2007, 2012) generated evidence to confirm that a dilemma can and must be solved so that it will not resurface. The solution to a dilemma requires leaders to learn and master its theory and practices so they could detect, acknowledge and articulate strategies to address and deal with such dilemmas within the organisations. She developed

a productive dilemma management approach that has the following components (Cardno, 2012) which can be used in a complex situation:

- recognising and articulating the dilemma
- confronting the dilemma (overcoming avoidance)
- using tools for productive dialogue/conversation
- creating a dilemma management culture (organisational learning).

Both Owens (2004) and Cardno (2012) comment on a lack of understanding of the complexity of the problem being the major reason why people do nothing about such problems. Unless people are given some specific training to help them to understand the problem at the start they cannot go on to further stages. According to Cardno (2012) knowing what we know about the most common responses to dilemmas, even the most experienced leaders will find ways to do little or nothing, or they could create even more tension around the dilemma by failing in an attempt to resolve it.

#### *Dealing with Dilemmas and Using Productive Dialogue*

When a dilemma becomes heightened or surfaced, leaders adapt these three approaches; avoidance, soft-sell or hard-sell (Cardno, 2007). These approaches link back to a defensive reasoning strategy because either the situation is avoided or controlled (Argyris, 1977). Avoiding the problem is the most common strategy according to Cardno (2012) whereby either the issue is suppressed totally or not dealt with at all in the hope that it will disappear, or only one of it is dealt with. Consequently, the dilemma will persist even though it may disappear for a while then reoccur. The second response is the soft-sell approach. This approach enables leaders to protect themselves and others and is concerned with “pussyfooting in order to protect others and one-self and to be indirect in communicating problems” (Cardno, 1998, p.2). A limitation to this approach is that organisational goals will remain unachievable but the relationships are maintained for the time being, and individuals are protected. The final approach is the hard-sell approach. This approach occurs when the soft-sell approach fails. An authoritarian stance is adopted, there is seldom a two-way communication of

facts and blame is laid elsewhere such as policy and management (Cardno, 1998). Subsequently, relationships will be eroded and organisational goals are met but only for a short time and there will be an unlikely commitment to change (Cardno, 1998). A key learning is required for leaders to become aware of their avoidance behaviour.

Leadership learning can occur “when a leader learns how to approach the management of a dilemma in a productive way” (Cardno, 2007, p.34). According to Cardno (2007; 2012) there is a curriculum for this that begins with understanding problems and why organisations and individuals cannot solve these problems. An organisation learns if it is able to detect and correct errors. For organisations to learn it is important for individuals and teams to identify the errors and correct them by using a range of skills so that learning can take place (Sun & Scott, 2003; Argyris, 1977). Argyris (1990) indicates that productive conversations which involve using the mental tool of the ladder of inference is an effective way in which dilemmas can be managed. Similarly, Senge et al. (2000) stated that, the use of the ladder of inference is important for a productive dialogue because when individuals openly reveal how they make an inference with one another, they will increase mutual trust and their relationships will be enhanced. These conversations recognise the importance of treating differing accounts of a problem as important in order for people to learn better ways to think and resolve problems. Productive conversations are learning conversations, also known as Open to Learning Conversations (Robinson et al., 2009). These sorts of conversations which allow “the person to be treated not as someone to be won over but as a contributor to the process of describing, explaining and evaluating” (Robinson 2006, p.42). These conversations recognise the importance of valuing the way differing people see a problem in order for people to learn better ways to resolve problems together.

Cardno (2012) puts forth the Triple I approach which helps people internalise the skills of productive conversations. The Triple I approach is a process consists of three initial stages: (1) informing, (2) illustrating and (3) inquiring with

attention paid to emotions during the process. The dilemma situations can then be explained by using the tensions between performance issues and relationship needs. Dealing with people problems such as dilemmas of course, takes time, professional development and practice.

The kind of professional development needed to teach people how to manage dilemmas is a particular form of leadership learning. Cardno and Fitzgerald (2005) explained that one method of leaders to change is the emphasis on intrapersonal and interpersonal and organisational behaviour using the case base behaviour. This is done by teaching the leaders specific set of skills to assist them in aligning their espousals more closely with their practices. “The integration of theory and practice implicit in developing skills that will enable leaders to manage dilemmas in their schools by reflecting in action is a core element” (p. 321).The authors further explained that dilemma management in a framework of organisational learning requires higher order problem solving and decision-making skills underpinned by familiarity with the theory based.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **Introduction**

This chapter begins with an overview of educational research, research epistemology, methodology, and research methods. The key aspects of qualitative research approaches are also discussed. The two data collection methods, the ‘semi-structured interview’ and the ‘open-ended questionnaire’ are discussed in relation to relevant literature. Key issues associated with appropriateness of choice and sampling are explained and strategies for data analysis are identified and discussed. Particular emphasis is given to how the aspects of validity, and triangulation were strengthened. Lastly, ethical issues are considered with the discussion focused on how these issues are addressed within the context of this research.

Educational research is essential for the improvement of education. According to Creswell (2012) educational research plays a significant role in the development of education for many reasons: it contributes new knowledge to the research knowledge, informs policy debates, and improves the current educational practice. Cohen, Manion, and Morrison (2011) define educational research as systematic and scholarly application of the principles of a science of behaviour to the problems of teaching and learning within education and to the clarification of issues having direct or indirect bearing on these concepts (p. 1). However, research in education is complex and challenging. Coleman and Briggs (2002) assert that research in education is more challenging and exciting as it draws on multi-disciplines. Freebody (2003) is of the view that, educational research is challenging and a multi-faceted field as the dynamics change in cultural values, political and economic features which contribute to the needs of educational research to meet social and economic expectations.

## **Epistemology**

According to Davidson and Tolich (2003), epistemology is described as the theory of knowledge that deals with how we know what we know. Creswell (2002) described epistemology as the acquisition of knowledge. The differences in beliefs about what actual reality is can affect the way one perceives and engages in situations (Cohen, Manion & Morrison, (2011). In my research, the knowledge I am seeking will reside in individuals' experiences, opinion and beliefs, so the approach I will use to acquire this knowledge is the interpretive approach. Cohen et al., (2011) explain that the central endeavor in the context of the interpretive paradigm is to understand the subjective world of human experience. These authors assert that, "to retain the integrity of the phenomena being investigated, efforts are made to get inside the person and to understand from within" (p.21). Because managing a dilemma involves interpersonal relationships, emotions, actions, and values that create meaning (both subjective and inter-subjective) this is a problem that needs to be studied using an interpretive approach (Cardno & Reynolds, 2009). Therefore, my epistemological position for this research is based on anti-positivist and interpretive assumptions. A positivist paradigm encompasses a view of knowledge as objective and tangible with strong links to the natural sciences. An anti-positivist and interpretive paradigm, on the other hand, is more personal and subjective and can be linked to the social sciences (Bryman, 2008; Cohen, et. al., 2007; Davidson & Tolich, 2003). In my research I have adopted an interpretive paradigm because it is subjective and linked to social sciences. Qualitative data are needed to describe and understand the problem.

## **Methodology**

Research methodology is referred to as the process or plan of action that a researcher uses to link methods to outcomes when studying theoretical arguments of the research (Cohen, Manion, & Morrison, 2011; Coleman & Briggs, 2002). Leedy (1997) describes methodology as a process through which the researcher attempts to "achieve systematically and with the support of data

the answer to a question, the resolution of a problem, or a greater understanding of a phenomenon” (p. 5). Similarly, Burns (1994) defines research methodology as a systematic approach to problem solving that involves ongoing collection, analysis and interpretation of data while Davidson and Tolich (1999) identify that when we talk about methodology, what we are really talking about is a certain order of philosophical commitment. Creswell (2002) describes research methodology as the processes of studying a certain research topic.

The methodology to be applied in my study is qualitative research and data collected will be analysed qualitatively, because the knowledge that I am seeking is subjective. Subjective knowledge originates from individuals’ construction of knowledge by attaching meanings to phenomena based on their interpretations (Cohen et al., 2007). Creswell (2002) explains that “individuals seek understanding of the world in which they live and work. They develop subjective meanings of their experiences – meanings directed towards certain objects or things” (p. 7). Qualitative research involves researchers collecting data from people in their own specific situations that can be analysed qualitatively and attempting to understand or interpret the meanings of their experiences as understood by or from the point of view of the participants (Creswell, 2002; Lichtman, 2013). The purpose of qualitative research is to examine the whole natural setting to get the ideas and feelings of those being interviewed or observed (Lichtman, 2013). He mentioned that analysing qualitative data is entirely a different matter, because the data is not numerical. Most qualitative approaches provide very general information about how to do this. It is usually a solo activity, you collect data on your own, analyse on your own, write it on your own, and are responsible for what you say. But research benefits from interacting with others, trying your ideas out on others and learning about the reaction of others to your ideas (Keeves, 1997).

## **Research Methods**

Research methods can be defined as the tools, instruments, techniques, procedures or approaches adopted by the researcher to collect data for interpretation, explanation and prediction (Cohen et al., 2011; Coleman & Briggs, 2002; Creswell, 2002). I used two research methods in this study, semi-structured interviews and open-ended questionnaires. Thus multi-method triangulation was used to increase the validity of data. This means the information from questionnaires would be complementary to the responses from semi-structured interviews. Information from both research instruments were combined and should, therefore strengthen the validity of my study. Cohen et al. (2007) explain multi-method triangulation is the use of many research methods in order to strengthen the validity of data.

### **Method 1: Semi-structured Interviews**

#### *Sample selection*

My research mainly focused on the nature of leadership dilemmas, challenging the role of senior managers and officers of TVET in PNG. The information to be obtained was within the education department of PNG, in which TVET is a functional division. The interviewees were all senior managers located within the same building, all of whom were invited to participate by email. I selected my sample of seven participants based on the order in which positive responses were received. The others were placed on a reserved list. All interviews were conducted in English. As Cohen, Manion and Morrison (2011) noted, the quality of research is dependent on both its use of an appropriate tool and the “suitability of the sampling strategy that has been adopted” (p. 92).

According to Fontana and Frey (2005), an interview is a way of surveying people about their opinion and is “one of the most common and powerful ways in which we try to understand our fellow humans” (p. 698). Interviewing includes variety of forms and uses. The most common form involves individual, face-to-face verbal exchange, but it can also be in group exchange or telephone exchange (Fontana

& Frey, 2005). Interviewing is based in conversation (Gubrium, & Holstein 2001) with the emphasis on researchers asking questions and listening, and respondents answering. It is similar to standardised survey interviewing in this respect, but unlike the survey interview, the epistemology of the qualitative interview tends to be more constructionist than positivist. Interview participants are more likely to be viewed as meaning makers, not passive conduits for retrieving information from an existing vessel of answers (Gubrium & Holstein 1995). Since my research is focused on getting opinions on sustainability, interviews were the main method of data collection then questionnaires. Cohen, Manion and Morrison (2007) categorise interviews into four types being informal conversational interview, interview guide approach, standardised open-ended interviews and closed quantitative interviews. For my study I used semi-structured interviews (Fontana & Frey, 2005; Hinds, 2000). Semi-structured interviewing is the mixture of structured and unstructured interviews with a schedule that is pre-prepared but also has flexibility. Lichtman (2013) stated that semi-structured interviews are commonly used in qualitative researches when detailed data is being sought from interviewees with specific knowledge or experience and the subject matter could be of a sensitive nature.

## **Method 2: Open-ended Questionnaire**

### *Sample selection*

There are 18 senior level officers working in the TVET head office in PNG; These 18 senior officers were asked to respond to the questionnaires which I expected hopefully a 50% return. According to Cohen et al. (2000) and Bryman (2012), the selection of samples for the open-ended questionnaire is based on non-probability sample strategies as the researcher targets a particular group of participants in a small-scale research. Many researchers state that the qualitative researchers mostly employ the non-probability sampling strategy; in particular, the respondents for the questionnaires are selected through purposive sampling (Bryman, 2012; Cohen et al., 2011; Forgelman & Comber, 2007). Cohen et al. (2011) and Forgelman and Comber (2007) underline that the purposive sampling

is commonly employed to select participants for a specific purpose or a specific case.

I will use a questionnaire as my second method of data collection. Cohen et al., 2011, & Hinds, 2000) stated that it is extensively a helpful instrument for collecting data, being able to be administered by participants, providing structure and being reasonably straight forward to analyse. Hinds (2000) argues that a questionnaire is “concerned with gathering data from, usually a large number of people (or respondents), and the data gathered usually focuses on the views, ideas and attitudes” (p. 41). According to Thomas (1998), a questionnaire is a series of written questions to be answered by selected groups of individuals about their beliefs and attitudes towards the phenomenon. Questionnaires are broadly used to collect data with multiple methods such as qualitative, quantitative and mixed methods (Johnson & Christensen, 2008). In addition to interviews, questionnaires were a useful tool for data collection in my research. According to Cohen, Manion and Morrison (2007) there are three types of questionnaires; structured, semi-structured and unstructured” (p. 247. Cohen, Manion and Morrison (2007) says that in “qualitative research, the less structured, word based and open-ended questionnaires may be more appropriate as they can capture the specificity of a particular situation” (p. 247-248). For this research, I used open ended, semi-structured questionnaires. Questionnaires allow the researcher to collect large amounts of data in a relatively short period compared to interviewing the same number of participants (Mills, 2003).

I selected open-ended questions as my second option because; a self-completed questionnaire has its advantages in terms of less cost, quickness of administering and conveniences for respondents. Bryman (2008) confirms that “the questionnaires are more convenient for respondents because they can complete a questionnaire when they want and at the speed that they want to go” (p. 218). Since organisations are extremely busy, the open-ended questionnaires are therefore more convenient to administer and cause less disruption to their daily activities (Bell, 2007; Bryman, 2008). Questionnaires are typically used for

qualitative research through gaining insights into participants' feeling and experience (Bryman, 2012; Johnson & Christensen, 2008). As the aims of my research were associated with the nature of complex problems experienced by senior managers of TVET in PNG, analyzing leadership dilemmas and investigating challenges in solving these dilemmas, questionnaires are considered as appropriate tools for collecting data for this study. Bryman (2008) and Cohen et al. (2007) suggest that the mix of closed and open-ended questions in the questionnaire has advantages as the respondents can answer in their own words; the questions do not suggest answers; unusual responses can be delivered; and, therefore new knowledge and understanding of issues can be tapped into and they are useful in uncovering new issues.

Constructing valid questionnaires require skills and time. In a broad sense, a questionnaire should be brief, attractive and easy to respond to. Gay, Mills and Airasian (2009) assert that a well-designed questionnaire can encourage respondents to fully engage in the data collection. The questionnaire should connect to the research objectives and the questions should cover the issues in order to collect and analyse the data (Sekaran & Bougie, 2010). Bogdan and Biklen (2003) stated that "questions developed to guide the research study need to depend on the context with process and meaning rather than cause and effects" (p. 150). The instructions to participate in questionnaires can encourage respondents to answer all items within the questionnaires. The questionnaire should have plenty of space for questions and answers; and the purpose of each section should be clearly explained (Bell, 2007; Cohen et al., 2007). In addition, the questions should be orderly and clearly categorised into sections as it is easy when collected data is analysed. Bell and Woolner (2012) explained that the researcher needs to ensure that the wordings of questions are clear and should not be complicated and sensitive with an easy layout for both respondents and the researcher. Cohen et al. (2000) also note that "the order of the questionnaire is important, for early questions may set the mind-set of respondents to the latter questions" (p.257). Furthermore, it is necessary to have a pilot test of the

questionnaire in order to make sure that all questions, formats and wordings expose the real research focus (Bell & Woolner, 2012; Cohen et al., 2007). In my research the questionnaire was designed with clear instructions and categorised into sections based on the research questions.

### **Data Analysis**

After data collection and transcription, the next step of the research is data analysis. (Lofland et al. 2006) define data analysis as the process that transforms raw data into outcomes or findings. Emerson (2001) describes data analysis as the interpretation of the data acquired from research subjects into meaningful explanations about the studied phenomenon. In addition, Bryman (2008) reveals that data analysis occurs in tandem with data collection so that the processes is repeated and dynamic; whereas, Miles and Huberman (1994) pointed out that data analysis is described pragmatically as containing three interrelated process concerned with data reduction, data display and conclusion drawing and verification. Neuman (2003) further considers data analysis as “examining, sorting, categorizing, evaluating, comparing, synthesizing, and contemplating the coded data as well as reviewing the raw and recorded data” (p.448). Data analysis of qualitative research involves multiple strategies and requires a systematic and explicit approach. According to Lofland et al. (2006), data analysis involves a “transformative processes in which raw data are turned into findings or results” (p. 36). They go on to determine four defining characteristics of qualitative data analysis. The process is primarily inductive rather than deductive, the researcher is the central key element, the process is highly interactive between research and data, and it is time consuming.

My strategies for the analysis of interview data are coding and memoing. According to Lofland et al. (2006), the essential activities of qualitative data analysis are coding and memoing. The authors claimed that coding is the process of arranging data into different groups and then attaching meanings to those groups. Gibbs (2007) describes the similar activity as thematic coding. When

organizing codes into concepts, it is the researchers' task to decide the most informative or logical manner of sorting by determining from the data what meaning you think can be found (Lichtman, 2013). Gibbs (2007) explains that coding has two forms: initial coding and focused coding. Initial coding is a summary of data at sentence level while focused coding is a generalisation and combination of multiple initial coding. Lichtman (2013) argues that coding is a challenging task during data analysis when moving from coding to categorizing to concepts. In coding my interview data, I had to examine the repetition or frequency of words, key words, connections between terms and the purposes of messages. I also had to practice memoing during the coding activity. Lofland et al. (2006) explain that memoing is about note taking during coding. Researchers should write their ideas and correlations among different codes (Lichtman, 2013).

### **Validity**

The strength of a piece of research can be dependent upon the researcher being able to demonstrate its rigor. The rigor is associated with validity and reliability. Validity can be best thought of as the measure of whether “a particular instrument measures what it claims to measure” (Cohen et al., 2007, p.133). According to Davidson and Tolich (2003), validity is considered as “the extent to which a question or variable accurately reflects the concept the researcher is actually looking for” (p. 31). Validity is also seen as a complex issue and requires the researcher to ask whether the questions employed truly measure the concept being researched (Bryman, 2008; Leedy, 1997). Validity is a key to effective research. In order to ensure the validity of both data collection and data analysis, validity can be addressed through authenticity, credibility, trustworthiness, and integrity even though the use of data triangulation can strengthen the credibility and validity of the research (Bryman, 2008; Lincoln & Guba, 2005).

In my qualitative research, it was the perceptions of senior managers of TVET PNG successfully identifying the nature of complex problems, the challenges they face to solve these complex problems as leadership dilemmas that were

investigated through interviews and open-ended questionnaires. Authenticity and credibility issues in this study could be addressed through the recording of the original data and the confidential storage of accurate typescripts (Cohen et al., 2011; Lincoln & Guba, 2005). All my interviews were recorded (audio taped) and transcribed in order to provide participants with opportunity to check for accuracy, and their feedback was requested so that the degree of consistency could be maintained. Transcriptions were completed by the interviewer and this facilitated consistency of interpretation and an understanding of voice inflections. In short respondent validation was sought from all participants.

In addition, another possible approach frequently used to strengthen the credibility and validity of a research was used. This was triangulation – the comparison of sources of evidence in order to determine the accuracy of information or phenomena. It is basically adopted for improving the validity of the research by means of cross-checking the data (Bush, 2012). Triangulation is essential for ensuring the validity of qualitative research (Bryman, 2008; Cardno, 2012; Cohen et al. 2011). It is a sensible and proper approach to enhance the credibility of a study, especially one which adopts multiple methods or sources of information to generate data as a validation procedure (Bryman, 2008; Cohen et al., 2011). In my study I achieved the triangulation of the interview and the questionnaire data because the questions were designed to be the same in both of these tools. In the following presentation of findings, the two sets of data have been merged. I also was able to achieve triangulation of two perspectives: the senior managers and the senior officers to see if they had the same experiences.

### **Ethical Issues**

According to Bryman (2012), ethical considerations are necessary for any type of research that involves people. Wilkinson (2001) says that research may have positive or negative impact on researchers, subjects and society so the main focus of ethics in research is how best to treat others. Therefore, many problems can happen to individuals and the organisation involved in this research. Fontana

and Frey (2005) pointed out that extreme care must be taken to protect humans from physical and mental harm during the research process. Israel and Hay (2006) explain that research ethics are conducted to achieve four main purposes. First, ethical behavior builds trust between researchers and participants. Second, research ethics ensure the credibility of research findings. Third, research ethics conform to organisational and professional standards. Finally, research ethics help researchers prepare for complex and challenging problems before commencing them.

The benefits of this research may include an understanding of the nature of complex problems and how best senior leaders of TVET PNG may handle them. However, the negative impact on the organisation might include the reputation of the organisation, the disclosure of confidential data, the loss of employees' working time, job dissatisfaction and other issues. Research subjects might receive inadequate details about the research or they might feel uncomfortable to provide data about job performance which might affect their job security. Therefore, many problems can happen to individuals and the organisation involved in this research.

Before approaching potential subjects, the researchers need to follow ethics guidelines developed by ethics committees (Wilkinson, 2001). These guidelines are established to protect the safety of research subjects and the researchers (Wilkinson, 2001). He points out that an ethics committee allows only the studies that are safe to take place and recommends the use of informed consent. This means the researchers need to ask permission from potential participants before commencing the researches. He further asserted that, informed consent means the research subjects should be voluntary to participate in the study. The term 'voluntary' in this context means research subjects are free from coercion and force (Wilkinson, 2001). In my research I met the standards for informed consent by providing Information Sheets for the participants. The information sheets for

interviews are provided in APPENDIX C. All interview participants also completed a Consent Form (see APPENDIX D).

Endacott (2004) explains that legal and ethical issues should be at the forefront of any researcher's mind when planning and conducting a study and disseminating findings. They are three ethical principles of beneficence, respect and justice underpin the conduct of research developed by ethics committee (Wilkinson, 2001).

*Informed consent in full knowledge of the risks and benefits of the study:* All participants should be given an information sheet outlining the nature of the data collection and the purpose for which the data will be used. Any risks, steps taken to reduce risk, and benefits for the individual participant should be made explicit on the participant information sheet. Consent should be obtained from each participant (Wilkinson, 2001).

*Autonomy:* It must be made clear to participants that they have the right to refuse or to withdraw from the project at any time without it affecting their relative's care (or, where the participants are members of staff, their professional development). This safeguards against use of information which may have been accidentally disclosed (Wilkinson, 2001).

*Confidentiality and anonymity:* All project data must remain confidential to the research team and no participant should be identifiable in the final report or any subsequent publications. Israel and Hay (2006) explain that confidentiality helps maintain trust between researchers and research subjects. In addition, it ensures the privacy of participants, and it also binds the researchers to respect the autonomy of participants. Israel and Hay (2006) propose strategies to protect the confidentiality of research subjects. They recommend the omission or

removal of participant information such as names and geographical clues at the earliest possible phase of the research. Israel and Hay (2006) stress that researchers have to communicate and discuss confidentiality with potential participants before conducting researches on them.

## CHAPTER FOUR

### FINDINGS

#### Introduction

This chapter presents the findings gathered from semi-structured interviews and questionnaires. As the interview and questionnaire questions were similar I have decided to put the findings together for both methods when compiling my report. I have presented the findings in sequence of the questions posed.

#### The Participants

My study was conducted at the Technical Vocational Education and Training (TVET) Division of the Department of Education in Papua New Guinea. Six senior managers agreed to participate in the interviews. Seven senior officers responded out of the nine who were sent questionnaires to complete.

**Table 4.1: Data identification codes for interviews and questionnaires**

Interviews		Questionnaires	
<i>Senior Manager</i>	<i>Coding used</i>	<i>Senior Officer</i>	<i>Coding Used</i>
Senior manager 1	SM1	Senior officer 1	SO1
Senior manager 2	SM2	Senior officer2	SO2
Senior manager 3	SM3	Senior officer3	SO3
Senior manager 4	SM4	Senior officer4	SO4
Senior manager 5	SM5	Senior officer5	SO5
Senior manager 6	SM6	Senior officer6	SO6
		Senior officer7	SO7

## **Question 1: What is your main role and responsibility?**

### *Responses from senior managers*

The participants interviewed were senior managers involved in administration, policy and management at the Technical Vocational Education and Training (TVET) division of the Department of Education in PNG. Specifically, three officers were of the view that their main responsibilities were to take the lead in the development, management, coordination and implementation of department programs and projects. Furthermore, these officers monitor subordinates and facilitate training for teachers in the provinces and conduct inspections. Accordingly, SM1:

My role here is an assistant secretary. My responsibilities were to oversee, manage and coordinate the functions of inspections. It's a leadership role and I am more into controlling, directing and organising.

Two senior managers were directly responsible for college operations. Their jobs were to recruit teachers, budget and monitor funding for the colleges and liaise with Teaching Service Commission (TSC). As mentioned by SM4:

I am responsible for staff in the technical colleges and deal directly with the principal for college operations.

A senior manager stated that his role and responsibility involved training, budgeting, maintaining quality of training to meet the standards set out by the Department of Education. Another responsibility was to secure and provide training of staff and teachers to better perform their duties. This includes the identification of training needs and the designing of training programs for staff and teachers as reiterated by SM2:

I am a senior manager of technical and business colleges and my main responsibility is to manage the quality of training according to the requirements of the Department of Education.

Overall, the senior managers confirmed that their role involved mainly leadership responsibilities and they relied on the college level leaders (the

principals) to manage staff directly. These senior managers also relied on senior officers to manage the daily operations of specific sections.

### *Responses from senior officers*

These responses from questionnaires involved sectional heads who were classified as senior officers. These officers worked closely with their senior managers in leading staff and managing the daily operations of each section within the TVET division. Their main responsibilities were supervision of TVET operations, and the management of staff who work under them. As explained by SO6:

I make sure that my staff attend to daily activities and execute them on time for further reporting.

Four senior officers who were directly responsible for the management of colleges and the sustainability of the quality of training in these institutions responded that they report directly to their senior managers as SO5 said:

My role is to make sure that quality training is provided in the colleges and teaching staff are performing their assign duties.

In summary, the main roles and responsibilities that emerged from the responses were: The senior managers were more involved in leading, managing and coordination of staff in head office and colleges. They were also responsible for budgets. The senior officers were being accountable for staff and college operations. They were also responsible for monitoring the quality of training of staff and teachers.

## **Question 2: What is your understanding of complex problems?**

### *Responses from senior managers.*

In response to the above question, senior managers were adamant that complex problems exist in their work place. From the responses received three officers

mentioned that complex problems were issues that were difficult to address. Usually, these problems were left to be discussed in a group meeting. For example, SM3 said:

Complex problems are those problems we find it difficult to resolve within our means. In the Department of Education, we face leadership problems. Some of these problems are very difficult and we either leave them alone or pass the buck to others to solve.

One of the officers said, when he is performing his duties he expected all complex issues to be addressed. He tried to address all problems including those that are considered complex, however only those issues that were beyond his powers were either deferred for further deliberation or referred to the top management for their decision. This is evidence by what SM4 had said:

Every day in our place of work we solve problems that relate to our jobs. Some of these problems were beyond our control and it becomes so complex that we cannot be able to handle it. We leave the particular problem unsolved or let someone else handle it.

The other two officers said that they were often caught in between when trying to deal with problems called direct and indirect problems. For example, direct problems are issues that can be addressed instantly whereas indirect problems are matters that are complex. As a result, they either avoid this type of problem or leave the problem to be addressed later when time becomes available. They call them their challenging problems on the job as mentioned by SM6:

I understand that complex problems we face are indirect problems we come across. Those problems that we can be able to solve are direct problems but indirect problems we find it difficult to solve and they become our complex problems.

These findings show that senior managers do encounter complex problems and are familiar with the idea that such problems are often avoided or they delay efforts to solve them.

### *Responses from senior officers*

Out of the senior officers who responded to the questionnaires, four of them mentioned that problems that have more than two solutions were complex issues. For example, decisions made will favour one and exclude the other. These complex problems have been faced by officers every day at their place of work. SO5 said:

We face complex problems in our work place at times and sometimes we find it hard to solve. We either leave the problem alone or call a meeting to address the particular issue.

In addition, two other senior officers were of the opinion, that although all problems were difficult some are easy to handle while others are much more complex and difficult to handle. As such they either avoid the problem or discuss them with their team members. For example, SO7 said:

Some problems were easy to handle and some were very difficult to handle. Those problems that were hard to handle became so complex that it becomes a challenge.

Furthermore, SO2 said:

When people face me and talk to me regarding their problems I respond at the same time and sometimes I feel relief when I see them and try my best to attempt to the problem. But the problem become complex when other people were used or forms of media were used to address complex problems.

According to the findings by senior officers they also admitted that they found some problems were more complex and they delayed solving them.

In summary, senior managers and senior officers understanding of what constitutes complex problems include problems that were: difficult to solve, not easy to handle and had multiple solutions. They also mention that complex problems are those problems that caused avoidance or delay.

**Question 3: What are some of the challenging problems and issues that you have to deal with?**

There were many challenging problems and issues faced by senior managers and officers. It was the personnel management issues that were more difficult to deal with as compared to the other normal day to day routine problems.

*Responses from senior managers*

Senior managers responded differently to how they deal with challenging problems. One of the real challenges was the assessment of staff performance as a number of staff did not meet their professional levels of expectation. For example, some staff members performed poorly, others did not come to work on time while many had attitude problems. It was further mentioned that some officers' behaviour were even worse. They become more defensive and argumentative at times. This situation made it difficult for senior managers to make timely decisions and as a result reporting at the divisional level to higher authorities was delayed. Under this scenario SM4 said:

The hottest challenging problem is dealing with my staff. Sometimes some of my staff members do not come to work and as a result we don't get much done for the day. This becomes a problem to me because I have to report to the authorities above me.

One particular issue raised was pay increment. Some officers had a very poor record of work performance but when it comes to pay increment they also want their pays to be increased with those performing ones. When this is not done the officers become aggressive and senior managers were under intense pressure trying to address the problem. When the problem becomes so difficult it is referred to the top management team for further discussion as stated by SM2:

Some of my officer's work performances were very poor and as a result they don't deserve pay increment. Even their performance is poor they still insisted for pay increment with other performing officers. These types of

problems were so difficult that they were referred to the top management team.

The participants also mentioned that funding is another difficult issue faced by the senior officers. Two senior officers mentioned that when the planned activities were not funded implementation becomes difficult. This posed a greater challenge as criticisms were often labelled at senior officers without due consideration of the way budgets have been negotiated and allocated. As a result, these officers felt that they have been ridiculed by their colleagues and the public for not performing their duties. According to SM3:

Funding is one of the challenging issues that I have dealt with. I have officers submitting their annual work plans but when I request for funding at the department level for funding they give me less or nothing. I am then challenged by my officers of not performing my duties.

These findings show that some of the challenging issues that senior managers had to deal with were staff performance and pay increment for officers. The findings also indicated that senior officers were challenged by budgets at the departmental level.

#### *Responses from senior officers*

One of the challenges was the appraising of staff performances. Three senior officers mentioned that they were challenged by nepotism (*wantok system*). This is a form of nepotism practiced in Melanesia. The *wantok system* is defined as one people of one language or a cultural group favouring each other. When senior managers appraising officers of the same language and cultural groups it becomes so difficult to make decisions and most likely nepotism takes place. As a result, staff appraisal feedback is meaningless. By keeping non performing staff in the department their work output is low which in turn affected the overall performance of the Department of Education. As explained by SO6:

I am challenged when appraising staff for their performance. Some officers are my *wantoks* (same language) and sometimes I am forced to make biased decisions.

Two senior officers were of the opinion that they were challenged when it comes to the delegation of duties and responsibilities to officers. Everyone wants decisions to be made in their favour and when it is not done, this had placed the senior officers in a difficult position. As SO2 said:

When it comes to delegating of duties and responsibilities, we are challenged to make tougher decisions at the administrative level.

Another two senior officers said they were challenged when appointing teachers to teaching positions at the technical and business colleges. There were only a few teaching positions and only the best officers were placed on these positions. Because some of the teachers were their close friends they have been challenged to make decisions which were biased. As SO5 mentioned that:

I am challenged when making appointments for teachers to teaching positions. Some of the teachers are my close friends and knowing that they cannot perform I still appoint them because of our strong relationship.

These findings show that senior officers were challenged when appraising staff. Nepotism (*wantok system*) was seen as one of the challenging problems. The other challenging problems as discussed was delegating of duties and responsibilities.

In summary, participants have been asked to identify the challenges and issues confronting senior managers and senior officers. Most of these challenges relate to staff performance and financing of departmental programs and projects. The staff performance problems include *wantok system*.

**Question 4: Can you identify one specific problem that matches this description of a leadership dilemma?**

The researcher provided participants with the following definition:

“A leadership dilemma is a particular complex problem because it contains tensions between what serves the organisation best and what is best for your relationship with the individual involved. In other words, you are torn between on the one hand, meeting the needs of the organisation and, on the other hand, meeting the needs of the individual” (Cardno, 2012, p.61).

Participants were asked if they could relate to the definition of a leadership dilemma and provide examples. In all instances the examples provided involved the leader’s interactions with other people and in most cases these interactions had some connections with the performance of a staff member.

*Responses from senior managers*

Three of the senior managers had given examples of their experiences of dilemmas relating to staff performances. Some of their staff have attitude problems and their performance in the work place were below the required standard. They were told a couple of times to improve on their performance but nothing positive happened. One situation relating to a leadership dilemma was the selection of staff for vacant positions at A2 Technical college. At that time the senior manager was the principal of the college. Because of his close relationship with the officer concerned, he was faced with a dilemma. The principal had to make a choice whether to select his colleague or select someone on merit. As SM6 explained:

A specific case at A2 Technical College was that the particular person that I had to interview knew me very well. At the back of my mind I was the principal of the college that time and I had to recruit the best person for the job. I also had a very close relationship with that person as well. It was a very difficult situation for me during that time as a principal to make a

decision. If I had recruited that person who may not be selected on merits it then affects my job as a principal of the college.

One of the senior managers gives an example of a situation where he had faced a leadership dilemma when recommending officers for promotion. Two officers were due for promotion to move up the rank. One of these officers was his close social friend but his performance was poor all year. Because he had a close relationship with him he is in a dilemma either to promote him or not to. This was reflected by SO4:

I was in a dilemma situation in promoting an officer who performs poorly. This particular officer performs poorly but because he had a close relationship with me I find it difficult to make a decision either to promote him or not.

These findings show that senior managers have explained similar situations relating to the definition of a leadership dilemma. Their major concerns were staff performances, staff with attitude problems performing below the required standards. They also faced dilemma situations in making appointments of teachers and dealing with promotion of staff members.

#### *Responses from senior officers*

Four of the senior officers had a similar idea by giving examples on staff performance appraisals when providing feedback. They said leadership dilemmas arise when they try to provide feedback to officer's appraisals. It is a challenging and a difficult situation because providing feedback may affect their relationship with the officer's concerned or their work outputs with the organisation. As SM6 said:

In appraising officers, I found it difficult when providing feedback. I really want to do my job but sometimes when the particular officer had a close relationship with me it makes my job difficult to make decisions. This forces me to be bias at times.

Another senior officer had given an example of a leadership dilemma that he had experienced when he selected officers for further training. SO2 said:

One of the officers in my section does not perform up to the standard, however he is a close friend of mine as well and he had applied to do further training. I was in a difficult situation either to select him to go for training or select someone else who is of high performing.

These findings show that senior officers were faced with leadership dilemmas when providing feedback for appraisals and involving in selecting officers for further training.

In summary, the participants provided examples that resonated with the way leadership dilemmas were described (Cardno, 2012) none of the respondents were able to articulate the dilemma to isolate the tension between organisational needs on the one hand and the need to maintain positive relationships on the other hand. The nature of the leadership dilemmas described in these prompted examples relating to performance of staff, providing feedback in appraisals, making appointments for teachers and promotion of staff members. These were the problem situations matching the description of a dilemma as explained by senior managers and senior officers.

**Question 5: In relation to the problem you have described, can you say something about its nature – such as: has this been a long term problem? Has it recurred?**

*Responses from senior managers*

The participants were asked to describe the nature of the complex problems they have faced. Some responded that these problems were long term and they have lived with them. Others mentioned that they made an attempt to resolve these problems but the problems continued to reoccur. Two senior managers responded that these were challenging problems to address so they avoided them. The other

two senior managers stated that the problems they faced at the work place were long term; even though management have changed they were still faced with the same problems. As SO1 said:

This has been a long time problem and it reoccurs. Some senior officers do not want to say out their colleague's weakness in the meetings because they don't want to frustrate their relationship with their job colleague. This has been seen as an ongoing problem and it will be really challenging to solve. It becomes a culture here where we have to fall to our relationship with the colleague or get the job done.

Similarly, one senior manager responded that once these problems were not properly addressed they seem to reoccur. He said every problem needs to be resolved even if they were difficult. This officer said that the end result is to come up with two choices; either avoid the problem or deferred it to be resolved later. According to SM3:

The nature of some problems are very difficult to resolve in decision making. When I am in such situations, I either avoid the particular problem or leave the problem to be solved some other time.

Another senior manager responded that these problems were really challenging problems to address. He said when the same problem continued to reoccur they were challenged as leaders to address them. As a result, the unresolved issues were again raised at the senior managers meeting. As SM1 said:

These were really challenging problems. Sometimes I leave the problem alone, other times I took it to the meetings to be discussed by the group.

The senior managers admitted that the nature of complex problems were long term problems and they continue to reoccur. As a result, the problems were deferred, avoided or discussed in meetings with others.

### *Responses from senior officers*

Three of the senior officers mentioned that the problems they have faced were all long term problems in their work place. Although top management have changed a number of times the problems still remain unchanged. At times these problems were beyond their control. For example, lack of funds to finance the operations of technical and business colleges programs have an impact on the outcomes. These unresolved issues were compounded by shortage of financial resources in the following year. As SO5 said:

These problems have been long term problems; sometimes the situation is beyond our control such as financial situations facing the TVET Division of the Department of Education.

Two senior officers outlined that the nature of the problems that they have faced at their work place actually reoccurred. They said when the particular problem has reoccurred they tried their best to avoid it or discussed it with colleagues at the senior management meetings. When it is not resolved at the senior management level it is likely that the problem would be avoided. As SO6 mentioned:

Because the problems recurred we find it very difficult to resolve and at times we leave the problem alone.

The other officers said that the nature of the problems they face at their work places were challenging at times. In such situations officers were faced with a dilemma. As a result, decisions made were either wrong or bias. This was reflected by SO1:

Not all problems are challenging at their place of work.

These findings show that the nature of complex problems experienced by senior officers were: long term problems and even management changes problems still existed and reoccurred. The problems were either avoided or biased.

In summary, senior managers and senior officers were able to identify that challenging problems for them were long term problems and those problems

were ongoing. When attempting to solve them they continue to reoccur. These problems are either avoided or deferred.

**Question 6: Did you encounter problems that might be considered as dilemmas?**

*Responses from senior managers*

In responding to this question few of the senior managers understood the general concept of a dilemma because it was explained by the researcher. Some officers were uncertain about the meaning of the word dilemma while others never heard of this word before. Two senior managers explained that every problem that they have faced at the work place were dilemmas. They further stated that every decision they make involved critical thinking before coming up with possible solutions. One other senior manager mentioned that only those problems that were very difficult to address were dilemmas. They explained that some problems have clear-cut answers while others with more than two solutions which then becomes dilemmas to them. According to SM1:

Every problem becomes a dilemma when you do not address them properly. We are human beings and when you do not address situations they began to accumulate and get out of hand.

Two senior officers stated that when dealing with people issues they cannot avoid dilemmas. Their main purpose of being on the job was to address all those problems even if they were regarded as difficult problems. Their understanding of dilemmas was that only those problems that were too difficult to address were dilemma as SM3 stated:

In decision making I have never come across dilemmas. Only those problems that were difficult to address were considered as dilemmas.

On the contrary, one senior officer confidently mentioned that he had never come across dilemmas and he has yet to experience one as SO2 explained:

They may be dilemmas but I have yet to experience them.

These findings show that some senior managers have understood the general concept of a dilemma, some never heard of it before while others were uncertain of the meaning. Some others say that only those problems that were difficult to resolve were considered dilemmas.

#### *Responses from senior officers*

The majority of the senior officers had similar views as senior managers when considering problems at the place of work were dilemmas. Five senior officers were of the opinion that problems they have encountered at the work place were dilemmas. One of these dilemmas was the issue of performance appraisals because when conducting appraisals senior officers were faced with conflict of interest situations. This was because on the one hand the officers concern were his social friends and on the other hand he has an obligation to effectively manage for better outcomes as SO4 said:

I am faced up with dilemmas when providing feedback for my officer's performance appraisals. I am in a difficult situation to make decisions either to benefit the organisation or to benefit my work colleague. Sometimes I make decisions affecting the other and benefit the other.

Two senior officers outlined that only some problems were considered as dilemmas. Not all problems were dilemmas, because some problems have straight answers whereas those that were difficult were considered as dilemmas as SO7 explained:

Not all the problems in TVET were dilemmas. There were other administrative problems needs to be solved straight away but when it is prolonged it becomes a dilemma. When leaders become ignorant and they do not see to the problem and come up with strategies to address them then this becomes a dilemma.

In summary, responses received from both senior managers and senior officers differed. Some indicated all problems as dilemmas while others were of the opinion that not all problems were dilemmas. Some senior officers mentioned

that only those problems that were very difficult to address were considered dilemmas.

**Question 7: How did you attempt to resolve this dilemma?**

*Responses from senior managers*

When questions were raised with senior managers on how to resolve leadership dilemmas in the department two of the senior managers responded that, although the decisions made may contain various options and the solutions these may not have a satisfactory outcome for everyone. One officer said that every time a decision is made that decision will always favour one and affect the other. Both officers agreed that resolving a dilemma is difficult. As a result, the problems were either avoided or deferred to be resolved later. This was pointed out by SM3 who said:

In fact, I did not have any intention to solve the problem but what I did was to let someone else to take over the responsibility. I admitted the fact and explained my situation to the authorities above me that this was a difficult situation for me in appointing the officers on acting appointments.

Another two senior managers mentioned that some clarification must be required. They described these problems as not the ordinary problems they address every day in their workplaces. Both officers said that they would require help from others in order to resolve these problems. According to SM4:

Because the problem is so difficult to resolve it is referred to be discussed at the top management level.

One of the senior managers mentioned that he would deal directly with the person involved in the dilemma. Talking directly to the person about how he felt about his behaviour and speak with the person concern about the problem and how best we can move forward. As SM6 said:

Because the nature of the problem is so difficult to resolve I would rather speak directly to the person concern and speak to him/her how best the problem can be addressed.

These findings show that senior managers and senior officers do face difficulties in resolving dilemmas. They responded that decisions they make will always favours one and affect the other. Some of the approaches that they have used were: they require help from others for clarification and they would speak directly to the person concern. As a result, they either avoid or deferred the problem.

#### *Responses from senior officers*

Three senior officers responded that when complex problems arise they quickly look for ways to address them. But when these problems cannot be resolved and escalate, the staff concerned were called into the senior officer's office to identify the cause of the problem and address them accordingly. In this particular situation SO4 said:

The particular officer is called into the office for an interview that leads to identifying the escalating issues contributing towards the problem he encounters in the organisation.

According to one officer, personal problem also contributes to the organisational problems. These are dilemmas faced by senior officers as discussed by SO5:

These personal problems were identified and possible solutions were discussed, including the possibility of the organisation to assist in solving these personal problems.

When problems are too difficult to solve one officer claims he does not know what to do and how to go about it. So he either avoids or deferred it to be discussed by the senior management team. This was supported by SM2 who said:

It is difficult to solve such problems but in attempting to solve I will require more clarification from the people concern relating to the particular issue.

Dilemmas were very difficult problems and they cannot be resolved easily. They involve two or more issues which require solutions at the same time. Three senior officers mentioned that they were uncertain about how to proceed and unsure of how to deal with such complex problems. According to SO3:

There is uncertainty in resolving dilemmas but I would attempt to resolve this dilemma by not viewing constraints as major impediments to problem solving.

In summary, resolving of dilemmas by senior officers and senior managers were seen as most difficult situations. The participants did make some attempts to resolve the dilemmas but they were not clear about the nature of these problems. Some participants responded that there was no solution to the problems because the problems were complex. Some said that because these were not everyday issues they would require help from authorities above them. Others mentioned that, it is most likely they would avoid the problem because they were unsure of how to deal with it

**Question 8: Do you think leadership dilemmas are particularly challenging problems?**

*Responses from senior managers*

In answer to question eight two senior managers agreed that leadership dilemmas were the most challenging problems in the organisation. These issues become problematic because there were two opposing situations facing the leader at the same time. The needs of both parties could not be addressed at the same time. As such addressing one would affect the other. As explained by SM3:

Leadership dilemmas were most challenging problems to be dealt with because I had to make a decision that should satisfy both parties at the

same time. For me to come up with such a decision is so difficult. I may have solved the problem but I don't think it is completely solved.

On the contrary, two senior managers stressed that leadership dilemmas were less challenging problems. If they can attend to the problems on a daily basis these problems would not accumulate and lead to another problem. This was echoed by SM4:

If leaders address these problems on daily bases, then they become less challenging. Problems only become most challenging when it is left overdue.

One senior officer was of the opinion that leadership dilemmas can be resolved. He said it is the leader's responsibility to identify the cause of the problem and address it. In support of the first senior officer, the second senior officer claims that problems were caused by human beings and leaders need to find ways and means to resolve the problem. As SM2 said:

Leadership dilemmas were not challenging problems. They were problems caused within the organisation that makes it become a dilemma for a leader. Find out who created the problem, the cause of the problem and solve it for the interest of the organisation.

### *Responses from senior officers*

Four senior officers said that leadership dilemmas were most challenging problems and there is no single solution to it. Even if an attempt is made to resolve the particular problems, they were unlikely to be resolved. As SO1 responded:

Leadership dilemmas were particularly challenging problems because other problems can be solved with a single discrete solution. Dilemmas do not present a clear solution and are unable to be resolved.

Another senior officer mentioned that leadership dilemmas were less challenging problems. He said that when leaders were not prepared to address the particular problem then it becomes a major problem as mentioned by SO4:

If dilemmas arise then try to confront them as they are. If you leave them to be solved later it will become difficult and more challenging to address.

However, two senior officers disagreed. They suggested that leadership dilemmas can be resolved. These are day to day problems that can be addressed by the leader. When right choices are not made leadership dilemmas exist. According to SO2:

Leadership dilemmas are not challenging problems, but you as a leader make it become a challenging problem. Leaders have to stand on neutral grounds, show integrity and take personal things out of work.

In summary, the respondents in this study found the following aspects of the dilemmas to be most challenging: there was often no clear solution; it was not possible to satisfy all parties and lastly seeking the cause of the dilemma. These leadership dilemmas were seen as problems that had not been effectively addressed in the past and hence persisted.

### **General Comments about Dilemmas.**

The senior managers and senior officers were also asked to find out if they had experienced other problems considered to be dilemmas. Almost 80 percent of the participants responded that there were other challenging problems apart from dilemmas. Some of these problems as mentioned were: workload; not enough time to focus on the big things; further training for leadership development; communication with staff and staff shortages; nervousness in decision making. As SM1 said:

Most of the problems that I face were leadership orientated and we need to go for leadership development training in order to address these

burning issues. Most times we leave problems unsolved because we lack in leadership knowledge.

The other challenging problem as mentioned by 50 percent of the participants was communication with other staff members. Some of the staff members face difficulties in operating computers for sending of emails etc. Others could not follow right channels of communication during reporting. Some officers could not attend important meetings because they could not write and read well. As SO3 said:

I face difficulties in operating my computer to send and receive emails. Every time I argue with my supervisor and put him under pressure to sort out this issue.

The other area that they have mentioned was up-skilling the human resources. Seven participants were of the opinion that most of the officers in the office were overdue for training. They said some of the officers currently on the job could not critically think and analyse problems to come up with better solutions. These officers need training so that they will know how to solve complex problems in the department. As mentioned by SO5:

Skilling of human resources is very important. Officers must be trained so that they must update their knowledge to think critically and analyse problems.

The other 20 percent of the participants responded that they were nervous because others would not agree with the decisions they make during meetings and other discussions. They said if they say something which is not correct others would talk about it. As SM5 said:

Most times I keep quiet and do not contribute much or say something during discussions, because If I say something which is not correct others would make negative comments about me.

## **Summary of Key Findings**

I have summarised the key findings under three major themes: Complex problems; performance management problems and dilemmas and resolutions.

### *Complex Problems*

The participants described complex problems as those problems that were beyond their control with no direct answers and difficult to resolve. These types of problems have existed in their place of work and were not easy to handle. Because they possess multiple solutions it is most likely that the problems were avoided, deferred or delayed efforts to resolve them. Some participants indicated all problems as dilemmas, because of the difficulties in resolving them, while others were of the opinion that not all problems were dilemmas, some problems can be solved straight away. The nature of complex problems could be either long term or they reoccurred. They were also challenged by budgets at the departmental level. The staff performance problems include *wantok system*.

### *Performances Management Problems*

One of the major problems that pose challenges for senior managers and officers as gathered from the findings was the issue of performance management. The findings showed that poor performance by staff and teachers were the major concern for leaders. The senior managers and officers' want to carry out their duties but because their close relationship with the officers concerned they find it difficult to make decisions for the organisation. There were other similar performance problems identified as well: They relate to: staff performance; pay increment; promotion up the rank; appraisal feedback and appointment of teachers to vacant positions. These performance problems were so difficult that they had created a challenge for leaders having to resolve, on one hand the organisational concerns and on the other hand the individual and the relationship concerns. This had resulted, the problems were not solved and most likely they were avoided, deferred or delayed for resolution.

### *Dilemmas and Resolutions.*

After providing the definition of a leadership dilemma to the participants none of the respondents were familiar with this way of articulating the dilemma to isolate the tension between organisational needs on the one hand and the need to maintain positive relationships on the other hand. The responses received from both senior managers and senior officers differed. Some indicated all problems as dilemmas while others were of the opinion that not all problems were dilemmas. Some senior officers mentioned that only those problems that were very difficult to address were considered dilemmas. However, the participants provided examples that resonated with the way leadership dilemmas were described (Cardno, 2012). The respondents in this study found the following aspects of the dilemmas to be most challenging: there was often no clear solution; it was not possible to satisfy all parties and lastly seeking the cause of the dilemma. Leadership dilemmas were seen as problems that had not been effectively addressed in the past and hence persisted.

Resolving of dilemmas by was seen as most challenging and difficult by senior managers and senior officers. The participants did make some attempts to resolve the dilemmas but they were not clear about the nature of the problems themselves. Some participants responded that there was no solution to the problems because the problems were complex. Some said that because these were not everyday issues they would require help from authorities above them. Others mentioned that, it is most likely they would avoid the problem because they were unsure of how to deal with it.

## CHAPTER FIVE

### DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### **Introduction**

This chapter presents a discussion of the findings from my study of the nature of leadership dilemmas in Technical Vocational Education and Training (TVET) in Papua New Guinea (PNG). The discussion relates the literature to the findings to highlight significant issues that were revealed through answering the research questions that guided my study.

The research questions of my study were to investigate:

1. What sorts of complex problems are experienced by Technical Vocational Education and Training (TVET) senior managers and senior officers?
2. Can these problems be identified as leadership dilemmas?
3. How are senior managers and senior officers challenged when they attempt to resolve these issues?

The discussion section is organised under three main headings: understanding dilemmas; evidence of dilemmas, and resolving dilemmas. From the process of writing the discussion, conclusions have been drawn and recommendations proposed.

#### **Understanding Dilemmas**

The choice of semi-structured interviews and open-ended questionnaires were determined by the need to gain an in-depth understanding of what participants considered to be a dilemma. The dilemmas were analysed according to a broad understanding of the nature of what literature generally calls an organisational dilemma. An organisational dilemma as the literature states is a complex problem that recurs and presents an extremely demanding challenge for

managers in order to satisfy multiple demands (Cuban, 2001; Dimmock, 1999). The findings of this study indicated that, what constitutes dilemmas or complex problems includes those problems that were difficult to resolve, not easy to handle, and had multiple solutions. This is supported by de Haan & de Heer (2015), who suggests that complex problems are issues that do not have a single solution but are multiple in nature. These are problems that senior managers and officers in this research tend to avoid or delay decisions where problems are complex.

In this study the focus is on leadership dilemmas experienced by senior managers and officers of TVET- PNG. A leadership dilemma is a particular situation description or proposed by Cardno (2012) who states that it causes tensions between meeting the organisational needs and maintaining positive relationships with colleagues. The data were analysed thematically and findings revealed that leadership dilemmas were seen as problems that had not been addressed in the past which is prevalent practice in the PNG education system. The findings indicated that senior managers and officers were not clear about the nature of these problems (as dilemmas) and none of the participants were able to identify their complex problems specifically as leadership dilemmas. They treat these dilemmas as normal day to day administrative problems. As Owens (2004) explains this is a common response because the elements of these problems are dynamically intertwined and difficult to separate on the basis of the objective criteria and solutions requiring coordination and interaction of different people. The findings further revealed that these problems were either avoided, referred to others or deferred for resolution due to their complexity in resolving them. This finding is supported by Leithwood, Seashore Louis, Anderson and Wahlstrom (1999), who stated that when problems become difficult to address they are either avoided, referred or deferred. These behaviours are typical of people struggling with extremely difficult problems. This finding is also similar to what is revealed by Argyris (1977) who explains

that avoidance links back to a defensive reasoning strategy where by the situation is avoided or controlled.

None of the respondents were able to articulate the meaning of the term 'leadership dilemma'. In addition, participants were not able to identify tensions between organisational needs on one hand, and the need of individuals on the other hand to maintain positive relationships in the organisation which is the way in which (Cardno, 2012) describes this particular form of a dilemma. However, when they were given a definition of a leadership dilemma, the responses received from senior managers and officers differed. Some indicated all problems seem to be dilemmas while others were of the opinion that not all of the problems they faced at the place of work were leadership dilemmas.

One of the key findings relating to leadership dilemmas that associated with the challenges of dealing with staff performance appraisals. Some of the staff members had a close working relationship with the senior managers and officers and found it difficult when they did not perform well or had problems relating to attitude. As Cardno and Reynolds (2009) suggest, because appraisal is multi-functional focusing on a concern for both organisational and individual improvement, leadership dilemmas tend to be highlighted. Piggot-Irvine (2005) supports this idea by saying that dilemmas cause significant problems in the context of staff appraisal. This had created an environment in my study where senior managers and officers were often caught in a dilemma of whether to serve the interest of the individual staff member being appraised or the interest of the organisation they serve. This scenario is supported by Oldroyd (2003) who is of the view that organisational leaders are under extreme pressure when providing feedback after an appraisal. The situation can be stressful when it is not done skilfully and sensibly. For example, officer stated that:

In appraising officers' performance, I find it difficult when it comes to providing feedback. I really want to do my job but when the particular

officer had a close relationship with me it makes my job difficult to make decisions. This forces me to be bias at times (SM6).

As Cardno and Reynold's (2009) stated, the demand for leaders to manage the performance of staff and solve problems in practice is a challenge not well addressed.

The findings of this study also indicated that a leadership dilemma is not often acknowledged, and as a result it is difficult to articulate. The study found that senior managers and officers were unable to relate the idea of the leadership dilemma with normal administrative matters, and these complex problems still exist and reoccur.

The findings also revealed that the kind of complex problems or dilemmas experienced by senior managers and officers were long term, even after the management had changed these problems still exist and continue to recur. Senge (2006) explains that those problems that recur are problems that are at high risk level. This triggers and challenges senior management in finding quick solutions to address these dilemmas. As de Haan and de Heer (2015) were of the view that such complex and intertwined problems cannot be resolved overnight as they these problems seek multiple solutions. The authors stated that with the ever present complex problems in organisations leaders are challenged to find ways and means to address the uncertainty and ambiguity of these problems. As one of the senior officers said:

The nature of some problems are very difficult to resolve in decision making. When I am in such situations, I either avoid the particular problem or leave the problem to be solved some other time (SM3)

In summary, the consolidated findings of this study show that the participants did not understand the meaning of dilemmas or leadership dilemmas and

therefore, unable to recognise the complexity of problems. As Cardno (2012) states, the ability to recognise and articulate a dilemma is an essential starting point in knowing how to deal with a leadership dilemma and these participants were unable to do this. As part of my study these senior managers and officers were introduced to the idea of dilemmas for the first time. They were able to describe their complex problems in ways that allowed me, as the researcher, to see that the problems were actually dilemmas.

### **Evidence of Dilemmas**

Even though the participants were not clear about the nature of these challenging problems, they had a strong view that some of the recurring problems were indeed dilemmas. As explained by Robinson (1993) dilemmas are problems ever present in organisations, “it arises when one is confronted with decision alternatives” (p. 42). From the findings it was evident that leadership dilemmas do exist in TVET- PNG. However, the majority of the participants could not distinguish the difference between a leadership dilemma and normal day to day problems.

One of the key findings in this study relates to appraising of staff performance. Senior managers and officers were challenged when making appraisal decisions, whether to make decisions in the best interest of the organisation or retain a positive relationship with staff members. This finding confirms research by Middlewood and Cardno (2001) who claim that appraisal challenges people in two different levels namely organisational level with the purpose of improving organisational performance or the individual level where it is about maintaining personal relationship and individual well-being. In the PNG culture it is offensive to criticise a *wantok* (relation or someone who is your close friend) as repercussions can be devastating. It is generally expected that a *wantok* will always favour the other. In this respect, staff expect senior officers and senior managers to favour them when appraising their work performance, and in return they will do their job well. As such leaders are caught in between serving

the interest of the organisation and serving the interest of the individual. Pertaining to this, the literature by Arua and Eka (2002), explained that *wantok system* can be seen as favouritism. This happens when the system is turned from its core values, meanings and understanding. It produces humiliation, shame, dishonesty and destruction of life. There was no existing literature on wantok system so I have nothing in the literature to back up this finding.

Ten of the thirteen participants were in agreement that they were often challenged with the dilemma when serving the interest of the organisation and favouring a *wantok*. The study found that officers were faced with a dilemma of satisfying the required standard of the department in terms of staff performance while retaining a cordial relationship with their colleagues at work. However, none of them were able to articulate what the leadership dilemma is, or fully identify the characteristics of such dilemmas. They seem to accept these challenges as another problem to be solved. As one participant states:

Some senior officers do not want to say out their colleague's weakness during meetings because they don't want to frustrate their relationship with their colleague. It is a culture here where we either fall to our relationship with the colleague or get the job done (SO1).

There is evidence that leadership dilemmas were not recognised by senior managers and officers of TVET- PNG. However, after intense discussion about the term leadership dilemma ten participants were able to identify the characteristics of a leadership dilemma. In addition, three participants confidently said that they have overcome the situation but in reality they were not able to resolve these complex problems. During the discussions, all thirteen participants agreed that dilemmas are complex matters that would require multiple solutions to address them. They found it difficult to acknowledge or confront these problems. This is not surprising because, as Robinson (1993)

revealed dilemmas are problems that are fraught with conflict and may be subject to multiple interpretations and solutions.

In summary, the consolidated findings show that leadership dilemmas do exist in TVET – PNG and challenges senior managers and officers. The leaders themselves were not able to identify them or separate them from normal day to day problems. The existence of leadership dilemmas was only realised when the definition was provided by the researcher. The findings revealed that staff performance was one of the common areas where leadership dilemmas arise. When it comes to appraising of staff *wantok system* takes place, and as a result the work colleague is favoured more than the organisation.

### **Resolving Dilemmas**

According to the findings the participants agreed that they had difficulties in managing dilemmas at their place of work. After providing the definition of a leadership dilemma senior leaders of TVET- PNG have recognised that some of the most challenging problems experienced in the department were actually leadership dilemmas. These include issues related to staff performance, staff appointment, staff promotions and pay increments. This is revealed by (Fitzgerald (2009) who stated that when people are involved in working with and through others it can be a complex and messy situation because the most difficult problems are generated by people. These problems always trigger two alternatives, either to serve the interest of the organisation or attend to the individual concern. The majority of the participants responded that they cannot address two or more goals simultaneously to satisfy both parties at the same time. They mentioned that solving one part of the problem will always leave the other unsolved. This is supported by Murphy (2007) and Dimmock; (1999) who suggest that, problems can be solved but dilemmas cannot, because choosing one element will leave the other element unsolved. When the participants were asked about the success of resolving leadership dilemmas, none of the 13 participants had indicated any success in resolving dilemmas.

### *Responses to leadership dilemmas*

In this study three approaches were identified when attempting to resolve leadership dilemmas. These were; *problem avoidance*, *problem deferral* and *problem referral*. As mentioned by Leithwood, Seashore Louis, Anderson and Wahlstrom (1999), when problems become too challenging they are either avoided, referred or deferred.

*Problem Avoidance* – because of the uncertainty in resolving dilemmas, avoidances were evident in the findings. Ten out of the thirteen participants stated that it is difficult to attend to dilemma situations at the place of work. When attending to one aspect of the dilemma they do not want to upset the people involved so they avoided the problem. The participants also mentioned that although the problems are avoided, these same problems do not disappear but reoccur. The findings further revealed that the fear of upsetting others is usually accompanied by a fear of threat or embarrassment, both of which are dominant values in a defensive approach that leads to avoidance. These findings are similar to ideas presented by Argyris (1977) and Cardno (2012) who commented that avoiding the problem is the most common strategy whereby either the issue is suppressed totally or not dealt with, consequently the dilemma will persist even though it may disappear for a while, but then reoccur. One participant comments that:

Because the problem is so difficult to address I'd rather let someone else to address it (SM2)

*Problem deferral* – The participants also responded that because some of the dilemmas were of complex nature and very difficult to address they were uncertain of how to deal with it. As a result, the need to deal with the problem is being put off or delayed to be solved another day. Cardno (2007) provided an alternative way to address such problems. First, leaders must recognise the problem as a dilemma and confront it, even though people are concerned that it

may upset others. Second, decision-makers must make a conscious choice between organisational and relational components of the dilemma simultaneously. In this study the participants have also mentioned what they call direct problems and indirect problems. The direct problems are once that they know they have to deal with but they defer or delay doing so. The indirect problems are sometimes passed on or referred to others.

*Problem referral*– the participants also indicated that some problems that they have dealt with hardly require any solution attempt so the particular problem is given away to someone else to resolve or it is delegated. Because these problems were not viewed as ordinary issues, all participants expressed a general feeling that such problems needed clarification and they would need help from others up the hierarchy or the problems be referred to a special organised group for further clarification. This is supported by Owens (2004) who stated that, “high quality solutions to emergent problems are likely to come from a group of people in the best position who possess the knowledge necessary to solve the problem and will be involved in implementing the decision” (p. 312). In regards to problem deferral, a participant said:

It is difficult to resolve such problems but, in attempting to solve these problems I will require more clarification from the people concern (SO6).

The study further suggests the need for senior managers and officers of TVET education in PNG to engage in leadership and management development in order to identify the existence of leadership dilemmas in the workplace and come up with possible context relevant solutions to address them in a more appropriate way. The research indicated that professional development is vital in solving leadership dilemmas and begins with understanding the nature of these problems (Owens, 2004; Cardno, 2012). The participants responded that there is lack of continued professional development for senior leaders and most of them were not capable of resolving complex problems. According to Cardno (2005),

educational leaders significantly influence the development of people and consequently improved the effectiveness of an organisation when they harnessed the potential of professional development.

Some participants suggested that professional development efforts designed to facilitate change must be specific to leadership issues that leaders are facing. Like in this case a training plan must be developed for leaders in managing and resolving leadership dilemmas alone. However, others insisted that the broader the scope of a professional development program, the more effort required of leaders in the department to be able to resolve all problems that arose. Miles and Louis (1990) point out that “developing the capacity to deal with problems concerning professional development promptly and actively in some depth may be the single biggest determinant of program success” (p. 60). Overall, the leaders in my research are very keen to have some sort of leadership and management development program and their understanding of dilemmas. According to Cardno and Fitzgerald (2005) educational leaders must require high order problem-solving and decision making skills underpinned by familiarity with the theory base. Such an approach is advised during their research which was done with experienced school principals. In their study they found that these school leaders really valued the opportunity to learn from both theory and practice and looking deeply at their own behaviours around problem solving.

In summary, the findings show that, leadership dilemmas are most challenging issues and there is no single solution to it. Even if an attempt is made to address these issues, the problems may still remain unsolved. This had prompted the senior managers and officers to take the approaches of avoidance, deferral and referral of the leadership dilemmas when attempting to resolve them. But according to some authors, educational outcomes will suffer if some dilemmas are left unsolved and Cardno (2007) confirms that there are ways to develop leaders with such complex problems.

## **Conclusions**

The discussion of the findings alongside the literature has shown me that there are three conclusions that can be drawn from my research. These are related to the existence of dilemmas; staff performance and the practice implication for change.

### *Existence of dilemmas*

From this study it can be concluded that leadership dilemmas exist in the PNG education system and are indeed challenging problems mainly because the senior managers and officers were not clear about the nature of the problem themselves. Because they were not clear about the nature of these problems none of the participants were able to identify these particular problems as leadership dilemmas. They face many complex problems and they remain unsolved. These unsolved problems continue to reoccur and cause senior managers and officers to be unproductive. Because many of these problems relate to staff performance, this remains poor and as a result, students learning are indirectly affected.

### *Staff performance*

Staff performance is the main context in which leadership dilemmas arise. After the definition of the leadership dilemma was provided by the researcher most of the examples provided by senior managers and officers were related to staff performance issues. The findings show that most of the dilemma situations that arose were related to dealing with staff performance issues, mainly conducting performance appraisals and providing negative feedback. The participants were challenged when making appraisal decisions, whether to favour the organisation or the staff member concerned. One of the key findings was the *wantok system* that restricted honest appraisal. In PNG in particular, the culture of *wantok system* exists. The culture of *wantok system* hinders senior managers and officers in meeting their obligations because demands of an individual *wantok* are considered of great importance and take priority, hence the manager will sometimes ignore the need of the organisation.

### *Practice implications for change*

Senior managers and officers practise defensiveness when problems become extremely challenging and they are unable to resolve them, such as staff performance issues. This is demonstrated in the way they avoid problems, defer problems and refer them to others. Overall this had resulted in the problems not being solved, and when a complex problem is unsolved, it reoccurs and then can be identified as a leadership dilemma. This eventually leads to unproductive performance by senior managers and officers. The PNG education system needs leaders who can recognise and resolve leadership dilemmas because this study has shown that leadership dilemmas do exist, and are not effectively managed. Leadership practices need to change and leaders' understandings of complex problems could be the starting point for such change.

### **Recommendations**

Though this research was conducted within a small group of senior managers and officers of the Education Department within the TVET branch in PNG, the findings revealed that leadership dilemmas were ever present. Leaders in PNG educational settings must resolve these problems so that educational outcomes for students are successful. Leaders have to realise the existence of leadership dilemmas and identify possible solutions to address these dilemmas separately from other administrative problems. The recommendations resulting from this research prompted me to address three specific audiences: Ministry of Education, top management team, and senior leaders of TVET.

### *Recommendation to the Ministry of Education*

This study suggests the need for the Ministry of Education in PNG to seriously review the training policy and processes that currently exist for educational leaders. The first step is to find ways to inform the Ministry about the importance of solving complex problems. A proposal for leadership dilemma training can be made by this researcher within a leadership and management

development programme for senior managers and officers of the TVET wing. This leadership training should focus on identifying the existence and nature of leadership dilemmas in the workplace and come up with solutions to address them in more appropriate ways.

#### *Recommendation to Top Management Team of the TVET Wing*

It is recommended that the top management team of the TVET wing should seriously consider the departments plans for training and development and identify needs informed by my study. It is recommended that a leadership and management workshop will begin to address the understanding of leadership dilemmas as complex problems for all leaders from the top leaders to the middle-level leaders. These workshops need to be followed by deep learning training associated with the adoption of a productive approach to managing dilemmas. I also recommend that staff in leadership positions be supported to win NZAid Scholarships to study the Master of Education Leadership and Management programme at Unitec to build a culture that understands about dilemma management.

#### *Senior Leaders of TVET*

The important recommendation to the senior managers and officers of TVET is that they must continue to improve and enhance their skills and capacity to be more competent and capable in performing their leadership roles and responsibilities. A one-off workshop by the researcher with the senior leaders would be appropriate as an introduction to understanding leadership dilemmas. During this workshop the researcher should be able to share the findings of his research with the senior leaders of TVET and if they are interested then a further leadership development workshop will be organised for them. This would enable them to confront dilemmas by learning some skills for dilemma management.

## **Recommendation for Future Research**

Because my research was conducted in one single division out of the many divisions within the National Department of Education, it was revealed that leadership dilemmas were seen as problems that had not been effectively addressed in the past and hence persisted in this one place. However, I strongly have a feeling that the other divisions may also be having similar issues with leadership dilemmas and that senior managers and senior officers do not realise the existence of these dilemmas or why it is important to manage them. As a result, these leaders become unproductive and less accountable and their work is not fully accomplished. I now recommend two options for further research:

- A small study that will collect data about what development is needed. This could use a leadership workshop on the topic of understanding complex problems for all senior officers and managers of the department and I can share my research findings.
- A further separate research project on the same topic to increase the scope of the research. This should involve many more participants from leadership teams in other sections within the Department of Education.

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## APPENDICES

### Appendix A – Interview Schedule



### INTERVIEW SCHEDULE

#### Leadership Dilemmas in Technical Vocational Education and Training in PNG

DATE: \_\_\_\_\_

INTERVIEWEE \_\_\_\_\_

POSITION \_\_\_\_\_

INTERVIEWER \_\_\_\_\_

1. What is your main role and responsibility?
2. What is your understanding of complex problems?
3. What are some of the most challenging issues / problems you have to deal with as a leader?
4. Can you identify one specific problem that matches this description of a “leadership dilemma”?

*A leadership dilemma is a particularly complex problem because it contains tensions between what serves the organisation best and what is best for your relationship with the individual involved. In other words, you are torn between on the one hand, meeting the needs of the organisation and, on the other hand, meeting the needs of the individual.*

5. In relation to the problem you have described, can you say something about its nature – such as: has this been a long term problem? Has it recurred?

6. Did you encounter problems that might be considered as dilemmas?

7. How did you attempt to resolve this dilemma?

8. Do you think leadership dilemmas are particularly challenging problems?

9. Are there other types or problems (other than what I have described as a “leadership dilemma” that you consider being as challenging? Why?

10. Is there anything else about leadership problems in general you would like to add?

11. What resources or skills would you like to have access to that would enable you to address complex, challenging problems?

12. Is there anything else about the nature of dilemmas and how you could resolve them that you wish to add?

Thank you very much for your cooperation and for taking the time to provide valuable answers, information, and comments to this open-ended questionnaire.

## Appendix B – Questionnaire



### OPEN-ENDED QUESTIONNAIRE

#### **The Nature of Leadership Dilemmas in Technical Vocational Education and Training in Papua New Guinea.**

This open-ended questionnaire is intended to:

- Seek the nature of the complex problems experienced by senior managers in Technical Vocational Education and Training (TVET) settings in PNG.
- Analyse leadership dilemmas in the TVET contexts.
- Investigate challenges for senior managers in resolving leadership dilemmas.

Your answers contributing to this questionnaire will be confidential and will be used in my thesis only. Please provide answers or comments as much as possible.

#### **Part I. Background Information**

Please tick (✓) in the box that is most relevant to you.

1. Gender

Male

Female

2. What is your current position?

Junior Officer

Senior Officer

Middle Manager

Senior Manager

3. How long have you been employed in this position?

Less than 5 years

5 – 10 years

More than 10 years

## Part 11. Questions

1. What is your main role and responsibility?
2. What is your understanding of complex problems?
3. What are some of the most challenging issues / problems you have to deal with as a leader?
4. Can you identify one specific problem that matches this description of a “leadership dilemma”?

*A leadership dilemma is a particularly complex problem because it contains tensions between what serves the organisation best and what is best for your relationship with the individual involved. In other words, you are torn between on the one hand, meeting the needs of the organisation and, on the other hand, meeting the needs of the individual.*

5. In relation to the problem you have described, can you say something about its nature – such as: has this been a long term problem? Has it recurred?
6. Did you encounter problems that might be considered as dilemmas?
7. How did you attempt to resolve this dilemma?
8. Do you think leadership dilemmas are particularly challenging problems?
9. Are there other types or problems (other than what I have described as a “leadership dilemma” that you consider being as challenging? Why?

10. Is there anything else about leadership problems in general you would like to add?

11. What resources or skills would you like to have access to that would enable you to address complex, challenging problems?

12. Is there anything else about the nature of dilemmas and how you could resolve them that you wish to add?

Thank you very much for your cooperation and for taking the time to provide valuable answers, information, and comments to this open-ended questionnaire.

## Appendix C – Information Sheet for Participants



### Information Sheet for Participants

#### **Title of Thesis: The Nature of Leadership Dilemmas in Technical Vocational Education and Training in Papa New Guinea.**

My name is Markus Demi. I am currently enrolled in the Master of Educational Leadership and Management degree in the Department of Education at Unitec, Auckland. I am seeking your help in meeting the requirements of my research for a Thesis course, which forms a substantial part of this degree.

The aim of my project is to examine the nature of the complex problems experienced by TVET senior managers. I am particularly interested in **leadership dilemmas** experienced by senior managers of TVET and wish to investigate challenges in resolving these leadership dilemmas. A leadership dilemma is a particularly complex problem because it contains tensions between what serves the organisation best and what is best for your relationship with the individual involved. In other words, you are torn between on the one hand, meeting the needs of the organisation and, on the other hand, meeting the needs of the individual.

I request your participation in the following way:

I will be working with two groups in my study. Group one comprises the assistant secretaries and superintendents and I will be interviewing volunteers from this group. Group 2 are all of the senior officers and I will be requesting completion of an open-ended questionnaire.

For the interviews, I will invite participants to respond to my invitation and will email this to them. If they agree to participate then I will arrange this at a time and place to suit them. The interview duration will be approximately 30-40 minutes.

For the questionnaires you will be given the opportunity to attend a group meeting and complete the written questionnaire at work and return this to me immediately if you agree to take part. This will take about 40-45 minutes.

The results of the research activity will not be seen by any other person in your organisation without the prior agreement of everyone involved. You are free to ask me not to use any of the information you have given, and you can, if you wish, ask to see the thesis before it is submitted for examination. I hope that you find this invitation to be of interest. If you have any queries about this research, you may contact my supervisor at Unitec, Auckland.

My supervisor is Professor Carol Cardno, and may be contacted by phone: +648154321 ext. 8406 or email: [ccardno@unitec.ac.nz](mailto:ccardno@unitec.ac.nz)

Yours Sincerely,

**Markus Demi**

**UREC REGISTRATION NUMBER: 2016-1067**

**This study has been approved by the Unitec Research Ethics Committee from. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 6162). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.**

## Appendix D – Participant Consent Form - Interview



### Consent Form – Adult Participants

**Research Event: Individual Interview**

**Researcher: Markus Demi**

**Programme: Master of Educational Leadership and Management**

**Thesis Title: The Nature of Leadership Dilemmas in Technical Vocational Education and Training in Papa New Guinea**

#### Participant's consent

I have been given and have understood an explanation of this research and I have had an opportunity to ask questions and have had them answered. I understand that neither my name nor the name of my organisation will be used in any public reports.

I also understand that I will be provided with a transcript of the interview for verification and that I may withdraw myself or any information that has been provided for this project up to two weeks after the return/confirmation of my verified transcript.

**I agree to take part in this project.**

**Signed:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**UREC REGISTRATION NUMBER: 2016-1067**

This study has been approved by the Unitec Research Ethics Committee from 02/11/16 to 02/11/17. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 6162). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

## Appendix E – Participant Consent Form - Questionnaire



### **Participant Consent Form – Adult Participants**

**Research Event: Individual Questionnaire**

**Researcher: Markus Demi**

**Programme: Master of Education Leadership and management**

**Thesis Title: The Nature of Leadership Dilemmas in Technical Vocational Education and Training in Papa New Guinea.**

I have had the research project explained to me and I have read and understand the information sheet given to me.

I understand that I don't have to be part of this research project should I chose not to participate and may withdraw at any time prior to the completion of the research project.

I understand that everything I say is confidential and none of the information I give will identify me and that the only persons who will know what I have said will be the researchers and their supervisor. I also understand that all the information that I give will be stored securely on a computer at Unitec for a period of 10 years.

**I agree to take part in this project.**

**Signed:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**UREC REGISTRATION NUMBER: 2016 - 1067**

This study has been approved by the UNITEC Research Ethics Committee from 02/11/16 to 02/11/17. If you have any complaints or reservations about the ethical conduct of this research, you may contact the Committee through the UREC Secretary (ph: 09 815-4321 ext 8551). Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

## Appendix F – Organisational approved Consent – Form



**DEPARTMENT OF EDUCATION**  
**Office of the First Assistant Secretary TVET WING**  
**CURRICULUM AND E-LEARNING**

Telephone: (675) 301 3363  
Fax: (675) 325 0070

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Papua New Guinea  
[wini\\_leka@education.gov.pg](mailto:wini_leka@education.gov.pg)

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Date: 9/20/2016  
File: CM2-4-7

To Markus Demi  
1510 Great North Road, 28E,  
Waterview Auckland

**RE: Master of Educational Leadership and Management**

THESIS TITLE: The Nature of Leadership Dilemmas in Technical Vocational Education and Training in Papa New Guinea.

**TO WHOM IT MAY CONCERN**

I have been given and have understood an explanation of this research project and I give permission for research to be conducted in the TVET Wing of the Education Department in Port Moresby in Papua New Guinea. I understand that the name of the organization will not be used in any public reports.

Signature

Name of signatory WINI LEKA

Yours faithfully,

**MR. WINI LEKA**  
**a/FAS TVET-Curriculum & e-Learning**



Full name of author: MARKUS DEMI

Full title of thesis/dissertation/research project ('the work'):

THE NATURE OF LEADERSHIP DILEMMAS IN  
TECHNICAL VOCATIONAL EDUCATION AND TRAINING IN PNG.

Practice Pathway: .....

Degree: MASTER OF EDUCATION LEADERSHIP AND MANAGEMENT

Year of presentation: 2017

Principal Supervisor: CAROL CARANO

Associate Supervisor: MARTIN BRISSETT

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MARKUS DEMI

Signature of author: 

Date: 28 / 06 / 2017



## Declaration

Name of candidate: MARIKUS DETTI

This Thesis/Dissertation/Research Project entitled: THE NATURE OF LEADERSHIP DILEMMAS IN TECHNICAL VOCATIONAL EDUCATION AND TRAINING IN PNG.  
is submitted in partial fulfillment for the requirements for the Unitec degree of EDUCATION LEADERSHIP AND MANAGEMENT.

Principal Supervisor: PROFESSOR CAROL CARONO

Associate Supervisor/s: MARTIN BASSETT

### CANDIDATE'S DECLARATION

I confirm that:

- This Thesis/Dissertation/Research Project represents my own work;
- The contribution of supervisors and others to this work was consistent with the Unitec Regulations and Policies.
- Research for this work has been conducted in accordance with the Unitec Research Ethics Committee Policy and Procedures, and has fulfilled any requirements set for this project by the Unitec Research Ethics Committee.

Research Ethics Committee Approval Number: .....

Candidate Signature: Marius Detti Date: 28/06/2017

Student number: 1432181