

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

# **Wisdom and Decision Making: Grounding Theory in Management Practice**

A dissertation presented in partial fulfilment of the requirements for the degree of

Doctor of Philosophy

in

Management

at Massey University, Albany, Auckland,

New Zealand.

Ali Intezari

2013

## Abstract

Wisdom has been an important subject in philosophy for ages, and numerous books and articles have been written about it. Although it is originally rooted in philosophy, other scientific fields such as psychology and management have also examined wisdom. Of the important managerial tasks, decision making is crucial, as the success and failure of an organisation to a considerable extent depends on management decisions. Despite the vital role of decision making, and the increasingly growing attention in management on wisdom, the literature of management is still lacking empirical research that provides a clear understanding of how management decision making can benefit from wisdom (Melé, 2010). This research aims to address this issue by answering the question: *What is the relationship between wisdom and management decision making?* Accordingly, the research objective is to investigate the role of wisdom in management decision making and to find out how wisdom can help with making better quality management decisions and taking ‘wise actions’.

To address the research question, an interpretive exploratory study using classic Grounded Theory (Glaser, 1978, 1998, 1999, 2007) was conducted. A semi-structured interview format was used as the data collecting method. Through five phases and selective sampling, 37 CEOs and senior managers from both the public and private sectors in New Zealand were interviewed. The informants were asked about their understanding of the concept of wisdom and its relationship with management decision making. They were asked about how they identified wise managers and wise management decisions in their business community, and about how a management decision can be made so that it is considered as being wise and leading to wise outcomes.

The findings indicated that wise management decision making is an integrated process of multiple qualities. Based on the findings, a theory was developed that offers an explanation of the relationship between wisdom and management decision making; *the Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)*. The theory suggests that wisdom in management decision making is achieved through an integration of Multi-Perspective Consideration

(MPC), Self-Other Awareness (SOA), and Cognitive-Emotional Mastery (CEM), and that the integration is fostered by Reflexivity and Praxis. PRIDM also suggests that the wisdom of the decision maker is developed through and manifests in reflexivity and praxis.

## Acknowledgements

First and foremost, I would like to thank my parents for their support and encouragement throughout my study, from the first day of my primary school to the last day of my PhD. Without their devotion, I would not even have been able to enter university.

Special thanks to my wife, Sara, whose emotional support gave me the strength to go calmly through all the ups and downs of this journey. Her belief in my abilities has been the most valuable support in my life.

I am extremely indebted to my primary supervisor, A/Professor David Pauleen, for all his support and comments during my study. His insightful and constructive comments and recommendations always took not only my dissertation, but also my academic worldview a step forward. He was always there whenever I needed his help. I cannot remember any time that any of my emails to him were answered with delay, or left unanswered. I would also like to thank my secondary supervisor, Professor Wendelin Küpers, for his contributions.

Appreciation is given to A/Professor Gabriel Eweje for his help at the beginning of my data collection, and to other colleagues in the School of Management, Massey University.

I express my gratitude to the interviewees for their time and helpful participation. Without them it would have been impossible to accomplish the present thesis.

Ali Intezari

November 2013

Auckland

# Table of Contents

<b>Abstract</b> .....	ii
<b>Acknowledgements</b> .....	iv
<b>Table of Contents</b> .....	v
<b>List of Figures</b> .....	ix
<b>List of Tables</b> .....	xi
<b>Chapter 1 Introduction</b> .....	2
1.1 Chapter Overview.....	2
1.2 The Research Problem.....	2
1.3 Research Objectives .....	5
1.4 The Research Questions .....	6
1.5 The Significance of the Study .....	6
1.6 The Researcher’s Role in the Research.....	8
1.7 Working Terms.....	9
1.8 Structure of the Dissertation.....	9
1.9 Chapter Summary .....	11
<b>Chapter 2 Initial Review of the Literature</b> .....	13
2.1 Chapter Overview.....	13
2.2 Wisdom .....	13
2.2.1 Philosophical Perspective.....	13
2.2.1.1 Wisdom, Virtue, and Excellence .....	14
2.2.1.2 Theoretical (Philosophic) and Practical Wisdom .....	18
2.2.2 Psychological Perspective .....	22
2.2.2.1 Implicit and Explicit Studies.....	23
2.2.2.2 The Berlin Wisdom Paradigm and the Balance Theory .....	27
2.2.3 Managerial Perspective .....	34
2.2.3.1 Social Practice Wisdom (SPW) .....	35
2.2.3.2 DIKW.....	37
2.2.3.3 Some of the Other Wisdom Studies in Management.....	40
2.2.4 An Inter-disciplinary Perspective .....	46
2.2.4.1 Key Aspects of Wisdom .....	54
2.3 Management Decision Making.....	60

2.3.1	Formal-empiricist, Rationalist, and Naturalistic Perspectives .....	61
2.3.2	Rational and Non-rational Decision Making.....	63
2.3.3	Decision Making Process .....	68
2.3.3.1	Decision Making as a Sequential Process.....	74
2.3.3.2	Decision Making as a Non-sequential Process .....	76
2.4	Chapter Summary .....	78
<b>Chapter 3</b>	<b>Research Methodology, and Grounded Theory .....</b>	<b>81</b>
3.1	Chapter Overview .....	81
3.2	The Choice of the Research Methodology and Methods .....	81
3.2.1	Phronêsiology as the Wise Methodology .....	86
3.2.2	Qualitative and Quantitative Research .....	88
3.3	Grounded Theory .....	90
3.3.1	The Key Components of Grounded Theory .....	91
3.3.2	Grounded Theory Approaches .....	94
3.3.3	Why Grounded Theory .....	96
3.3.4	Why the Classic Grounded Theory (Glaserian Approach) .....	100
3.3.5	Examples of Grounded Theory in Organisational and Management Studies .....	101
3.4	Chapter Summary .....	102
<b>Chapter 4</b>	<b>Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations.....</b>	<b>104</b>
4.1	Chapter Overview.....	104
4.2	Data Collection and Analysis Process .....	104
4.3	Sampling and Informants .....	106
4.3.1	Sampling.....	107
4.3.2	Informants as Management Decision Makers .....	108
4.3.3	Variety in the Sample .....	109
4.4	Interview Questions.....	110
4.4.1	Asking Theoretical and Hypothetical Questions.....	112
4.5	Rigour and Credibility .....	113
4.6	Ethical Considerations.....	117
4.7	Chapter Summary .....	118
<b>Chapter 5</b>	<b>Data Interpretation .....</b>	<b>120</b>
5.1	Chapter Overview .....	120
5.2	Coding Process .....	120
5.3	The Core Category: Praxio-Reflexive Integrated Decision Making .....	127

5.3.1	Multi-Perspective Consideration .....	127
5.3.1.1	Consequence-anticipating .....	128
5.3.1.2	Perspective-taking .....	130
5.3.1.3	Considering Ethical Codes .....	133
5.3.2	Cognitive-Emotional Mastery .....	136
5.3.2.1	Cognitive Mastery .....	137
5.3.2.2	Emotional Mastery .....	141
5.3.3	Self-Other Awareness .....	152
5.3.3.1	Self-awareness .....	152
5.3.3.2	Other-awareness: Awareness of Surrounding Environment... ..	156
5.3.4	Reflexivity .....	159
5.3.4.1	Internal Reflection .....	160
5.3.4.2	External Reflection .....	163
5.4	Chapter Summary .....	165
<b>Chapter 6 Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM) .....</b>		<b>167</b>
6.1	Chapter Overview .....	167
6.2	The Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM) .....	167
6.2.1	Multi-Perspective Consideration .....	169
6.2.2	Self-Other Awareness (SOA) .....	172
6.2.3	Cognitive-Emotional Mastery (CEM) .....	177
6.2.4	Reflexivity .....	183
6.2.5	Praxis .....	190
6.3	Chapter Summary .....	195
<b>Chapter 7 Implications, Limitations, and Directions for Future Research ...</b>		<b>197</b>
7.1	Chapter Overview .....	197
7.2	A Review of the Research .....	197
7.2.1	Research Problem and Objectives .....	197
7.2.2	Research Findings .....	198
7.3	Implications for Practitioners .....	200
7.3.1	Education .....	203
7.3.2	Sustainability: Implications for Organisations and Governments ..	207
7.3.3	Knowledge Management .....	210
7.3.4	Improving Decision Making .....	211
7.3.4.1	Reflexivity: Challenging Core Assumptions .....	211

7.3.4.2	Balancing Knowledge and Doubt.....	212
7.3.5	Developing an Integrated Multi-factor Assessment Tool .....	213
7.3.6	Reconciling Emotion-Logic Dualism in Decision Making .....	213
7.4	Contribution to the Literature.....	214
7.4.1	Management Decision Making .....	215
7.4.2	Management Learning: Experiential Learning Theory .....	216
7.4.3	DIKW Pyramid.....	217
7.5	Limitations of the Research.....	218
7.5.1	Limitations Associated with Research Methodology.....	218
7.5.2	Limitations of Findings .....	219
7.5.3	Limitations of the Theory.....	221
7.6	Directions for Future Research.....	222
7.6.1	Directions for Future Research Based on Limitations of the Research .....	222
7.6.2	Directions for Future Research Based on Limitations of the Research Findings .....	224
7.6.3	Directions for Future Research Based on Limitations of the Theory... .....	228
7.7	Chapter Summary .....	229
7.8	Concluding Statement .....	230
<b>Bibliography</b>	.....	<b>231</b>
<b>Appendices</b>	.....	<b>275</b>

## List of Figures

Figure 2-1: Wisdom, Virtue, and Excellence.....	15
Figure 2-2: Theoretical and Practical Wisdom .....	21
Figure 2-3: A Model of Wisdom.....	26
Figure 2-4: The Development, Structure, and Functions of Wisdom: A Theoretical Model .....	30
Figure 2-5: A Balance Theory of Wisdom.....	32
Figure 2-6: DIKW Pyramid .....	38
Figure 2-7: The Contribution of Wisdom and Wisdom-related Aspects to Management.....	41
Figure 2-8: Organisational Responses to Turbulence as a Function of Wisdom Capacities .....	42
Figure 2-9: Integrated Wisdom Development Model .....	43
Figure 2-10: Dynamic Model of Organizational Wisdom, Showing Relationships Amongst Transcendence, T <sup>3</sup> and Wisdom .....	44
Figure 2-11: Integral Pheno-practice of Wisdom.....	45
Figure 2-12: Rational Decision Making as Performative Praxis .....	65
Figure 2-13: Perspectives on Decision Making .....	67
Figure 2-14: Drucker’s Effective Decision Process.....	75
Figure 2-15: A Model of the Chaotic Dynamic Cycle of the Decision Making Process .....	77
Figure 3-1: Interpretivism’s Analytical Trinity.....	85
Figure 3-2: Paradigms and Approaches to Research, as well as their Keywords and Identifiers.....	89
Figure 3-3: Key Components of Grounded Theory .....	92
Figure 4-1: The Research Data Collection and Analysis Phases .....	105
Figure 4-2: Data Collection/Analysis and Theoretical Sensitivity/Saturation....	111
Figure 5-1: Coding Phases .....	121
Figure 5-2: Developing Conceptual Categories.....	125
Figure 5-3: The Main Conceptual Categories and Sub-core Categories.....	126
Figure 6-1: Multi-Perspective Consideration (MPC).....	170
Figure 6-2: Self- Other Awareness (SOA).....	173
Figure 6-3: Integration of MPC, CEM, and SOA .....	181

Figure 6-4: Reflexivity ..... 187

Figure 6-5: Wise Management Decision Making: Praxio-Reflexive Integrated  
Decision Making (PRIDM) ..... 193

Figure 7-1: Integration of an Integral Meta-competencies Theory of Practical  
Wisdom into Business Education Programs ..... 205

Figure 7-2: The Link between Wisdom, HPT, and Sustainability ..... 209

## **List of Tables**

Table 2-1: Use of the Wisdom Criteria to Evaluate Discourse About Life Matters .....	29
Table 2-2: Commonly Proposed Subcomponents of Wisdom.....	50
Table 2-3: Wisdom Definitions.....	53
Table 2-4: Key Aspects of Wisdom .....	59
Table 2-5: Different Perspectives on the Decision Making Process.....	71
Table 2-6: Decision Making Phases and Relevant Functions.....	72
Table 2-7: Characteristics of the Three Approaches to Making Decisions .....	78
Table 3-1: Basic Belief (Metaphysics) of Alternative Paradigms .....	82
Table 3-2: Why Grounded Theory? .....	97
Table 4-1: Credibility Criteria for Grounded Theory .....	115
Table 5-1: Sample of the Initial Coding.....	122
Table 6-1: Qualities Involved in Wise Management Decision Making, and their Definitions.....	169
Table 7-1: Implications for Practitioners .....	202
Table 7-2: PRIDM Qualities and Self-awareness Questions .....	207
Table 7-3: Contribution of the Study to the Literature .....	214
Table 7-4: Directions for Future Studies: Recommendations Based on the Research Limitations.....	223
Table 7-5: Areas for Further Research.....	226

## Part 1

### The Nature of the Research Problem

The dissertation structure illustrated below is represented before each chapter to give the reader a picture of the position of the chapter in relation to other chapters and to the dissertation as a whole.

<b>Part 1</b> The Nature of the Research Problem	Chapter 1	Introduction
	Chapter 2	Initial Review of the Literature
<b>Part 2</b> Methodology Design	Chapter 3	Research Methodology and Grounded Theory
	Chapter 4	Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations
<b>Part 3</b> Findings	Chapter 5	Data Interpretation
	Chapter 6	Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)
<b>Part 4</b> Conclusion	Chapter 7	Implications, Limitations, and Directions for Future Research

# Chapter 1 Introduction

## 1.1 Chapter Overview

This chapter sets the stage for the thesis by reviewing the research problem and objectives. Following an explanation of the research problem and objectives, the research questions are provided. The research questions include one main question and six secondary questions. The significance of the study is also discussed, which is followed by an explanation of the researcher's place in the study. The working terms are defined, and the thesis structure is explained and depicted. A chapter summary is provided at the end of the chapter.

## 1.2 The Research Problem

In today's world, known as 'the information society', solutions to business challenges are influenced by power-seeking choices or egoistic interests of individuals and businesses (Pantzar, 2000). Globalisation, technological advances, instability of the business world, and more importantly, global environmental issues and recent widespread financial crises have raised new challenges for organisations and managers.

A high level of uncertainty as the distinctive characteristic of the contemporary business world (Buckley & Carter, 2004), has meant that the impacts of organisational decisions are no longer limited only to the organisations where the decisions are made. The consequences of organisational decisions will have profound impacts not only on their organisations and those who directly interact with them, but also on the wider community, e.g. the business community, societies, and the environment. Decision making as the essence of management (Melé, 2010; Nutt & Wilson, 2010; Stewart, 2006) is becoming increasingly complex due to technological and politico-socio-economic factors (Ahmed, Hasnain, & Venkatesan, 2012). Even simple decisions and actions may lead to unintended and uncertain consequences, which affect both decision makers and stakeholders (Intezari & Pauleen, 2013a).

Society's awareness and expectations of businesses and their contribution to the society and the environment, has increased the social responsibilities of

organisations and managers. Consequently, management education has attracted widespread criticism for failing to prepare business students and managers for the ethical and complex challenges of the contemporary business world (Maxwell, 2013; Pless, Maak, & Stahl, 2011). Organisation leaders and managers are continuously looking for new rules, concepts, and models that can help them deal with an ever-changing reality (Rycroft & Kash, 1999).

Over the last two decades, there have been enormous advances in technology, a significant expansion of knowledge and information, and greater attention on effectively managing these resources. All these have been assumed to help managers and leaders with making better decisions, and preventing environmental and financial crises. However, information and technological advances have not increased people's empathy, and the world is deeply lacking wisdom that could ultimately help with solving the issues most significant to people (Pantzar, 2000).

Evidence of how difficult decision making has become, is everywhere (Rycroft & Kash, 1999). Recent financial crises and environmental disasters such as the Eurozone crisis since 2009 (Shambaugh, Reis, & Rey, 2012), the Enron collapse (Hintze, 2006), the Global Financial Crisis in 2009, and the BP oil spill in the Gulf of Mexico are examples that support the belief that knowledge, in and of itself, does not necessarily lead to certainty and truth (Beck, 2000; Hearn, Rooney, & Mandeville, 2003) and suggest that it is time to rethink the conventional approach to the implementation and contribution of technology, knowledge and information to businesses, management decisions, and human life (Eisenhardt, 1989; Prusak & Davenport, 2003; Rowley, 2006a). Maybe it is time to look at a quality that is related to 'a good life' (Yang, 2013), as Rooney et al. (2010) argue, "a better future [than the one resulting from relying completely on limited cognition, relative knowledge, perception and truth] is possible if we look beyond the accumulative assumptions about knowledge (and technology) to wisdom" (p. 17).

Wisdom, one of the critical areas in human life (Ardelt, 2005; Baltes & Staudinger, 1993), that can have a significant impact on success at individual, organisational and community levels (Rowley, 2006a), has been of interest to philosophers for ages, and recently to psychologists, and organisational and

management scholars (Baltes, Dittmann-Kohli, & Dixon, 1984; Baltes, Staudinger, Maerker, & Smith, 1995; Baltes & Freund, 2003; Biloslavo & McKenna, 2013; Clayton & Birren, 1980; Clayton, 1975, 1982; Edwards & Küpers, 2014; Hays, 2007, 2013; Kitchener & Brenner, 1990; McKenna, Rooney, & Boal, 2009; McKenna, Rooney, & Kenworthy, 2013; McKenna, Rooney, & Liesch, 2006; Rooney et al., 2010; Rooney & McKenna, 2005; Rooney, 2013a; J. Smith & Baltes, 1990; Sternberg & Dobson, 1987; Sternberg, 1998, 2000, 2003). Nonetheless, there is still a long way to go to find out what the nature of such a ‘thing’ is and how it can be fully implemented in the organisation and management fields.

This study looks at wisdom from the managerial perspective. Wisdom is an increasingly important area in management, as inattention to wisdom in this unstable business world costs organisations and companies dearly. In the modern business world stakeholders’ interests are complex, which further complicates their relationships with organisations. When managers and organisational leaders make unwise decisions, both organisations and society suffer (Marker, 2013). Consequently the complexity of today’s business world requires managers and businesspeople to know how to seek and cultivate wisdom (Tredget, 2010).

Maxwell (1984, 2007, 2010, 2012a, 2012b, 2013) emphasises the importance of wisdom over the accumulation of knowledge. Rooney et al. (2010) call for considering wisdom in a knowledge society, stating, “knowledge in the absence of wisdom presents as a danger to the world” (p. 1). Rowley and Gibbs (2008) argue that in the current business world, wisdom is required as it relies on contextual, particular, and subjective aspects in decision making rather than only on rational, objective and known elements. Similarly, Small (2004) emphasises that “within the context of management development programs, [...] there is now an urgent need to understand completely the nature of *wisdom* and its more recent offshoot managerial wisdom” (p. 752).

So far, however, there has been little discussion about how wisdom contributes to management decision making (Melé, 2010; Rowley, 2006b; Small, 2004). Small (2004), highlighting the lack of wisdom studies, criticised management studies by saying: “if ‘the getting of wisdom’ is considered a necessary component for

today's managers, why is it that very few programs in management studies include courses in 'Managerial Wisdom 500' or something similar?" (p. 752). Rowley (2006b) writes that "wisdom has received little attention in the information management and systems, knowledge management and management literature" (p. 251). Remarking on the necessity for practical wisdom in management decision making, Melé (2010) calls for research in this area: "Every decision has an ethical dimension, which should be considered by managers for making good decisions. Practical wisdom is essential in perceiving such a dimension and in making sound moral judgments in the making of decisions" (p. 637).

As long as the interactions between decision making and wisdom and their contribution to management are unclear, the attempt to find a way out of the current complex and turbulent business situations and help managers take proper actions when confronted by unpredictable events will most likely be unsuccessful. This study seeks to address this issue.

### **1.3 Research Objectives**

The objective of this research is to explore the relationship between wisdom and management decision making. Given that articulating the concept of wisdom independent of the environmental context is impossible (Sternberg, 1990a), investigating wisdom in organisational and management studies requires research to explore how the concept is understood by managers and practitioners. Accordingly, studying the relationship between wisdom and management decision making first requires an investigation into their perceptions of the concept of wisdom. This study aims to develop a theory of wise management decision making that will be helpful for managers to make sound judgments and right decisions and to take appropriate actions in a complex world. The theory is developed from a basis of field data and provides an explanation of the relationship between wisdom and management decision making.

The following comment accurately reflects the objective that this research pursues: "The future belongs to those who are willing to ask tough questions and dare to dream of a better world. It is [hoped] that we will not settle for information, that we will not settle even for mere knowledge. Let us dare to do

more than gain knowledge. Together, let us seek real organizational wisdom and find ways to make truly wise choices” (Allee, 1997, p. 17).

#### **1.4 The Research Questions**

Based on the research objective, the main question that this study seeks to address is:

- What is the relationship between wisdom and management decision making?

In order to answer this question, the following questions are also examined. Answering these questions is not the main objective of this research. However, the answers to these questions are central to addressing the main research question, and were used in the data collection:

- How is the concept of wisdom understood by managers and practitioners?
- How is wisdom identified in the business world?
- How is wisdom defined with regard to management decision making?
- How do managers identify wise management decisions?
- How can wisdom be incorporated into management decision making?
- How do managers think that a wise management decision can be made?

#### **1.5 The Significance of the Study**

“Humans have perpetually sought new tools and insights to help them make decisions. From entrails to artificial intelligence, what a long, strange trip it’s been” (Buchanan & O’Connell, 2006, p. 32). The significance of this study will lie in two main areas: broadening scholarly understanding of the concept of wisdom and its relationship with management, and improving the quality of managers’ and executives’ decision making.

The necessity of understanding how wisdom can be applied to management decision making has been recently underlined in the relevant literature (Kemmis, 2012; Melé, 2010). However, having reviewed the literature of both wisdom and management, it appeared that this literature was lacking empirical studies on the relationship between wisdom and management decision making. This study aims to fill this gap. The study findings will broaden the scholarly understanding of wisdom in the management field, by providing a significant in-depth and empirical interpretation of the relationship between wisdom and decision making.

The significance of the study of wisdom in relation to practitioners' decision making becomes more obvious if it is realised that "a good decision does not guarantee a good outcome" (Buchanan & O'Connell, 2006, p. 33), and that managers are judged based on the outcomes of their decisions (Stewart, 2006). Both goals and means are dealt with in wisdom (Intezari & Pauleen, 2013a). This study, by developing a theory of wisdom and decision making, can help both managers and employees frame problems and issues in a way that provokes more cooperative and productive thinking about the problem. People in an organisation that fosters wisdom can think in terms of the broader context in which the organisation operates, and can act prudently and in the best interests of the group and organisation, despite personal interests (Rowley, 2006a).

In addition, in the current turbulent business world, the most difficult challenges managers face, as Bennis and O'Toole (2005) stress, question their judgments rather than their ability to accumulate facts. Success in a large degree entails appropriate decisions that are made on the basis of accurate judgments of the business situations, and lead to proper actions (Nonaka & Takeuchi, 2011; Pasupathi & Staudinger, 2001). Thus the potential implications of this study are potentially beneficial at the individual, organisational, government, and societal levels, as making sound judgment calls, and taking proper actions at a given time are the qualities that are dealt with in wisdom. At all levels it is hoped the findings of this study will significantly improve decision making. For example, wisdom at the organisational level can help with all phases of planning, decision making and action (Bierly III, Kessler, & Christensen, 2000).

Since the findings of this study are based on the data collected from managers and senior practitioners, the significance of this study can be re-emphasised by considering the relevance of the findings to the managers and practitioners. The outcome theory grounded in in-situ managers' experience and interpretation is hoped to serve as a practical guide to improve management decisions in the real world.

## **1.6 The Researcher's Role in the Research**

Grounded theorists start their research based on a set of experiences that they want to explore (Charmaz, 1990). Prior to my PhD, my study was concentrated on Management Information Systems and mainly on knowledge management. My Master's thesis was an empirical study, which, as quantitative research, required a study of a wide range of approaches to knowledge and knowledge management. In the literature, what frequently emerged as a dominant approach among scholars was that knowledge was a higher level of information and data, illustrated by a three tier pyramid, known as the DIK pyramid or hierarchy, with data at the bottom, information on top of data, and knowledge at the top level. In some versions of the pyramid, wisdom was placed at a fourth and highest level of the pyramid.

Unlike data, information and knowledge, the relationship between wisdom and the rest of the pyramid was not explicitly explained or significantly examined in management literature at the time. Although over the final stage of my master's thesis, more intensive studies of wisdom began to emerge in the management literature (Kessler, 2006; McKenna et al., 2006; Rooney, McKenna, & Keenan, 2006; Rooney & McKenna, 2005; Rowley, 2006b; Small, 2004), gaining an explicit understanding of the relationship between wisdom and the levels of knowledge, information, and data as depicted in the DIKW pyramid began to become in my mind a prime objective for my future study.

I was further encouraged to study wisdom by a criticism that began to rise in my mind during and following my Master's studies. The criticism challenged the implementation of knowledge (as defined in knowledge management) in an emergent and unpredictable business world, where events are unprecedented and appear to have little or no similarity to those of the past (Intezari & Pauleen,

2012). According to the knowledge pyramid, information is data in context, and knowledge is the understanding of how to put that information into action. In this sense, knowledge tends to have a past-oriented quality in terms of data and information, and is most likely to fall short in emergent situations. The query that further encouraged me to study wisdom was this: Would wisdom address this issue, given that wisdom is illustrated in the DIKW pyramid?

## 1.7 Working Terms

Throughout the dissertation three terms are frequently used, that are defined below for clarification and consistency: ‘manager’, ‘decision maker’, and ‘management decision making’.

**‘Manager’ and ‘Decision Maker’:** The terms ‘manager’ and ‘decision maker’ are used interchangeably throughout the dissertation. Depending on the context, either of the terms has been used to enhance the flow of reading. In either case, the two terms refer to the individual CEO, manager, or executive who is in the position of decision making.

**Management Decision Making:** The decisions that are made by top management and senior executives. The decisions are highly significant as they are often vital to the long-term strategy and the success of organisations (Harrison, 1999). In this study, the phrase ‘management decision making’ does not necessarily connote the decisions that are made through pre-set procedures or guidelines. Wherever in this study the term ‘management decision making’ is used, it refers to any type of decision that is made by managers.

## 1.8 Structure of the Dissertation

This dissertation contains seven chapters that are grouped into four parts. Part 1 provides an introduction to the study and presents the initial review of the literature. Part 2 describes the methodology design. Part 3 presents the data interpretation and discusses the findings. And in Part 4 the study is concluded, and implications and limitations are mentioned. The seven chapters are outlined as follows:

### **Part 1: Introduction and Literature Review**

*Chapter 1* provides an overview of the research problem, objectives, and the research questions. The significance of this study is highlighted, and the researcher's interests and academic background in relation to the choice of this study is explained. In the last two sections of the chapter, working terms are defined and a structure for the dissertation is provided.

*Chapter 2* presents the initial literature review. The literature review includes wisdom literature and management decision making literature. Wisdom is discussed from three perspectives: philosophical, psychological, and managerial. The perspectives are synthesised in an inter-disciplinary discussion. The management decision making literature is also provided.

## **Part 2: Methodology Design**

*Chapter 3* explains the research methodology, and discusses the choice of the research methodology. As part of the discussion, the philosophical stand and reasons for choosing the methodology are also discussed. Grounded theory and its variants are explained and some examples of grounded theory studies in organisational and management studies are given.

*Chapter 4* explains the data collecting processes, informants sample, interview questions, and the rigour, validity, and reliability issues of this study. The ethical considerations of this research are also discussed in Chapter 4.

## **Part 3: Data Interpretation and Findings Discussion**

*Chapter 5* focuses on the data interpretation, and explains the coding process through which the data have been interpreted. The chapter also provides appropriate representative comments from informants.

*Chapter 6* discusses the findings. The Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM) is introduced, and the interrelationships among the key components of the theory are discussed.

## **Part 4: Conclusion**

*Chapter 7* discusses the contribution and implications of the findings to the literature and for practitioners. The limitations of the research methodology and

the findings of the study are then underlined, and some directions for future research are provided. The dissertation is summed up by a Concluding Statement.

### **1.9 Chapter Summary**

This chapter outlined the main research problem, and the objectives of the study. The research question as well as the secondary research questions were provided. This chapter also explained the significance of this study, and the researcher's place in relation to the research project. Those sections were followed by the provision of definitions for the terms that are used throughout the study. The working terms that have been introduced by this study, as well as the terms that have been adopted from the relevant literature have been defined in this chapter. This chapter also outlined the structure of the thesis and provided a depiction of the structure. In the next chapter, wisdom and decision making literature are reviewed.

<b>Part 1</b> The Nature of the Research Problem	Chapter 1	Introduction
	Chapter 2	Initial Review of the Literature
<b>Part 2</b> Methodology Design	Chapter 3	Research Methodology and Grounded Theory
	Chapter 4	Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations
<b>Part 3</b> Findings	Chapter 5	Data Interpretation
	Chapter 6	Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)
<b>Part 4</b> Conclusion	Chapter 7	Implications, Limitations, and Directions for Future Research

## **Chapter 2 Initial Review of the Literature**

### **2.1 Chapter Overview**

This chapter sets the stage for the thesis by presenting the initial review of wisdom and management decision making literature which was done prior to data collection. Due to the adopted methodology (classic grounded theory), the literature was reviewed twice: an initial review that was done to complete the PhD proposal as a requirement of PhD admission; and the second review that was done during the data interpretation after the substantive theory began to emerge, and during the development of the discussion and implication sections. The literature that the researcher used to develop the later sections (Chapter 6, and Chapter 7) is presented and introduced in those sections. The current chapter presents the initial literature review. The initial review, however, has been updated in the final report of the thesis.

This chapter comprises four main sections. In the first section, wisdom literature is reviewed from philosophical, psychological, managerial, and inter-disciplinary perspectives. This is followed by a review of the management decision making literature. At the end of the chapter a chapter summary is provided.

### **2.2 Wisdom**

Wisdom is believed to be a polysemantic concept that may take a slightly different meaning in different contexts and applications (Rowley & Slack, 2009). In the following paragraphs wisdom is examined from three different perspectives: Philosophical, Psychological, and Managerial. Since most contemporary academic studies of wisdom draw on the philosophical traditions of wisdom as presented by ancient Greek philosophers such as Plato, Socrates and Aristotle, the philosophical perspective is discussed first.

#### **2.2.1 Philosophical Perspective**

The philosophical discourses of the concept of wisdom are rooted in the works of the classical philosophers such as Socrates (469-399 B.C.) and Aristotle (384-322 B.C.). In the recent studies of wisdom, however, the Eastern traditions, such as Confucianism and Buddhism, have begun to appear (Case, 2013; Harwood, 2011; Yang, 2011a). Jeste et al. (2010) report that “religious traditions in Buddhism,

Christianity, Hinduism, and Judaism stress religiosity or at least spirituality as a characteristic of wise people” (p. 676). In Dahlsgaard et al.’s (2005) cross-cultural examination of the ancient written texts in the Western and Eastern philosophical and religious traditions, wisdom was identified as one of the six core virtues: courage, justice, humanity, temperance, wisdom, and transcendence. Wisdom in the Western approach, and especially as Aristotle explains it, is divided into two main conceptualisations: *sophia* and *phronesis*. *Sophia* or theoretical wisdom is more concerned with eternal truth, and *phronesis* is action-oriented (*the Nicomachean Ethics 1143b*, 15-20), i.e. doing the right thing at a given time (Tredget, 2010). With a strong theist foundation, the Eastern tradition shares the same understanding of wisdom as being a quality in relation to knowledge and judgment. Wisdom in both traditions is a means to achieve a good life for self and others (Yang, 2011a).

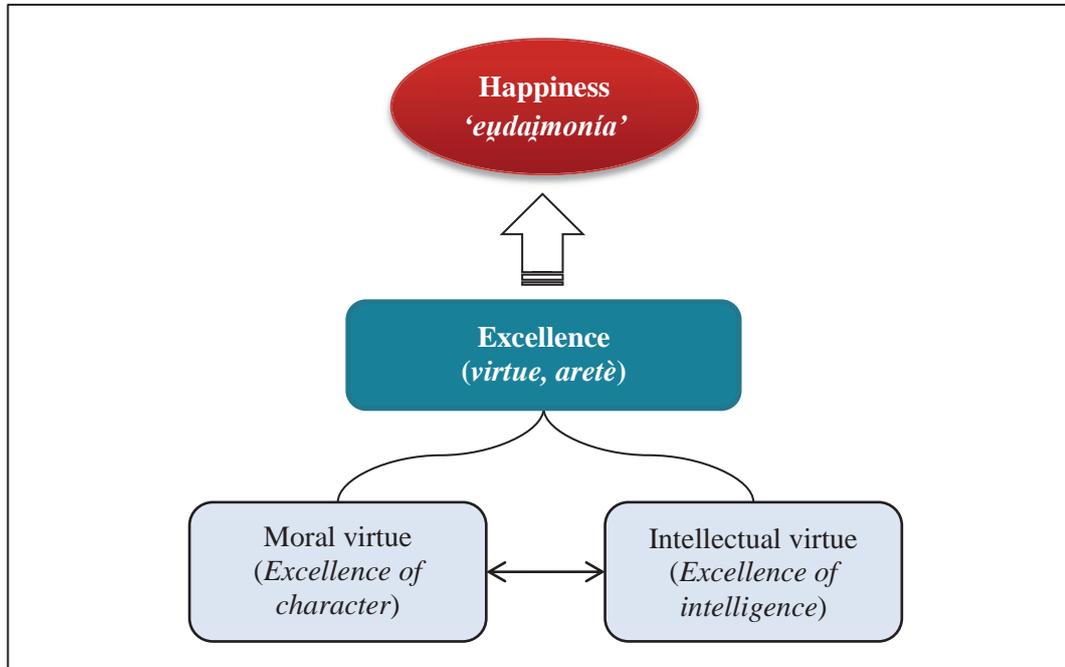
In the classical era, wisdom was listed among the virtues that were regarded as the cardinal virtues: wisdom (*sophia/sapientia*), courage (fortitude), moderation or self-control (temperance [*temperantia*]), and justice (*iustitia*) (Small, 2004). In Plato’s last and longest dialogue, *The Laws*, wisdom is the first virtue among the other virtues. For the Socratics, wisdom is a cardinal virtue, transcending the realm of the merely cognitive (Robinson, 1990). ‘Virtue’ and ‘excellence’ are the key concepts in relation to the philosophical understanding of wisdom.

### ***2.2.1.1 Wisdom, Virtue, and Excellence***

In the literature, *virtue* and *excellence* are treated equally in terms of meaning. Virtue is the Latin word for the ancient Greek notion of *arête* (Baggini & Fosl, 2007; Begley, 2006), which may refer broadly in meaning to excellence in quality which in addition to human beings, may be held by inanimate objects and/or by any other creatures (Begley, 2006), or refers more specifically to the socially valued character traits such as patience, humility and graciousness (Beauchamp, 1991). As Aristotle put it, “the virtue of man is the state of character which makes a man good and which makes him do his own work well” (*the Nicomachean Ethics 1106a*, 20-25).

Josef Pieper in his book *The Four Cardinal Virtues* (1966, p. xii) mentions that virtues are the excellence which enable a person “to attain the furthest

potentialities of his nature”. In this sense, virtues (*excellence*) are achieved when humans’ emotions, desires, and passions are excellently cultivated and come together in an excellent way (Baggini & Fosl, 2007), which, as illustrated in Figure 2-1, leads consequently to happiness (*eudaimonia*, *εὐδαιμονία*) (Baggini & Fosl, 2007; Polansky, 2000).



**Figure 2-1: Wisdom, Virtue, and Excellence**

Kramer (1990) believes that theoretical and practical wisdom are not separate domains. It is also seen abundantly in the literature that the terms ‘wisdom’ and ‘practical wisdom’ are used interchangeably (Begley, 2006). One of the reasons the two notions, wisdom and practical wisdom, are used interchangeably is to some degree because the two words traditionally refer to the term ‘excellence’ (discussed in the previous section). According to Urmson (1998) both wisdom and practical wisdom refer to excellence, which in theoretical matters is called wisdom, while, in practical matters, it is referred to as practical wisdom. As Begley (2006) put it, “anything good performs its function well and demonstrates virtue, arête, or excellence” (p. 258). This issue, nevertheless, is discussed in the following paragraphs to illuminate the term *wisdom*, as an integrated form of both theoretical and practical wisdom.

Eudaimonia, happiness or well-being, is the good end toward which human beings move. Aristotle defines happiness as “something final and self-sufficient [that] is

the end of action” (*the Nicomachean Ethics 1079b*, 20). By ‘self-sufficient’, Aristotle refers to the final end that “we choose always for itself and never for the sake of something else” (*the Nicomachean Ethics 1079b*, 1-5). He explains that the final end leads to happiness. Honour, pleasure, and reason are the examples of the virtues that Aristotle says that we choose indeed for themselves (for if nothing resulted from them we should still choose each of them), and that we choose them for the sake of happiness, because through them we become happy. So, achieving *eudaimonia* means flourishing and making a success of life (Beauchamp, 1991, p. 215).

Aristotle believed that there are two types of human excellence which include *moral* and *intellectual excellences* (*the Nicomachean Ethics 1103a*, 15). *Bodily excellence*, in addition, is sometimes mentioned as being another excellence which aligns with the other two (Urmson, 1998). Some philosophers such as Karl Popper, R. F. Dearden and Anthony Quinton believe that intellectual virtues are a subgroup of moral virtues (Steutel & Spiecker, 1997). Either as a subgroup of moral virtues or as a separate quality, intellectual and moral virtues are inherently interwoven excellences of human beings (MacIntyre, 1985; Polansky, 2000; Urmson, 1998). Moral virtue refers to excellence in relation to such attributes as temperance, justice, and courage, while intellectual virtue refers to excellence in practical wisdom and in theoretical matters (Begley, 2006).

To define virtues, Aristotle (*the Nicomachean Ethics 1105b*, 20-30) considers three qualities: 1) emotion, 2) capacity, and 3) states of character. By emotions, Aristotle means “appetite, anger, fear, confidence, envy, joy, friendly feeling, hatred, longing, emulation, pity, and in general the feelings that are accompanied by pleasure or pain”. By capacities, he refers to “the things in virtue of which we are said to be capable of feeling these, e.g. of becoming angry or being pained or feeling pity”. States of character are defined as “the things in virtue of which we stand well or badly with reference to the passions, e.g. with reference to anger we stand badly if we feel it violently or too weakly, and well if we feel it in an intermediate way; and similarly with reference to the other passions”.

Aristotle (*the Nicomachean Ethics 1105b*, 30-35) continues that virtue is neither an emotion nor a capacity. He explains that nobody is pronounced good or bad,

and nobody is praised or blamed according to or for their emotions. For example a person is not praised for being frightened or angry, as one is not angry or afraid by choice. Moreover nobody is pronounced good or bad, or praised or blamed just because of one's capacity for emotion. In addition, one is not born good or bad by nature, while he or she possesses certain capacities by nature. Aristotle concludes that virtues are then *states of character*. He defines moral virtue as "a settled disposition of the mind determining the choice of actions and emotions, consisting essentially in the observance of the *mean* relative to us, this being determined by principle, that is, as the prudent man would determine it" (*the Nicomachean Ethics 1107a, 1-5*).

Moral virtues are personality traits and habits, and states of character that intrinsically motivate a person in a specific situation to act in a certain way in pursuit of good (O'Toole, 1938; Spielthener, 2004). Intellectual virtues, on the other hand, denote the excellences of the mind, which enable one to deliberate (Deslauriers, 2002) and to act well. Moral virtues facilitate the placing of good actions (O'Toole, 1938), and as Aristotle put it, a moral virtue is a "habit accompanied with a deliberate preference in the relative *mean* defined by reason and as a prudent man would define it" (O'Toole, 1938, p. 83). Intellectual virtues aim at one's cognitive connection with reality and from this point of view, a person of intellectual virtue is the one who succeeds in achieving such access (Abraham, 2006).

With regard to the development of moral and intellectual virtues, Aristotle (*the Nicomachean Ethics 1103a, 15-20*) says that: "intellectual virtue in the main owes both its birth and its growth to teaching (for which reason it requires experience and time), while moral virtue comes about as a result of habit".

There is no consensus in the virtue and wisdom literature on whether wisdom is a subcategory of intellectual virtue or of moral virtue. Roca (2007), for example, considers practical wisdom as a moral virtue. Polansky (2000), in contrast, categorises prudence (practical wisdom) under intellectual virtue. And Schollmeier (1989) considers practical wisdom as an intellectual virtue with which moral virtues are developed. In the Aristotelian perspective, prudence is the highest intellectual virtue (Roca, 2007) that is directed by moral virtues. In this

sense, practical wisdom (prudence) is referred to as being associated with both intellectual and moral virtues (O'Toole, 1938), as “it is not possible to be good in the true sense without Prudence, nor to be prudent without Moral Virtue” (*the Nicomachean Ethics 1144b*, 30-32).

Aligned with practical wisdom, there is another complementary quality of wisdom which is more related to non-mundane aspects of life, theoretical wisdom (Holliday & Chandler, 1986). To better understand how moral virtues, intellectual virtues, and wisdom are inter-related, an explanation of the bifurcation of theoretical and practical wisdom is necessary.

### **2.2.1.2 Theoretical (Philosophic) and Practical Wisdom**

There are two literally separated types of wisdom: *theoretical wisdom* – also known as *divine, esoteric, metaphysical, pure, abstract* or *theoretically-oriented wisdom*, and *practical wisdom* – also referred to as *earthy, or mundane* (Begley, 2006; Holliday & Chandler, 1986; Nonaka & Takeuchi, 2011; Ryan, 1996; Tredget, 2010). Practical wisdom stands at the foundation of action, while the basis of theoretical wisdom is philosophy itself, devoted to the truth (Robinson, 1990). Moody (1983) notes that theoretical wisdom is more associated with theology, and provides meaning to life by questioning the nature of humanity, whilst practical wisdom is more associated with such fields as “administration, law, or the management of human affairs” (p. 2) and serves the function of governing society.

Divine wisdom, as it was prevalent in the very early literature of wisdom, is thought to be an unattainable ideal that could only be strived for rather than attained (Adler, 1992). This sentiment is reflected in *Plato's Republic*: wisdom is “the only one that is innate” (Robinson, 1990, p. 14). Earthy wisdom, by contrast, is a framework for understanding all other fields, and it can be achieved and developed by humans (Holliday & Chandler, 1986). Descartes believed that divine wisdom can only be attained as a gift from God (Holliday & Chandler, 1986). Aristotle, by contrast, suggests that both theoretical and practical wisdom are attainable by people, as people naturally have the capacity to receive virtues, and thus, virtues can be acquired by humans through habituation; for example, we become brave by doing brave acts (*the Nicomachean Ethics 1103a*, 15-25). For

Aristotle, the distinction provides an explanation of why some knowledgeable people are incompetent in their actual life (Baggini & Fosl, 2007).

Aristotle identifies three states of mind (*the Nicomachean Ethics 1141a*, 1-10):

- episteme ( *ἐπιστήμη*, scientific knowledge)
- sophia ( *Σοφία*, philosophic wisdom)
- phronesis or prudence ( *φρόνησις*, practical wisdom)

Episteme, or “universally valid scientific knowledge” (Nonaka & Takeuchi, 2011, p. 60) is judgment about things that are universal and necessary (*the Nicomachean Ethics 1140b*, 30-35). Episteme is found in those who understand things from a scientific point of view, and know the nature of things and the governing principles of the behaviour of things (Robinson, 1990).

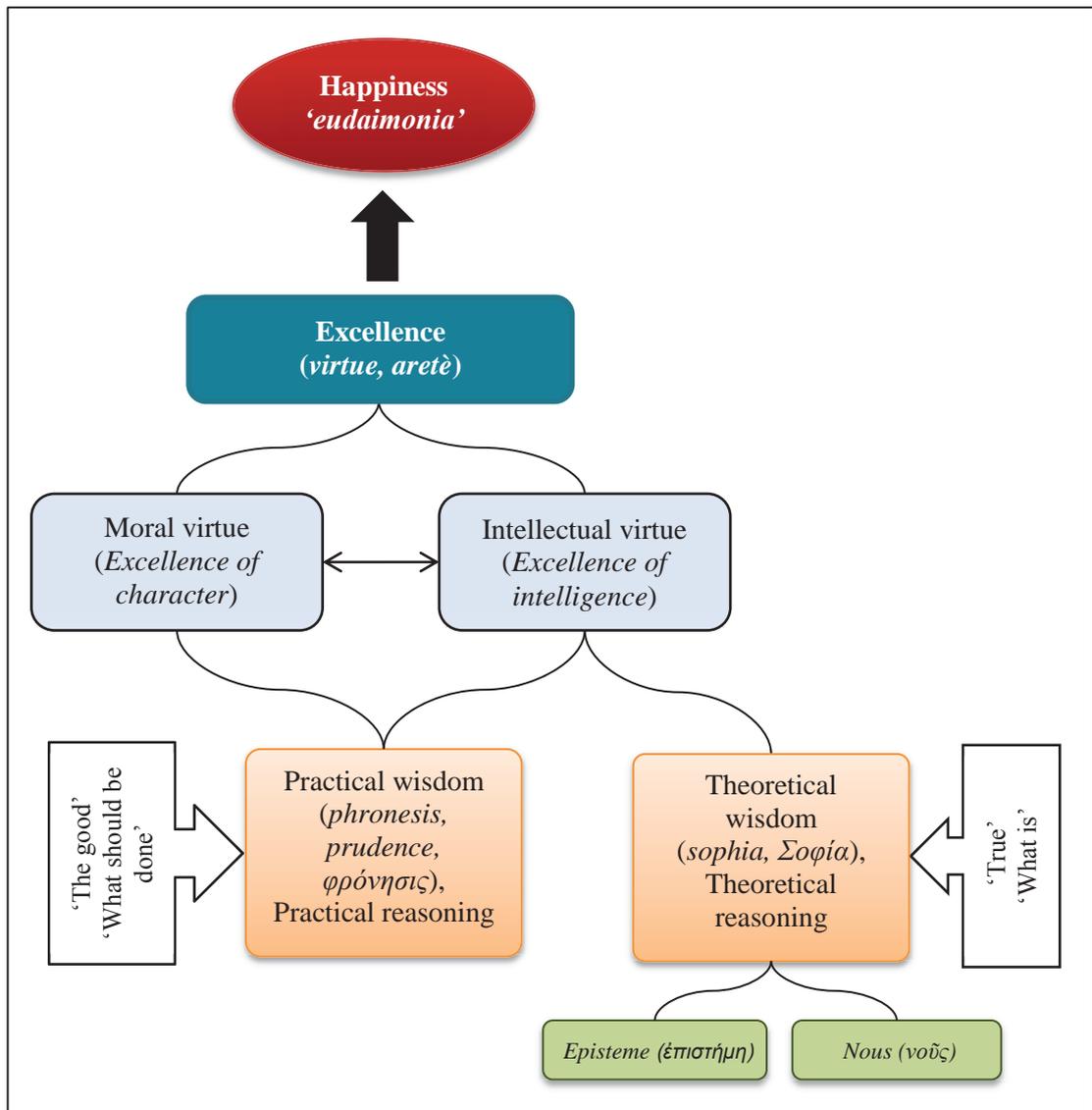
Theoretical wisdom or *sophia* is the combination of scientific knowledge (*episteme*) and intellect or intuitive understanding (*nous*) (*the Nicomachean Ethics 1141b*, 1-5). It is focused on those “who have devoted themselves to a contemplative life in pursuit of truth” (Robinson, 1990, p. 14). It is the knowledge of the eternal forms or ideas, the ends-in-themselves, and relies on understanding what something factually is (Baggini & Fosl, 2007; Kleimann, 2013). Theoretical wisdom begins from *episteme* which refers to the knowledge of ‘what is’ (Baggini & Fosl, 2007). However, it is not “merely factual knowledge”, but it “puts factual knowledge in proper perspective” (Ryan, 1996, p. 255).

While theoretical wisdom is not based on experience, both experience and maturity are needed for practical wisdom (Baggini & Fosl, 2007; Begley, 2006). Practical wisdom is an action-based entity (Robinson, 1990), while theoretical wisdom is the base of philosophy itself, and is not concerned with practice (*the Nicomachean Ethics, 1143b*, 15-25). Theoretical wisdom is the knowledge of eternal truths (Tredget, 2010).

The action-oriented nature of practical wisdom makes it crucial to form sound ethical judgments (Begley, 2006). Practical wisdom (*phronesis*) is one’s capacity to direct action (Polansky, 2000). It is “a reasoned and true state of capacity to act with regard to human goods” (*the Nicomachean Ethics 1140b*, 20), and begins from the apprehension of ‘what should be’ and whether or not a particular action

should be done in a particular circumstance (Baggini & Fosl, 2007). Aquinas makes a similar statement: practical wisdom is “right reason in action” and “a prudent man is one who disposes well of the things that have to be done for a good end” (*Summa Theologica II-II*, 47, 13). Practical wisdom “locates the prudent course of action and resists the urgings of the passions and the deceptions of the senses” (Robinson, 1990, p. 14).

Practical wisdom as effective deliberation and sound reasoning leads to a morally right course of action (Baggini & Fosl, 2007). Thus, it engages ethics and moral virtues, so that being practically wise is impossible without being good (Roca, 2007) (Figure 2-2). This leads theoretical wisdom to be intimately linked to practical wisdom, as practical wisdom “is inspired by a moral intuition of what is or is not virtuous” (Roca, 2007, p. 198). So, theoretical wisdom is essentially needed for understanding ethical concepts and frameworks (Begley, 2006). Practical wisdom is developed through practicing moral virtues (Melé, 2010).



**Figure 2-2: Theoretical and Practical Wisdom**

Aristotle asserts that the highest form of human well-being is the life controlled by reason (Beauchamp, 1991). So, sound reasoning plays an important role in being wise, and it refers to both theoretical reasoning – the apprehension of what the truth is – and practical reasoning – the apprehension of whether or not a particular action should be done. In this sense, sound reasoning is defined as “the capacity to determine not only the *true* but also *the good* action” (Baggini & Fosl, 2007, p. 17).

As discussed later on in this chapter, in the ‘An Inter-disciplinary Perspective’ section, the prominent approach in the contemporary academic literature of wisdom considers wisdom as a practical and earthy wisdom; that is, it is associated with practice, and can be developed (Begley, 2006; Bierly III et al.,

2000; Bigelow, 1992; Fraser & Hyland-Russell, 2011; Gayle, 2011; Gibson, 2008; Grint, 2007; Halpern, 2001; Intezari & Pauleen, 2013b; Jarvis, 2011; Jeste et al., 2010; Kaldjian, 2010; Kok, 2009; Levanon, 2011; McClain, Ylimaki, & Ford, 2010; Small, 2011; Stanovich, 2001; Sternberg, 1998, 2001, 2004a; Trowbridge, 2011).

Rooted in the philosophical traditions of wisdom, extensive studies have been done in psychology on understanding and conceptualising wisdom.

### **2.2.2 Psychological Perspective**

The concept of wisdom has been extensively studied in psychology over the last three decades. The psychological studies of wisdom were provoked by Erikson's (1963) life-span model as well as the emergence of developmental psychology (Sharma, 2005). Erikson (1963) suggests that human personality develops over eight psychological stages: trust vs. mistrust, autonomy vs. shame, initiative vs. guilt, industry vs. inferiority, ego identity vs. role confusion, intimacy vs. isolation, generativity vs. stagnation, and ego integrity vs. despair. In each stage an individual experiences psychosocial crisis that must be resolved either positively or negatively. In the last stage that begins in the later years of life the aging individual looks back on and evaluates their effect on others and the world in order to provide meaning to their life (Erikson, 1968). Erikson (1959, 1963) argues that those who successfully resolve the earlier stages of psychological crisis achieve a special insight into their existence, meaning of life, and their position in the world. Erikson (1959, 1963) characterises the achievement of this insight as wisdom.

Wisdom and intelligence can provide positive features of development in the later years of life (Clayton, 1975, 1982), in that, increasingly with age, wisdom provokes the person to consider the impacts of his or her actions on self and on others (Clayton, 1982). Others, such as Brugman (2006), Vaillant (2002), and Meacham (1990), however, suggest that there is no correlation between wisdom and aging. Wisdom has been conceptualised in psychology in different ways. This diversity makes it difficult, if not impossible, to provide a comprehensive psychological definition of the concept of wisdom (Bergsma & Ardelt, 2012; Jeste et al., 2010; Kunzmann, 2004). The psychological studies of wisdom can be

divided into two main variants: implicit theories and explicit studies (Baltes & Staudinger, 2000; Sternberg, 1990b).

### ***2.2.2.1 Implicit and Explicit Studies<sup>1</sup>***

The first group of theories of wisdom, *implicit* studies, refers to the theories that are based on common-sense, everyday beliefs, or folk-psychological conceptions of wisdom (Staudinger, 2008; Sternberg, 1998). These are based on the assessment of how wise people are characterised as well as the language-based descriptions of the term wisdom (Baltes & Staudinger, 2000). Implicit studies of wisdom are in principle based on the approach that was first implemented by Clayton (1975). Examples of implicit theories include Clayton (1975, 1976, 1982), Clayton and Birren (1980), Sternberg (1985), Holliday and Chandler (1986), Orwoll (1990), Bluck and Glück (2005), Webster (2010), Jeste et al. (2010), Glück and Bluck (2011), and König and Glück (2013).

**Implicit studies** try to understand wisdom by examining people's perception of the concept of wisdom. In this approach a group of people are asked to list the characteristics that they believe to be related to wisdom. Then another group of individuals are asked to rate the characteristics in terms of their wisdom relatedness or typicality. The rated characteristics are analysed to identify the main dimensions of wisdom (Staudinger, 2008).

Applying the approach, Clayton and Birren (1980) identify three prototypical dimensions of wise people: 1) affective characteristics such as empathy and compassion, 2) reflective processes such as intuition and introspection, and 3) cognitive capacities such as experience and intelligence. In this sense wisdom, which is defined as “the ability to grasp human nature, which is paradoxical, contradictory, and subject to continual change”, provides for life-long knowledge acquisitions (Clayton, 1982, p. 315).

---

<sup>1</sup> To the extent that the understanding of the practitioners' perception of the concept of wisdom is concerned, the current study may appear to tend to resemble an implicit study. This, however, has not been due to an intentional choice on the part of the researcher between implicit or explicit studies. The objective of the study was to provide a conception of wisdom from practitioners' (not necessarily wise or unwise people/practitioners) point of view. So the tendency is due to the research objective, methodology, and sampling.

Holliday and Chandler (1986) conducted a prototype analysis of wisdom, studying about 500 participants' descriptions of wise people. To see whether the concept of wisdom was understood as a prototype, they rated the characteristics that the participants attributed to wise people. Based on the ratings, Holliday and Chandler (1986) carried out a principle-components analysis, and identified five factors underlying the concept of wisdom: exceptional understanding, judgment and communication skills, general competencies, interpersonal skills, and social unobtrusiveness. Their study indicates that wisdom is perceived as the exhibition of two set of characteristics: a) exceptional understanding and b) judgment and communication. Wise people learn from their experience and see events and phenomena within the larger context. Moreover, wise people understand life, make thoughtful decisions, and consider multiple points of view.

Glück and Bluck's (2011) study develops a wisdom questionnaire assessing the conceptions of wisdom and how it develops. The questionnaire included eight items asking 'what is wisdom?' and nine items on 'how does one become wise?'. 1955 lay people rated the importance of the items. The results showed two typical conceptions of wisdom: 'cognitive conception' and 'integrative conception'. In the cognitive conception, cognitive and reflective characteristics are rated as central to wisdom. However, people with integrative conception endorsed all cognitive, reflective, and affective characteristics as important aspects of wisdom. For the participants with cognitive conception, learning from experience and from wise people were critical in developing wisdom, whilst in integrative conception, 'experience with life challenges' is added and rated as equally important. Glück and Bluck's (2011) study was later extended by König and Glück (2013), by including a qualitative assessment of people's perception of wisdom and its development. The new findings confirmed 'cognitive' and 'integrative' conceptions.

**Explicit studies:** In psychology, explicit studies refer to the studies that are done based on data collected from people performing tasks. The tasks are presumed by the researcher to measure wisdom (Sternberg, 1985). In respect to wisdom studies, psychological studies of wisdom are aimed at the behavioural expressions and manifestations of wisdom (Baltes & Staudinger, 2000).

Explicit studies of wisdom can be divided into three approaches (Baltes & Staudinger, 2000; Kunzmann, 2004; Pasupathi & Staudinger, 2001): 1) personality development: considering wisdom as being related to personality development, and conceptualising wisdom as personality traits; 2) cognitive development: relating wisdom to the development of cognition, and conceptualising wisdom in dialectical and post-formal thought; and 3) expertise development: conceptualising wisdom as an expert knowledge and judgment about the meaning of life. In spite of their different origins, three aspects of the nature of wisdom are commonly indicated by these three conceptualisations. First, wisdom involves cognitive, affective and motivational qualities in an integrative manner, and for this reason is different from other personality traits. Second, wisdom is an ideal, and not all people can become wise. Third, wisdom by setting behaviour standards, guides one's behaviour towards optimising one's own and others' potentials (Kunzmann, 2004). Compared to the number of implicit theories, explicit theories of wisdom are less common (Kunzmann & Baltes, 2005; Sternberg, 1990b). Examples of these approaches include Labouvie-Vief (1990), Baltes and Smith (1990), McAdams and de St. Aubin (1998), Baltes and Staudinger (2000), and Taylor et al. (2011).

Kramer, for example, provides a model of wisdom which underlines the integration of cognition and emotion in wisdom (Figure 2-3). Kramer (1990) argues that one's wisdom-related skills that allow wisdom to operate in individuals are developed through the reciprocal interaction of cognitive and affective development. Examples of the ways that wisdom manifests in individuals include advising others, engaging in spiritual reflection, and making life decisions.

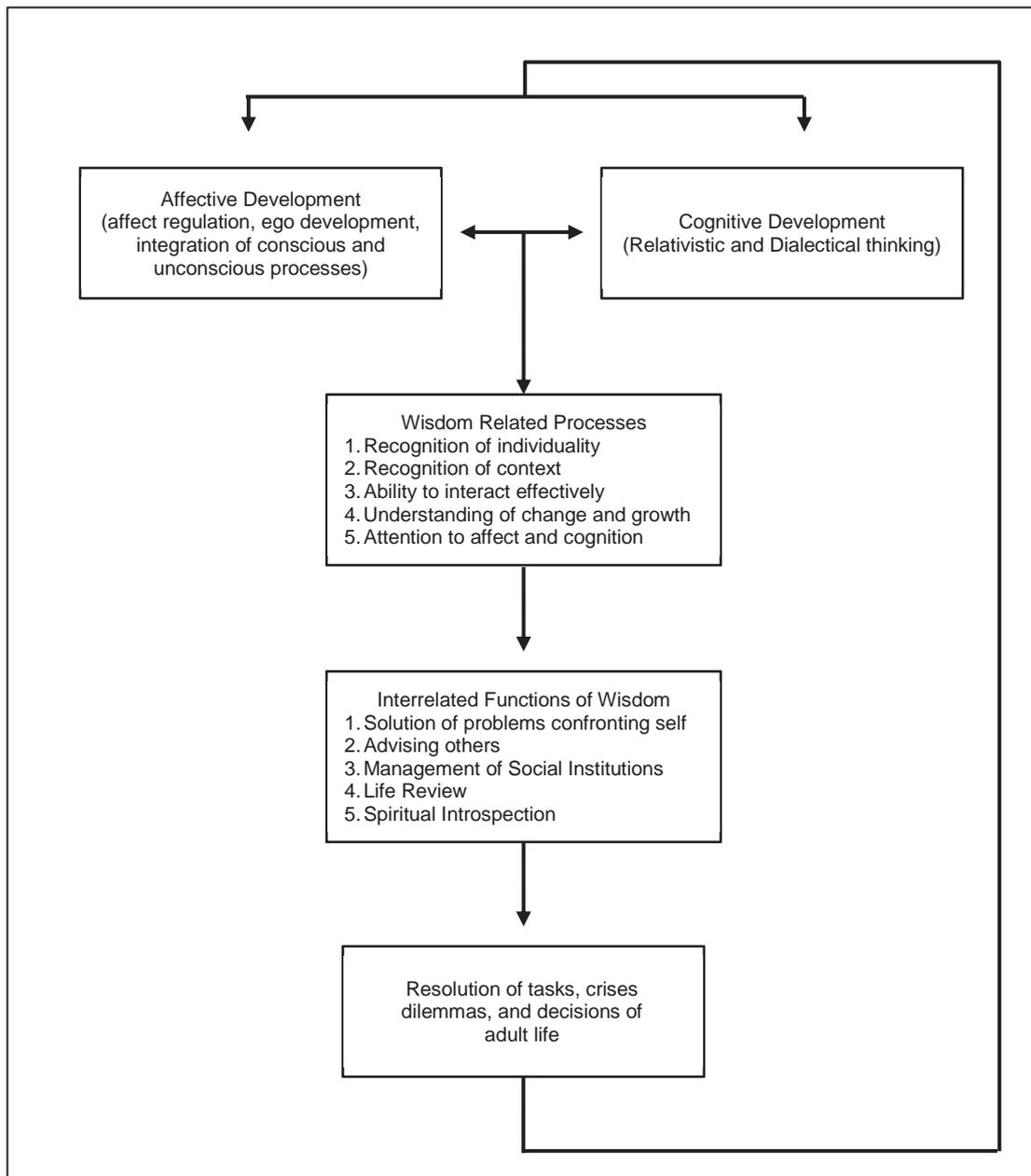


Figure 2-3: A Model of Wisdom (Kramer, 1990, p. 282)

In an explicit study of wisdom, Pasupathi and Staudinger (2001) hypothesised that moral reasoning as one aspect of morality is related to the wisdom-related qualities of knowledge and judgment. 220 participants who ranged in age from 20 to 87 completed three measures. The measures included *wisdom-related performance*, and *moral reasoning*, as well as measures that assessed intellectual functioning and personality. To assess wisdom-related performance, Pasupathi and Staudinger (2001), following the Berlin Wisdom Paradigm (which is discussed in the next section), employed three tasks: suicide task (existential life management), meaning of life task (life review), and family task (life planning).

Participants were asked to think aloud in response to the hypothetical tasks. Moral reasoning was assessed using a paper-and-pencil measure. Participants were asked for their reaction to two stories, each representing a moral dilemma. The participants were then asked to discuss the acceptability of 12 arguments, six ‘for’ and the rest ‘against’ the actions taken in the stories. The findings supported the hypothesis of the positive association between moral reasoning and wisdom-related performance. Moreover, it was evident that personal characteristics such as personality and intelligence mediate this association. Pasupathi and Staudinger (2001) adopted a developmental model of wisdom-related knowledge and judgment, which was introduced by Baltes and Smith (1990).

Baltes’ line of work on wisdom, and the approaches taken by him and his colleagues (Baltes & Kunzmann, 2003; Baltes et al., 1995; Baltes, 2004; Pasupathi, Staudinger, & Baltes, 2001; Staudinger, Smith, & Baltes, 1992) are among the prominent psychological approaches to wisdom. Sternberg’s (2004b) theory is another approach that has made an enormous contribution to the body of knowledge and studies of the concept of wisdom. The two studies are categorised by their theorists as explicit studies (Baltes & Kunzmann, 2004; Sternberg, 1998).

#### ***2.2.2.2 The Berlin Wisdom Paradigm and the Balance Theory***

In psychology two prominent approaches can be identified: the Berlin school, which is mainly based on Baltes and his colleagues’ studies of wisdom (Baltes & Kunzmann, 2003; Baltes et al., 1995; Baltes, 2004; Pasupathi et al., 2001; Staudinger et al., 1992); and the Balance theory of wisdom, which has been introduced by Sternberg (Sternberg & Dobson, 1987; Sternberg, 1985, 1986, 1990b, 1998, 2000, 2003, 2004a).

**The Berlin Wisdom Paradigm:** The most prominent contemporary studies of wisdom are by Baltes and colleagues (Baltes & Freund, 2003; Baltes & Kunzmann, 2003, 2004; Baltes & Smith, 1990; Baltes & Staudinger, 1993, 2000; Baltes, 1991, 2004; Pasupathi et al., 2001; Staudinger et al., 1992), referred to as the Berlin school, or ‘the Berlin wisdom paradigm’ (Baltes & Staudinger, 2000). In the Berlin wisdom paradigm, wisdom is defined as ‘expert knowledge’ (Baltes & Smith, 1990, p. 95; Pasupathi, Staudinger, & Baltes, 2001, p. 351) and ‘an expertise’ (Baltes & Staudinger, 2000, p. 124): “an expert knowledge system in

the fundamental pragmatics of life permitting exceptional insight, judgment, and advice involving complex and uncertain matters of the human condition” (Baltes & Staudinger, 1993, p. 76).

Wisdom in this school is considered as a utopia of mind and virtue (Baltes & Kunzmann, 2004) that has individual and collective representations (Baltes & Smith, 1990; Baltes & Staudinger, 2000): “wisdom is the utopian idea of an ideal development on individual and collective levels” (Baltes & Kunzmann, 2004, p. 293).

According to Baltes and Staudinger (1993), wisdom-related knowledge can be assessed by five criteria: factual knowledge regarding fundamental pragmatics of life, procedural knowledge about life problems (e.g. strategies of information search, decision making and advice giving), life-span contextualism which refers to the knowledge that considers the contexts of life and societal change, relativism or the knowledge which considers relativism of values and life goals, and uncertainty (the knowledge which considers the uncertainties of life). Table 2-1 outlines the criteria and provides the instantiations of the criteria in verbal discourses.

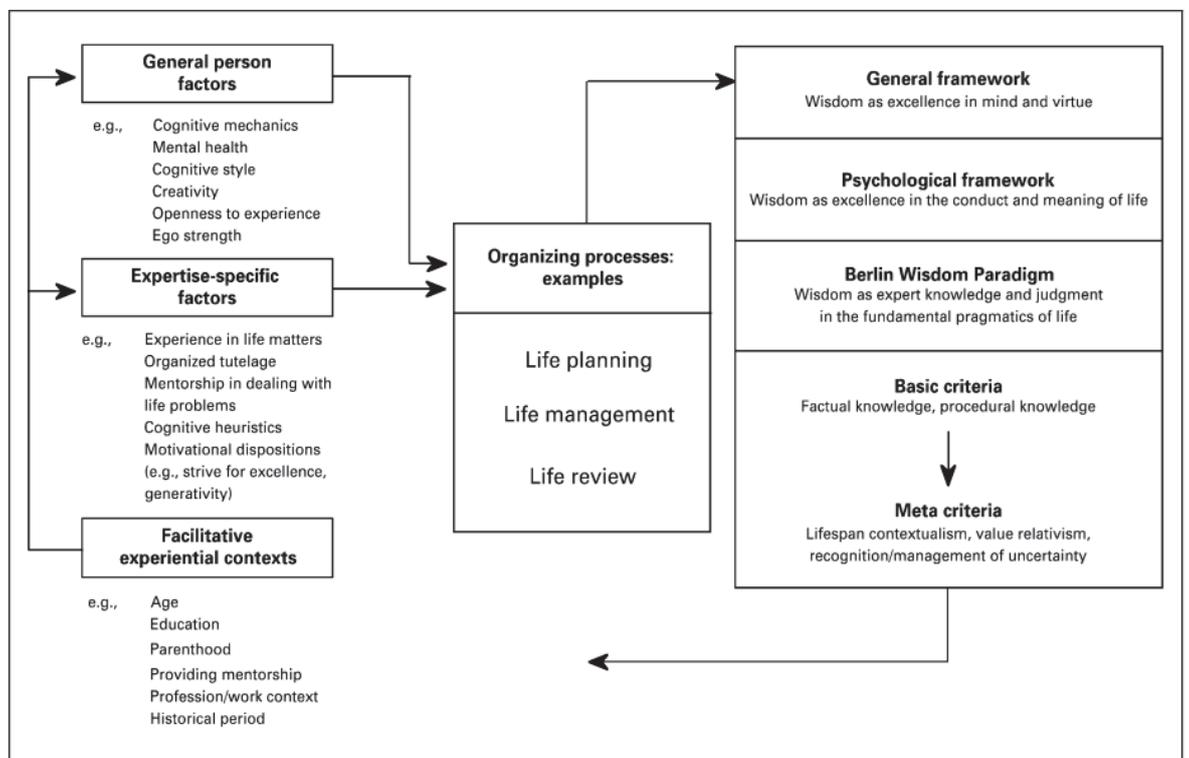
Criterion	Instantiation in verbal discourse
Factual knowledge	Who, when, where? Specific knowledge, examples, variations General knowledge of emotions, vulnerability, and multiple options (parenting, adoption, abortion)
Procedural knowledge	Strategies of information search, decision making, and advice giving Timing of advice Monitoring of emotional reactions Heuristics of cost-benefit analysis
Life span contextualism	Likely age sequence Sociohistorical and idiosyncratic context Coordination of life themes (family, education, work) and temporal changes Contextual conflicts and tensions
Relativism	Religious and personal preferences Current/future values, goals, motives Cultural relativism
Uncertainty	No perfect solution Optimization of gain/loss Future not fully predictable Back-up solutions

**Table 2-1: Use of the Wisdom Criteria to Evaluate Discourse About Life Matters** (Baltes & Smith, 1990, p. 104)

Factual knowledge refers to the long-term memory about life matters, and procedural knowledge is a repertoire of heuristics or mental procedures that one uses to organise the information about pragmatics of life in order to use it in decision making and action planning. Life-span contextualism denotes the understanding that life events and life development is embedded in such life-span contexts as sociohistorical, age-related, and idiosyncratic context, and that life-span contexts may conflict, leading to tension (Baltes & Smith, 1990). For instance, “how does one balance career priorities with family and leisure priorities?” (Baltes & Smith, 1990, p. 102). Relativism, as a wisdom criterion, refers to the understanding that people are different with different values, priorities and goals. Baltes and Smith (1990) suggest that those with expertise in the pragmatics of life are flexible in terms of value when interpreting past events and decisions in life, or others’ life decisions. That is, when wisdom-type experts make judgments about others, they consider the individual differences, and do not allow their own personal experiences, values and cultural backgrounds affect their judgments. The last wisdom criterion, uncertainty, connotes knowledge about the

relative unpredictability and indeterminacy of life. Wise people know that no one can know everything about the past and future. So, they admit their knowledge limitations (Baltes & Smith, 1990).

Figure 2-4 illustrates how the development of wisdom depends on multiple factors including general factors (such as cognitive, cultural and personal efficiency), specific factors (such as practice with problems of life), and modifying and facilitative factors (such as professional status and education). Baltes and Kunzmann (2004) argue that wisdom as expert knowledge evolves within life planning, life management, and life review.



**Figure 2-4: The Development, Structure, and Functions of Wisdom: A Theoretical Model** (Baltes & Kunzmann, 2004, p. 295)

Wisdom, therefore, according to the Berlin Wisdom Paradigm, represents a kind of expert knowledge that is not a purely cognitive matter, but it requires a coalition between experiences and understanding. In addition, wisdom as an expert knowledge “is not knowledge for knowledge’s sake, but rather such expert knowledge is in the service of the fundamental pragmatics of life and plays a central role in the development of one’s self and one’s contribution to the development of others” (Baltes & Kunzmann, 2004, p. 295).

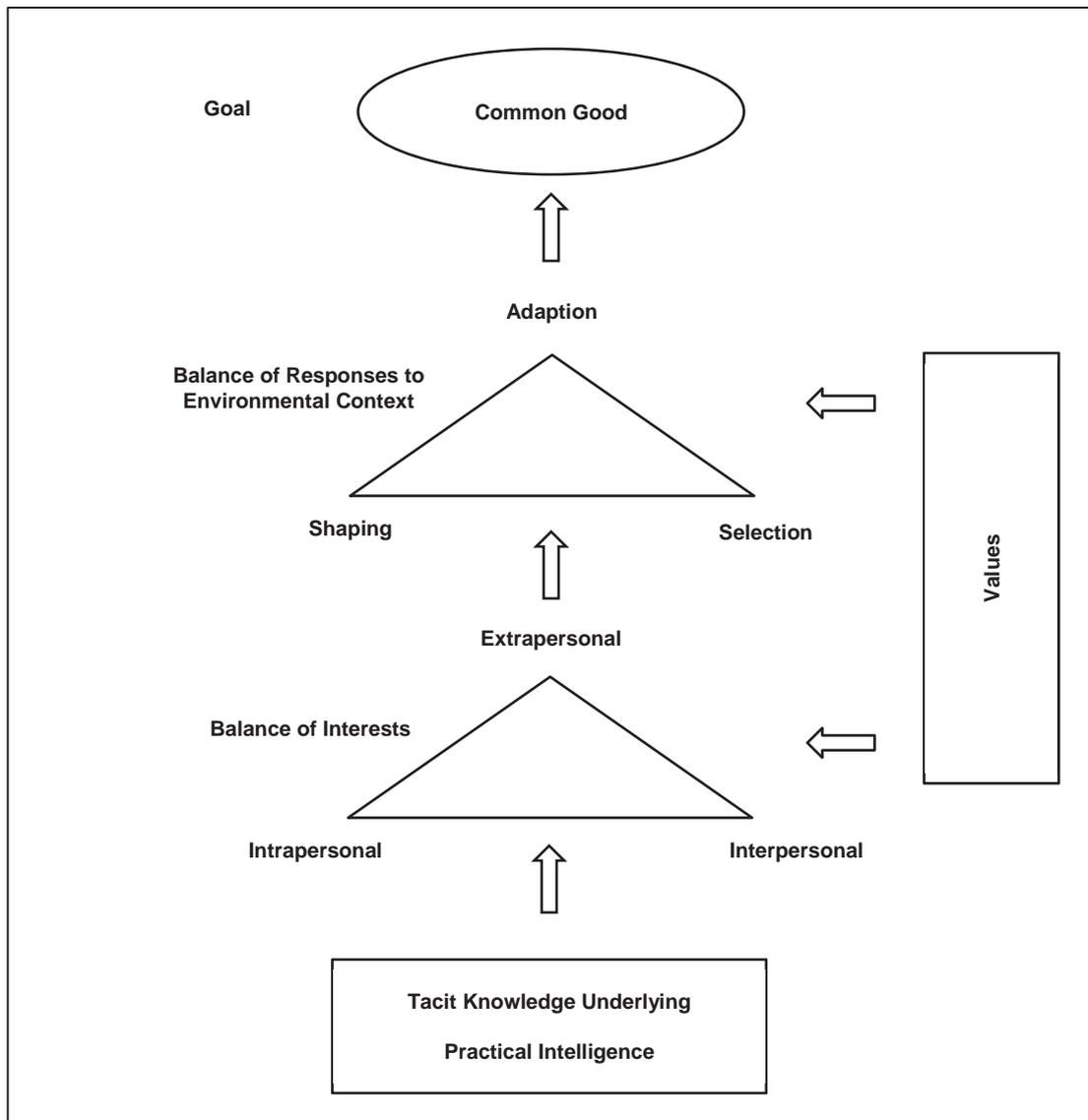
The studies by Baltes and colleagues, however, are criticised by others such as Ardelt (2004), arguing that the definition, operationalisation, and measurement of the concept of wisdom that the Berlin school provides, assessed above all intellectual knowledge, not wisdom per se. Ardelt (2004, 2010) and Bergsma and Ardelt (2012) stress that wisdom, being an integration of cognitive and reflective characteristics, does not exist independently of wise individuals and that it should not be limited to *expertise*. Rather, wisdom must be reserved for wise people, and that wisdom should be characterised as a personal quality. Furthermore, Ardelt (2004) contrasts wisdom and knowledge and emphasises that considering wisdom as expert knowledge, as suggested by the Berlin wisdom paradigm, restricts wisdom to the intellectual level, while wisdom deals with experience and is therefore understood at the experiential level.

Another major criticism that Ardelt (2004) raises of the Berlin wisdom paradigm deals with the measurement of wisdom. In the Berlin wisdom paradigm, Baltes and colleagues (Baltes & Smith, 1990; Kunzmann & Baltes, 2005) use the maximal-performance approach, which requires one to solve a challenging problem (Sternberg, 2004b) to measure wisdom. The questions that participants are asked are hypothetical questions about pragmatics of life. In contrast, Ardelt (2004) uses personality testing, which focuses on one's description of how one typically responds to a given situation (Sternberg, 2004b), and emphasises that wisdom must be measured on a basis of people's individual assessments of their typical reactions to their own real situations.

The approach adopted in this study in terms of the interview questions reflects a combination of these two perspectives. The debate is reiterated in Chapter 4 ('Asking Both Theoretical and Hypothetical Questions' section). That chapter discusses the suggestion by Sternberg (2004b) that a mixture of both hypothetical and real life scenarios should be used to measure wisdom. Sternberg is one of the prominent scholars in the psychological studies of wisdom, whose theory of wisdom, the Balance theory, has been highly influential in wisdom studies.

**The Balance theory:** According to the Balance theory, wisdom is the use of intelligence toward the achievement of a common good (Sternberg, 2004a): "the use of one's intelligence and experience as mediated by values toward the

achievement of a common good through a balance among (1) intrapersonal, (2) interpersonal, and (3) extra personal interests, over the (1) short and (2) long terms, to achieve a balance among (1) adaptation to existing environments, (2) shaping of existing environments, and (3) selection of new environment” (p. 164) (Figure 2-5).



**Figure 2-5: A Balance Theory of Wisdom** (Sternberg, 1998, p. 354)

As depicted by Figure 2-5 the Balance theory proposes that the goal of wisdom is achieving the common good. The common good is achieved through a balanced response to the environment. That is, in order to achieve the common good, the wise person may choose to adapt to the existing environmental context, to shape the environmental context, or to select a new environmental context. This aspect of the Balance theory considers wisdom as embedded in the individual’s

interaction with the situation context: “the balances proposed by the theory are in the interaction between a person and his or her context, rather than, say, in internal systems of functioning (such as cognitive, conative, and affective)” (Sternberg, 1998, p. 353).

The wise person’s balanced responses to the environmental context rely on a balance between stakeholders’ interests. As the theory suggests, the core of wisdom is tacit knowledge that underlies practical intelligence. The practical intelligence is applied to balancing multiple and often competing interests at three levels: intrapersonal, interpersonal, and extrapersonal. In other words, wisdom is not involved if the practical intelligence is applied to only maximising self-interest. By the term ‘interest’, Sternberg (1998) refers to both cognitive (point of view) divergence and motivational (affective) divergence. He points out that “in order to be wise, one must understand not only people’s cognitions, but also their motivations and even their affects” (Sternberg, 1998, p. 355).

Sternberg (1998) sees wisdom and values as inherently interwoven, and explains that the balance proposed by the theory is mediated by values: in balancing between multiple interests, balancing responses to the environment, and even the way people define a common good. According to the theory, people may differ in terms of the degree to which they aim for a common good, in their balance of responses and interests, in their level of tacit knowledge in judgmental situations, and in their values. Sternberg, however, does not explain how this balance, whereby the common good is achieved, is made. Wisdom may be located in knowing when and how to balance interests at the intra-, inter-, and extra-personal levels.

The Berlin wisdom paradigm, the Balance theory, and other psychological studies of wisdom mostly share commonalities with regard to the key aspects of wisdom. The wisdom aspects that the theories commonly indicate include (but are not limited to): a) wisdom is interwoven with values and ethics (Le, 2008; Pasupathi & Staudinger, 2001; Sternberg, 1998); b) it is linked to practice and action (Kunzmann, 2004); c) it is a mixture of cognition and emotion (Ardelt, 2011; Tredget, 2010); d) engages knowledge and experience (Montgomery, Barber, & McKee, 2002); and e) goes beyond the personal level, aiming for the common

good (Sternberg, 1998). These constructs of wisdom also appear in a wide range of organisational and management studies of wisdom. The wisdom literature in the organisational and management field is reviewed in the following section.

### **2.2.3 Managerial Perspective**

Wisdom studies in organisational and management studies draw extensively upon philosophical and psychological studies. Accordingly, as with philosophy and psychology, it is difficult to capture a single definition of wisdom in management. However, concurring with the psychological understanding of wisdom, managerial perspectives treat wisdom as a unifying quality of rationality (cognition, knowledge, reason) and non-rationality (feeling, intuition and emotions) (McKenna, 2013a; Rooney et al., 2010; Rowley & Gibbs, 2008), that can be learnt and developed (Elkin, Martin-Niemi, & Cathro, 2013; Intezari & Pauleen, 2013b; McKenna, 2013b). Rowley and Gibbs (2008) argue for the need for wisdom in management by saying that practical wisdom, relying on the particular, contextual and subjective, goes beyond rational and objective understanding, and what is already known.

Wisdom has been examined in leadership (Boal & Hooijberg, 2000; Grint, 2007; Kodish, 2006; Küpers, 2007; McKenna et al., 2009; McKenna & Rooney, 2008; Nonaka & Takeuchi, 2011; Pauleen, Rooney, & Holden, 2010; Rooney & McKenna, 2009; Yang, 2011b), management education (Intezari & Pauleen, 2013b; Tredget, 2010), public administration (Rooney & McKenna, 2008), policy making (Etheredge, 2005), knowledge management (Rowley, 2006b), organisational learning (Bierly III et al., 2000), and the learning organisation (Bennet & Bennet, 2008). The divergence of the approaches to wisdom has led the term wisdom to be referred to differently: the highest level of abstraction, vision, and foresight (Awad & Ghaziri, 2004), knowledge-based action (Bierly III, et al., 2000); and a way of thinking and acting (Hays, 2010) that is exhibited through decision making (Rowley & Slack, 2009). With regard to leadership, for example, Hammer (2002, as cited in Rowley and Slack, 2009) suggests that wisdom in the management and leadership context concerns “strategy thinking and reasoning, visioning and being able to take the long view; being able to effectively dialogue with others and engage them; and effective self-management”

(p. 113). McKenna et al. (2008) argue for wisdom in organisations and in leadership and emphasise that wisdom is founded on both the wise leaders and the organisational capacity for wise practice which they create. Rowley (2006) defines wisdom as “the capacity to put into action the most appropriate behavior for an organization, taking into account what is known and the legitimate concerns of its various stakeholders” (p. 262).

By studying the concept of wisdom, organisational and management scholars aim to explore how such qualities as ‘wisdom’, that once were at the heart of philosophical debate in the classical era, can be applied to management practice today (Small, 2011). Wisdom in management is seen as being a “fundamentally practical” “way of being” (Rooney et al., 2010, p. 17).

In the following section Rooney et al.’s (2010) theory of wisdom is presented, and then wisdom is examined by drawing on the broadly accepted presentation of wisdom as a higher level of knowledge, as suggested by the DIKW pyramid. This is followed by a critical review of the DIKW approach to wisdom. Then the literature review is expanded to the very recent organisational and managerial studies of wisdom.

### ***2.2.3.1 Social Practice Wisdom (SPW)***

Social Practice Wisdom (SPW) is a theory of the practical application of wisdom in the world towards the excellence of oneself and others. David Rooney and Bernard McKenna can be safely named as the pioneers in organisational and management studies of wisdom (McKenna et al., 2009; McKenna, Rooney, & Hays, 2011; McKenna et al., 2013, 2006; McKenna, Rooney, & ten Bos, 2007; McKenna & Rooney, 2007, 2009; Rooney, Hearn, & Ninan, 2005; Rooney et al., 2010; Rooney, Hearn, & Kastle, 2012; Rooney & McKenna, 2005, 2009). Their main idea about wisdom and its implication(s) for management is articulated in their book, *Wisdom and Management in the Knowledge Economy* (Rooney et al., 2010).

Their initial argument of the necessity for wisdom in organisational and management studies draws primarily on their criticism of the conventional non-axiological conception of knowledge. In one of their first writings on wisdom,

Rooney and McKenna (2005) argue that an inadequate conception of knowledge that is lacking the axiological dimension of knowledge has limited the discourse on knowledge-based economies. They then suggest that “a wisdom-based renaissance of humanistic epistemology is needed to avoid increasing social dysfunction and a lack of wisdom in complex technological societies” (Rooney & McKenna, 2005, p. 307). They underline the criticality of wisdom in the contemporary turbulent world, and propose that “wisdom be established as the ideal of organizational practice and that practices be measured against that ideal” (McKenna et al., 2007, p. 84). Rooney et al. (2010) note that “having good judgment, making good decisions, and acting well do not automatically happen in management, and wisdom is the quality that shapes action in ways that are likely to lead to good judgment, good decisions, and good acts” (p. xi). Therefore in an uncertain and complex environment wisdom becomes a key resource for management, as it acknowledges the relativity of truth, knowledge and perception, and human cognitive limitations (Rooney et al., 2010).

In their aforementioned book, Rooney et al. (2010), taking a new Aristotelian approach, introduce an inter-disciplinary-driven theory of wisdom which draws on a philosophical-psychological foundation for managerial implications. The *Social Practice Wisdom* theory (SPW) connotes “the integration of rationality, calculation, intuition, insight, imagination, and creativity while acting in everyday life” (Rooney et al., 2010, p. 63). Based on the theory and with regard to management, Rooney et al. (2010) suggest that knowledge management, innovation management, and creativity management must be integrated and incorporated into one strategy in organisations. The core of the theory is “a complex, multidimensional integration that creates clarity and decisiveness through equanimity and corresponding dispositions that generate the insight, composure and motivation to deploy the resources needed to act excellently and successfully in the best interests of oneself, others and the planet” (Rooney, 2013b, p. 36).

SPW brings together both knowledge (reason, rational) and intuition (emotions, nonrational). As McKenna (McKenna, 2013a, p. 15) has recently reiterated, “wise thinking is rational, based on sound knowledge, but is also intuitive, ethical and capable of metaphysical reflexivity. It is the explicit combination of intuition and

science, values and truth, intuition and transcendent cognitions that solve real-world problems” (p. 15). SPW proposes five wisdom principles that can be applied to such organisational and management areas as leadership, innovation, international business, and human resources management. The disciplines that SPW proposes include: 1) “wisdom is based on reason and observation”; 2) “wisdom incorporates non-rational and subjective elements into judgment”; 3) “wisdom is directed to authentic humane and virtuous outcomes”; 4) “wisdom is articulate, aesthetic, and intrinsically rewarding”; and 5) “wisdom is practical” (Rooney et al., 2010, pp. 57, 58).

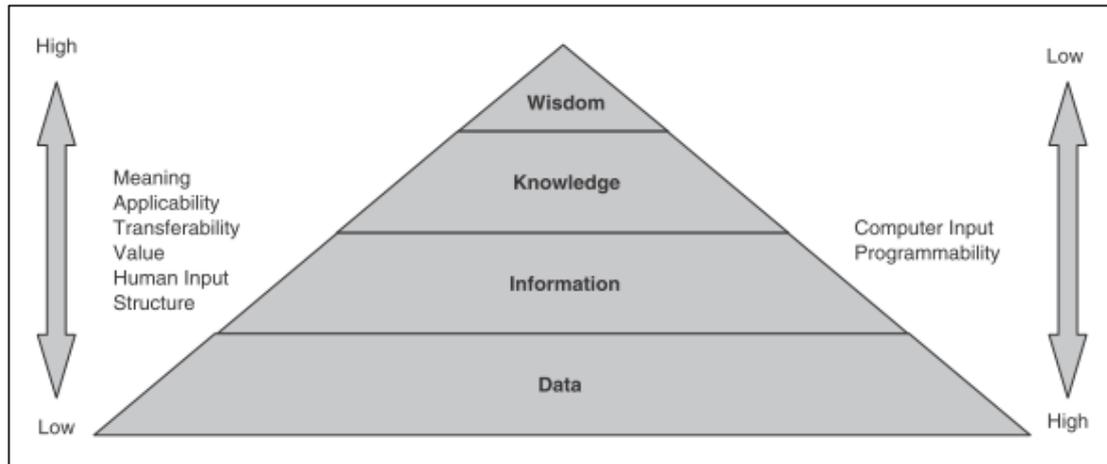
Knowledge is regarded as critical to wisdom in the managerial perspective. One of the first appearances of wisdom in the organisational and management studies is in the Data-Information-Knowledge-Wisdom (DIKW) pyramid, where wisdom is the pinnacle of the pyramid and defined based on the concept of knowledge.

### **2.2.3.2 DIKW**

According to the DIKW model, wisdom is defined in terms of knowledge. However, in the management, knowledge management, and information systems literature that broadly refer to the model, there are few discussions on the concept of wisdom and its relationship with the other levels of the DIKW model (Rowley, 2007). Below is a critical review of the relevant literature of DIKW, where wisdom is seen as a higher level of knowledge.

A very common approach to the notion of wisdom is that wisdom is a higher level of knowledge (Ackoff, 1989; Alter, 1999; Faucher, Everett, & Lawson, 2008; Pantzar, 2000; Tuomi, 2000; Zins, 2007). Although the importance of the contribution of knowledge in developing wisdom is well considered in this approach and it provides an initial framework necessary for understanding wisdom, it must be noted that both traditional and conventional views similarly believe that having knowledge does not make one wise (Bierly III et al., 2000; Meacham, 1990; Nunamaker Jr., Romano Jr., & Briggs, 2002), and that there are other critical qualities involved such as judgment, cognition, intelligence, experience, values and beliefs in the development of wisdom (Baltes & Smith, 1990; Birren & Svensson, 2005; Etheredge, 1992; Holliday & Chandler, 1986;

Kodish, 2006; Kramer, 1990; Liew, 2013; O’Sullivan, 2005; Pasupathi & Staudinger, 2001; Roca, 2008, 2007; Rowley & Slack, 2009; Tredget, 2010).



**Figure 2-6: DIKW Pyramid** (Rowley, 2007, p. 176)

Another concern with regard to defining wisdom in terms of knowledge is the conceptualisation of knowledge. Although understanding the nature and the meaning of ‘knowledge’ has been the focus of many philosophical studies in ancient times and contemporary scientific studies, still no significant globally accepted definition of the term can be found. Knowledge can be defined in numerous ways even in the same fields. From a general perspective, knowledge can be regarded as understanding, experience, power and wealth (Harris, 2005), or just as the basis for effective actions (McElroy, 2003). So, as the term ‘knowledge’ is criticised in conceptualising wisdom in the DIKW perspective, it is important to know what the concept of knowledge connotes in DIKW.

#### 2.2.3.2.1 A Critical Approach to the DIKW Conception of Knowledge

In traditional epistemology, knowledge is defined as “justified true belief” (Nonaka, 1994, p. 15), which according to Plato (Fearn, 2005, p. 81) possesses three rules: 1) it is a true proposition; 2) one believes it; and 3) there is a justification. The definition stands on such broad terms as ‘justified’, ‘true’, and ‘belief’, each of which requires intensive investigation to be defined. The statement, however, has provided a very important theoretical foundation for understanding ‘knowledge’ in different disciplines including management. Having added a pragmatic feature, ‘knowledge in action’, to this definition, Alavi and Leidner (1999), for instance, delineate the conception of knowledge and limit the

concept to the individual level by defining ‘knowledge’ as “a justified personal belief that increases an individual’s capacity to take effective action” (p. 5). Other examples of the definition provided in the management field include “the understanding of information and their associated patterns” (Bierly III et al., 2000, p. 601), or similarly, the understanding of how to use information in context (Davenport & Prusak, 1998).

The last definition has been broadly adopted in DIKW studies. Knowledge, in this sense, is understood as processed and validated information (Firestone, 2003). Information is then defined in terms of data. When the data are put in a meaningful context and processed, information is built (Kock Jr, McQueen, & Baker, 1996; Lillrank, 2003). Data is a “representation of an object” (B. Miller, Malloy, Masek, & Wild, 2001) and a “set of discrete, objective facts about events” (Davenport & Prusak, 1998) constructing “factual content of information” (Melkas & Harmaakorpi, 2008, p. 108).

Knowledge is also seen as experience. Bourdreau and Couillard (1999) believe that knowledge is a kind of professional experience which is appropriate for the domain. When information is combined with people’s experience and interpretation, and when individuals tailor and mobilise information, it becomes a knowledge source (Kreiner, 2002). Similarly, Davenport and Prusak (1998) assert that knowledge develops through experience.

Such an articulation of knowledge using statements like ‘processed information’, ‘information in context’, ‘validated information’, or ‘experience in the domain’ does not show the complex nature of knowledge. This conception leads knowledge as a data- and information-based quality to be bounded to what can be known. From a psychological perspective, growth of knowledge is “conceived in terms of accumulation of skills, habits, vocabulary, information, concepts, and so forth, as each person strives to come closer to the fixed boundary of what can be known” (Meacham, 1990, p. 183).

In this sense, whether knowledge is accepted to be simply a processed form of information or argued to be a combination of experience and information exactly tailored to a given context through individuals’ perception, knowledge, by definition, is derived from past-oriented constructive components (i.e. data,

information, experience), which may prevent knowledge being applicable to future situations. This implies that the existing knowledge is incomplete and so it cannot be claimed that existing knowledge is complete and unassailable for use in unforeseen situations. For instance, a leader of a group of six may not have enough knowledge to direct a team of sixty. Similarly, the same leader of the same group of six may face an unpredicted situation that makes it extremely difficult for the leader if he or she makes decisions relying merely on prior knowledge and experience. The situation would result in more unintended consequences if making a precise perception of the circumstances is difficult, if not impossible.

Given that the value of knowledge, from the DIKW perspective, depends on its effective implementation, in taking actions or in problem-solving (Churchman, 1971; Davenport & Prusak, 1998; Harris, 2005) in the present or in the future, the past-oriented nature of knowledge due to its past-oriented informative components (i.e. data, information, and experience which derive from the past) leads knowledge to fall short in unforeseen and emergent circumstances (Intezari & Pauleen, 2013a). Meacham (1990) argues that the acceptance of the fallibility of knowledge is the essence of wisdom. This is discussed further in Chapter 6.

### ***2.2.3.3 Some of the Other Wisdom Studies in Management***

Drawing on the inadequacy of knowledge in a complex world, Intezari and Pauleen (2013a) suggest a model of wisdom for management (Figure 2-7). They argue that the fallibility of knowledge, unpredictability of today's world, and inconsistency of human cognition, lead organisations' responses and management decisions made in unpredictable environments to result in unintended consequences. They suggest that wisdom contributes to management through three wisdom-related aspects that help managers and organisations operate wisely.

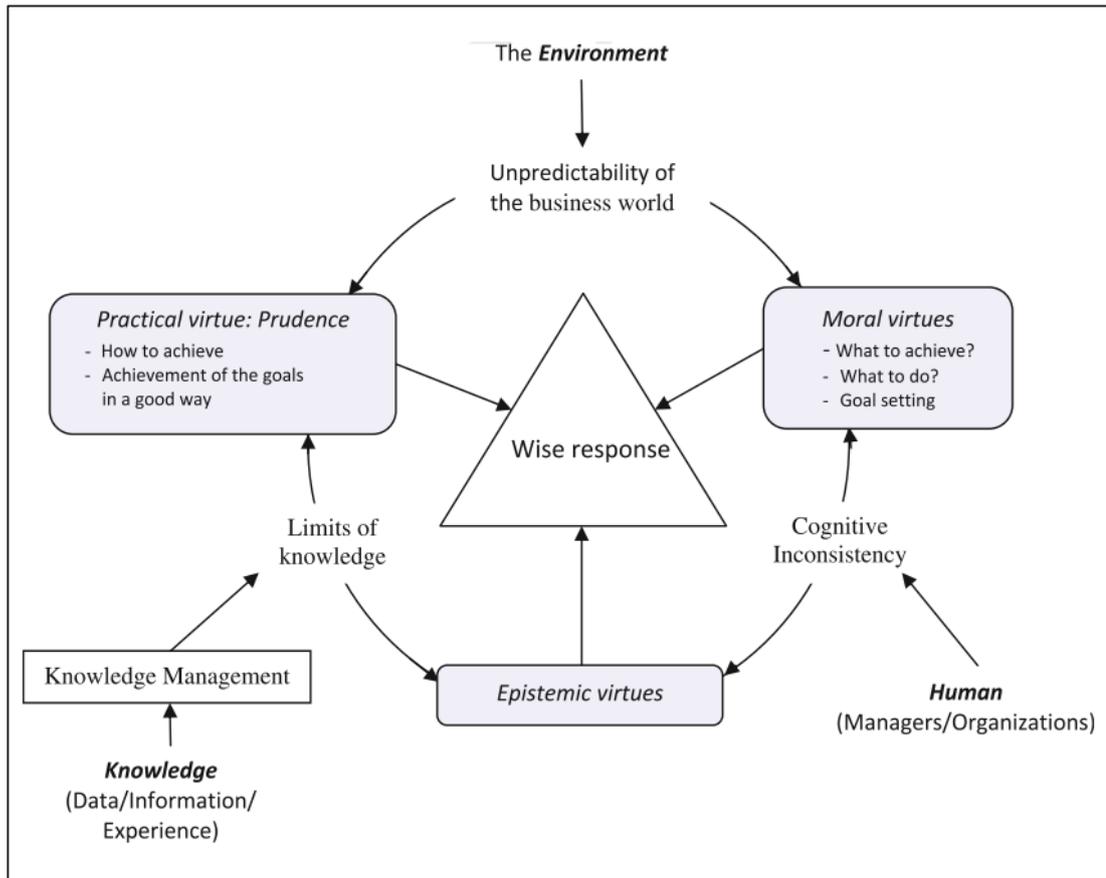
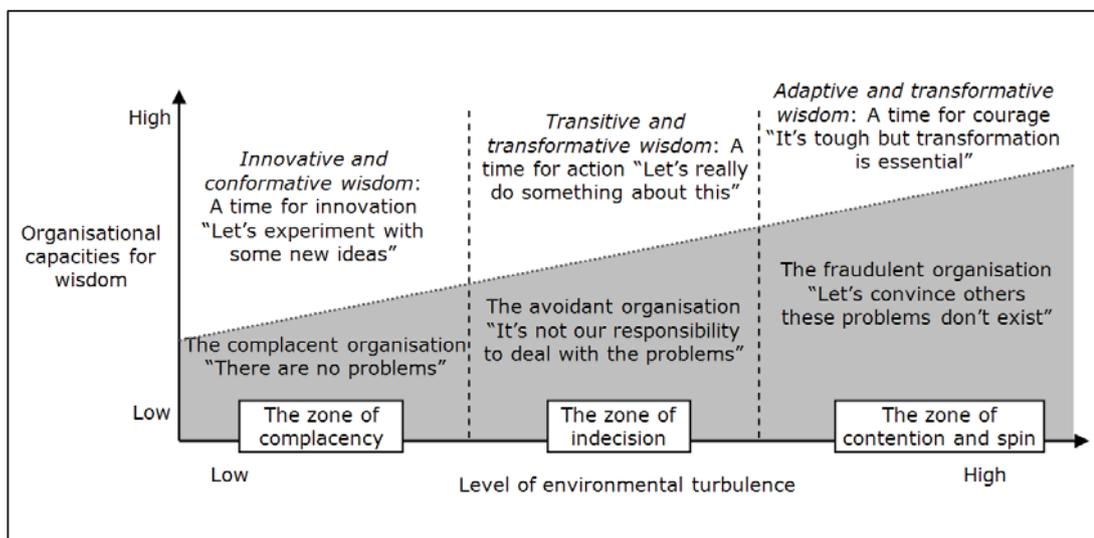


Figure 2-7: The Contribution of Wisdom and Wisdom-related Aspects to Management (Intezari & Pauleen, 2013a)

According to Intezari and Pauleen (2013a), wisdom as a *Moral virtue* helps with setting appropriate goals harmonising morality at both individual and communal levels. As an *Epistemic virtue*, wisdom embeds ‘epistemic responsibility’, ‘awareness of limitations’, and ‘balance between certainty and doubt’ into management decisions and actions. And as a *Practical virtue*, the contribution of wisdom to management can be understood in two ways: achieving the desired goals and achieving those goals through appropriate means. The wisdom virtues are critical in order to act wisely in the current turbulent world (Intezari & Pauleen, 2013a).

Organisational responses to turbulence as a function of wisdom capacities are mapped out in another model suggested by Edwards (2013). Edwards (2013) proposes a wisdom typology, including transformative, transitive, innovative, conformative, and adaptive wisdom, and argues that depending on the level of environmental turbulence, organisational responses may vary based on these five

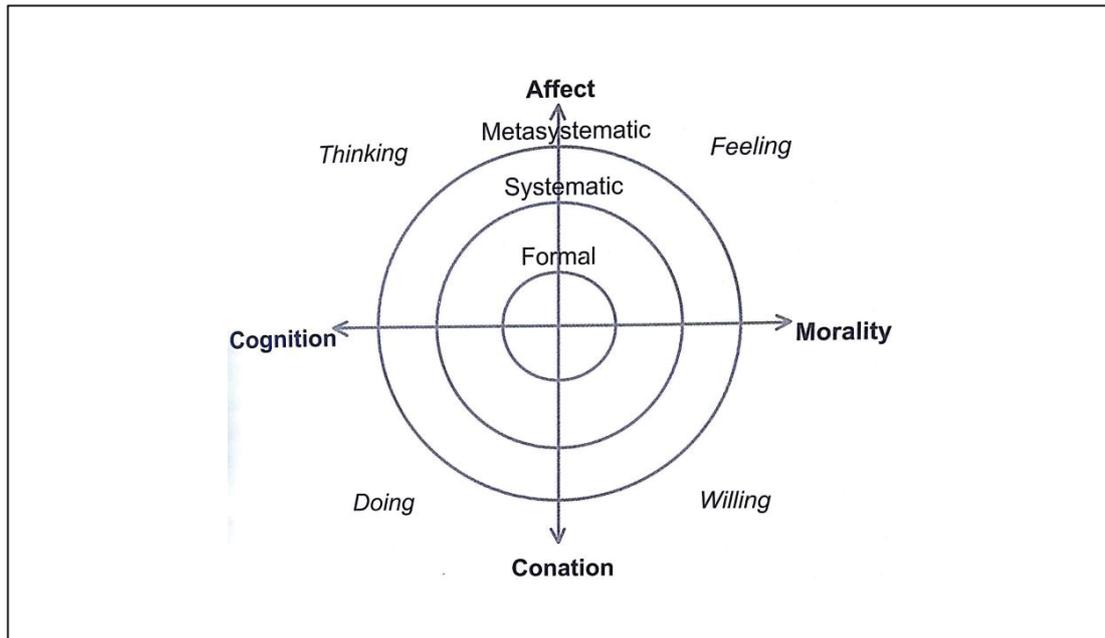
types of wisdom. According to the model (Figure 2-8), when the environment is highly stable and the conventional modes of managing dominate, organisations may move towards *innovative* (nurturing innovative ideas) and *conformative wisdom* (scanning the environment, and focusing on conventional contingencies that form strategic goals). As environmental turbulence grows, organisations may call on their capacities of *transitive* or *transformative wisdom* to take decisive action in dealing with the environment. When the environmental turbulence is at its peak organisations use their capacities towards qualitative changes and so shift to new systems and values (*adaptive and transformative wisdom*). The model highlights the inextricable link between organisations and their surrounding environment and the association of the interrelationship with wisdom.



**Figure 2-8: Organisational Responses to Turbulence as a Function of Wisdom Capacities** (Edwards, 2013, p. 207)

In another model, by contrast, wisdom is examined at the individual level. Biloslavo and McKenna (2013) suggest a developmental model of wisdom that aims for finding human characteristics that indicate wisdom in individuals. The underlying assumption of the model is that the only way to judge wisdom is through actions of individuals, and that individual actions can be predicted by personality traits. The model is based on four inter-dependent dimensions: cognitive, conative, affective, and moral. Biloslavo and McKenna (2013) argue that a wise action comprises the four dimensions synthesised at the meta-systemic level and that the development of wisdom requires an integrative development

along all four dimensions (Figure 2-9). The development happens through three stages: formal, systematic, and meta-systematic.



**Figure 2-9: Integrated Wisdom Development Model** (Biloslavo & McKenna, 2013, p. 117)

Given the assumption that “the general direction of human development is oriented towards a more complex and more integrated personality structure”, Biloslavo and McKenna (2013, p. 116) emphasise the integration of cognitive, conative, affective, and moral complexities at the meta-systematic level. Cognitive complexity refers to the capability of considering and discriminating different aspects when thinking about something. Conative complexity includes the capacity to coordinate different systems of motives and relate them to the set goals. Affective complexity refers to one’s capacity to understand that some emotions conflict, and to reflectively regulate and differentiate one’s own emotion. A person with a high level of moral complexity is aware of his or her interconnectedness with the wider natural and social systems. A person pursuing the rights of human beings is committed to virtuous outcomes, and recognises that some legal and peer standards may not be fully moral. Biloslavo and McKenna (2013) claim that the model provides a comprehensive way to assess wisdom in others’ actions. They test the model through a textual analysis of the lives of two political leaders, Nelson Mandela and Aung San Suu Kyi, and conclude that the two leaders demonstrate a high level of integration of the four dimensions.

Hays (2013) offers a dynamic model of organisational wisdom that integrates transformational leadership ( $T^1$ ), transformational learning ( $T^2$ ), and transformational organisational changes ( $T^3$ ) in association with transcendence and organisational wisdom (Figure 2-10). Hays (2013) argues that the integration of the transformation is critical for organisational survival, and that leaders play a key role in all transformational learning and changes.

Hays (2013) differentiates transformational leaders from transactional leaders, in that their approaches to followers are different. He emphasises that transactional leadership, helping others to become wise, promotes organisational wisdom. Transformational change is greater than gradual and incremental changes, as it is concerned with both structural and cultural changes. Within an organisation, transformational change requires fundamental changes in understandings, attitudes, beliefs and cultural values. Transformational learning, according to Hays (2013), is an instrumental part of transcendence and transformation, and it plays a vital role in wisdom. Compared to shallow or superficial learning, which is limited to what is already known, transformational learning leads to discovery and development, and fundamentally changes an individual in some way. The transformation influences both *what* and *how* one thinks. Transcendence is a capacity that leads wise leaders to look beyond their own interests.

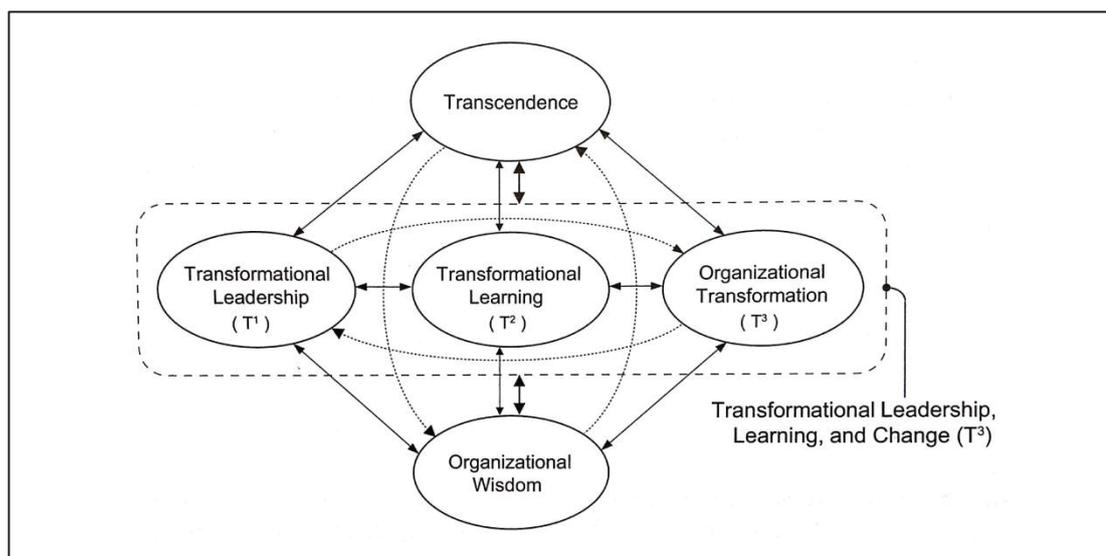


Figure 2-10: Dynamic Model of Organizational Wisdom, Showing Relationships Amongst Transcendence,  $T^3$  and Wisdom (Hays, 2013, p. 135)

The transformations are actualised by transcendence. Hays (2013) asserts that transcendence contributes to purposeful, conscious, and continuous learning and change. He discusses how transcendence actualises transformational leadership, learning, and change, and through the integration of the transformations, contributes to the development of organisational wisdom.

In the last managerial wisdom study that is presented here, Küpers (2007) uses an advanced phenomenology, suggesting an integral ‘pheno-practical’ and processual approach to wisdom, which integrates diverse “processes of knowing and doing, communal activities and collective functioning, with all its ambivalent and reflective qualities” (p. 186). This approach sees wisdom as an integral and relational process. As illustrated by the model (Figure 2-11), the individual-communal and interior-exterior dimensions of wisdom and their interconnectedness of the intentional, behavioural, systemic, and cultural processes of wisdom are dealt with in an integrated and comprehensive manner.

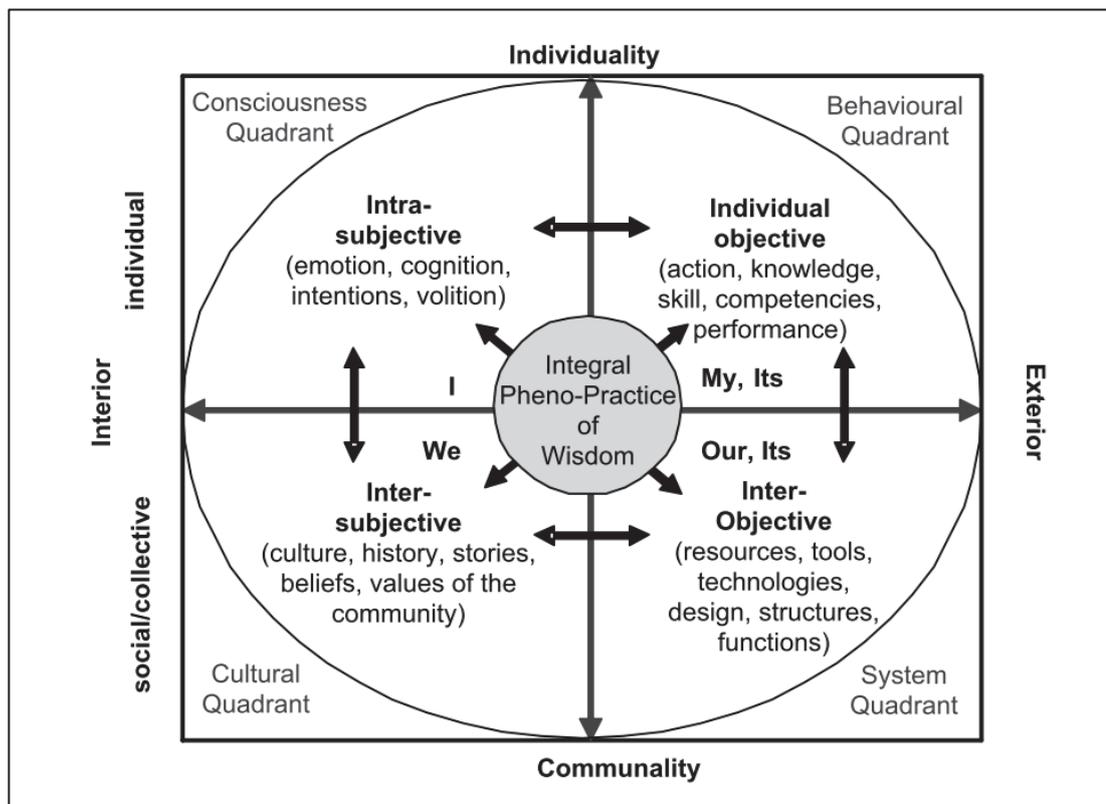


Figure 2-11: Integral Pheno-practice of Wisdom (Küpers, 2007, p. 177)

Küpers (2007) considers wisdom as an embodied form of decentred knowing and judging that guides meaningful actions in uncertain or ambiguous circumstances.

He claims that such an approach provides a conceptual and practice-oriented understanding of wisdom, and therefore bridges the gap between theory and practice regarding the conception of wisdom.

The preceding review of the management studies of wisdom shows that as with the philosophical and psychological studies there is no consensus among management scholars in respect to the nature of wisdom. Moreover, due to the considerable influence of philosophical and psychological perspectives on organisational and management studies of wisdom, it is challenging, if not impossible, to delineate the boundary of wisdom conceptions in management without borrowing from philosophical and psychological studies. Therefore, following the aforementioned disciplinary perspectives, in the next section, an inter-disciplinary approach is taken towards the literature review of the conceptualisation of wisdom. The following inter-disciplinary review is based on the supposition that despite the lack of one widely-shared definition of wisdom (which is mainly due to the multidisciplinary nature of the concept of wisdom) (Baltes & Staudinger, 2000; Gugereff & Riffert, 2011), philosophical and contemporary psychological studies of wisdom have considerable overlap (Biloslavo & McKenna, 2011; Rooney et al., 2010), and that managerial wisdom studies while drawing heavily on the philosophical and psychological studies of wisdom share commonalities with these disciplines.

For this reason various definitions of wisdom are provided and their conceptual commonalities in terms of the qualities or elements that are suggested as associated with wisdom are discussed regardless of their original disciplines. The review is important as it provides a comprehensive understanding of wisdom that transcends a discipline-bounded conceptualisation.

#### **2.2.4 An Inter-disciplinary Perspective**

The literature review provides numerous descriptions of the notion of wisdom ranging from the classical Greek philosophical tradition that sees wisdom as an enlightened and morally-based (rather than knowledge-based) understanding of 'living well' and of how to make one's life as moral as possible (Holliday & Chandler, 1986), to the most recent psychological approaches defining wisdom as being *expert knowledge* (Baltes & Kunzmann, 2004; Baltes & Staudinger, 1993),

a knowledge-based action (Bierly III et al., 2000), or a way of knowing (Csikszentmihalyi & Rathunde, 1990), which put emphasis on knowledge/intellect, ethics/emotion, or both.

The divergent approaches to wisdom, however, have considerable overlap in terms of the qualities upon which wisdom is conceptualised. There is a consensus in the literature that wisdom is a multidimensional construct that encompasses interrelated qualities (Ardelt, 1997; Baltes & Staudinger, 2000; Birren & Fisher, 1990; Clayton & Birren, 1980; Küpers, 2007; Labouvie-Vief, 1990; Montgomery et al., 2002; Orwoll & Perlmutter, 1990; Sharma, 2005; Sternberg, 1998; Taranto, 1989; Webster, 2003). According to both conventional and historical models of wisdom, wisdom is associated with such conceptions as judgment about important matters, knowledge and the implementation of knowledge, achieving well-being of all, and awareness of the social consequences of one's action (Etheredge, 2005; Kramer, 1990; Rowley & Slack, 2009; Small, 2004; Sternberg, 1990a; Tredget, 2010). For example, in a psychological approach, wisdom is conceptualised as expert knowledge (Baltes & Kunzmann, 2004) and human affairs-related judgment that contains awareness of the ill-structured, contextual, and often contradictory nature of experience (Kramer, 1990). Likewise, from a managerial and leadership perspective, wisdom is considered as experiential knowledge that helps people make ethically sound judgments (Liew, 2013; Nonaka & Takeuchi, 2011). Many studies have attempted to provide a list of the constructs of wisdom, examining different definitions of wisdom.

In one study, Gibson (2008), for example, conducts an interpretive study of the nature of practical management wisdom, and develops a heuristic model of wisdom. In the study, Gibson (2008) reviews the wisdom literature and identifies six constructs on which wisdom relies. The constructs include “a dynamic interaction between perception, experience, character, and an insightful vision of what is proximately and ultimately good for people, organizations, and business” (p. 528). Likewise, Green and Brown (2009) suggest that wisdom comprises six interconnected elements: self-knowledge, understanding of others, judgment, life knowledge, life skills and willingness to learn.

Jeste et al.'s (2010) empirical study indicated that there was a consensus among most of the 57 international wisdom experts who participated in their study that wisdom is “human; a form of advanced cognitive and emotional development that is experience driven; and a personal quality, albeit a rare one, which can be learned, increases with age, can be measured, and is not likely to be enhanced by taking medication (p. 668).

Similarly, Rowley and Slack (2009) identify the key facets of wisdom, by exploring the early Western-Eastern philosophical traditions, as well as the more recent philosophical, psychological, and organisational approaches to wisdom. Rowley and Slack (2009) propose that the key aspects of wisdom can be summarised as: wisdom a) “is embedded in or exhibited through *action*”; b) involves the sophisticated and sensitive use of knowledge”; c) “is exhibited through decision making”; d) “involves the exercise of judgement in complex real-life situations”; e) “requires consideration of ethical and social considerations and the discernment of right and wrong”, and f) “is an interpersonal phenomenon, requiring exercise of intuition, communication, and trust” (pp. 113, 114).

Kok (2009) draws on different philosophical and psychological statements (e.g. Aristotle's, and Sternberg's) of wisdom and summarises the main principles of wisdom:

- “Using reason and careful observation to make logical deductive explanations;
- Evaluating the salience and truth-value of logical propositions by using clear understandings of ontological categories that theoretically describe substance, process and quality through logical argument;
- Acknowledging the sensory and visceral as important components of decision making and judgment;
- Having a metaphysical and spiritual quality that does not bind one absolutely to the rules of reason thereby enabling vision, insight and foresight;

- Respecting and drawing upon tradition as a means of apprehending who and what one is as a form of personal insight enabling them to understand the contingency of life and constructedness of phenomena;
- Being humane and producing virtuous and tolerant decisions;
- Being practical and oriented towards everyday life;
- Being articulate and understanding the aesthetic dimension of one's work and seeking the intrinsic personal and social rewards of contributing to the good life" (p. 55).

In another study, Meeks and Jeste (2009) analyse ten published descriptions and definitions of wisdom and identify six subcomponents of wisdom that the definitions commonly included. The subcomponents include prosocial attitudes/behaviours, social decision making/pragmatic knowledge of life, emotional homeostasis, reflection/self-understanding, value relativism/tolerance, and acknowledgment of and dealing effectively with uncertainty. Table 2-2 outlines the subcomponents.

<p>I. Prosocial attitudes and behaviours</p> <ul style="list-style-type: none"> <li>• "Achievement of a common [social] good"</li> <li>• "Implicit idea that wisdom serves a common good"</li> <li>• Factor analysis yielded "altruism" as a dimension of wisdom</li> <li>• Affective wisdom includes "positive emotion and behaviors toward others, and absence of indifferent or negative emotions toward others"</li> <li>• One of five dimensions of wisdom is warmth</li> </ul> <p>II. Social decision making/pragmatic knowledge of life</p> <ul style="list-style-type: none"> <li>• Two basic criteria: (1) rich factual knowledge regarding human nature and life course and (2) rich procedural knowledge regarding ways of dealing with life's problems</li> <li>• The tacit nature of knowledge implies more than knowing but also knowing when, where, how, and why to apply knowledge</li> <li>• "Practical knowledge" as a dimension of wisdom</li> <li>• Practical wisdom is "good interpersonal skills and understanding, expeditious use of information, and expertise in advice giving"</li> <li>• Three dimensions of wisdom include judgment, life knowledge, and life skills</li> </ul> <p>III. Emotional homeostasis</p> <ul style="list-style-type: none"> <li>• Emotional stability despite uncertainty as a component</li> <li>• Affective wisdom includes "absence of indifferent or negative emotions toward others, and remaining positive in the face of adversity"</li> <li>• One dimension of wisdom: emotional management</li> </ul> <p>IV. Reflection/self-understanding</p> <ul style="list-style-type: none"> <li>• Reflective abilities are a key component of wisdom</li> <li>• Reflective judgment an important part of wisdom</li> <li>• Transcendental wisdom comprises interest in self-understanding</li> <li>• Reflective wisdom is one of three key dimensions of overall wisdom</li> </ul>
--

<ul style="list-style-type: none"> <li>• Self-knowledge identified as a dimension of wisdom</li> </ul>
<p>V. Value relativism/tolerance</p> <ul style="list-style-type: none"> <li>• Value relativism and tolerance one of three meta-criteria for wisdom</li> <li>• Value relativism seen as a component of wisdom</li> <li>• As part of reflective wisdom: “ability and willingness to examine phenomena from multiple perspectives; absence of projections”</li> <li>• “Tolerant and understanding” part of descriptors of Practical Wisdom Scale</li> </ul>
<p>VI. Acknowledgment of and dealing effectively with uncertainty and ambiguity</p> <ul style="list-style-type: none"> <li>• “Handling of uncertainty, including the limits of knowledge”</li> <li>• Comprehension of/dealing with uncertainty</li> <li>• “3 key components: (1) Meta-cognition (acknowledging uncertainty and ability for dialectical thinking); (2) Personality/affect (emotional stability despite uncertainty and openness to new experience); (3) Behavior (ability to act in the face of uncertainty)”</li> <li>• “Cognitive wisdom includes awareness of life’s inherent uncertainty yet ability to make decisions in spite of this”</li> </ul>

**Table 2-2: Commonly Proposed Subcomponents of Wisdom** (adapted from Meeks & Jeste, 2009, p. 356)

In the table below (Table 2-3) some of the wisdom definitions that have been explored during the current literature review are provided. Providing multiple wisdom definitions, conceptions, and statements from diverse approaches in one place may facilitate an inter-disciplinary understanding as to the meaning and nature of wisdom, and elements researchers proposed as associated with wisdom. It must be noted that the table includes only some of the numerous wisdom definitions in the vast pool in the literature, and by no means claims to be exhaustive.

Definitions	Disciplines
Aristotle’s definition: “a reasoned and true state of capacity to act with regard to human goods” ( <i>the Nicomachean Ethics 1140b</i> , 20).	Philosophy
“Wisdom is the way in which knowledge is held. It concerns the handling of knowledge, its selection for the determination of relevant issues, its employment to add value to our immediate experience. This mastery of knowledge, which is wisdom, is the most intimate freedom obtainable” (Whitehead, 1967, p. 30).	Philosophy
Practical wisdom is “the sense of governance we have in directing our free and voluntary choices to ends befitting us as human beings” (Hakim, 2006, p. 97).	Philosophy
“Knowledge about certain principles and causes” (Hakim, 2006, p. 99).	Philosophy
“The ability to make right use of knowledge, or the capacity to judge rightly in matters relating to life and conduct” (Ostenfeld, 2003; as cited in Rowley, 2006a, p. 1248).	Philosophy
Practical wisdom is “sound reasoning and effective deliberation that leads to morally right practice” (Baggini & Fosl, 2007, p. 153).	Philosophy

“The competence in, intention to, and application of, critical life experiences to facilitate the optimal development of self and others” (Webster, 2007, p. 164).	Psychology
“Wisdom can be defined as the ability to grasp human nature, which is paradoxical, contradictory, and subject to continual change” (Clayton, 1982, p. 315).	Psychology
“A blending of the intellectual perception of truth and the moral sentiment of right is wisdom” (Emerson, 1929, p. 45, as cited in Csikszantmihalyi & Rathunde, 1990, p. 31).	Psychology
“Wisdom is an attitude taken by persons toward the beliefs, values, knowledge, information, abilities, and skills that are held, a tendency to doubt that these are necessarily true or valid and to doubt that they are an exhaustive set of those things that could be known” (Meacham, 1990, p. 187).	Psychology
Wisdom is “expert knowledge and judgement about important, difficult and uncertain questions associated with the meaning and conduct of life” (Baltes & Kunzmann, 2003, p. 131).	Psychology
“Wisdom is a form of judgment pertaining to some domain of human affairs that involves an awareness of the ill-structured, contextual, and often contradictory nature of experience” (Kramer, 1990, p. 291).	Psychology
“The ability to recognize the limits of one’s knowledge” (Holliday & Chandler, 1986, p. 15).	Psychology
“A set of attributes assumed to be correlated with advanced age and not usually covered under the umbrella of intelligence” (Labouvie-Vief, 1990, p. 52).	Psychology
“Wisdom is the use of one’s intelligence and experience as mediated by values toward the achievement of a common good through a balance among (1) intrapersonal, (2) interpersonal, and (3) extrapersonal interests, over the (1) short and (2) long terms, to achieve a balance among (1) adaptation to existing environments, (2) shaping of existing environments, and (3) selection of new environments” (Sternberg, 2004a, p. 164).	Psychology
“Wisdom is conceptualized as the personal philosophy (perspective on life), sense of balance and understanding of the complexities of inter-actions within a landscape” (Korac-Kakabadse, Korac-Kakabadse, & Kouzmin, 2001, p. 213).	Psychology
“Wisdom is the continually evolving understanding of and fascination with the big picture of life and what is important, ethical, and meaningful; it includes the desire and ability to apply this understanding to enhance the well-being of life, both for oneself and for others” (Lombardo, 2010, p. 34).	Psychology
“The optimum, ultimate expression of a blend of human qualities” (Birren & Fisher, 1990, p. 323).	Psychology
“An integration of cognitive, reflection, and affective dimensions” (Ardelt, 2003, p. 277).	Psychology
“Wisdom is both correct insight and action consistent with it” (Strijbos, 1995, p. 363).	Psychology
“A perfect, perhaps utopian, integration of knowledge and character, of mind and virtue” (Kunzmann, 2004, p. 504).	Psychology

Wisdom comprises “critical thinking skills (or strategies), the disposition to use these skills, and metacognitive monitoring of the critical thinking process” as well as “a way for deciding which goals <i>should be</i> desired, a way that is based on a balance among self and other interests and short- and long-term goals” (Halpern, 2001, p. 255).	Psychology
“The capacity to put into action the most appropriate behaviour, taking into account what is known (knowledge) and what does the most good (ethical and social considerations)” (Rowley, 2006b, p. 257).	Management
“Wisdom is the critical ability to use knowledge in a constructive way. Equally, wisdom has in it the critical ability to discern ways in which new ideas can be created” (Matthews, 1998, p. 209).	Management
“A capacity to perceive, deliberate, decide, and act effectively” (Gibson, 2008, p. 528).	Management
“Wisdom is the highest level of abstraction, with vision, foresight, and the ability to see beyond the horizon” (Awad & Ghaziri, 2004, p. 40).	Management
“Wisdom is the ability to act critically or practically in a given situation. It is based on ethical judgement related to an individual’s belief system” (Jashapara, 2004, p. 17).	Management
“Wisdom consists of the ability to move away from absolute truths, to be reflective, to make sound judgments related to our daily existence, whatever our circumstances” (Merriam & Caffarella, 1999, p. 165).	Management
“Practical wisdom is experiential knowledge that enables people to make ethically sound judgments” (Nonaka & Takeuchi, 2011, p. 60).	Management
“The ability to best use knowledge for establishing and achieving desired goals and learning about wisdom as the process of discerning judgments and action based on knowledge” (Bierly III et al., 2000, p. 601).	Management
“Wisdom is the quality that shapes action in ways that are likely to lead to good judgment, good decisions, and good acts” (Rooney et al., 2010, p. xi).	Management
“Practical wisdom refers to a habituated pattern of actions that are normatively positive both in terms of their process and in terms of their outcome” (Statler & Roos, 2007, p. 88).	Management
“Wisdom is socially accepted or experience-validated explication of purpose” (Zeleny, 2006, p. 7).	Management Systems
“Wisdom is the proper use of knowledge that has been applied in a way that takes into account all its pertinent relationships and that is consistent with universal laws” (McKinney, cited in Walker, 2005, p. 33).	Leadership
“A disposition toward cleverness in crafting morally excellent responses to, or in anticipation of, challenging particularities” (Moberg, 2007, p. 536).	Business Ethics
“Wisdom means to choose one’s behaviour based on knowledge and shared values, in order to enhance the well-being of all and awareness that personal actions have social consequences” (Blasi, 2006, p. 407).	Education

“A positive process that encompasses three core components: 1) cognitive integration of what are ordinarily considered separate ideas or conflicting ideals to form a vision promoting the good life, 2) actions that embody the integrated thought or vision, and 3) positive effects of the actions on the actor and others” (Yang, 2011a, p. 49).	Management & Education
“Wisdom is knowledge plus ingredients that resist easy characterization but typically are based in the long experience of communities. If you must have an equation; wisdom = knowledge + accumulated experience of communities” (Pantzar, 2000, p. 234).	Education & Learning
“Wisdom is a process that brings together the rational and the transcendent, the prosaic and higher virtues, the short- and long-terms, the contingent and the absolute, and the self and the collective rather than being only concerned with rational processing of knowledge” (Kok, 2009, p. 56).	Education & Learning
“The power to choose well”, which involves the qualities or abilities of ‘epistemic discernment’, ‘awareness of the limits of one’s own knowledge’, ‘the quality of desiring well’, and ‘self-knowledge’ (Gayle, 2011, p. 72).	Education & Learning
“The capacity (and perhaps the active desire) to realize what is of value in life, for oneself and others” (Maxwell, 2012c, p. 165).	Education & Learning
“The ability to base sound judgements on deep understandings in conditions of uncertainty” (O’Sullivan, 2005, p. 222).	Health and Social Care
“Wisdom is a practice that reflects the developmental process by which individuals increase in self-knowledge, self-integration, nonattachment, self-transcendence, and compassion, as well as a deeper understanding of life. This practice involves better self-regulation and ethical choices, resulting in greater good for oneself and others” (Aldwin, 2009, p. 3).	Human Development and Family Science
“Something highly personal involving the integration of theory, religion/philosophy and subjective experience” (Krill, 1990, p. 14).	Human Services
“Wisdom is good judgment about important matters” (Etheredge, 1992, p. 497).	Politics

**Table 2-3: Wisdom Definitions**

One of the main commonalities of the definitions is that wisdom is highly associated with practice (Aldwin, 2009; Aristotle, 2009; Bierly III et al., 2000; Blasi, 2006; Gibson, 2008; Jashapara, 2004; Korac-Kakabadse et al., 2001; Ostefeld, 2003; Rooney et al., 2010; Roos, 2006; Rowley, 2006b; Strijbos, 1995; Webster, 2007; Yang, 2011a). For example, Strijbos (1995) believes that “wisdom is not just connected with action; it includes action” (p. 363). Table 2-3 indicates that the contemporary understandings of wisdom tend towards the conception of ‘practical wisdom’ rather than ‘theoretical wisdom’, so that the term ‘wisdom’ is broadly used interchangeably with ‘practical wisdom’ (this bifurcation has been discussed earlier in this chapter in section 2.2.1, ‘Philosophical Perspective’). The pervasiveness of the practice-oriented approach may be because of the great

interest among scholars in the implication of wisdom in daily and business life (e.g. Baltes & Kunzmann, 2004; Baltes & Smith, 1990; Roca, 2007, 2008; Rooney, McKenna, & Liesch, 2010; Schwartz & Sharpe, 2006; Statler & Roos, 2007; Sternberg, 2003, 2004). The key aspects of wisdom that are commonly suggested by the definitions in Table 2-3 are discussed in the following section.

#### ***2.2.4.1 Key Aspects of Wisdom***

Considering different conceptualisations of wisdom, and the literature review, a set of characteristics or qualities can be identified that have been attributed to wisdom in different perspectives.

*Concerned with fundamental matters of life:* Wisdom is concerned with the fundamental aspects and uncertain matters of human life (Baltes & Kunzmann, 2004; Baltes & Smith, 1990; Etheredge, 1992; Pasupathi & Staudinger, 2001). Maxwell (1984) expresses that wisdom includes desire for and the ability to see *what is of value* in the circumstances of life. In philosophy, wisdom is understood as being associated with knowledge and sound judgment in order to be *living a good life* (Small, 2004). They understand the importance of commonplace truths for living the good life, and know how to construct a pattern that leads to a good life (Kekes, 1995). Similarly, Garret and College (1996, p. 221), with a similar understanding, argue that wise people understand that “which is essential to living the best life”.

For Kant, wisdom is concerned with the practical purposes of human existence in the mundane world (as cited in Rowley & Slack, 2009). “Wisdom is the truth seeker and pattern finder that penetrates to the core of what really matters” (Allee, 1997, p. 44). Wisdom pursues the fundamental meaning of existence (Kramer, 1990), and helps people consider the world and life as a whole; “having practical wisdom is to be endowed with a capacity which makes one good at thinking about what one should do, not to achieve particular goals but to live a fulfilled and worthwhile life as a whole” (Melé, 2010, p. 641). Kramer (1990) says that wisdom is associated with the pragmatics of life, which refer to the extrapersonal, intrapersonal, and interpersonal situations that are personally meaningful to the individual.

*Self-transcendence*: self-transcendence is a critical element of wisdom (Curnow, 1999). Self-transcendence “reflects a decreasing reliance on externals for definition of the self, increasing interiority and spirituality” and a greater understanding of connectedness with the surrounding environment and others including past and future generations (Levenson, Jennings, Aldwin, & Shiraishi, 2005, p. 127). Wisdom has a multidimensional nature and is associated with both individual and communal levels (Aldwin, 2009; Baltes & Kunzmann, 2004; Baltes & Smith, 1990; Csikszentmihalyi & Rathunde, 1990; Halpern, 2001; Intezari & Pauleen, 2013b; Kramer, 1990; Pasupathi & Staudinger, 2001). Levenson et al. (2001) argue that transcending the ego is a developmental process that leads to wisdom. Küpers (2007) considers wisdom as a socio-cultural process, which refers to development in two dimensions: individuality and communality. Maxwell (1984) writes, “wisdom can be conceived of, not only in personal terms, but also in institutional or social terms” (p. 66). According to Staudinger (1996), wisdom has a three-faceted social-interactive nature, and can manifest on both individual and cultural levels. The three facets of the social-interactive nature of wisdom include the development of wisdom over time, the application of wisdom in social situations, and identifying a given written, verbal, or behavioural product as wise (Staudinger, 1996). Personal, interpersonal and societal factors are involved in developmental origins of wisdom. So, practical wisdom is not limited to the individual level in that not only does it help its possessors act well, but also to advise others about appropriate action (Polansky, 2000). Wisdom therefore is associated with choosing “one’s behaviour based on knowledge and shared values, in order to enhance the well-being of all and awareness that personal action has social consequences” (Blasi, 2006, p. 407).

*Knowledge*: wisdom is broadly admitted to be associated with knowledge (Garrett & College, 1996; Kekes, 1995; Lehrer & Smith, 1996; Ryan, 1996). This refers to both possessing knowledge (Maxwell, 1984) and the ability in using knowledge and experience (Birren & Fisher, 1990; Matthews, 1998; Walker, 2005). According to Bierly III et al. (2000), wisdom, being associated with choosing and applying the appropriate knowledge effectively in a given situation, “is the ability to best use knowledge for establishing and achieving desired goals” (p. 601). Wisdom, therefore, is not a simple accumulation of knowledge (Maxwell, 2007,

2013; Nunamaker Jr. et al., 2002): rather it relies on character and mind, and is more concerned with how one apprehends and deploys knowledge than how much one knows (McKenna et al., 2008). Ardel (2004) asserts that the accumulation and *quantity* of knowledge cannot be an indicator of wisdom, as knowledge is believed to be only at the intellectual level, whilst wisdom is seen at the experiential level.

*Experience:* As the Roman lyric poet, Horace (65-8 BCE), says, “wisdom is not wisdom when it is derived from books alone”. Experience is essential and required for practical wisdom (Baggini & Fosl, 2007; Grint, 2007; Kodish, 2006; Urmson, 1998). “Individuals must have exposure to experience that will progressively accumulate in producing a wise person” (Birren & Fisher, 1990, p. 322). Aristotle (*the Nicomachean Ethics 1142a*, 10-15) emphasises the role of experience in the development of wisdom, by saying: “while young men [can] become geometricians and mathematicians and wise in matters like these, it is thought that a young man of practical wisdom cannot be found. The cause is that such wisdom is concerned not only with universals but with particulars, which become familiar from experience, but a young man has no experience, for it is length of time that gives experience”. Experience, however, in and of itself does not necessarily lead to wisdom (Holliday & Chandler, 1986), as alongside ‘facts’, normative ideas are critical to wisdom (Grint, 2007).

*Ethics:* Ethics is referred to as a key subcomponent of wisdom. Wisdom is not an independent entity of morality (McKenna, 2005; Moberg, 2007; Nonaka & Takeuchi, 2011; Pasupathi & Staudinger, 2001; Robinson, 1990; Statler & Roos, 2007; Sternberg, 1998; Steutel & Spiecker, 1997). Central to wise practice is ethical action (Rooney & McKenna, 2008). In this sense, morality is considered as a necessary feature of wisdom, in that achieving the peak levels of wise performance is impossible without having, to some degree, the capacity of moral reasoning (Pasupathi & Staudinger, 2001). Statler and Roos (2006) develop a model of practical wisdom that emphasises the role of ethics in practical wisdom. Aristotle (*the Nicomachean Ethics*) points out that nothing could lead to good ends without being good, as “a good person will naturally do the right thing, whereas someone who has intellectual insight alone may possess neither the motivation nor the requisite skills and habits to carry out the right action” (LeBon,

2001, p. 58). From a practical wisdom perspective, understanding the ethical dimension of one's action is important to fully understand the action (Melé, 2010). In this sense, practical wisdom brings together ethics, knowledge and practice. Discriminating between wisdom and knowledge, Courtney (2001) says that "knowledge involves the ability to act intelligently and to learn", and "wisdom guides knowledge actions on the basis of moral and ethical values" (p. 23).

*Practice-oriented:* Wisdom is *prone to act* (Birren & Fisher, 1990), and as excellence, leads things to what those things belong to and to perform their function well (*the Nicomachean Ethics*). Wisdom is a way of being and doing (Bierly III et al., 2000; McKenna et al., 2008; Nichols, 1996; Rooney et al., 2010). Wisdom is not just about the achievement of good ends, but it is also about how to achieve desired goals (Intezari & Pauleen, 2013a). Gibson (2008) defines wisdom as "a capacity to perceive, deliberate, decide, and *act* effectively" (p. 528). Wise people are defined as being "the sort of person who acts" (Telfer, 1990). Beck (1999) asserts that wisdom encompasses both action and knowledge, which are related to doing what is good and to understanding the truth, respectively. Wise people not only *know how* to live, but they also do live well (Nozick, 1989; Ryan, 1996). As Garret and College (1996) put it, "living well, living better or living the best life is what lies behind our interest in wisdom" (p. 226).

*Judgment:* Wisdom is seen to be associated with judgment. Wisdom enables people to make good pragmatic judgments about important matters of life (Baltes & Smith, 1990; Bierly III et al., 2000; Csikszentmihalyi & Rathunde, 1990; Etheredge, 1992; Holliday & Chandler, 1986; Merriam & Caffarella, 1999; Pascual-Leone, 1990; Pasupathi et al., 2001; Pasupathi & Staudinger, 2001; Rooney et al., 2010). Being able to make sound judgment regarding the conduct of life is one of the factors which differentiate wise people from those who are merely knowledgeable (Bierly III et al., 2000). This implies that making good judgment is one of the extremely important characteristics of wisdom (Etheredge, 1992; Roca, 2007). In this sense, Kramer (1990) even defines wisdom as "a form of judgement" that pertains to the domain of human affairs (p. 291). Gibson (2008, p. 533) asserts that to make wise decisions and take wise actions, *experience*, character and judgment are of great importance.

*Non-rationality:* Wisdom is a unifying quality of rationality (cognition, reason) and non-rationality (feeling, intuition) (McKenna, 2013a; Rooney et al., 2010; Rowley & Gibbs, 2008). Wisdom goes beyond rational and objective understanding, and what is already known (Rowley and Gibbs, 2008), in that it incorporates subjective and non-rational elements into judgment (Rooney et al., 2010). For example, McKenna et al. (2006) assert that wisdom in management is based on reason, but it coalesces a humane and virtuous teleology, non-rational, practical wisdom.

*Emotions:* Wisdom is not a purely cognitive quality (Intezari & Pauleen, 2013b). Wisdom involves emotional characteristics (Baltes & Kunzmann, 2003; Tredget, 2010). Wise people balance their emotions such that their emotions do not dominate their decisions (Baltes & Kunzmann, 2004; Birren & Fisher, 1990; Roos, 2006; Tredget, 2010). A person of practical wisdom knows how to keep emotions in proper bounds while choosing from a range of possible options in order to achieve the good end in particular circumstances (Beauchamp, 1991). Emphasising the emotional dimension of phronesis, Roos (2006) asserts that “our emotional reactions manifest, or indicate also the moral dimensions of the situation at hand” (p. 215). For this reason, the achievement of virtues happens when one’s emotions, desires and passions are excellently cultivated (Baggini & Fosl, 2007). In this sense, emotions cause a person of intellectual virtue to abhor intellectual vice and to be quite careful about the truth (Abraham, 2006).

*Awareness of the limits of knowledge:* According to Aristotle (*the Nicomachean Ethics*) wise people are aware of the limitations of their knowledge. Wisdom does not connote knowing specific facts, but it is ‘knowing’ while keeping a balance between excessive confidence and excessive cautiousness (Meacham, 1990). Wise people are aware of their own knowledge limitations (Baltes & Kunzmann, 2004; Holliday & Chandler, 1986; Kitchener & Brenner, 1990; Meacham, 1990). Awareness of unknowns and their applications in judgment and problem-solving are the main characteristics of wise people (Kitchener & Brenner, 1990), as unlike unwise people, who believe that they are wise, wise people are those who do not consider themselves wise (Ryan, 1999). Wise people’s awareness of their own limitations leads them to learn from mistakes through evaluative and reflective skills (Sternberg, 1985).

The following table (Table 2-4) summarises these aspects of wisdom and provides a description of each.

Wisdom aspects	Description
Concerned with fundamental matters of life	Wisdom is related to fundamental and pragmatic aspects of life.
Self-transcendence	Wisdom is not restricted to the individual level, but it manifests at both individual and social levels. Wisdom is concerned with well-being of self and others.
Knowledge	Knowledge is important in making wise decisions and taking wise actions. However, wisdom is more than a mere accumulation of knowledge. Wisdom is also associated with one's ability to use knowledge.
Experience-based	Experience is a critical subcomponent of wisdom. Experience, however, in and of itself, does not necessarily lead to wisdom.
Ethics	Wisdom and morality are interwoven. Ethics is a substantial aspect of wisdom.
Practice-oriented	Wisdom is prone to act. Wisdom is a way of being and doing. Wise people are defined as being "the sort of person who acts". Wisdom is not just about the achievement of good ends, but it is also about how to achieve desired goals.
Judgment	Wisdom enables people to make good pragmatic judgments about important matters of life.
Non-rationality	Wisdom is a unifying quality of rationality and non-rationality, and goes beyond rational and objective understanding, and what is already known.
Emotions	Wisdom is not a purely cognitive quality. Wise decisions, however, are not overly affected by emotions. Wisdom helps to keep a balance between emotions and logic.
Awareness of the limits of knowledge	Wisdom is about being aware of what is not known. Wise people are aware of the limitations of their knowledge.

**Table 2-4: Key Aspects of Wisdom**

It is concluded that from different perspectives in the literature, there are various elements with which wisdom may be associated, and that possession of any single quality does not necessarily lead to wisdom. The diversity of opinions makes it a challenging task to conceptualise wisdom in a way that takes account of all the elements, but Birren and Fisher (1990) and Kodish (2006) note the following articulation of the concept of wisdom as "the optimum, ultimate expression of a blend of human qualities" (Birren & Fisher, 1990, p. 323) that involves various

elements including perception, experience, knowledge, rationality and non-rationality, decision making, purposive action, virtue, character, transcendence, understanding self and others' interests, and promotion of self and others (Kodish, 2006).

So far, the wisdom literature has been reviewed. Since the research objective is to examine the relationship between wisdom and management decision making, in the second part of this chapter, management decision making literature is discussed.

### **2.3 Management Decision Making**

Decision making is central to what managers do (Hickson, Butler, Cary, Mallory, & Wilson, 1989; Michel, 2007; Stewart, 2006), Decision making ability is one of the critical abilities that managers are required to have and develop in order to lead their organisations in the business world. Porter (1985) emphasises that at the core of the success or failure of a firm is the competitive ability to make decisions. The dynamic and uncertain nature of the current business world requires managers to make effective decisions if they want their organisations to survive and compete (Ahmed, Hasnain, & Venkatesan, 2012). Decision making is integrated in any sort of management (Harrison, 1999), so that Herbert Simon (1960) considers 'decision making' and the whole process of management as synonymous. In organisations, the decision making ability and the quality of the decisions that the managers make, indicate the effectiveness or ineffectiveness of the managers (Harrison, 1999).

'Decision' is defined as an "answer to some problem or a choice between two or more alternatives" (Rowe & Boulgarides, 1983, p. 4). Mintzberg et al. (1976) define 'decision' as "a specific commitment to action (usually a commitment of resources)" (p. 246). Harrison defines 'decision', irrespective of the number of steps, as being "a moment, in an on-going process of evaluating alternatives for meeting an objective, at which expectations about a particular course of action impel the decision maker to select that course of action most likely to result in attaining the objectives" (Harrison, 1999, p. 5). Decision making is defined as a mental activity in order to choose among alternatives (Galotti, 2002), or as a mental process of "option generation and comparison" (Schraagen, Klein, &

Hoffman, 2008, p. 4). As a process, decision making refers to a multi-stage and -criteria process (Hall & Hofer, 1993) through which different alternatives are developed and differentiated to achieve a desired outcome in a given situation (Keast & Michael, 2009).

In organisational and management studies, decision making is mainly approached as a process (Langley, Mintzberg, Pitcher, Posada, & Saint-Macary, 1995), through which different alternatives are developed, compared, and chosen from, in order to achieve desired goals (Keast & Michael, 2009). The process may be characterised as a sequential or linear process (Maddalena & Canada, 2007) or as a non-sequential or non-linear process (McKenna & Martin-Smith, 2005). Decision making as a linear process draws on the rationalist perspective that assumes decision functions (e.g. goal setting, developing alternatives, and etc.) have a predetermined order. In contrast, the conceptions that emphasise the nature of decision making as a non-linear process rely on a non-rationalist or naturalistic approach. Thus, before proceeding to examine management decision making phases, it is necessary to review the main underlying approaches to decision making.

### **2.3.1 Formal-empiricist, Rationalist, and Naturalistic Perspectives**

Historically, three main schools of thought on decision making are evident: the formal-empiricist, the rationalist, and the naturalistic (Cohen, 1993). For formal-empiricists, the main goal of decision making is to maximise the subjectively expected utility. They suggest normative models for comparing and choosing from the alternatives that are available (Rosen, Salas, Lynos, & Fiore, 2008). The second group, the rationalists, take a logical approach to decision making, and consider decision making as a process that is logically expected to achieve the optimal outcome, based on a precise assessment of the values and risk preferences of the decision maker (Bazerman & Moore, 2009). For naturalists, decision making is an experience-based process. That is, people make decisions in the field setting, based on their experience (Zsombok, 1997).

As opposed to the formal-empiricist and rationalist schools that have a rational approach to decision making, the naturalistic school holds a non-rational position. For the first group, decisions are suggested to be made based on clearly defined,

rational processes which include defining, diagnosing, designing, and deciding (Mintzberg & Westley, 2001). Decision making investigations in the naturalistic school concentrate on the decision maker and complex decision making situations where the decision maker is faced with limited resources and time (Rosen et al., 2008).

The theories that are proposed by the first two schools are prescriptive in nature, while the naturalistic theories are descriptive (Bazerman & Moore, 2009). The prescriptive theories are mainly based on the primacy of rationality, and seek to develop normative models and methods that aim at optimising decisions. Normative models are, for example, mathematical models that enhance the decision maker's rational behaviour (Rosen et al., 2008). According to the models, the decision maker is expected to apply the maximisation principle (Betsch & Held, 2012). In contrast, the descriptive theories following the naturalistic perspective want to understand how decisions are naturally made in situ (Messick & Bazerman, 2001). The descriptive theories hold that the decision maker "is uniquely herself in a specific context, at a specific time and in a specific place" (Sharp, 2007, p. 303), and seek to discover and provide a description of the decision makers' cognitive and behavioural processes as they engage in making different kinds of decisions in their natural environments (Beach & Connolly, 2005).

The descriptive theories draw on the dual process theories of reasoning (Elqayam & Over, 2012; Kahneman & Frederick, 2002; Thompson & Morsanyi, 2012). Dual process theories suggest that thinking is based on two processes of intuitive and reflective thinking (Evans, 2009, 2012). Intuitive thinking is typically characterised as automatic, holistic, implicit, and often unconscious or preconscious, and the decisions that are made based on intuitive thinking are less rational. On the other hand, reflective thinking is controlled, deliberate, demanding, analytic, explicit, and often linked with conscious awareness, and the decisions that are based on this kind of thinking are more rational (Stanovich & Toplak, 2012; Stanovich & West, 2000).

### **2.3.2 Rational and Non-rational Decision Making**

A rational decision making process is the process that is “logically expected to lead to the optimal result, given an accurate assessment of the decision maker's values and risk preferences” (Bazerman, 2006, p. 6). In a rational decision making process, a decision is thought to be reached by a logical and linear step-by-step process (Miller, Hickson, & Wilsdon, 2002). Winterfeldt and Edwards (1986) explain that rational decision making “has to do with selecting ways of thinking and acting to serve your ends or goals or moral imperatives, whatever they may be, as well as the environment permits” (p. 2). In rational decision making all the relevant objectives and goals, not just the first one, must be taken into consideration (Galotti, 2002). This essentially assumes that the decision maker is able to differentiate and rank outcomes according to some criteria and choose the optimal outcome (Keast & Michael, 2009).

Since in the rational decision making process, all the aspects involved and their interrelationships with the problem are considered (Gibcus, Vermeulen, & Radulova, 2008; Klein & Weiss, 2007), this type of decision is slower, effortful, conscious, logical, and explicit (Bazerman, 2006). In contrast, intuitive or holistic decisions, which are not limited to an obligatory resolution process, are typically made implicitly, emotionally, automatically, quickly, and effortlessly (Bazerman, 2006), and have such advantages as flexibility and creativity (Khatri & Ng, 2000; Morera & Budescu, 2001). Most of the decisions in life, according to Bazerman (2006), are of this kind. According to Klein and Weiss (2007), intuitive decision making is creative and suitable for non-conventional situations, while rational decision making benefits from accuracy in data processing and is appropriate for conventional circumstances.

Purely rational decisions are argued to be impossible to make in the real world due to human bounded rationality (Simon, 1960), and the influence of factors beyond rationality that are significant in decision making (Rosanas, 2013). Simon (1945, 1960) argues that the limited human cognitive capacities and the complexity of modern organisations mean the decision maker is unable to make perfect rational decisions. Such constraints as the vague and unclear nature of the issues for decision, misrepresented, incomplete, or unavailable information about

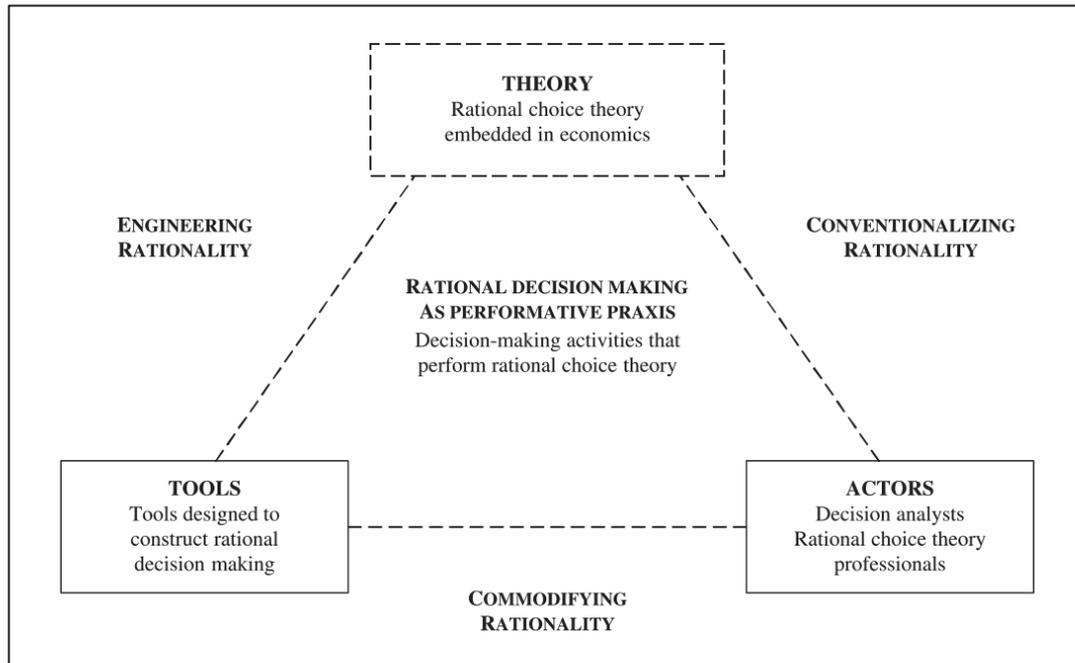
the alternatives, disagreement on the criteria against which alternatives must be evaluated, limited time and energy are all likely to lead the decision outcomes to be ‘satisfying’ and sufficient, rather than an optimised choice, in a given situation (Miller et al., 2002).

Rosanas (2013) argues that for three reasons, human rationality is bounded: 1) “decision makers do not know exactly what they want, i.e., they have blurry or fuzzy preferences and are not very good at anticipating the satisfaction (or dissatisfaction) they will derive from any given action alternative”; 2) “decision makers do not automatically know all the action alternatives and so cannot pick the one they prefer; action alternatives have to be created, using imagination and effort”; and 3) “decision makers may not be able to perform the necessary calculations or make the necessary comparisons between criteria in order to reach a conclusion that is consistent with people’s preferences, abilities, and professional qualifications” (p. 39).

It is noteworthy to mention that despite numerous critiques from various perspectives, e.g. bounded rationality (Simon, 1955, 1959), task complexity (Cannon-Bowers & Salas, 1998), bounded self-interest (Thaler, 2000), and choice-centric (with little support for other phases in the process of decision making) (Smith, 2008), the rational decision making approach has remained dominant in organisational decision making. Cabantous and Gond (2011) conceptualise decision making as a performative praxis and explain that this persistence of rational decision making in organisations is because rational decision making is “a set of activities whereby organizational actors collectively produce rational decisions and thus grant social reality to rational choice theory” (p. 574). Cabantous et al. (2008) suggest that in organisational studies of decision making, rationality must be brought back as an object of empirical investigations.

Cabantous and Gond (2011) conceptualise rational decision making as formative praxis, and suggest a model that explains why managers and organisations are embedded in rationality. The model suggests that rational decision making is the result of the interrelationships among three elements that are linked to one another through three mechanisms. The elements include theory, tools, and actors. The

mechanisms include rationality conventionalisation, rationality engineering, and rationality commodification (Figure 2-12).



**Figure 2-12: Rational Decision Making as Performative Praxis** (Cabantous & Gond, 2011, p. 578)

‘Actors’ refer to the whole range of people who are directly or indirectly involved in decision making, whether they are within the organisation e.g. managers and employees, or from outside the organisation e.g. independent consultants. Regarding rational decision making as praxis, Cabantous and Gond (2011) argue that it is “a purposeful effort of managers in search of rationality”, and has a performative effect as it leads rational choice theory to manifest in reality. Rational choice theory, as a performative theory, influences the social reality in such a way that its predictions and premises become true. Rational decision making as praxis focuses on the actual doing of the ‘actors’, and underlines the importance of ‘tools’ and techniques that the actors use in their decision making activities.

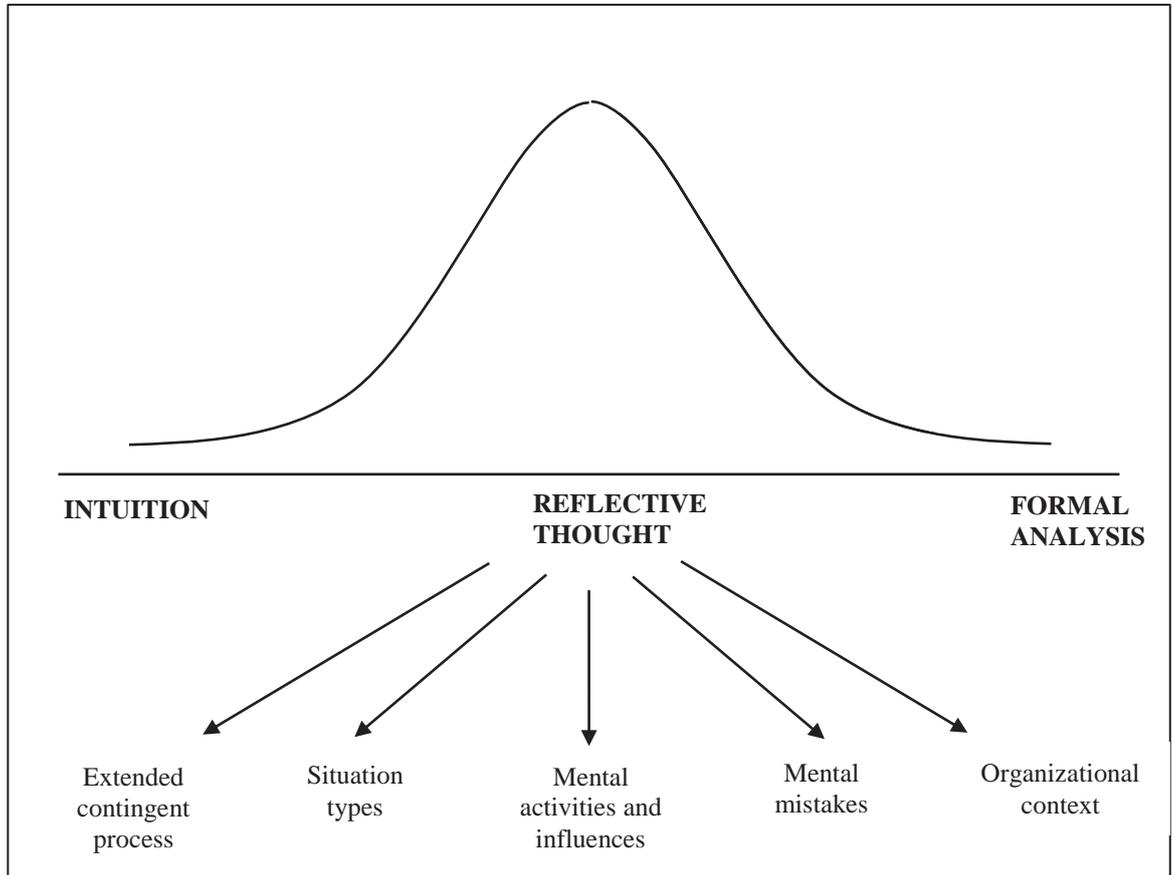
Cabantous et al. (2008; 2011) argue that rationality not only has not disappeared, but it has become a ‘convention’ in organisational settings, i.e. a social norm that guides decisions and actions. In conventionalising rationality in organisations, business schools and other management education have embedded students and future managers in rational choice theory. This cognitive embeddedness in

rational choice theory is sustained by ‘engineering rationality’, which refers to managers’ attempts to make rational decisions by relying heavily on decision making tools, e.g. software and decision support systems, in order to overcome their bounded rationality. The conventionalisation and engineering are complemented by rationality ‘commodification’. According to Cabantous and Gond (2011) rational decision making has become a convention embedded in tools and practices (engineering) and has become a commodity which is sold to managers and organisations by academics, consultants, and managers. The three mechanisms support the spread of rational choice theory in organisations.

By contrast, rational decision making theory is criticised for neglecting the influence of factors other than rationality, e.g. politics and power (Pettigrew, 2002; Schein, 1985), individual differences (Carnevale, Inbar, & Lerner, 2011; Galotti et al., 2006; Shiloh, Koren, & Zakay, 2001), emotions (Hess & Bacigalupo, 2011; Sevdalis, Petrides, & Harvey, 2007), and ethics and morality (Arnold Sr, Dorminey, Neidermeyer, & Neidermeyer, 2013; Holian, 2002; Kohlberg, 1984; Maddalena & Canada, 2007; Rest, 1984, 1986). For example, Shiloh et al. (2001) investigate how individual variations affect people’s decision making. They report that decision complexity, which depends on the number of alternatives, the number of the attributes and outcomes of each alternative (objective decision complexity), and personal variables such as deficiencies in skills, information, and readiness, can increase decision making difficulties. Shiloh et al. (2001) argue that in addition to decision complexity and personal characteristics, the decision maker’s perception of the complexity of the decision structure and difficulty (subjective decision complexity) affects his or her decisions. Individuals are different, for example, in their skills of assessing a problem situation, recognising a problem, detecting a problem underlying structure, and recognising patterns. So, depending on their dissimilar perception of the complexity of the problem and the decision (subjective decision complexity), decision makers may construct decision structures differently.

In contrast to the dichotomous approaches of rational and intuitive decision making, Smith (2008) suggests a broader account of decision making that stands in the middle of a bell-like continuum with the extremes of intuition and formal analysis (Figure 2-13). Smith (2008) argues that, on the one hand, the

understanding of intuition that intuitive decision making has provided is too broad, and fails to differentiate intuitive decisions from habitual decisions or random selections. Rationality, on the other hand, is conceived too narrowly in terms of utility maximisation and deductive logic, and therefore overlooks the reflective thinking practices that people use to make decisions in their lives.



**Figure 2-13: Perspectives on Decision Making** (Smith, 2008, p. 461)

The bell-like curve in the figure corresponds to the distribution of the practical decision situations that can be addressed by formal analysis, intuitive methods, or reflective thinking. The model suggests that the majority of practical decision situations are addressed by reflective thought rather than by pure intuition or formal analysis methods. Smith (2008) argues that intuition and rational techniques play a limited role in thoughtful decision making, and that reflective thought capacity is the most valuable resource of people's decision making ability.

The model suggests five significant ways through which the underlying thinking of decision making reaches beyond the either-or rational-intuition dichotomy: Extended contingent process, Situation types, Mental activities and influences, Mental mistakes, and Organisational context. Smith (2008) suggests that these significant ways must be incorporated into courses that teach decision making.

Reflective thought on decision making requires a consideration of the variability in the functions that are required in different situations (Extended contingent process), so the decision makers must adapt their decision making thinking to the situation. For example, problem diagnosis in some situations, such as on the production line, is critical, while in another situation, such as hiring a new employee, problem diagnosis is not required. Smith (2008) also suggests that familiarity with different problem types, such as performance and negotiation problems, as well as knowing how to deal with these, enhances the decision maker's capacity to make reflective decisions (Situation types). Different people use a variety of mental resources including judgment and emotions, and decision making is shaped by both cognitive and non-cognitive influences (Mental activities and influences). Thus, skills such as critical thinking, as well as cognitive virtues like open-mindedness and mental flexibility, enhance the decision maker's reflective thought in decision making. Furthermore, decision makers need to be aware of mental mistakes and reasoning errors such as the fallacy of hasty generalisations of causality when the mistakes occur (Mental mistakes). There are various factors such as politics, history, policies, and group process dysfunctions that influence decisions at the organisational level. Decision makers must understand the pitfalls related to the factors (Organisational context).

Having reviewed different approaches to decision making, the following section discusses the phases that are involved in management decision making.

### **2.3.3 Decision Making Process**

Management decision making is articulated as a multistage process encompassing various phases or functions (Hall & Hofer, 1993; Harrison, 1999; Langley et al., 1995) through which the alternatives are differentiated in order to achieve an optimal outcome in a given situation (Keast & Michael, 2009). Simon (1960) believes that the three principal phases of decision making are: "finding occasions

for making a decision; finding possible courses of action; and choosing among courses of action” (p. 1). Or similarly, Mintzberg et al. (1976) define ‘decision process’ as “a set of actions and dynamic factors that begins with the identification of a stimulus for action and ends with the specific commitment to action” (p. 246).

Zeleny (2006, p. 4) characterises decision making processes as “purposeful coordination of interrelated activities” of three stages: 1) pre-decision stage, during which the problem is defined and information is gathered about when the decision is to be made, about the context and scope of the decision, and about who must make the decision; 2) decision stage, during which alternatives are compared and the best alternative is selected towards identifying a course of action; and 3) post-decision stage, during which the decision and its implementation are explicitly justified. Similarly, Maddalena and Canada (2007) categorise decision making phases into *assessment, planning, implementation, and evaluation*, which incorporate nine functions through which 1) the problem is articulated, 2) information is gathered, 3) the problem is verified, 4) the best possible resolution and outcome is articulated, 5) options are listed and tested, 6) the decision is made and implemented, 7) appropriate criteria are defined, 8) results are evaluated, and finally, 9) followed up.

Bazerman (2006) asserts that six steps should be taken in the process of decision making including defining the problem, identifying criteria, weighting the criteria, generating alternatives, assessing each alternative based on each criterion, and finally calculating and choosing the highest valued option. According to Saaty (1994, p. 21), decision making is a process through which six steps are taken: 1) identifying a problem’s key elements by structuring the problem, 2) eliciting judgments that reflect knowledge, feeling or emotions, 3) representing the formed judgments with meaningful numbers, 4) prioritising the elements of the hierarchy, using the numbers, 5) determining an overall outcome, synthesising the results acquired from the previous step, and finally 6) analysing sensitivity to changes in judgment. Recognition, formulation, search, evaluation, choice, and implementation are the other six steps believed to form the process of decision making according to Gibcus et al. (2008). Others may identify fewer or more steps in the decision making process. Nutt (1989) considers learning as part of the

decision making process, and explains that what is learnt from the previous decisions can improve one's decision making ability. Nutt (1989) identifies four phases in decision making: 1) exploring possibilities, 2) assessing alternatives, 3) testing assumptions, and 4) learning.

Explanations of the phases and functions involved in decision making vary from different perspectives. These phases may be divided into two overall phases of problem-finding and problem-solving. Alternatively they can be categorised into a number of phases beginning, for example, with the articulation of a problem and finishing with implementing the choice and evaluating final results (Nutt, 2002). Nutt (2002), for instance, believes that five stages are followed which include collecting information, indicating desired results, establishing a systematic search for ideas, evaluating ideas, and managing barriers that are likely to block the decision during implementation. Table 2-5 shows the diversity of the perspectives as to the phases of decision making process.

Theorists	Steps involved in decision making process							
	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
<b>Simon (1960)</b>	Finding decision making occasions	Finding possible course of action	Choosing among courses of action					
<b>Beach and Connolly (2005)</b>	Diagnosing the decision problem	Selecting an action	Implementing the selected action					
<b>Maddalena and Canada (2007)</b>	Assessing	Planning	Implementing	Evaluating				
<b>Rosanas (2013)</b>	Identifying and defining the problem	Establishing the criteria that any solution must meet	Searching for and generating action alternatives	Analysing and comparing action alternatives	Choosing an action alternative as the solution to the problem			
<b>Nutt (2002)</b>	Collecting information	Indicating desired results	Establishing a systematic search for ideas	Evaluating ideas	Managing barriers			
<b>Galotti (2002)</b>	Setting goals	Gathering information	Decision structuring	Making a final choice	Evaluating			
<b>Drucker (1967)</b>	Classifying the problem	Defining the problem	Specifying the answer to the problem	Deciding what is 'right'	Putting the decision into action	Feedback		
<b>Bazerman (2006)</b>	Defining the problem	Identifying criteria	Weighting the criteria	Generating alternatives	Assessing alternatives	Calculating and choosing the highest valued option		

<b>Saaty (1994)</b>	Identifying a problem's key elements	Eliciting judgments	Representing the formed judgments	Prioritising the elements of the hierarchy	Determining an overall outcome	Analysing sensitivity to changes in judgment		
<b>Gibcus et al. (2008)</b>	Recognition	Formulation	Search	Evaluation	Choice	Implementation		
<b>Harrison (1999)</b>	Setting managerial goals	Searching for alternatives	Comparing and evaluating alternatives	The act of choice	Implementing decisions	Follow-up and control		
<b>Hammond et al. (1999)</b>	Working on the right problem	Specifying objectives	Creating imaginative alternatives	Understanding the consequences	Grappling with trade-offs	Clarifying uncertainties	Thinking about risk tolerance	Considering linked decisions

**Table 2-5: Different Perspectives on the Decision Making Process**

Although there appears to be diversity among the perspectives on the phases and functions of decision making (Bazerman, 2006; Galotti, 2002; Gibcus et al., 2008; Maddalena & Canada, 2007), three main phases including seven functions are commonly indicated. These phases include problem defining, problem solving, and follow up. These phases incorporate seven functions: 1) identifying and articulating the problem, 2) setting goals, 3) establishing criteria, 4) generating alternatives, 5) evaluating and selecting the most appropriate alternative, 6) implementing the choice, and 7) evaluating and following up (Table 2-6). In the following paragraphs the decision making functions are discussed.

<b>Phases</b>	<b>Decision making functions</b>	
Problem finding	Identifying and articulating the problem:	<i>The problem is recognised, identified, and defined.</i>
Problem solving	Setting goals:	<i>A desired status in which the problem has been solved is defined.</i>
	Establishing criteria:	<i>The information needed for criteria development is gathered. A set of criteria is defined to evaluate possible options.</i>
	Generating alternatives:	<i>Necessary information for developing alternatives is gathered. Possible and available options toward the achievement of the established goal are found and/or developed.</i>
	Evaluating and selecting the most appropriate alternative:	<i>The alternatives are judged against the criteria and one is selected.</i>

	Implementing the choice:	<i>The selected alternative is put into action.</i>
Follow up	Evaluating the outcome and following up:	<i>The actual outcomes of the decisions are assessed to see whether or not the desired goals that were set at the time the decision was made were achieved.  Possible improvements are identified for future decisions.</i>

**Table 2-6: Decision Making Phases and Relevant Functions**

*Identifying the problem:* Corresponding to the functions ‘defining the problem’, and ‘recognition and formulation’, respectively discussed by Bazerman (2006) and Gibcus et al. (2008), in the ‘identifying the problem’ step, the problem is recognised and defined by a thorough understanding of the problem. Bazerman and Moore (2009) identify three errors that managers often commit in this step and suggest that identifying and defining the problem requires accurate judgment. The errors are 1) “defining the problem in terms of a proposed solution”, 2) “missing a bigger problem”, and 3) “diagnosing the problem in terms of its symptoms” (p. 2). To accurately identify and define the decision problem, having appropriate knowledge and information is essential in decision making (Maddalena & Canada, 2007). During this function various kinds of knowledge, information, and technical data concerning the details of the problem, actors involved, objectives, policies, factors influencing the outcomes, time frame, and scenarios are gathered (Saaty, 1994). It is, accordingly, of prime importance for decision makers not only to acquire adequate information, but also to acquire real understanding of the problem, context and consequences of the decision.

*Setting goals:* Harrison (1999) identifies ‘setting managerial goals’ as the first function of decision making. In the problem solving phase, a specific goal in the form of a desired result is set, taking the decision maker’s plans for the future, values, principles, and priorities into consideration (Galotti, 2002). The goals that are set may be need-based (indicating that a problem must be fixed) or opportunistic (in order to make improvements, not relying on a problem) (Nutt, 2002).

*Establishing criteria:* This function involves defining a set of criteria to apply to evaluating alternative actions. The function of comparing and contrasting different alternatives would not be possible without appropriate criteria. Criteria are the

conditions that the decision must meet: “a decision criterion is a fact or circumstance that would make [decision makers] choose a particular alternative, all else being equal” (Rosanas, 2013, p. 31). To establish appropriate criteria, the decision maker must have relevant and reliable knowledge of and information on the decision problem and context.

*Generating alternatives:* This function corresponds to the functions ‘search’ and ‘gathering information’ of Gibcus’ et al. (2008), and Galotti’s (2002) perspectives, respectively, and to the function ‘generating alternatives’ examined by Bazerman (2006). Through this function, the information needed for identifying possible courses and available alternatives is gathered (Bazerman, 2006; Galotti, 2002). This information may already exist in forms of knowledge or experiential information in the decision maker’s mind, or may be gathered through consultation or extended research in available databases. The decision maker may rely on his or her own prior experience or on others’ (Rosanas, 2013).

*Evaluating and selecting the most appropriate alternative:* The decision makers gather the information they need to see which alternative meets the criteria (Galotti, 2002), evaluate alternatives, and choose the final option. Different alternatives are compared and rated based on criteria. Then, one or a group of preferred alternatives are selected that, according to the criteria, are expected to meet the desired goals.

*Implementing the choice:* This function puts the preferred alternative into action (Nutt, 2002). Implementing a choice may be seen as separate from the decision making process (Bazerman, 2006; Saaty, 1994), or it may be referred to as the highest point of the process (Harrison, 1999). Rosanas (2013) argues that the final choice is put into action by ‘real people’, not ‘abstract agents’, and that people with different priorities and preferences may take a course of action differently depending on their particular knowledge and abilities. In this respect, Drucker (1967) writes: “unless a decision has ‘degenerated into work’, it is not a decision; it is at best a good intention. This means that, while the effective decision itself is based on the highest level of conceptual understanding, the action commitment should be as close as possible to the capacities of the people who have to carry it out” (p. 92). Unlike Gibcus et al. (2008), Harrison (1999), and Maddalena and

Canada (2007) who consider ‘implementing the choice’ as a part of the decision making process, Bazerman (2006) and Saaty (1994) do not include this step in the process of decision making. In the implementation phase, a decision is put into use (Nutt, 2002).

*Following up:* It is critically important in the decision making process to monitor whether or not the desired goals have been achieved and indicate what improvements are required to make better decisions in the future. Drucker (1967) underlines that people are fallible and decisions are made by people. So, information reporting and monitoring must be put in place to continuously test the actual results against the decision maker’s expected outcomes.

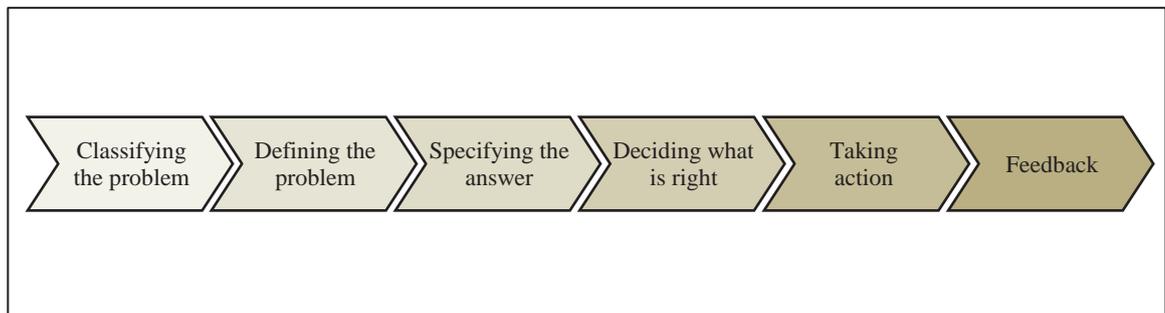
These functions, as mentioned earlier in this section, may be seen as being sequentially linked to one another in a linear or an orderly process (Bass, 1983; Beach & Connolly, 2005; Maddalena & Canada, 2007) or as multi-directional interconnected phases that characterise decision making as a non-sequential or non-linear process (McKenna & Martin-Smith, 2005). The two perspectives are discussed and examples are provided below.

### **2.3.3.1      *Decision Making as a Sequential Process***

According to the rationalist perspectives on decision making, a decision making process includes a set of stages, sequentially related, that are based on a predetermined order (Galotti, 2002). To put it differently, the functions cannot be skipped, and each function must be completely fulfilled before the next function is carried out. Rationalists assume that the decision makers 1) perfectly recognise, identify, and diagnose the problem, 2) identify and stringently establish all criteria, 3) accurately set all the criteria by rating them based on their preferences, 4) perfectly know all the possible alternatives, 5) precisely assess all the alternatives against each criterion, and 6) accurately calculate and select the alternative that has the highest value (Bazerman & Moore, 2009). From this perspective, decision making may be defined as “an orderly process, beginning with the discovery by the decision maker of a discrepancy between the perceived state of affairs and the desired state. This desired state is usually between an ideal and a realistically attainable state. Alternative actions are selected or invented. One of these alternatives emerges as the action of choice followed by justification

for it. Then comes its authorization and implementation. The process cycle is completed with feedback about whether the action resulted in movement toward the desired state of affairs. If the gap between the perceived and desired state of affairs has not narrowed sufficiently, a new cycle is likely to commence” (Bass, 1983, p. 4).

Decision making as a sequential process is well illustrated by Drucker’s (1967) articulation of executives’ effective decision making process. He argues that an effective decision is made through “a systematic process with clearly defined elements and in a distinct sequence of steps” (p. 98). The steps that Drucker (1967) proposes that are involved in the decision making process include: 1) the classification of the problem, 2) the definition of the problem, 3) the specifications which the answer to the problem must satisfy, 4) the decision as to what is right, rather than what is acceptable, in order to meet the boundary conditions, 5) the action planning built into the decision, and 6) the feedback which tests the validity and effectiveness of the decision against the actual course of events. Drucker (1967) argues that these sequential functions are the stepping-stones of the decision making, and if any of them is neglected the executive will not arrive at a right and effective decision. The steps can be illustrated as below (Figure 2-14).



**Figure 2-14: Drucker’s Effective Decision Process**

Although articulating management decision making as a sequential process provides a clear and broad understanding of the core components of the decision making process, such an articulation does not represent how management decisions are made in the real world. In organisations, decisions are not made in isolation, and various elements such as time pressure, budget limits, politics and power, intuition and imagination influence decisions and the decision making process, in such a way that the manager does not necessarily follow an orderly

process of sequential steps. Therefore, decision making is also regarded as a non-sequential process.

### **2.3.3.2      *Decision Making as a Non-sequential Process***

In describing the decision making process, Galotti (2002) uses the term ‘phases’, instead of the term ‘stages’, to show that the steps of decision making may or may not follow a set order or task. That is to say, these tasks can overlap, some tasks can be skipped, and a different order can be followed, in the process of decision making. Moreover, the importance of each phase in the whole process of decision making may vary, depending on the problem situation or other factors.

McKenna and Martin-Smith (2005) argue that due to the emerging environmental context, the chaotic and complex world, influence of people’s conscious and unconscious mind on their relationships with others and on decisions, power and politics, and ethical considerations, decision making in today’s environment is tremendously complex. So, providing an understanding of decisions as simple sequential steps does not grasp the complex nature of decision making. They suggest that decision making is “a dynamic cycle set in a complex and chaotic environment, and influenced by the interactions between complex human beings” (McKenna & Martin-Smith, 2005, p. 832).

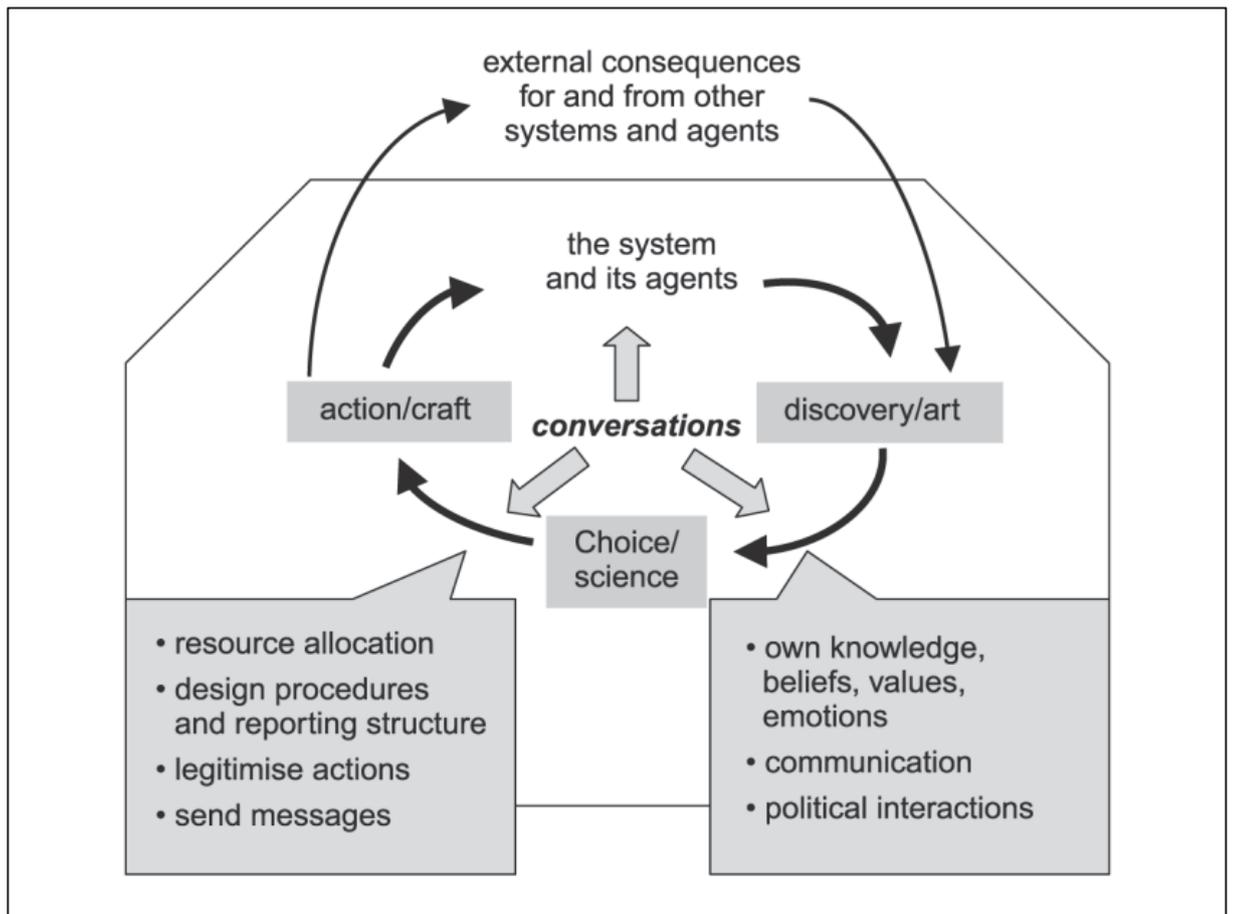


Figure 2-15: A Model of the Chaotic Dynamic Cycle of the Decision Making Process (McKenna & Martin-Smith, 2005, p. 833)

Similarly, Mintzberg and Westley (2010) argue that decision making is not necessarily always a ‘thinking first’ process, a linear process which begins with ‘defanging the problem’ and then evaluating and choosing from alternatives. They propose a model of decision making and suggest that the ‘thinking first’ style, which corresponds to rational decision making, must be complemented with two other decision making styles: ‘seeing first’ and ‘doing first’. They argue that decisions may be driven by what is seen, as opposed to what is thought. They emphasise the role of insight in making decisions by saying “no one should accept any theory of decision making that ignores insight” (Mintzberg & Westley, 2010, p. 76). With regard to ‘doing first’ decision making, they argue that the decision maker may not be able to see or even think of a problem. In these cases, doing first may drive thinking: “successful people know that when they are stuck, they must experiment. Thinking may drive doing, but doing just as surely drives thinking. We don’t just think in order to act, we act in order to think” (Mintzberg

& Westley, 2010, p. 76). Table 2-7 outlines the characteristics of the three approaches to making decisions.

<i>'Thinking first' features the qualities of</i>	<i>'Seeing first' features the qualities of</i>	<i>'Doing first' features the qualities of</i>
Science Planning, programming The verbal Facts	Art Visioning, imagining The visual Ideas	Craft Venturing, learning The visceral Experiences

**Table 2-7: Characteristics of the Three Approaches to Making Decisions** (Mintzberg & Westley, 2010, p. 77)

Mintzberg and Westley (2010) suggest that when the problem is clear, the data are reliable, the context is structured, thought can be pinned down, and discipline can be applied, then the 'thinking first' decision making approach works best. In the situations where developing a solution requires consideration of various factors, commitment to the solution, and communication across boundaries are critical; the best decision making approach is 'seeing first'. 'Doing first' works best in novel and confusing situations, when complicated specifications are barriers, and "a few simple relationship rules can help people move forward" (p. 81).

Management decision making, either as a sequential or non-sequential process, refers to the same understanding of decision making. Ofstad (1961) reminds us that when it is said that a manager has made a decision, three meanings may be comprehended: 1) "he has started a series of [actions] in favour of something", 2) "he has made up his mind to do a certain [thing]", or 3) he has made "a judgment regarding what one ought to do in a certain situation after having deliberated on some alternative courses of action" (p. 5).

## 2.4 Chapter Summary

The chapter comprises two sections: wisdom, and management decision making. In the first section, an initial review of the literature of wisdom was presented. The concept of wisdom was discussed from four perspectives: philosophical, psychological, managerial, and an inter-disciplinary perspective. Wisdom was defined as a multidimensional quality that in different disciplines is defined differently. Various understandings of wisdom, however, share commonalities. The qualities that from philosophical, psychological, and managerial perspectives are commonly mentioned as associated with wisdom were identified.

The second section dealt with the literature review of management decision making. The rationalist and non-rationalist perspectives on decision making were discussed. It was explained that decision making might be seen as a sequential or non-sequential process. The functions that are involved in the decision making process were identified and discussed.

In the following chapter, as the first chapter of 'Part 2: Methodology Design', the research methodology and grounded theory are discussed.

## Part 2

### Methodology Design

<b>Part 1</b> The Nature of the Research Problem	Chapter 1	Introduction
	Chapter 2	Initial Review of the Literature
<b>Part 2</b> Methodology Design	Chapter 3	Research Methodology and Grounded Theory
	Chapter 4	Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations
<b>Part 3</b> Findings	Chapter 5	Data Interpretation
	Chapter 6	Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)
<b>Part 4</b> Conclusion	Chapter 7	Implications, Limitations, and Directions for Future Research

## Chapter 3 Research Methodology, and Grounded Theory

### 3.1 Chapter Overview

In this chapter, the researcher's worldview and the research design and methods are described. First the researcher's paradigmatic stance is described, comparing three different philosophical traditions. Then, the methodology and methods that have been adopted in this study are explained and justified. The section is followed by a discussion on the informants sample. How the data were collected, analysed and interpreted are also discussed. The last sections of the chapter cover ethical considerations and summarise the chapter.

### 3.2 The Choice of the Research Methodology and Methods

Methodology is “a way of thinking about and studying social reality” (Corbin & Strauss, 2008, p. 3). The research adopted to answer the research question, ‘*What is the relationship between wisdom and management decision making?*’ is an interpretative exploratory research, which uses qualitative methods for data collection and analysis.

In social sciences, the research design is based on the inquirer's philosophical assumptions. What is the researcher's approach to the nature of the world and ‘reality’ (*ontology*)? How can the researcher understand it (*epistemology* – the theory of knowledge)? And how and by applying what research method(s) can/should the ‘reality’ be studied (*methodology*)? In the following sections the philosophical assumptions underlying the current study are explained.

There are different schools of thought, or paradigms, from which the researcher's philosophical position can be determined (Creswell, 2007). Although it is not always possible to draw a clear-cut border between them (Symon & Cassell, 2012), some examples of the paradigms can be identified that at the most abstract level, include: positivism, postpositivism, realism, constructivism, pragmatism, advocacy/participatory, interpretivism, phenomenology, feminism, critical theory, and postmodernism (Creswell, 2007; Maxwell, 2005). There are, however, three key broadly categorised schools of thought or philosophical traditions that are referred to regarding conducting research: positivist, interpretivist and critical

research (Carey, 2012; Cavana, Dellahaye, & Sekaran, 2001; Cooper & White, 2012) (Table 3-1).

	Positivism	Critical Theory	Interpretivism
<b>Ontology</b>	<i>Nature of reality:</i> Naïve realism – ‘real’ reality but apprehendable  <i>Nature of social beings:</i> Deterministic and reactive	Historical realism – virtual reality shaped by social, political, cultural, economic, ethnic, and gender values; crystallised over time	<i>Nature of reality:</i> Socially constructed, multiple, holistic, and contextual  <i>Nature of social beings:</i> Voluntaristic, and proactive
<b>Epistemology</b>	<i>Knowledge generated:</i> Nomothetic, time-free, context independent, findings true  <i>Research relationship:</i> Dualism, objectivist (privileged point of observation), separation	Transactional/subjectivist; value-mediated findings	<i>Knowledge generated:</i> Idiographic, time-bound, context-dependent, created findings  <i>Research relationship:</i> Interactive, cooperative, subjectivist (no privileged point of observation)
<b>Methodology</b>	Experimental/manipulative; verification of hypotheses; chiefly quantitative methods	Dialogic/dialectical	Hermeneutical/dialectical

**Table 3-1: Basic Belief (Metaphysics) of Alternative Paradigms** (adapted from Hudson & Ozanne, 1988; Lincoln & Guba, Egon, 2000)

Positivists hold that the scientific methods used in natural sciences can be applied directly to the study of societies and human behaviour (Carey, 2012). Social science, from a positivist perspective, is an “organized method for combining deductive logic with precise empirical observations of individual behaviour in order to discover and confirm a set of probabilistic causal laws that can be used to predict general patterns of human activity” (Neuman, 2003, p. 71). For positivists, there is a ‘real’ world out there that exists independent of the observer (i.e. researcher). That is, knowledge is objective, and what science should concentrate on are the phenomena that are directly observable (Symon & Cassell, 2012). In this sense, social science looks for objective facts based on which general ‘laws’ of social life can be discovered by using neutral means of investigation (Inglis & Thorpe, 2012). The neutrally gathered facts then must be used in a hypothetico-deductive fashion to test theories (Symon & Cassell, 2012). If the findings are confirmed by repeatedly checking in a variety of contexts, the theory can be considered as a *law of human behaviour*, which is true in all circumstances (Haralambos, Holborn, & Heald, 1995). Positivists believe that the only way to

ensure that the facts are neutrally gathered and analysed, and that observation is theory-free, is to make sure that knowledge is not unwarrantedly intruded on by subjective ideas (Crook & Garratt, 2011). So, it is crucial to minimise the possible influences of the researcher's values and perception on the subject that is being studied during data collection and analysis (Cavana et al., 2001).

Critical theorists criticise positivism for not being able to unveil the true *essence* of society due to its reliance on collecting superficial data, which just illustrates the *surface* features of society (Inglis & Thorpe, 2012). The main objective of critical research is to uncover myths and reveal hidden meanings that are behind surface illusions and reality, in order to empower people to improve their life and create a better world (Cavana et al., 2001). Critical theory looks towards a better future and tries to show how things could be different from their current status (Inglis & Thorpe, 2012). So, in favour of revealing what the society is *really* like, critical theory rejects the ways of thinking that are common in a society, as well as the mere appearance of the society and the way that it represents itself and thinks about itself (Inglis & Thorpe, 2012). In critical tradition, such issues as asymmetrical power relations, exploitation, false consciousness, and distorted communication tend to be investigated (Symon & Cassell, 2012).

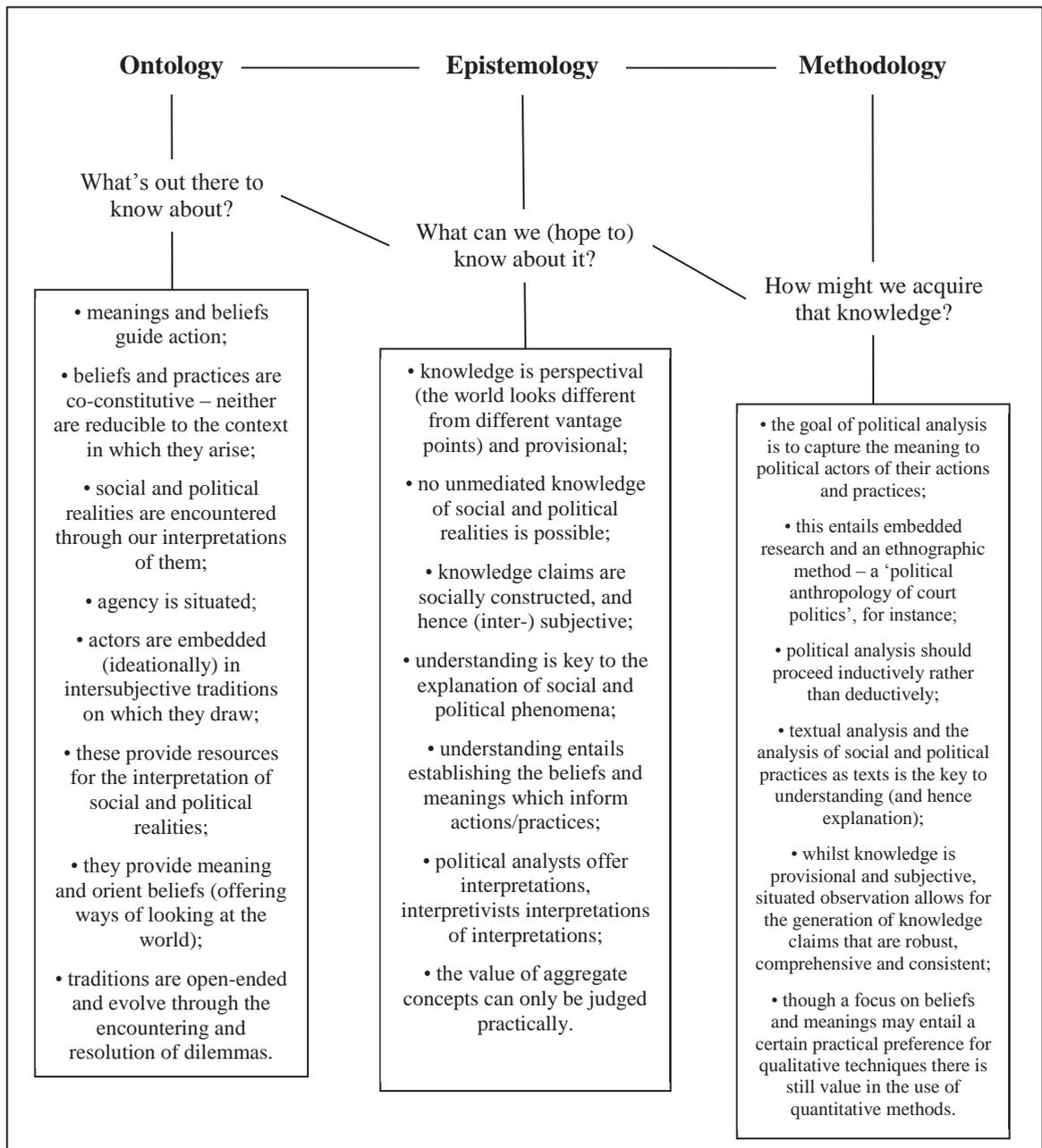
It is noteworthy that there is not just one critical approach, and that like other theories and approaches, the critical tradition is constantly evolving (Kincheloe & McLaren, 2008). Examples of other variants of the tradition include Historical Materialism, Feminism, Structuration and Praxiology (Prasad, 2005). Despite the variation, the critical traditions remain united, as Prasad (2005) put it, "in their focus on the oppression and exploitation of different groups whether they are women, workers, the poor, or specific ethnic minorities. At the heart of the critical tradition are deep concerns with both material and symbolic domination and a concomitant interest in emancipating oppressed groups from this domination" (p. 110). The philosophical traditions investigate social phenomena through the lenses of domination, conflict and power (Prasad, 2005), and focus on how knowledge is legitimised by values and politics (Alvesson & Sköldberg, 2009). Both the critical traditions and interpretivists commonly draw on the assumption that the world is a socially constructed phenomenon. However, critical theorists

also hold that conflicting interests and power relations mediate the constructions (Prasad, 2005).

The interpretivist researcher's ontological and methodological commitment, is that the social world does not exist independent of our perceiving and knowing and that it cannot be neutrally and objectively observed in order to either describe social phenomena or test theoretical predictions (Symon & Cassell, 2012). The interpretivist researcher assumes that reality is socially constructed. That is, social interactions create meaning systems and the world is/must be defined based on people's perception of the world (Cavana et al., 2001). Moreover, interpretivists emphasise that there is no "theory-free observation" or "transcendental view" that can go beyond the influence of the researcher (Crook & Garratt, 2011, p. 214). Therefore, the separation (dualism) of the researcher and what is being investigated is in practice impossible (Phillips & Burbules, 2000).

For interpretivists, it is 'interpretation' that guides behaviour of actors, and accordingly what is important to study is 'interpretations' (Hay, 2011). Accordingly, interpretivists try to understand the meaning system with which social beings define the world.

The term interpretivism covers a variety of philosophical approaches (Symon & Cassell, 2012), which all share the philosophical position that the starting point for understanding the social world is 'human interpretation' (Prasad, 2005). Figure 3-1 outlines the ontological, epistemological and methodological assumptions.



**Figure 3-1: Interpretivism's Analytical Trinity** (Hay, 2011, p. 169)

This study commenced with the researcher maintaining an interpretivist position. It is worth mentioning here that, following the completion of the study, the findings (Chapter 6) confirmed the appropriateness of the stance in this study. As is discussed in Chapter 6, wisdom, as a virtue, is strongly correlated with morality (Pasupathi & Staudinger, 2001) and includes the desire for and the ability to see what is of value in the circumstances of life (Maxwell, 1984). Similarly, good decisions are rooted in accepted values (Maddalena & Canada, 2007). At the organisational and managerial levels, decisions affect the life of stakeholders

within (e.g. employees and managers) and outside the organisation (business community, society, and the environment), which leads management decisions to be inextricably interwoven with values and ethics. Accordingly, conducting research on the nature of and the relationship between wisdom and decision making requires an ontology that does not separate values and beliefs from the knowledge developed from the subject being studied. This implies that interpretivism, as an epistemology that holds that knowledge is not separate from faith, values and belief, is appropriate for this research.

It might be argued that conducting the research based on an interpretivist stance leads to outcomes that are inherently affirmative to the philosophical assumptions underlying the whole study. As discussed later on in this chapter (the ‘Grounded Theory’ section) and in the next chapter, the methodology that has been used in the study maximised the groundedness of the findings in the field data. That is, the value-laden nature of wisdom as presented in the generated theory (the emergent theory of Praxio-Reflexive Integrated Decision Making) is more rooted in the field data than being solely the outcome of the researcher’s interpretivist stance.

The emphasis that interpretivists put upon the interconnection between knowledge and values is also reflected in Rooney’s (2013a) suggested wisdom-based methodology. As far as organisational research and wisdom are concerned, the query that arises is that, while ‘*epistemology*’ is concerned with people’s *knowledge*, what approach would lead methodologies in organisational research towards adding to human *wisdom*? In the following section Rooney’s (2013a) approach to doing organisational research wisely, *Phrónêsiology*, is discussed.

### **3.2.1 Phrónêsiology as the Wise Methodology**

This thesis adds to knowledge (*episteme*), as PhD research should. It is hoped that this research will also foster management wisdom (*phrónêsis*). This hope is based on Rooney’s (2013a) approach to practical wisdom as a methodology. According to phronesiology, the basic motive for organisational research is to foster wisdom in the business world. This motive resonates partly with the ‘Research Problem’ (in Chapter 1) of the current study. In the current world where the volume of information is increasingly growing, and knowledge and information technologies are rapidly developing, global environmental catastrophes and financial crises still

happen. The information and knowledge and their related technologies that have been assumed to help humans with making better decisions have not increased, for example, people's empathy, and the world is still struggling to solve the issues most significant to people.

Rooney (2013a) emphasises the critical role of practical wisdom in human life, and calls for organisational research methods to be shaped by practical wisdom (*phrónêsis*). He suggests a wisdom-based research approach to organisational studies, *phronesiology* (Rooney, 2013a). Rooney (2013a) argues that to address current financial and environmental crises (e.g. global poverty, destructive business practices, and planetary unsustainability) organisational research must actively and directly contribute to positive changes in our living conditions, rather than merely contribute to the stock of knowledge.

The importance of organisational wisdom research relies on the integrative framework that wisdom provides for the complex inter-relationship between organisations and various other aspects of life including stakeholders' interests. Rooney (2013b) writes: "organizational wisdom research is important because it can address the problem of the lack of integration across a number of important areas of organizational life and between organizations and the rest of reality. Wisdom research is also important because wisdom brings a focus to larger issues that go beyond the narrow, short-term interests of managers and shareholders" (p. 34). This is emphasised in Blasi's (2006) comment on the necessity for shifting academic research goals from short-term programmes and outcomes to long-term development that positively shapes the future:

*"the competition in research, the pressure from society to transfer scientific knowledge from research to application as quickly as possible, the constant quest for new research funds, and an unstable work situation, confine researchers' activities within strict time schedules and tempt them to choose short-term research programmes. To produce the knowledge necessary to shape the future, universities therefore have to set up explicit structures and procedures that counter-balance the 'tight time ideology' by creating space for the long-term development of the diverse forms of knowledge that*

*transcend the need for immediate applicability. The university must be a place for 'free and fundamental research'" (p. 407).*

This concern is echoed by Rooney (2013a), stressing the need for the coherent and meaningful integration of axiology, ontology and epistemology.

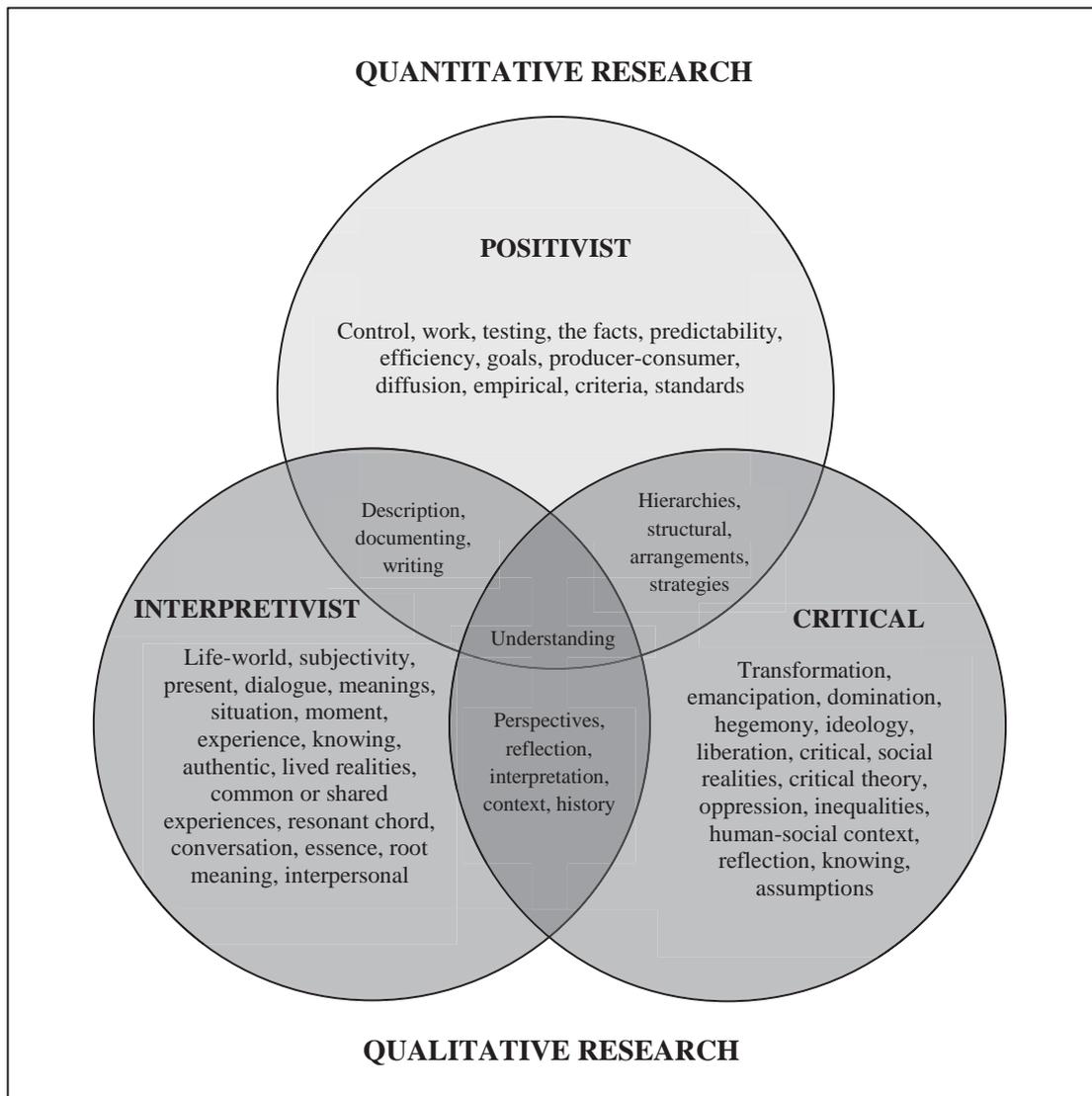
Rooney (2013a) highlights the five principles of Social Practice Wisdom (SPW), and asserts that these have a role in wisdom-based research (SPW has been discussed in detail in section 2.2.3, 'Managerial Perspective', in Chapter 2). Rooney states that "wisdom-based research methods [...] are, in part, a way of socially constructing knowledge grounded in observation and interpretation of empirically real processes, places and people" (Rooney, 2013a, p. 87).

To sum up, Phronêsiology is not studying wisdom, but studying *for* wisdom through wisely conducted research for practically wise ends. It is hoped that the current study, both epistemologically and phronesiologically, adds to the body of knowledge, lends some insight into positive changes in the management field, and contributes to human flourishing.

In the following sections, a comparative analysis of qualitative and quantitative research is provided. Then in the last section of the chapter, grounded theory, the methodology that has been used in this study is discussed.

### **3.2.2 Qualitative and Quantitative Research**

There are two major paradigms around which most research is organised: quantitative and qualitative (Cooper & White, 2012). Qualitative research "initially arises under the umbrella of a shared philosophical critique of certain assumptions deployed by the positivist mainstream – assumptions primarily to do with the nature of human behavior" (Symon & Cassell, 2012, p. 16). Figure 3-2 illustrates the relationship between the philosophical approaches and the bifurcation of quantitative and qualitative research.



**Figure 3-2: Paradigms and Approaches to Research, as well as their Keywords and Identifiers** (adapted from Cooper & White, 2012, p. 18)

Creswell (2009) argues that this is due to researchers' intention towards interpreting and making sense of the meanings that others hold about the world. Qualitative research is a form of interpretive inquiry, and often called interpretative research. As Veal (2005) put it: "the common thread that binds qualitative research together is the shared goal of uncovering the underlying meanings of the phenomena being studied" (p. 139), whilst quantitative research tends to adopt the positivist approach (Cooper & White, 2012). Rooted in the natural sciences, positivist research uses deductive reasoning, in that it begins with a theoretical position and then tries to test the proposed theories against empirical evidence (Cavana et al., 2001). So, in quantitative research, hypotheses and theories must be developed prior to gathering data.

This research is an interpretive-explorative study. In some interpretivist traditions, the researcher is the focal point of interest (Symon & Cassell, 2012). This research has drawn on interpretivism, mainly due to the involvement of the researcher's perception in examining the subject matter. That is, the researcher aims to interpret and make sense of the meanings that informants hold about the world (Creswell, 2009). Moreover, the researcher asks informants about their perspectives and interpretations of the subject matter. Because of the paucity of empirical studies on the relationship between the concept of wisdom and management decision making, this research is an exploratory one, in that the research, rather than confirming or testing a hypothesis, aims at exploring patterns and hypotheses (Collis & Hussey, 2009).

Interpretivism offers different approaches to conducting empirical research from that of positivism. Wolcott (2009) identifies 19 qualitative strategies that can be used in qualitative research. Five common qualitative research strategies are case study, ethnography, phenomenological study, content analysis, and grounded theory (Leedy & Ormrod, 2013).

With respect to interpretivism, in this research, an inductive and interpretive strategy was used to explore, interpret, and develop a theory grounded in action – grounded theory. In the following section, grounded theory is discussed, followed by an argument of why grounded theory was found a suitable methodology to address the research question.

### **3.3 Grounded Theory**

Aimed at generating new, relevant and empirically grounded theory, Grounded Theory (GT) was developed by Barney Glaser and Anselm Strauss in the late 1960s. By applying this methodology, theory is generated from data systematically obtained from social research (Glaser & Strauss, 1967; Glaser, 1978, 1992, 1998). As opposed to logico-deductive research that tests existing theory, grounded theory leads to the generation of theory from data. This means that “most hypotheses and concepts not only come from the data, but are systematically worked out in relation to the data during the course of the research” (Glaser & Strauss, 1967, p. 6). Thus the core of grounded theory is the intimate dialectical interaction between data collection and theory development (Wastell,

2001). Glaser (1992) defines this methodology as: “a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area” (p. 16).

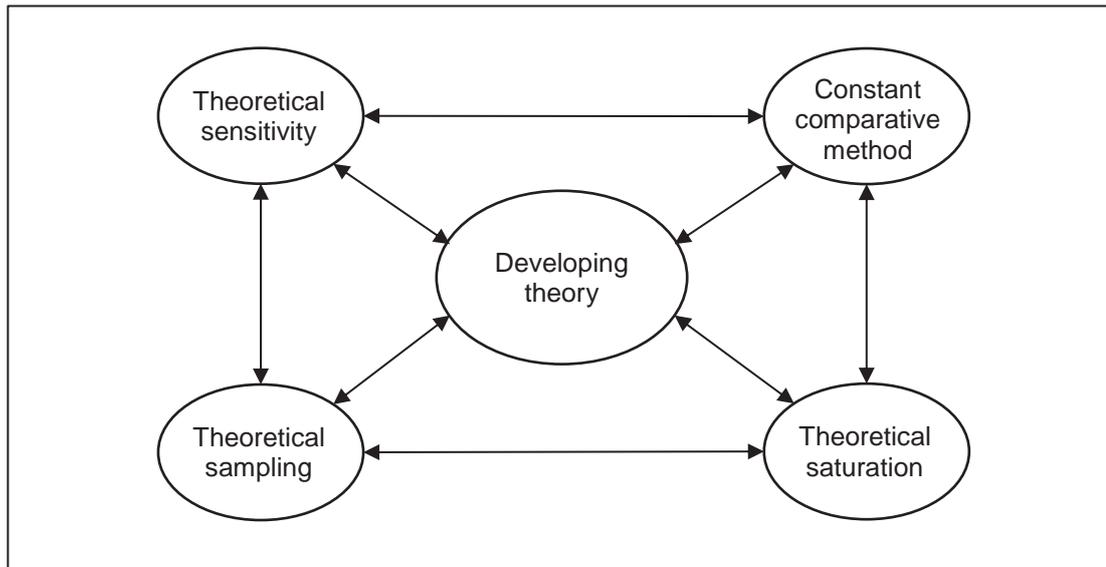
It must be mentioned that Glaser and Strauss, after their original work, *The Discovery of Grounded Theory: Strategies for Qualitative Research* (1967), grew apart in views and provided different approaches on grounded theory. While Glaser’s (1992) emphasis is on the emergence of phenomena and on selecting an area such as an organisation for study to let issues emerge without preconceived concepts and questions, Strauss believes that a phenomenon or issue such as a manager’s leadership should be identified (Douglas, 2006). In the following paragraphs, the fundamental suppositions and underlying logic of grounded theory are discussed.

According to grounded theory, generating a theory involves a process of research (Glaser & Strauss, 1967), through which data are collected and continuously inspected for new concepts, general categories are developed, and by a constant comparison between the categories and new data, it is decided whether the existing categories are adequate or new ideas required (Wastell, 2001). In contrast with logical deductive theory, Glaser and Strauss (1967) hold the position that theory, and the process by which that theory is developed, are not separated.

Therefore, grounded theory is a progressive process in which all the different phases cannot be planned in advance, but overall theoretical structure progressively takes shape as the research process unfolds (Wastell, 2001). The key components of grounded theory are discussed in the following paragraphs.

### **3.3.1 The Key Components of Grounded Theory**

The key components of grounded theory are constant comparison, theoretical sensitivity, theoretical sampling, and theoretical saturation (Glaser & Strauss, 1967). Figure 3-3 outlines the components.



**Figure 3-3: Key Components of Grounded Theory** (Oktay, 2012, p. 16)

*Theoretical sensitivity* means being analytic and able to see the subject that is under study in theoretical terms (Oktay, 2012, p. 16). The grounded research must be sufficiently theoretically sensitive, in order to be able to formulate and conceptualise a theory, as the theory is emerging from the data. Theoretical sensitivity enables the researcher to combine the concepts that have emerged from the ground data with some existing concepts that are relevant and fit into the emerging concepts and hypotheses (Glaser & Strauss, 1967). Glaser (1978) emphasises that, in order to be theoretically sensitive, the researcher must enter the research settings with a minimum of predetermined ideas and prior hypotheses.

*Theoretical Sampling* refers to the process through which the researcher collects data for generating theory “whereby the analyst jointly collects, codes, and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges. The process of data collection is controlled by the emerging theory” (Glaser & Strauss, 1967, p. 45). By theoretical sampling, the researcher, based on new data, checks, fills out, and extends theoretical categories (Charmaz, 1990), and accordingly decides what data and from where it must be collected (Glaser & Strauss, 1967). Theoretical sampling ensures that the data being collected is relevant to the emerging theory. In theoretical sampling, categories and their properties are discovered, and their relationship with a theory is suggested (Glaser & Strauss, 1967).

The recursive process of collecting and interpreting the data continues until *theoretical saturation* is reached. As Glaser and Strauss (1967) define it, “saturation means that no additional data are being found whereby the sociologist can develop properties of the category” (p. 61). Theoretical saturation is a criterion that tells the researcher when to stop sampling the different groups of a category (Glaser & Strauss, 1967). Theoretical saturation delimits coding. Theoretical saturation happens when no additional data are found to develop dimensions and properties of a category and ultimately the basic social process (Glaser, 1978, 1998; Glaser & Strauss, 1967). As similar instances appear repeatedly over and over again, the researcher becomes empirically confident that the category has been saturated and he or she can start developing the properties of the category (Glaser & Strauss, 1967).

Another key operation of grounded theory is the *Constant Comparative method*, an approach to analysis of qualitative data. This method refers to applying joint coding and analysis in order to generate theory systematically. Glaser and Strauss (1967) explain the purpose of this method: “the constant comparative method is designed to aid the analyst... in generating a theory that is integrated, consistent, plausible, close to the data and at the same time is in a form clear enough to be readily, if only partially, operationalized for testing in quantitative research” (p. 103). The aim of the constant comparative method is “to generate theory more systematically ... by using explicit coding and analytic procedures” (Glaser & Strauss, 1967, p. 102).

Unlike research methodologies based on preconceived hypotheses seeking to test theories, grounded theory leads to the generation of theory based on grounded data (Glaser & Strauss, 1967). Grounded theory requires the researcher to minimise their preconceptions and to be open-minded to the emerging theory. The emerging theory guides both processes of generating theory and social research (Glaser, 1978).

Constant comparison and theoretical sampling are used conjointly (Glaser & Strauss, 1967). The process of grounded theory begins with the defining of a research question, then relevant data are collected and through forming provisional categories and abstraction of the data, a tentative explanation of the

research problem is provided (constant comparison). Following this comparison, the researcher needs to go back to redefine properties of the initial concepts and categories, and/or to get more data and analysis. The researcher moves back and forth between collecting, coding and interpreting data (analytic induction) until a theory tightly woven and grounded in the data emerges (Binder & Edwards, 2010).

The aim of grounded theory is therefore to generate a theory that is directly derived from data. There are some features that distinguish grounded theory from other methodologies. Grounded theory aims at generating theory from ground data. Unlike theory developed by logico-deductive methods, grounded theory is deductively derived from data through social research (Goulding, 2002).

### **3.3.2 Grounded Theory Approaches**

Glaser (1992) believes that the version of grounded theory that Strauss and Corbin (1990, 1998) introduce is fundamentally different from the original approach to grounded theory methodology (Glaser & Strauss, 1967). Glaser says that Strauss and Corbin's methodology is a new conceptual method that, being uniquely appropriate for qualitative research, simply uses the grounded theory name (Glaser, 1992). It is worthwhile to mention that although grounded theory is broadly referred to as a qualitative method, Glaser (1992, 1998, 2003) holds that grounded theory is neither a qualitative method that merely draws on constructivism, nor is it a quantitative one that is objectivist. Rather, grounded theory is a unique inductive theory generating method that borrows from both qualitative and quantitative methods yet is different from them (Odis E. Simmons, 2011). As Simmons (2011) put it "classic grounded theory stakes out a middle territory by adopting reasonable and limited rather than absolute features of both and offering an alternative that is of greatest practical use because it solidly grounds explanatory theory in data and provides a theoretical foothold for effective actions and change initiatives" (p. 27).

The most important difference between Glaserian and Straussian approaches to grounded theory refers to the influence of a priori theoretical assumptions on data collection and analysis. The Straussian approach (Strauss & Corbin, 1998) considers the literature or experience to stimulate thinking about dimensions and

properties during data collection and analysis. During comparative analysis “we might turn to the literature or experience to find examples of similar phenomena ... to stimulate our thinking about properties or dimensions that we can then use to examine the data in front of us” (Strauss & Corbin, 1998, p. 44), while the Glaserian approach emphasises that theoretical preconceptions must be avoided in the emergence of theory: “in grounded theory we do not know, until it emerges” (Glaser, 1992, p. 95), and “we do not know what we are looking for when we start ... we simply cannot say prior to the collection and analysis of data what our study will look like” (Glaser, 2001, p. 176). So, preconceptions must be minimised, not encouraged, in grounded theory, even if some degree of constructivism is impossible to avoid at the deep ontological and epistemological levels (Odie E. Simmons, 2011).

Grounded theory based on Glaser’s (1978, 1998, 2001) perspective is a full systematic research method, while in the Straussian (1987a) approach, it is “a particular style of qualitative analysis of data” (p. xi). Glaser (1999) defines grounded theory as “a specific methodology for how to get from systematically collecting data to producing a multivariate conceptual theory. It is a total methodological package. It provides a series of systematic, exact methods that start with collecting data and takes the researcher to a theoretical piece that is publishable” (p. 836).

As mentioned above, the paucity of empirically-derived theories of the relationship between wisdom and management decision making has led me to adopt a methodology that rather than preconceived theories draws on the field data. Therefore, compared to Strauss and Corbin’s (1990, 1998) the Glaserian approach is better suited to the exploratory nature of this study. According to Glaser (1992) this approach is “a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area” (p. 16). The methodology leads to the development of theory through a dialectical interaction between data collection and theory development (Wastell, 2001).

### 3.3.3 Why Grounded Theory

According to Hayes (2000), the complexity and dynamism of the world call for systematic observation, instead of hypothesis testing, to help managers cope with actual problems. Almost all explanatory methods and theories including grounded theory aim to recognise, understand or explain behaviour patterns. However, one of the aspects where the classic grounded theory differs from other methods is that the classic grounded theory researcher identifies the behavioural patterns inductively and concepts are conceptually named from the data, and these are done without incorporating intentional constructivist elements (Simmons, 2011). There are some reasons grounded theory is found appropriate for answering the research question: *What is the relationship between wisdom and management decision making?* Table 3-2 outlines the reasons.

Reasons	Description
<i>The lack of empirical research on the subject</i>	When study on a phenomenon is minimal or the existing theories do not adequately explain the phenomenon, grounded theory is used, as it can expand social scientists' capacities for creating new theories. There is a paucity of empirical study on the relationship between wisdom and management decision making.
<i>An analytical tool for data interpretation</i>	In grounded theory the social processes and patterns of a group of people are studied through the lenses of and as understood by the group.  Grounded theory, as a methodology and as an analytical tool for analysing data, enables the researcher to interpret the informants' interpretation/perception of the contribution of wisdom to management decision making.
<i>Consideration of metaphysical and unobservable aspects</i>	In order to study human behaviour, social researchers should bear in mind that rather than physical and observable subject matter features (e.g. age and gender), metaphysical and unobservable aspects (e.g. experiences and attitudes) must be taken into account.
<i>Action-orientation of the subject matters</i>	Wisdom and decision making are action-oriented qualities.  The ability of grounded theory to generate a comprehensive account of organisational action in context leads grounded theory to be appropriate for researching organisational and managerial behaviour. In this sense, grounded theory bridges theory and practice.

<p><i>Consideration of social context</i></p>	<p>Drawing on interpretivist stance, reality is given meaning based on the social context. Accordingly, it is critically important to know the context of a social phenomenon or behaviour. In grounded theory the context is considered in developing a theory, as the theory is generated from and grounded in the data that is directly collected from the field.</p>
---	--

**Table 3-2: Why Grounded Theory?**

*The lack of empirical research on this subject:* Grounded theory “is most commonly used to generate theory where little is already known, or to provide a fresh slant on existing knowledge” (Goulding, 2002, p. 42). In other words, when study on a phenomenon is minimal or the existing theories do not adequately explain the phenomenon, grounded theory is used as it can expand social scientists’ capacities for creating new theories (Tang, Chen, & Xiao, 2010). In the literature of management, there is a paucity of pre-developed empirical theory regarding the link between wisdom and the management decision making process (Melé, 2010). Therefore, this study required an appropriate approach for data collection and analysis that could work from a minimal theoretical basis (Johnston, Brignall, & Fitzgerald, 2002). Instead of applying preconceived codes, data are fitted into the emergent codes that are shaped by the researcher’s perception of the data (Charmaz, 2000). Grounded theory was adopted as it allowed the researcher to systematically gather and analyse data grounded in which a new theory could develop (Glaser & Strauss, 1967; Glaser, 1978, 1992, 1998; Strauss & Corbin, 1994).

*Interpretation:* As discussed earlier in the section on philosophical traditions in social research, interpretivism holds that the social world is subjective, that reality is the one perceived by the subjects involved in a given social milieu, and the researcher is not independent of the research process. The key objective of this research is to discover the CEOs’, managers’, and senior executives’ perceptions of the relationship between wisdom and decision making with regard to managerial matters. As interpretivism holds, the reality is what the actors involved in a given social area perceive of the world around them (Veal, 2005). So, an analytical tool was required to interpret data, and to understand informants’ perceptions of the social process and patterns (Stern, Allen, & Moxley, 1982). Grounded theory, as a methodology and as an analytical tool for analysing data,

enables the researcher to interpret and analyse the informants' perception of the contribution of wisdom to managerial decisions. In this sense, research conducted using grounded theory aims to give a structure to and make sense of the data collected through the research in order to determine the meaning and the significance of the data for the actors, researchers and readers (Parker & Roffey, 1997).

*Consideration of metaphysical and unobservable aspects:* Wisdom and decision making are human phenomena. Neither wisdom nor decision making are considered independent of humans. This requires the researcher to follow a research approach and methodology that enables him to consider distinctive human characteristics in order to investigate such phenomena as wisdom and decision making that are not possible to study detached from humans. As Bryman (2008) put it, "the study of the social world requires a ... logic of research procedure that reflects the distinctiveness of human as against the natural order" (p. 15). In other words, in order to study human behaviour, social researchers should bear in mind that rather than physical and observable subject matter features (e.g. age and gender), the metaphysical and unobservable aspects (e.g. experiences and attitudes) need to be taken into account.

In studying human social behaviour, as Goulding (2002) argues, "the metaphysical, the intangible and the irrational as aspects of the complex, interactional and sometimes conflicting influences that constitute human behaviour" cannot be ignored (p. 13). This means that positivist approaches that reflect the characteristics of the physical sciences and rely only on observation, avoiding metaphysical concepts, may not be a suitable approach for this research in comparison with critical/interpretive epistemology. Since this research aims to investigate how informants interpret the relationship between wisdom and management decision making, it is very important to apply an approach that helps the researcher analyse the informants' interpretation of the subject as well as interpret the data that are collected from the informants. Interpretivism is an approach that addresses these issues. According to Interpretivism, the social world cannot be studied in the same way as non-human entities, as it is socially constructed and subjective (Veal, 2005). So, it is of great importance in social

research that a researcher is able to find out how the subject being studied perceives the world.

As mentioned, wisdom and the decision making process are closely interrelated with morality. In moral epistemology, as McDowell (1998) describes: “occasion by occasion, one knows what to do, if one does, not by applying universal principles but by being a certain kind of person: one who sees situations in a certain distinctive way” (p. 73). That is, the reality differs from one person to another. So, the achievement of the objectives of this research, exploring how wisdom is incorporated in management decision making, requires following an interpretive ontology. Interpretive ontology, in contrast to realist and positivist ontology, which assumes that an objective reality independent of the researcher exists and the behaviour of the objects under study (e.g. individuals, groups, or organisations) is concrete and objective (Burrell & Morgan, 1979; Veal, 2005), holds that because of different individual and group perspectives, multiple realities exist rather than just one reality (Hudson & Ozanne, 1988).

*Action-orientation:* This reason for using grounded research refers to the inherent action-oriented nature of the concepts of ‘wisdom’ and ‘decision making’ (Bierly III et al., 2000; Wilsdon & Arvai, 2006). Wisdom is inextricably linked to practice. It is prone to act (Birren & Fisher, 1990) and being wise and taking action are interrelated qualities (Bierly III et al., 2000; Nichols, 1996; Rooney et al., 2010). Similarly, decision making manifests in behaviour and is also seen as behaviour (March, 2000; Razzouk, Seiz, & Capo, 2007; Wilsdon & Arvai, 2006). Therefore, it was critically important to apply a methodology that leads the inductively-derived theory to explain the understanding and behaviour of the participants (Christiansen, 2007). Glaser and Strauss (1967) suggest that a theory would be better in terms of predicting and explaining a phenomenon if it is inductively developed from social research. Grounded theory, as O’Callaghan (1996) and McCallin (2003) argue, is focused on behavioural patterns in an individual and social context. According to Glaser (1998), grounded theory is based upon the supposition that common behavioural patterns emerge as individuals define situations with the self and others. The ability of grounded theory to generate a comprehensive account of organisational action in context (Martin & Turner, 1986), leads grounded theory, as argued by Locke (2001), to be

“particularly appropriate to researching managerial and organizational behaviour” (p. 95). In this sense, grounded theory, bridging theory and practice, is helpful in order to answer the research question of this study, as it produces an account of incorporation between wisdom, decision making and practice.

*Consideration of social context:* For interpretivists, since reality is constructed and given meaning based on context, it is critically important to know the context of a social phenomenon or behaviour (Hudson & Ozanne, 1988). In contrast, positivism encourages the approaches that tend to individualise and isolate human behaviour, in order to carefully study a personality in isolation, limiting the impacts of other factors. So, that approach is criticised for neglecting the influence of such other factors as poverty, gender, class, and that of the wider historical or structural forces (Carey, 2012). Consistent with the interpretivist belief that the comprehension of a phenomenon is impossible without understanding the context in which that phenomenon is investigated (Locke, 2001), grounded theory was adopted for this study, as the context is considered in developing a theory, in that theory is generated from and grounded in the data that is directly collected from the field.

### **3.3.4 Why the Classic Grounded Theory (Glaserian Approach)**

The grounded theory approach that has been chosen in this study is the Glaserian approach as articulated in *The Discovery of Grounded Theory: Strategies for Qualitative Research* (Glaser & Strauss, 1967) and in Glaser’s subsequent writings (1978, 1992, 1998, 1999, 2007). Although the Strauss-Corbin version of grounded theory is well-written and pedagogical, and its steps are easy to follow (Tang et al., 2010), it was not used in this study as, according to Glaser (1992), it violates the basic tenets of grounded theory. Glaser (1992), in his book, *Basics of Grounded Theory Analysis: Emergence vs. Forcing*, very explicitly highlights the differences between what Glaser considers as the original grounded theory and Strauss and Corbin’s (1990; Strauss, 1987b) approach of grounded theory. Glaser (1992) emphasises that Strauss and Corbin’s approach is not grounded theory but was rather a form of qualitative data analysis that must be named something other than grounded theory. Glaser (1992) stresses that “Anselm’s methodology is one full of conceptual description and mine is Grounded Theory. They are very

different, the first focusing on forcing and the second on emergence. The first, keeping all of the problems of forcing data; the second, giving them up in favour of emergence, discovery, and inductive theory generation” (p. 122).

Moreover, since the main objective of this study was to explore the relationship between wisdom and management decision making, as understood by practitioners in the real world, the Classic grounded theory was thought more suitable. This is because the theory that is produced by the Classic grounded theory is more suitable for action, being denser, richer and more completely grounded in data than other variations of grounded theory (including the Straussian one) (Simmons, 2011).

### **3.3.5 Examples of Grounded Theory in Organisational and Management Studies**

Grounded theory is now an ingrained methodology that is being used in different fields of study including management (Carroll-Garrison, 2012; Douglas, 2010; Hanson, Melnyk, & Calantone, 2011; Holton, 2007; Idrees, Vasconcelos, & Cox, 2011; Ihidero, 2012; Jablow IV, 2012; Newton, 2012; Puleo, 2011; Simha, 2012; Woodman, 2011). Below, three examples of grounded theory studies in management are provided.

Jablow IV (2012) investigates the influence of experience on executive decision processes. The objective of that research was to develop a theory to understand how executives utilised experience in their decision making processes. A grounded theory is used in the study to collect and analyse the data. Twenty seven business leaders participated in the study by responding to a decision vignette, and were interviewed using structured and unstructured interviews. The study shows that there is a nexus between experience, decision making and leadership. According to the findings of the study, experience influences business leaders’ decisions by enhancing the leaders’ awareness of the decision situation, and by enabling them to anticipate the possible future consequences of their decisions, and to set goals.

Carroll-Garrison (2012) employs a grounded theory method to explore managers’ awareness of, and reaction to, the phenomenon of workplace incivility. Workplace

incivility is prevalent in contemporary organisations and businesses, and has negative impacts on organisational productivity. Twenty four managers were interviewed using eight open-ended questions. The informants' awareness of workplace incivility was the unit of analysis. The study introduces a theory that suggests that manager's Self-awareness and interpersonal awareness contributes to recognising, moderating and mitigating the causes and consequences of incivility in the workplace.

Woodman (2011) studied the functioning of boards of directors in the public sector, by one such board for a year. The findings indicate that a board of directors' effectiveness is increased, and their relationship with stakeholders is strengthened, when the board is motivated to sustain the strategic vitality of their organisation. The findings also show that such a motivated board creates effective strategy, infuses the strategy, and fosters strategic performance. Woodman (2011) uses a grounded theory research method to analyse his observations, and to develop an organisational strategic vitality theory based on the observation analysis.

### **3.4 Chapter Summary**

Chapter 3 has justified the choice of the research methodology and method by discussing the philosophical approaches to ontology, epistemology, and methodology. It also discussed phronesiology, since it resonates to some extent with the current study. A comparative analysis of qualitative and quantitative research has been provided. Grounded theory was introduced, and it was explained that there were five reasons, including 'the lack of empirical research on the research subject', and 'grounded theory as an analytical tool for data interpretation', why grounded theory was found appropriate for this research. The classic grounded theory was justified as the adopted approach in this study following a comparison between the classic and newer approaches to grounded theory. How grounded theory has been implemented in this research is detailed in the next chapter.

<b>Part 1</b> The Nature of the Research Problem	Chapter 1	Introduction
	Chapter 2	Initial Review of the Literature
<b>Part 2</b> Methodology Design	Chapter 3	Research Methodology and Grounded Theory
	Chapter 4	Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations
<b>Part 3</b> Findings	Chapter 5	Data Interpretation
	Chapter 6	Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)
<b>Part 4</b> Conclusion	Chapter 7	Implications, Limitations, and Directions for Future Research

## **Chapter 4 Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations**

### **4.1 Chapter Overview**

This chapter outlines the research process. The data collection process is demonstrated, and the sampling and informants sample is explained. The interview guideline and interview questions are provided. This is followed by a discussion on the 'Rigour, Validity, and Reliability' of this study. The ethical considerations of this study are also discussed. A chapter summary is provided at the end of the chapter.

### **4.2 Data Collection and Analysis Process**

In grounded theory, data collection and data analysis take place at the same time in an iterative fashion (constant comparative method) (Glaser & Strauss, 1967). That is, each phase encompasses both data collection (doing interviews) and data interpretation (doing coding). This way, it was possible to do in-case comparison, inter-case comparison and inter-phase comparison. This process is continued until theoretical saturation is reached, which in the case of this study, was the end of Phase 4. Figure 4-1 illustrates the process through which the final theory was developed.

The data collection (interviews) was done over five phases: four interviews in phase one, five interviews in phase two, eight interviews in phase three, eleven interviews in phase four, and nine interviews in phase five. Since there is no limit set on the number of informants at the beginning of a grounded study (Cutcliffe, 2000), data transcription and analysis began with the first four informants who agreed to be interviewed. The inconsistency in the number of interviewees in phases two, three and four is not due to theoretical sampling or any other sort of purposive and biased intention from the researcher. The numbers just represent those who accepted the interview invitation and participated.

Twenty five interviews were conducted face to face in informants' offices or other places according to their suggestions and convenience. Eleven were done by phone, Skype<sup>TM</sup>, or Microsoft Lync<sup>TM</sup>. In one case an informant preferred to receive, respond to, and send back the interview questions in a text file via email.

All the interviews were audio-recorded except that in two cases the phone interviews were not audio-recorded due to technical issues, and only notes were taken of the interviewees' responses. Whenever needed the researcher made notes during interviews. The interviews' length ranged from thirty minutes up to around 80 minutes. The average length for the interviews however was 45 minutes.

After each interview, the audio recordings were transferred into and transcribed using QSR NVivo™ software. The informants who had agreed to be sent the interview data for checking had the interview transcriptions returned to them. In the consent form that was given to the informants at the beginning of each interview, each informant was asked if they wished to have the data returned to them (for Participant Consent Form, see Appendix H). To analyse the data, QSR NVivo™ software was used throughout the coding process to expedite the process and to facilitate managing codes and their relationships.

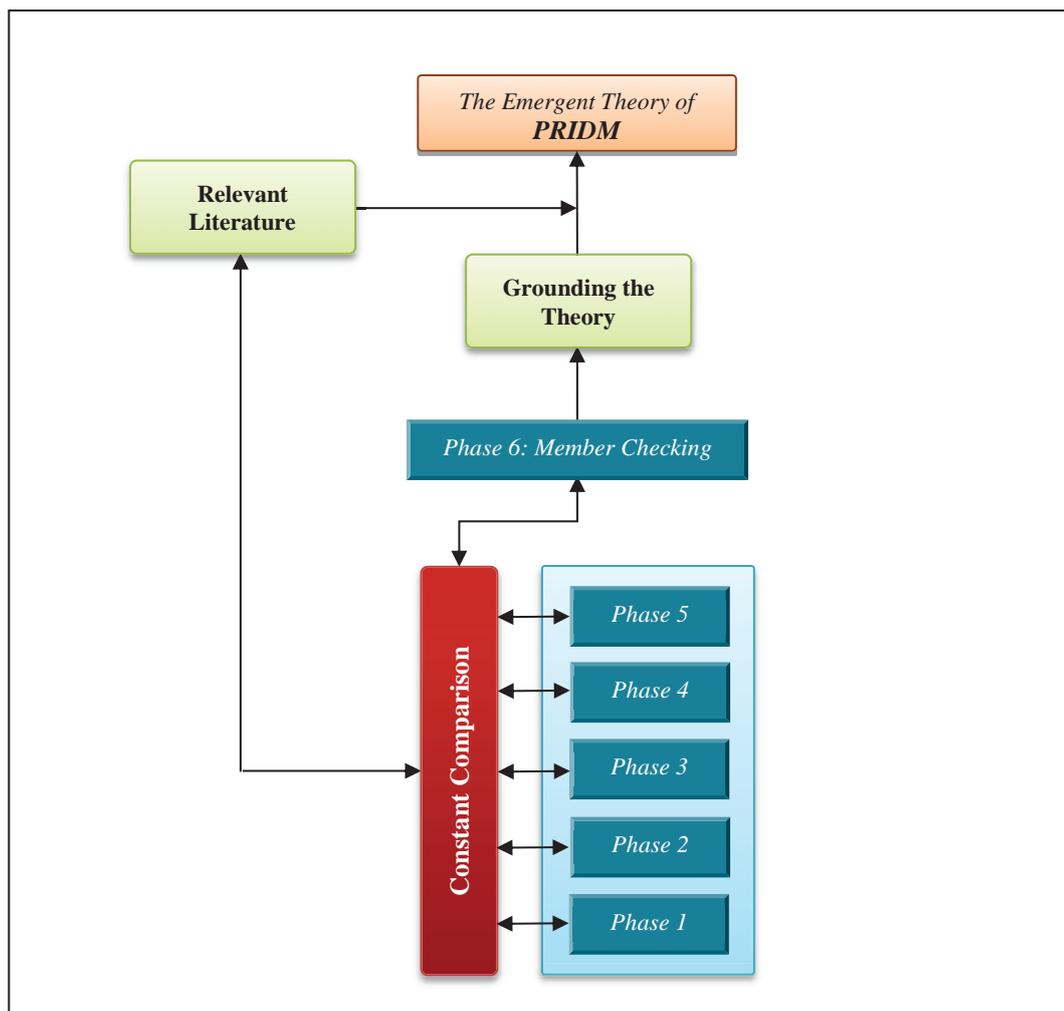


Figure 4-1: The Research Data Collection and Analysis Phases

When theoretical saturation was reached (this is discussed in more detail later on in this chapter, in section 4.4, ‘Interview Questions’), Phase 6 was conducted. Before the theory was finalised, the findings were sent to all informants and they were asked to comment on the findings and suggest whatever changes they thought might be required (Member Checking). Member checking is suggested for ensuring the credibility of the findings (Goulding, 2002), whereby the researcher returns the data analysis to participants to check and comment on (Birks & Mills, 2011). Out of 37 informants, thirteen responded and some of them suggested some minor changes according to which the theory was amended. For example, one informant suggested that the term ‘anticipating’ would be more accurate if it was replaced with the term ‘Consequence-anticipating’. The suggestions were incorporated into the data analysis.

Following Phase 6, the grounded theory, i.e. the emergent theory of *Praxio-Reflexive Integrated Decision Making (PRIDM)*, was interwoven with the relevant literature through a constant comparative process (Elliott & Higgins, 2012). As Glaser (1998, p. 69) asserts, “the literature is discovered as the theory is”. The relevant literature became apparent during the data collection and analysis process. As discussed in the ‘Rigour and Credibility’ section (section 4.5, this chapter), in order to make sure that the emerging theory was not likely to be derailed by the literature, the literature was not referred to until the main category and process (the basic social process) had emerged (Elliott & Higgins, 2012) (Figure 4-1).

### **4.3 Sampling and Informants**

Sampling in qualitative research is different from that in quantitative research. There are some key features that differentiate qualitative samples from quantitative samples: a) sampling is purposive and theoretical, rather than being based on theories of the statistical probability of selection; b) samples are not big – they are small, and studied intensively, so that each sample typically generates a considerable amount of information; c) samples are usually selected sequentially, rather than being wholly pre-specified; d) sample selection is conceptually driven; e) due to the involvement of ethical and theoretical implications that arise from purposive and theoretical sampling (choosing to include some cases and exclude

others), qualitative research needs to be explicit and reflexive with regard to the rationale for case selection; and f) “qualitative samples are designed to make possible *analytic* generalizations (applied to wider theory on the basis of how selected cases ‘fit’ with general constructs), but not *statistical* generalizations (applied to wider populations on the basis of representative statistical samples)” (Curtis, Gesler, Smith, & Washburn, 2000, p. 1002).

In grounded theory, in order to develop theory as it emerges, the researcher decides what data and where the data must be collected next (Glaser & Strauss, 1967). In the current study, sampling was theoretical to the extent that the researcher looked for those who were information-rich and were able to describe experiences in depth (Binder & Edwards, 2010; Glaser & Strauss, 1967). Potential participants were *purposefully* selected from organisations of different sizes, and from different professional fields in both the private and public sectors. Further, due to the low number of female informants in the first two phases, the researcher purposefully looked for more female informants in phases three, four and five.

### **4.3.1 Sampling**

Maintaining an interpretivist stance, the aim of this study was to uncover the socially constructed meaning that the informants understood (Cavana et al., 2001) for the concept of wisdom, and its relationship with management decision making in the business world. Thus, the informants were selected based on the criteria of their involvement in management decision making (this is discussed in the next section, ‘Informants as Management Decision Makers’).

I used my own contacts, my supervisor’s, and those of other colleagues to find potential informants. I also used online social networks such as LinkedIn.com<sup>TM1</sup> to find potential informants, and the snowballing technique. The social network was very useful in purposive sampling, as I could sum up whether or not the person could be considered as a potential informant based on the information each member of the network had already shared on his or her pages. The information

---

<sup>1</sup> Potential informants identified via LinkedIn.com<sup>TM</sup>, were invited to participate in the research by sending a connection request and a very brief introduction to the research project. Once the invited person accepted the connection request, and to be interviewed, a full invitation request was sent to them prior to the interview. The full invitation was a more detailed explanation of the project, including an abstract that outlined the main theoretical components of the research (for the Information Sheet, see Appendix G).

included their location, current and previous professional position and organisation, education, and their experience. The potential informants were identified based on two criteria:

- Organisational/professional position, and
- Previous experience in management decision making.

In other words, the group of potential informants included those who were, at the time of this study, in a management position, and were involved in making management decisions, or had had experience in management positions.

To find informants, the snowballing technique was also used. Snowball sampling is a referral technique for sampling a target population to locate informants. At the end of each interview, informants were asked to introduce other members of the target population if they thought that they knew others who might be interested in participating in the study. This referral chain continued to find more informants (Singleton & Straits, 2005). In two cases, informants introduced other potential informants (snowballing) who might be interested in and willing to participate in the research project. In both cases, I first ensured that the introduced individuals were in managerial positions and involved in management decision making, and that their demographic information characteristics added to the variety of the sample, and then contacted and interviewed them.

Finally, over five data collection and interpretation phases (constant comparative method and theoretical sampling) more than 170 invitational emails were sent out to the selected potential informants, including CEOs, top and middle managers, and senior executives in New Zealand. Overall, 44 informants agreed to be interviewed, of whom 37 were interviewed. The rest of the 44 informants were not interviewed, due to such issues as unplanned changes in the informants' schedules, or lack of further communication from the informants.

#### **4.3.2 Informants as Management Decision Makers**

Of those who are involved in, or have had management decision making experience in, the business world, CEOs, managers, and senior executives (e.g. entrepreneurs) have been considered as research informants. None of the participants were approached as though they were (although they might or might

not be) wise. This approach was taken because of two reasons. First, a globally agreed-upon list of wise managers' characteristics does not exist based on which the researcher could identify and study *wise managers*<sup>1</sup>. And second, to meet the credibility criteria of grounded theory, the researcher decided not to adopt any pre-conceived theory, for example in the form of a pre-developed list of wise managers' characteristics, while collecting and analysing the data. The credibility criteria of grounded theory are discussed later on in this chapter, in the 'Rigour and Credibility' section (section 4.5).

### 4.3.3 Variety in the Sample

From the pool of potential informants that was created following each search at each phase of data collection and analysis, more purposeful selection was done in order to build diversity in the final informant sample. That is, the final set of informants was chosen to include various demographic characteristics (Appendix B). This was done because of the emphasis of theoretical sampling upon *comparison groups* (diverse groups): "development of ... major categor[ies] ... based on comparisons of different sets of groups" (Glaser & Strauss, 1967, p. 50). Grounded theory suggests that collecting data from diverse groups (e.g. old-young and educated-not educated informants) will result in 1) dense development of properties of categories, 2) integrating of categories and properties, and 3) delimiting the scope of the theory (Glaser & Strauss, 1967, p. 58). Glaser and Strauss (1967) explain that "comparative analysis takes full advantage of the 'interchangeability' of indicators, and develops, as it proceeds, a broad range of acceptable indicators for categories and properties" (p. 49).

The practitioners' professional fields were a diverse range of education, banking, food and beverages, health, medical devices, environmental services, paper and forest products, communication and graphic design, utilities, distribution, design and construction, airlines and aviation, consultation and business growth, and IT and technology. The practitioners' organisations varied in size from a small local

---

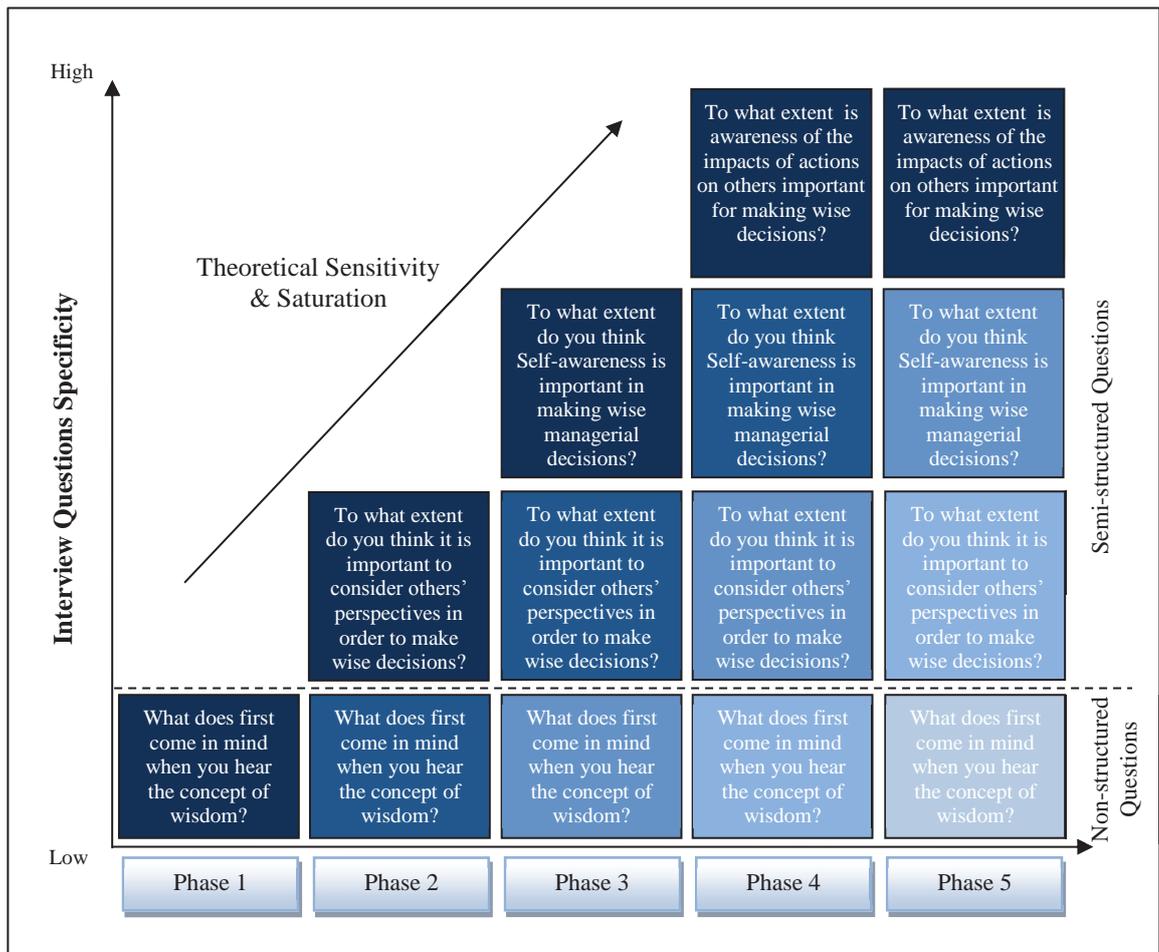
<sup>1</sup> An approach to the sampling could be a nomination paradigm (Baltes et al., 1995). A nomination paradigm in wisdom research means that the nomination relies on the nominators' opinion of wisdom (Orwoll & Perlmutter, 1990). That is, nominating a manager as being wise is done by the virtue of and reflects more than anything else the nominator's perception of wisdom at the managerial level in the business world. This study investigates the perception that managers have of wisdom and its relationship with decision making.

company with fewer than 10 members to a large multi-national enterprise with 100,000 plus employees. Informants were all based in New Zealand. However, they include some originally from Europe and the USA. The informants varied in years of experience, ranging from novice managers with just six years of experience to very experienced managers with more than 40 years of professional experience. In terms of academic qualifications, informants also vary, ranging from diplomas to PhDs.

#### 4.4 Interview Questions

Grounded theory is, in fact, a method that arises directly from field-data (Wastell, 2001), so multiple data sources such as interviews and observation of behaviour may be used (Goulding, 1998). The two most common data collection methods in grounded theory are in-depth interviews and observation (Polit & Beck, 2004). In this research, non-structured and semi-structured interviews were conducted. Grounded theorists use non-structured, open-ended interviews for the most of their data collection, as this type of interview has high conceptual yield (Simmons, 2011). As advised by Glaser (1998), the interviews began with very broad and open statements in order to allow the informants to talk freely about the subject. Glaser (2003) suggests that passive non-structured interviewing or listening holds constructivism to a minimum, by preventing the interviewer from forcing and feeding interviewee responses.

Leading to an increase in theoretical sensitivity, as more interviews were conducted and more data were collected and analysed, the interview guideline was modified and developed further by adding new and more theoretically sensitive and purposeful questions (Appendix C). In order to ensure theoretical saturation (discussed in the previous chapter, section 3.3.1, 'The Key Components of Grounded Theory'), the questions that had been asked in the previous phases were also asked in the following phases. That is, the interview questions of Phase 1 were also asked in Phase 2, and the interview questions of Phase 1 and Phase 2 were also asked in Phase 3, and so forth (Figure 4-2).



**Figure 4-2: Data Collection/Analysis and Theoretical Sensitivity/Saturation**

In the interviews of Phase 1, informants were asked broad questions about wisdom and its relationship with management decision making. Interview questions included: “What first comes to mind when you hear the term ‘wisdom?’” or “How would you identify wisdom in the real world of management?” In Phase 2, new questions were asked that were mainly concerned with concepts and categories that emerged in Phase 1. For example, informants were asked “To what extent do you think it is important to consider others’ perspectives in order to make wise decisions? Please explain why?” or “To what extent do you think knowledge is important for a manager to be able to make wise decisions? What kind of knowledge? Why?”

More theoretically sensitive questions were added to the interview guideline in Phase 3. The new questions focused on the informants’ perception of the interrelationship and development of the qualities that appeared to be associated with wise management decision making: “How do you think knowledge,

experience, emotions, ethics, awareness, and considering multiple perspectives are interrelated with regard to wise management decision making?” Phase 3 further investigated the contribution of the qualities to wise management decision making. In Phase 4, two new questions were added to the guideline. The following question is an example of the theoretically sensitive questions: “To what extent do you think it is important for a manager to be aware that their behaviour and decisions affect others in order to be able to make wise management decisions?”

By the end of Phase 4, theoretical saturation had already been reached. In order to check the theoretical saturation, in a new phase, Phase 5, the same questions as those of Phase 4, which included all the questions asked over the first four phases, were asked. Phase 5 was to ensure that no additional data would be found based on which new properties or categories could be developed (for the full interview guideline, see Appendix C).

It must be noted that during the interviews I used some techniques to ensure that the interview questions had been correctly understood by the informant. For example, the same question was asked in different ways for clarification.

#### **4.4.1 Asking Theoretical and Hypothetical Questions**

As mentioned in Chapter 2, in respect to the psychological studies of wisdom, there is a debate originally conducted by Baltes (2004; Baltes & Smith, 1990; 2004; Smith & Baltes, 1990), Ardel (2004), and Sternberg (2004b) on the measurement of wisdom. In the Berlin Wisdom Paradigm, wisdom is measured by analysing participants’ responses to a hypothetical life-planning task (Smith & Baltes, 1990). This approach is, however, criticised by others like Ardel (2004), who argue that, by using hypothetical questions and scenarios, it is knowledge and expertise that are measured, not wisdom. Ardel (2004) suggests that instead of giving participants hypothetical wisdom tasks, respondents must be presented with real scenarios. In contrast to both Baltes and his group and Ardel, Sternberg (2004b) argues that nobody is wise all the time or necessarily in all contexts, and suggests that wisdom exists as a natural and integral part of the interaction among people, tasks, and situations. Sternberg (2004b) suggests that the best approach to measure wisdom is to use a combination of both hypothetical and real-life

scenarios, as “sometimes one is called upon to judge wisely in giving advice to others on problems they face. At other times one needs to think wisely in solving one’s own problems” (pp. 287-289).

In this study, the interview questions included both hypothetical and real-life scenarios and questions. For example, informants were asked “Have you ever made or seen management decisions that you consider as being (un)wise decisions? And explain why do you regard those decisions as being (un)wise?” I encouraged informants to concentrate on real examples, if they knew of any, to answer the interview questions. Informants were also asked such hypothetical questions as “Imagine yourself sitting in your office, and you just hear of a decision made in your business field, your first reaction is ‘Wow, that was a wise decision’ or ‘Oh! That is not a wise decision’. Please explain what would those decisions look like?”

#### **4.5 Rigour and Credibility**

Standards that are used for the quality of research vary, depending on the quantitative or qualitative nature of the research. The qualitative research methods are not objective, they fail to test hypotheses, and their results are not generalisable. For this reason, such standards as measurement reliability, hypothesis testing, and generalisability do not suit the measurement of quality for quantitative research (Oktay, 2012). On the other hand, qualitative research (especially grounded theory) emphasises inductive, intuitive, open-ended approaches to data collecting and analysis, and in this sense they are different from logico-deductive verification approaches (Charmaz, 1990). Accordingly, different standards including “credibility”, “conformability”, “transferability”, “dependability”, as well as other criteria of “authenticity” (e.g. “ontological authenticity”, “educative authenticity”, “tactical authenticity”, and “catalytic authenticity”) have been developed to judge the quality of qualitative research (Lincoln & Guba, 1985). It must also be mentioned that, since different qualitative methods pursue different goals, a single set of criteria may not be applicable to different qualitative studies (Oktay, 2012).

The aim of grounded theory to develop a theory, and the engagement of the grounded theorists throughout the recursive process of data gathering and

analysis, differentiate grounded theory from other qualitative studies (Charmaz, 1990). Therefore, the criteria that are used to evaluate the quality of grounded theories are different from the ones that are used in other qualitative traditions (Glaser & Strauss, 1967). Charmaz (1990) echoes the point by saying that grounded theory provides a rigorous method for qualitative studies, so it must not be assessed by the inappropriate application of the external criteria that are used in other methods, but by assessment from the internal logic of its own method.

Glaser and Strauss (1967) provide a clearly explained prescription of the grounded theory method on gathering and analysing data, and suggest that the credibility of grounded theory would increase if researchers precisely followed their carefully explained grounded theory method. As Glaser (1978) put it “grounded theory is based on the systematic generating of theory from data, that itself is systematically obtained from social research. Thus the grounded theory method offers a rigorous, orderly guide to theory development that at each stage is closely integrated with a methodology of social research” (p. 2). To follow Glaser’s and Strauss’ (1967) advice on the credibility of the research, the current study has been conducted with careful application of grounded theory as presented by Glaser and Strauss (1967) and Glaser (1978, 1992, 1998, 2001). The application of grounded theory in this study has been fully and explicitly explained earlier in this chapter, in the ‘Informant Sample’ and ‘Data Collection and Analysis’ sections. The ‘Coding Process’ and the way concepts emerged are discussed in the next chapter.

Glaser and Strauss (1967) provide an evaluation framework that is based on the quality of the generated theory. They argue that the theory must meet four criteria: *fit*, *work*, *relevance*, and *modifiability* (Glaser, 1978). Table 4-1 outlines the criteria.

Criteria	Description
Fit	The concepts and categories must emerge from and fit the data.
Work	The theory must be understandable for the practitioners so they can use it.
Relevance	The core category corresponds to the most categories underlying the theory.

Modifiability	The theory must be readily and quickly modified to explain new or surprising variations.
---------------	--

**Table 4-1: Credibility Criteria for Grounded Theory**

**Fit:** This criterion connotes that the data should not be forced to fit pre-existing categories. To meet this criterion, theoretical sensitivity makes a critical contribution to the rigour of the grounded theory (Hall & Callery, 2001). The concepts and categories must emerge from and fit the data. This criterion is based on the supposition that “the reality produced in research is more accurate than the theory whose categories do not fit, not the reverse” (Glaser, 1978, p. 4). Since, in grounded theory studies, the categories of the grounded theory are derived directly from the field data, this criterion is inherently met (Glaser & Strauss, 1967). In the current study, the categories of the theory closely correspond to the data. Examples of the initial coding (presented in the next chapter, in Table 5-1) and axial coding (presented in the next chapter, in Figure 5-2 and Figure 5-3) provide evidence of the criteria.

To minimise the impact of my initial literature review on guiding the data collection, I used natural and unstructured interview questions in the early phases of the data collecting, and congruent with Glaser’s (1998) advice, I started data collection, coding, and analysis by asking of the data the following questions: “What is this a study of? What category does this incident indicate? And what property of what category does this incident indicate?” (Glaser, 1998, p. 123). Throughout the data collecting and analysing process analytic memos were written to document and track my own non-grounded and conceptual ideas (Glaser, 1998). Theoretical memos “are the theorizing write-up of ideas about codes and their relationships as they strike the analyst while coding” (Glaser, 1978, p. 83). I also used *in vivo* codes as much as possible and suitable, to reduce the potential bias from the literature review (Elliott & Higgins, 2012). Further, I did not refer to the literature until the theory had been developed.

**Work:** The grounded theory that has been developed by this study meets this criterion by providing an interpretation and explanation of what is happening in the area of the inquiry. The theory also predicts what will happen in the same area of formal inquiry (Glaser, 1978, 1998). The criterion connotes that the theory is understandable for the practitioners in the substantive area. The emergent

concepts of the theory of *PRIDM* are analytic and sensitising which facilitate the understanding of the theory by managers. Glaser and Strauss (1967) emphasise that this understanding is crucially important since “it is these people who will wish either to apply the theory themselves or to employ a sociologist to apply it” (p. 239). This criterion is evident in this study. For example, the following comment from informants on the synopsis (Phase 6: Member Checking), provides evidence of the criterion of work:

*“First of all, I must say that your synopsis and the resulting model (especially Figure 5<sup>1</sup>: Praxis and the integrative capacity) really resonates with me, specifically the role that reflection plays in supporting the effect of integration” (Informant 8).*

*“I have read your first findings with interest and the model you proposed certainly reflects my perception of wisdom in decision making” (Informant 14).*

In order for a theory to work, the categories of the theory must *fit* and have *relevance* (Glaser, 1978).

**Relevance:** This criterion is met by the emergent theory of *PRIDM*, as by the constant comparative method throughout the collecting and interpreting of the data, the core process (i.e. the basic social process) was allowed to emerge (Figure 4-1). A basic social process “explains a considerable portion of the action in an area and relates to most categories of lesser weight used in or making the theory work” (Glaser, 1978, p. 5). So, to make sure that the core category corresponds to most categories underlying the *PRIDM* theory, the final codes and categories were double checked to assure that all identified codes were constantly applied across interviews, and were appropriately sorted and grouped under conceptual codes (Longhofer, Floersch, & Hoy, 2013). The constant comparative method itself is a way to validate the grounded theory (Glaser, 1998). Through constant comparison the researcher keeps track of the emergence and development of his or her ideas, which prevents the researcher’s bias from influencing the emergence of the theory. Therefore, the constant comparative

---

<sup>1</sup> For this figure see Appendix E: Synopsis

method, and carefully saturating concepts and categories, will result in a credible theory (Glaser & Strauss, 1967). The constant comparative method also makes it possible to modify the grounded theory.

**Modifiability:** Modifiability means that the theory can be readily and quickly modified to explain new or surprising variations (Glaser, 1978). Accordingly, in a modifiable theory, the new data can be incorporated into the theory without losing what has already been discovered (Schreiber & Stern, 2001). Glaser (1978) argues that since the variation and relevance of basic social processes are ever changing, the correctness of the theory is limited to its ability to work the data. He writes: “always something emerges that requires generating qualification of what came before, but also causing a need to hang on to what one had generated up to that point as precious and inviolate” (Glaser, 1978, p. 5). Glaser and Strauss (1967) argue that the categories of the theory must be abstract to the extent that the emerged theory, while being understandable for practitioners, can serve as a general guide to ever-changing and multi-conditional daily situations. This requires the grounded theory to be flexible enough to be readily adjusted and reformed when needed. This study acknowledges that the emergent theory of PRIDM is a “momentary product” (Glaser & Strauss, 1967, p. 32) and has potential for further development should the new data warrant (Glaser, 1978).

#### 4.6 Ethical Considerations

Although this research involved the participation of humans in the process of the study, the research did not do informants any harm. However, prior to the research project, Massey University Human Ethics Approval was attained (Appendix F), and the researcher was obliged to and did comply with ethical principles.

When informants were invited for the interview, they were sent a copy of the Information Sheet (Appendix G), which described the research project, mentioned the informants’ rights with regard to the interview, and highlighted Massey University Human Ethics Approval information. Prior to each interview, informants were asked to sign the Participant Consent Form (Appendix H). Further, in order to make it clear for the informants how their participation contributed to the research project, the researcher very briefly described the whole research project in terms of the research objectives and the implications of

findings, and explained what would be done with the informants' answers in relation to the study. All the interviewees were also given a chance either before or after the interviews to ask any questions that they might have, or to add any further comments to their answers.

The interviews' recorded audio files were given identification codes and saved as password-protected files on the researcher's computer with log in password protection. On the printed materials no real name was used.

#### **4.7 Chapter Summary**

This chapter outlined the process of the data collection and analysis as a recursive process, whereby the data collection and data analysis take place at the same time in an iterative fashion. The phases through which the data was collected and led to the final theory were demonstrated. Informant sampling information and the interview questions were provided, and there was discussion of how, in each phase of data collection, more theoretically sensitive questions were added to the interview guideline. How the rigour and credibility of a grounded theory depends on four criteria was also discussed. In the last section of this chapter the ethical considerations of this study were mentioned.

So far, the nature of the research problem (Part 1) and the methodology design (Part 2) have been presented. The next part, Part 3, Findings, deals with the findings of the study. The data interpretation is presented (Chapter 5), and the findings are discussed (Chapter 6).

## Part 3

### Findings and Discussion

<b>Part 1</b> The Nature of the Research Problem	Chapter 1	Introduction
	Chapter 2	Initial Review of the Literature
<b>Part 2</b> Methodology Design	Chapter 3	Research Methodology and Grounded Theory
	Chapter 4	Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations
<b>Part 3</b> Findings	Chapter 5	Data Interpretation
	Chapter 6	Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)
<b>Part 4</b> Conclusion	Chapter 7	Implications, Limitations, and Directions for Future Research

## **Chapter 5 Data Interpretation**

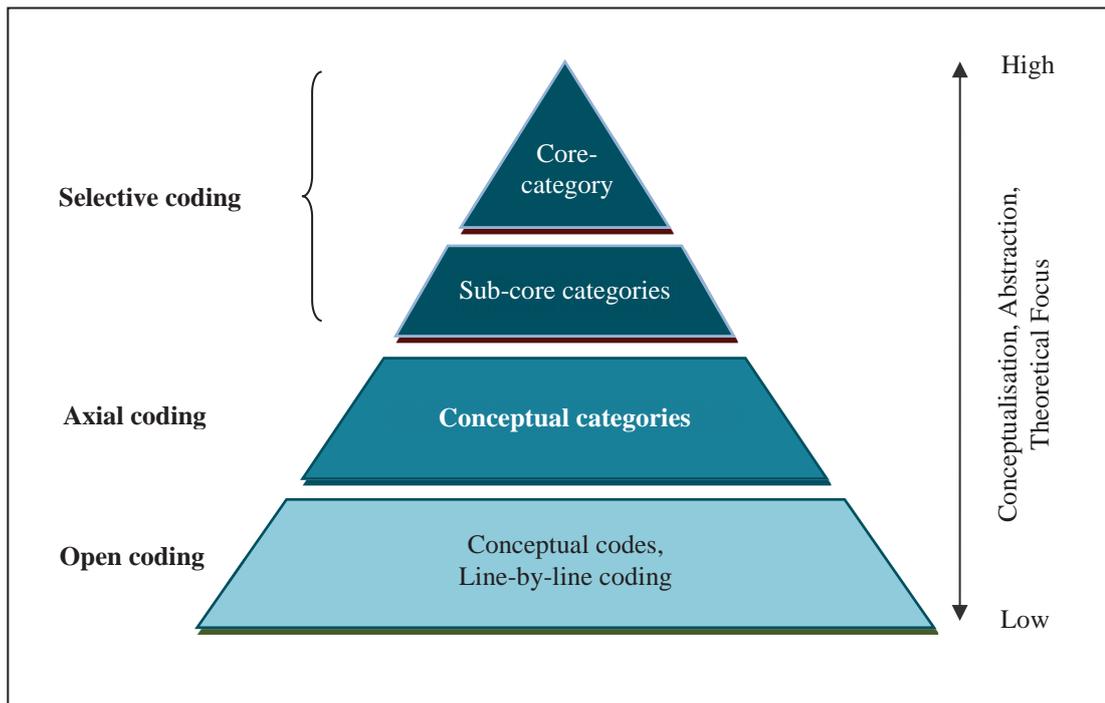
### **5.1 Chapter Overview**

This chapter describes the analysis process: the way open coding, axial coding, and selective coding were conducted. The conceptual codes, conceptual categories, and sub-core categories are presented. For each category some examples of the informants' comments are provided, which are interpretively explained. A chapter summary is provided at the end of the chapter.

### **5.2 Coding Process**

The process of analysing the data occurred at the same time as the data were gathered. That is, I engaged in data interpretation and analysis at the same time as collecting data; data gathering and analysis were not a linear process (“constant comparison”) (Glaser & Strauss, 1967, p. 109). I moved back and forth between emerging categories and the data iteratively. The aim of the constant comparative method is “generating and plausibly suggesting (but not provisionally testing) many categories, properties, and hypotheses about general problems” (Glaser & Strauss, 1967, p. 104). So, the constant comparative method alternates sequences of data collection and data analysis (Glaser, 1978; Glaser & Strauss, 1967).

The data were analysed using three coding strategies: open coding, axial coding, and selective coding (Glaser & Strauss, 1967). Figure 5-1 illustrates the coding techniques. While in open coding, codes and categories are less conceptual and abstract, in axial and selective coding, codes and categories become more abstract and conceptual. During axial and selective coding, data analysis is delimited to coding the data that are relevant to the core categories (Jones & Noble, 2007).



**Figure 5-1: Coding Phases**

Before transcribing and reading each interview transcript, I listened to the audio-recorded interviews to acquire an overall understanding of the interviewee’s main points. When interviews were transcribed, I first read the transcriptions. At this stage no coding was done as the first readings were also just for gaining an initial familiarity with the collected data. However, I made memo notes and even did some mapping at this stage and throughout the analysis process in order to record any emerging ideas, codes, and possible relationships between categories and subcategories. For instance, the following comments are two examples of the memos that I wrote after I listened to the interviews with Informants 4 and 10, respectively:

*“The informant believes that knowledge is as important as experience for wisdom. He considers experience as the source of knowledge and that the two entities (experience and knowledge) not being separable, are both to the same degree important for wisdom. He mentions that he believes that an individual is able to make wise decisions, if they have 1) a strategic mind, 2) experience, 3) knowledge, and 4) time to reflect on the experience” (memo, 14 October 2011).*

*“This informant suggests that wisdom can be developed through following three main steps: Education, having good mentors, and experience” (memo, 8 June 2012).*

After initial familiarisation, I began to code the data in “every way possible”; i.e. “running the data open” (Glaser, 1978, p. 56). And I coded different incidents into as many categories as possible (open coding) (Glaser, 1978). In open coding, as suggested by Glaser (1978), in order to maximise “allowing the best fit, the most workable ones and the core relevancies to emerge on their own” (p. 56), I even coded the incidents that had not been obviously stated. ‘Understanding that the decision has impacts on others’, as presented in Table 5-1, is an exemplar.

Line-by-line analysis dominated the early stages of the coding process. Appropriate open codes were assigned to each line, sentence or paragraph. Table 5-1 is an example of open coding of the data. Throughout open coding, I kept asking myself the three questions that Glaser (1978, p. 57) suggests to keep the researcher theoretically sensitive and transcendent during the collecting, coding and analysing process, as well as “to focus on patterns among incidents”:

- “What is this data a study of?”
- “What category does this incident indicate?”
- “What is actually happening in the data?”

Informant’s quote	Open coding (substantive codes)
<p>Experience is wisdom no doubt about it. But I suppose one of the other things that I absolutely believe, is being empathetic... you know?</p> <p>Understanding that no matter what decision you are going to make. Whatever decision you make there is going to be reaction or result of that decision somewhere else. There is always going to be another reaction to what you’ve decided. And that comes with wisdom I think. And that makes you wise when you understand that. And yeah, so by knowing that it helps you decide that ‘if I do this, this is going to happen and I am happy to still do this’.</p>	<p>Wisdom definition</p> <p>Multiple aspects</p> <p>Being empathetic</p> <p>Consequences are more important than the DM itself</p> <p>Considering consequences</p> <p>Impacts on others</p> <p>Others’ reaction to the decision</p> <p>Understanding that the decision has impacts on others</p> <p>Consequence-anticipating</p> <p>Feeling, being satisfied</p>

**Table 5-1: Sample of the Initial Coding**

Assigning codes was sometimes a challenging task, as the data could be understood in different ways, and in some cases, comments could be assigned more than one code. So, while I consulted with my supervisors and checked the literature for guidance, as this is a PhD, ultimately I had to rely on my own interpretation (see Limitations in Chapter 7). This data set might under other circumstances be coded by a second coder, subject to inter-coder reliability (Kolbe & Burnett, 1991; Tinsley & Weiss, 1975, 2000).

In some cases, informants used terms interchangeably. That is, they were using a term while they were meaning something else. In these cases I coded the comments based on the meaning rather than the word. For example, in the following comment, the informant mixes up the terms ‘ethics’ and ‘intuition’. She is in fact referring to ‘intuition’ rather than to ‘ethics’ as ‘considering ethical and moral codes’. The following comment was coded as ‘Trusting intuition in making decisions’:

*“I think ethics is important, for me. In the decisions that I make, I’ve learnt that through experience that if your gut is telling you something and you act against that, your instinct; then the result would be a bad one, it won’t work. So, whatever decision is, that I make I measure them against my gut reaction or my instincts” (Informant 31).*

As another example, in the comment below, the informant is referring to ‘reflection’ by using the term ‘Self-awareness’. I coded the comment as ‘reflecting on self’ rather than ‘Self-awareness’:

*“Self-awareness is the ability to question yourself and say: ‘was I wrong? Yes I was. I made a bad decision” (Informant 18).*

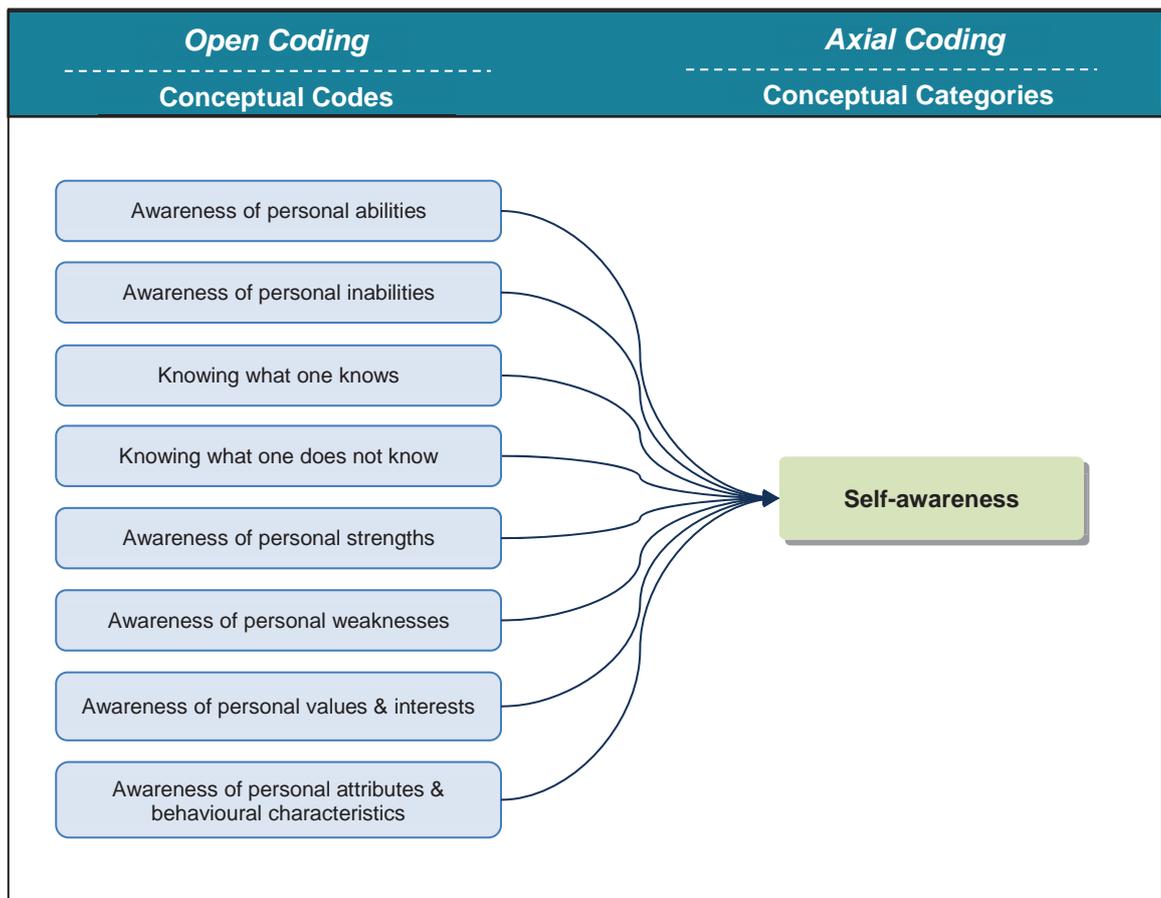
Code names were created from both the informants’ actual words (in vivo coding) and the researcher’s knowledge. I compared informants’ comments attached to a specific code to determine any possible mismatched quotes. New codes were created for the quotations that did not fit. The codes were then compared and sorted into higher-level codes, i.e. conceptual codes. For instance, the transcripts that had mentioned ‘considering the impact of the decision on others’, ‘understanding others’ concerns and their emotions’, ‘not hurting people’,

‘understanding how others feel about the impacts of the decision’, ‘caring about the surrounding environment’, and ‘having empathy in dealing with people’ were coded ‘empathy’.

The number of the conceptual codes changed over the process of data gathering and analysis, as categories were merged into each other, and/or new categories came up. For example, ‘impartiality (openness to others’ ideas)’ and ‘taking into account others’ perspectives’ were merged into one category, ‘Representing alternative points of view’. This was done as the incidents applicable to the categories were referring to the same thing. The comments that were attached to a specific quote were compared to identify the quotes that were possibly mismatched, and then the mismatched quotes were assigned to a new code.

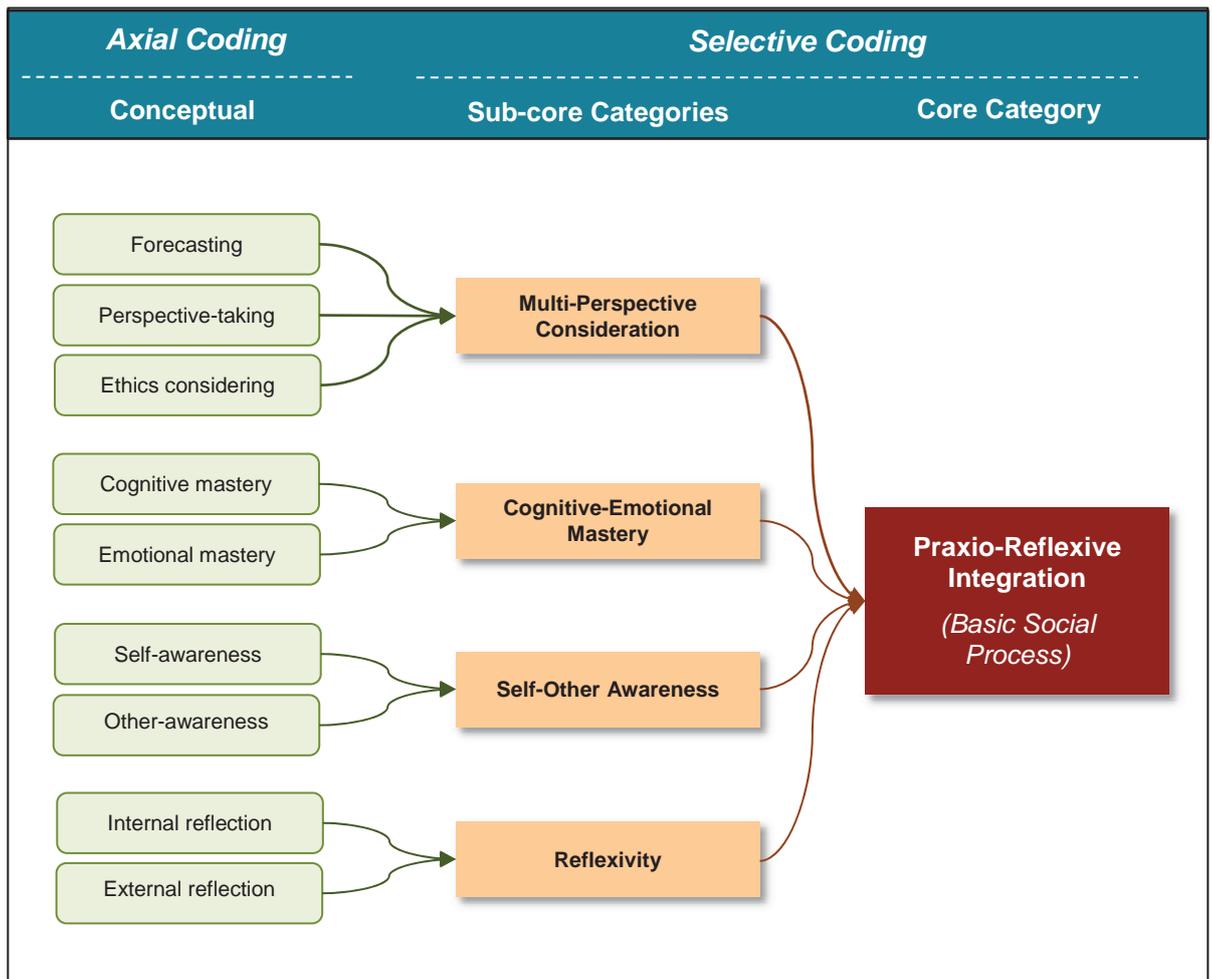
Some of the codes were removed as they did not appear to be a concern for all other informants. For example, ‘naturally talented’ and ‘ability to simplify issues’ were each mentioned by one informant and did not appear in the preceding and following data and analysis. The codes were not incorporated into the development of the conceptual categories and the core category.

Once conceptual codes (i.e. open codes) began to accumulate, I began to categorise them by grouping them under “more abstract explanatory terms: i.e., conceptual categories” (Strauss & Corbin, 1998, p. 114). The original list of concepts was, therefore, cut down and coding and analysing the data become more selective and focused (axial coding) (Glaser & Strauss, 1967). During axial coding nine conceptual categories were identified: Consequence-anticipating, Perspective-taking, Ethical considering, Cognitive mastery, Emotional mastery, Self-awareness, Other-awareness, Internal reflection, and External reflection. Figure 5-2 illustrates an example of the conceptual categories that were developed in axial coding. Appendix A demonstrates the full list of the conceptual codes and the conceptual categories.



**Figure 5-2: Developing Conceptual Categories**

As data was collected and analysed more purposively, “theoretical sampling” (Glaser, 1998, p. 157), sub-core categories and their inter-relationships began to emerge. Therefore, the categories that were identified through axial coding were refined, elaborated, and integrated to build up the larger theoretical scheme (Figure 5-3). This way I began to delimit the coding process by focusing on the variables that were more associated with the core category that began to emerge. Axial coding was followed by selective coding where I selected and focused on the core category and the “basic social process” (Glaser, 1978, p. 94) that related the core category to the other important sub-core categories and core categories. In selective coding, coding was delimited during the third round of data collecting and analysing.



**Figure 5-3: The Main Conceptual Categories and Sub-core Categories**

It must be noted that the categories overlap. It is not possible to draw a neat border between categories. For example, ‘Empathy’ and ‘Reconciling individual and communal interests’ could be categorised under one conceptual category, e.g. ‘Ethical consideration’, instead they are categorised under the conceptual categories of ‘Perspective-taking’ and ‘Emotional mastery’, respectively. Considering the overall picture of the themes and their interrelationships, categories were constantly compared, moved around, and categorised in the best way that I thought they would fit a higher level category. I also consulted with my supervisors regarding the categorisation of the codes. During the coding process, whenever it was needed, I gave myself some mental space, as suggested by Glaser (1998, 2001), to process ideas.

In the following section, the categories that emerged during the coding process are presented. The core category is first presented, followed by the description of the

sub-core categories and their formative conceptual categories. For each category, representative Informant Quotes are provided.

### **5.3 The Core Category: Praxio-Reflexive Integrated Decision Making**

‘Evolving integrative approach in wise decision making’ is the important social process that accounts for a large portion of the variations in behavioural patterns. The basic social process was named ‘Praxio-Reflexive Integrated Decision Making’. The core category represents the cognitive processes and behavioural patterns that are problematic for and relevant to those involved (Glaser, 1978). Praxio-reflexive integrated decision making concerns managers’ perspective-taking, their intense and evolving Cognitive-Emotional Mastery, and understanding of themselves (Self-awareness) and the world around them (Other-awareness) in making decisions.

The core category represents four sub-core categories: Multi-Perspective Consideration, Cognitive-Emotional Mastery, Self-Other Awareness, and Reflexivity. The categories are based on nine conceptual categories that emerged during axial coding. In the following sections, the conceptual categories are discussed and some informants’ quotes that best represent the categories are provided.

#### **5.3.1 Multi-Perspective Consideration**

‘Multi-Perspective Consideration’ (MPC) represents the conceptual categories of ‘*Consequence-anticipating*’, ‘*Perspective-taking*’, and ‘*Ethics considering*’. According to the data, wise managers are able to see the bigger picture, look at phenomena from different angles, and take into account different aspects, when making decisions. MPC refers to the extent to which the decision outcomes and ramifications are analysed, both short- and long-term outcomes are deliberated, alternative points of view are represented, individual and communal interests are reconciled, and ethical codes are considered. As one of the informants asserts, lack of understanding the bigger picture precludes making wise decisions.

*“The lack of understanding of the big picture, and making decisions in isolation without understanding the big constraints within which that*

*decision is being made leads to making unwise decisions” (Informant 29).*

Similarly, another informant points out that having a holistic approach that brings a wide range of different elements into consideration is critical for a decision to be made wisely:

*“When decisions are made based on a wider more holistic context, I think they are more likely to be wise decisions. Because, wise decisions are ones that can accommodate a wide range of different things that need to be considered, versus an expedited decision that only looks at one thing [...]. A holistic point of view is critical in wise decision making” (Informant 23).*

Another informant asserts the same point by linking wisdom with what s/he calls ‘holistic thinking’. Wisdom is associated with the consideration of different aspects in decision making. That is, not just thinking, for example, of financial success, but also the social and environmental implications.

*“I think in a business context, for me, wisdom is around being able to connect a kind of values, personal values, potentially spiritual beliefs, alongside and merged in with business practice, dealing with people, by making decisions that their outcomes are not just focused on money, but also focused on social applications, understanding social implications, environmental implications. So, I guess, that is around more about holistic approach. So, wisdom is holistic thinking” (Informant 19).*

### **5.3.1.1 Consequence-anticipating**

Wise managerial decisions, according to the informants, are made based on a pre-evaluation of the possible consequences of a decision: “I am unwise when I make decisions without considering all ideas, and not considering consequences, and ideas of others” (Informant 35). Wise decisions, according to informants’ interpretations, do not merely see the immediate impacts of the action, but the resounding consequential effects as well. That is, both the short- and long-term

consequences are deeply analysed when making a decision. This is reflected in the following comments characterising unwise decisions:

*“Potentially an unwise business decision is something that just has a short term view on the world. So, an unwise decision to me would be one that just doesn’t look very far into the future, and just is dealing with something immediate. And it is just trying to put a band-aid on a problem, or not really looking at the strategic future” (Informant 17).*

Similarly other informants regard wisdom as more associated with medium to long-term thought. Informant 19 characterises wise managers as being able to see long-term effects of their decisions.

*“To give some examples of unwise business decisions, I am thinking of a couple of situations that I’ve seen recently, where some people focus on short-term financial benefits, and not the long term positioning of the company. So, it is a kind of short term versus long term. It seems to be the more wise people can see the long-term view. And that tends to be maybe the harder path than the better path, especially at the moment when finances are tight for lot of people. It seems to be a quite a few short term decisions being made around the place. All of people have to survive, I know that; but there is fine line to walk. [...] wisdom is almost like people’s ability to develop a clear long-term strategy for a business” (Informant 19).*

Wise management decisions are, as one informant perceived, those managerial decisions that in addition to considering immediate financial return, take into account the strategic successes.

*“Wise decisions don’t always relate around immediate financial return, in my opinion. That’s going to be medium to long-term. If you are talking about greater strategic than all financial decision making; you do what can support your company strategy medium to long-term” (Informant 20).*

### **5.3.1.2 Perspective-taking**

According to the informants, different perspectives, alternative points of view, and individual and communal interests are taken into account and integrated in wise decisions. In this sense, wise managers overcome the inclination that may lead them to limit their view to the consideration of only personal interests or just a few aspects in decision making. According to the informants, wise decisions are made based on a deeper understanding and non-biased view of the subject matter.

*“Wise managers are prepared to listen not just to themselves, but they will take counsel from really wise counsellors” (Informant 10).*

Similarly, another informant explicitly asserts that in order to solve problems wisely, the wise manager needs to go beyond his or her own biased position:

*“I think if you want to be a wise manager, you need to be able to look at problems from a point beyond your position. You should be able to go beyond your personal-biased position” (Informant 36).*

In the comment below, one informant gives an example of an unwise managerial decision, and in explaining why she considered the decision unwise, she asserts that the decision makers had not looked at the broader picture:

*“They didn’t take into account the stakeholders. And so they didn’t make a wise decision. It is a sort of like that they did it in a vacuum ‘Okay! this makes sense’. But they didn’t a sort of look at the broader picture. And they sort of made that decision based on one sort of criteria. So, in some ways it might be a good decision in terms of helping [that group of people], but it didn’t end up to be a wise decision” (Informant 13).*

One of the key aspects of wise decisions is that they represent alternative points of view and reconcile individual and communal interests. Individual refers to the decision makers, and communal interests comprise the opinions, ideas, values and beliefs of all stakeholders other than the decision makers. Wise decisions, in other words, are not made based on narrow-minded thinking, or neglecting the

ramifications of the decisions. This sentiment is reflected by the following comments:

*“If more priority is given to wisdom and enthusing wisdom through culture, through organisational culture, we are going to have much more responsible industries. Industry and commerce, they are the driving force behind most of our decisions that we make our mess today. And they are largely responsible for the issues that we are dealing with the environmental issues, the social issues, and energy, and health and all that sort of stuff. And I think that lot of the problems have been caused, has been as result of narrow-minded thinking. Have been focused in and not looking at the other impacts of what you are doing” (Informant 22).*

*“A wise decision is a decision where you can see the big picture, and you can see the ramification of the decision. Often people make decisions without going: ‘but this happens next, and that happens after that’. So, I think it is important” (Informant 30).*

Another informant underlines the importance of taking into account different perspectives in their operation as an organisation. He considers his organisation to be wise, and he refers to their consideration of the triple bottom line (people, planet, profit) as the reason why he thinks society calls them wise. The informant asserts that the society they are working in looks at them as not being focused only on one of the financial, environmental or societal concerns, rather bringing into consideration the three concerns equally:

*“Some people may put more credibility on our company because of our environmental side, some others may put more credibility on us because of what we do for society, from a society point of view. Others might put lot of credibility on us because we’ve got pretty good financial bottom-line. But at the end of the day they look at us because, we have looked at all three of those things as being equal” (Informant 4).*

Wisdom is not limited just to the consideration of different perspectives in decision making. Rather it requires an integrating capacity of bringing together different ideas to make appropriate decisions.

*“One source of wisdom is the ability to integrate different ideas and draw different parts of information together in order to come up with the good results. So, the ability to see a variety of different information and perspectives and come up with the logical conclusion is a form of wisdom” (Informant 29).*

Prior to making decisions, wise managers assess their alternative decisions not only from their own point of view, but also through the eyes of those who are likely to be affected by consequences of their decisions. Wise managers, as one of the informants asserts, know, based on their experience, that their decisions would have more or less impacts on others, so they take into account how others see the managerial decision:

*“A wise person would look at his thoughts and ideas and think ‘Okay! This is how I’m thinking about it. But how would somebody else that would be affected by this decision view it.’ Or somebody else who might not be directly related to an operational decision; but they know, because of experience, that there is going to be an impact” (Informant 14).*

According to the informants, although people and the possible impacts on them are considered in wise decisions, business interests are not ignored in the wise decision making process. That is, while the wise managers aim to achieve their organisational goals, they minimise the negative impacts of their decisions on other people. As one of the informants notes:

*“I think a wise decision takes I guess the people factor in. And you need to take into account that you’re dealing with people. And so you got to make that course of right call to make but to try and minimise the impact on the people that are existing; that sort of scenario. Making a decision that is in the best interest of business which does the least harm. So, it’s sort of like you need to bring in something else,*

*like you need to bring in wisdom to make the right decision”*  
(Informant 13).

### **5.3.1.3 Considering Ethical Codes**

Ethics was perceived by the informants as a critical element in making wise management decisions. During axial coding, the conceptual codes that were related to ‘ethics’ were grouped as “Consider ethics”. The conceptual category refers to the extent to which ethics and moral codes are considered in management decision making. Informants perceived wise management decisions as being made based on the consideration of moral and ethical codes. The management decisions that informants identified as wise were distinctively characterised as not being ignorant of ethics. As one informant notes:

*“I think values are important. And I would suggest that, people with wisdom, would actually consider those values and beliefs in their decision making process. They may have individual values and beliefs, or stronger kind of values and beliefs that a part of the decision making process that makes them kind of more wise decisions”*  
(Informant 14).

One informant gives two examples of the ethical characteristics that are important for making wise decisions. She explains that it may not be always possible to please all people; however, it does not imply being immoral or unethical.

*“To me ethics and morality are absolutely totally critical for making wise managerial decisions. I don’t believe in anything other than transparency, honesty. I think ethics should inform every decision: ethics, morality and understanding of the impacts of the decision. How it might play out for other people? I don’t necessarily think that you can always please all the people all the time. There are situations where you have to be quite tough and ruthless. But I think that’s different from being unethical or immoral”* (Informant 24).

Wise management decisions respect the values of the society. The decisions do not go against the ethical and moral codes that are broadly respected in the organisation, the wider business community and society. In the following

comment, the informant puts extra emphasis on considering morality and ethics in making wise management decisions.

*“I don’t say that morals and ethics are necessary in wise managerial decisions; I would say they are essential if you want to make a wise decision. I don’t think I’d put myself in a position to act unethically or without morals. Morals I think are related to people component, whereas ethics is a way of going about business, in the way that you conduct your business, the way that you interrelate with other businesses. To me that is critical. I don’t believe that businesses can be successful or very successful without being ethical. You have to respect the values that society is respecting” (Informant 20).*

Informant 34 mentions that being ethical is more important than being financially successful, for a management decision to be the wise one. The informant also asserts that considering ethical codes is mutual between the manager and others. That is, the manager should not expect others to be ethical if the manager him/herself does not respect ethics and morality.

*“I think ethics is incredibly important in wisdom. You end up living by your own morals. And if you don’t have your own standards and ethics, so you can’t expect others to have any either. So, I wouldn’t think that it was a wise decision, if a managerial decision is unethical, even if it was a financially successful one” (Informant 34).*

Two informants refer to ethics as “the building-block” and “foundation” of wisdom:

*“I think that ethics and values is the building block from which you make wise decisions” (Informant 2).*

*“I think ethics have an important role in wise decision making. Ethics to me are part of the framework of decision making so they are one of the foundation stones of making a good decision, and they’re always there. So, they have to always be present in the same way that you can’t build a house without foundation stone missing, there would be a weakness in that corner. Periodically in business decision making*

*you take that stone out, you try to find a way to make a decision without the stone there, because you want to make a different decision. And you know that decision is contrary to your ethics, and if you don't put that stone back in, and make that decision, then that's going to be an unwise decision. And you know it. So, I know people make decisions all the time without ethics. But I think the best decision is when it is present" (Informant 16).*

For another informant ethics is the distinctive characteristic of wise decisions compared to other decisions:

*"Ethics is absolutely indispensable in wise decisions. I think without healthy and robust ethics, your decisions can't be wise, but be tactical or expedient. Because you are not making it coming from where your core values are. Or team and shared core values" (Informant 23).*

One informant asserts that ignoring ethical codes would certainly have negative impacts on the manager and the business in the long term. He emphasises that the impacts of the ignorance of ethics on the decision maker and the business would be considerable, if ethics are disregarded:

*"Wise decisions come back to ethics. [...] I need to operate ethically, because society is looking at how I am behaving from their ethical point of view. [...] If you throw out ethics, if you throw that out, it's going to come back and haunt you. It may take a long time before it does, but always comes back to haunt you; and then where are you at, you know what I mean? The higher you go, the further and faster you're going to fall" (Informant 4).*

In the comments below, one informant, highlighting the critical role of ethics in association with wisdom, links the 'consideration of moral and ethical codes' with the 'conscious and external awareness' category. The wise person needs to first be truly aware of the value system of the community and then to be able to consider those moral codes in their decisions. The comment also conveys that for informants, ethical considerations refer to not breaking the law.

*“A wise decision would be not to do anything that breaches the law. [...] I think they are important, because if you are unethical or immoral, these days you are about to be caught out. [...] I think it is really a part of wisdom: understanding the relationship between morality and society and ethics. And that’s all a part of a good business person” (Informant 7).*

Together with ‘integration’ some other qualities were according to the informants identified as associated with making wise management decisions. Some of the qualities were relevant to cognition and some others to emotions. The qualities are discussed in the following section.

### **5.3.2 Cognitive-Emotional Mastery**

Two conceptual categories were identified during axial coding: ‘Cognitive mastery’ and ‘Emotional mastery’. The categories correspond to the involvement of knowledge and experience as well as emotions in wise management decision making. Cognitive mastery and Emotional mastery were categorised into *one* sub-core category in selective coding: the ‘Cognitive-Emotional Mastery’ (CEM) category. This was done to better reflect the balance that informants perceived should be drawn between cognition/logic and emotion when making wise management decisions. Below are two examples of informants’ interpretations of the required balance:

*“Emotion and logic are 50/50 in wise decision making process. Everyone has emotions, but some know how to use it when making decision and some do not know” (Informant 35).*

*“I think people with wisdom have good Emotional Quotient or EQ. They are netted by their own emotions and other people’s emotions and reactions. Because if you only use logic, logic will fall over. Because we are people and as soon as people are involved, there ‘is emotions’. So, it needs to be a bit of both, mainly driven by logic, that is also backed up with emotional experience, emotional wisdom for both making decisions and communication” (Informant 21).*

### **5.3.2.1 Cognitive Mastery**

The conceptual category of ‘Cognitive mastery’ encompasses the codes and conceptual codes that represent the knowledge- and experience-related qualities that informants interpreted as being associated with wisdom and wise management decision making. According to the informants, when it comes to decision making, wise managers can use their experience effectively and manage their knowledge to make appropriate decisions.

Cognitive mastery is not solely based on one’s ability to acquire and apply their knowledge and use experiences. Rather there are some other cognition-related qualities and traits that all together lead wise managers to be cognitively adept. For example, they are insightful (as opposed to superficial), and they are able to think outside the square when needed.

According to informants’ perceptions of wisdom and wise management decision making, knowledge and experience play critical roles in making wise decisions. The importance of having knowledge when making decisions is made explicit when one informant, for example, mentions that when there is a lack of knowledge, not making a decision is the wise decision:

*“There is always something that you don’t know. There is always something out there, there is always knowing where to go to ask what you don’t know, where to get help, or maybe just making the decision that you can’t make that decision. And sometimes a wise decision is just saying ‘I can’t decide’, because you just don’t know enough to make a wise decision on” (Informant 4).*

Similarly, another informant asserts that even the wise person may fail if their experience does not fit the business position they are in:

*“If the wise person is put in a business position where he or she does not have experience, they might ultimately be unsuccessful” (Informant 1).*

Being knowledgeable and experienced does not mean that the knowledge or experience, in and of itself, leads to wise decisions. Wisdom is, as informants

perceived, associated with one's ability to apply what one knows. So, although knowledge and experience are important, and they were referred to by informants as important elements for one to be able to make wise decisions, the informants also identified the ability to put the knowledge and experience into action as one of the characteristics of wise managers. This sentiment was expressed by one informant:

*“Just because you have knowledge and experience doesn't mean you are going to use it wisely” (Informant 4).*

Similarly, in the following comment, Informant 12 asserts that wisdom is not just having knowledge or experience. However it is associated with the understanding of how to put that knowledge into practice:

*“Experience and knowledge are very important to make wise decisions. You can learn everything at start, but putting it in practice and understanding how to put it in practice can be a different thing. Wisdom to me is that understanding: understanding how to put your knowledge in practice” (Informant 12).*

Informant 6 differentiates wisdom from knowledge by attaching ‘the ability to apply knowledge and experience’ to wisdom:

*“I think knowledge and wisdom are different. You can know a lot but not really be able to apply it. I think wisdom is about being able to apply knowledge and experience. I suppose wisdom is the thing that translates that into an actual outcome for decision. Possibly you know lots of things but don't do [anything] with it. I think you may have less knowledge but more wisdom if you actually apply what you have to be able to say: ‘Right, here is the decision’. I think wisdom goes with decision making” (Informant 6).*

The following comment reflects the same sentiment: association of wisdom with the implementation of both knowledge and experience. According to Informant 3, the implementation of knowledge and experience manifests in exercising good judgment. Informant 3 notes that wisdom is associated with one's ability to implement his or her knowledge to make sound judgments.

*“I suppose we associate wisdom with particular people. So, there are people who we can identify as being very wise. And we do that, with saying by exercising very good judgment. I guess I’d equate wisdom with your ability to draw on a body of knowledge and experiences so that you make good judgments. Those whom I call wise, know how to apply their knowledge and experience to get problems sorted out”* (Informant 3).

Likewise, another informant uses the same criteria to characterise the person whom he regards as being wise:

*“One of the CEOs I worked with, where I was the chair of the board [...], I would consider him to be a wise manager because he has the confidence in his own experience as collective experience, and he was able to apply that in a practical way. So, to try to explain that better, he is able to make a quite number of decisions quickly and efficiently, based on his own practical experience. So, to me in a sense that was wisdom”* (Informant 16).

In addition to knowledge and experience implementation, informants mentioned that in order to be able to make wise decisions, managers need to be able to acquire the knowledge and information that they need. According to the informants, making wise decisions requires the manager to be able to find the information, to get advice from others, and to consult those whom they trust. The following comments reflect the sentiment:

*“In order to make a wise decision I need to gather some information, and once I’ve gathered that information I might go and speak to my manager; I’m putting myself into the team members’ position now. May talk to my manager, certainly talk to others that I trust or think that they are wise. And I need to do that carefully because the decision may have some confidentiality, so I need to be careful who I chose”* (Informant 11).

*“In order to make a wise decision, get as much information as you can. Consult as widely as you can, if you’ve got time to do it” (Informant 13).*

*“Wise managers get advice when they need it. And that is up to them to know when they need that advice” (Informant 16).*

Being insightful as opposed to superficial was another quality that informants interpreted as linked to making wise management decisions. Informants’ perceptions of wise managers convey that wise managers when making decisions do not make their decisions based on a superficial analysis of the problem, rather they consider details. Wise managers are perceived to be able to see the possible relationships between apparently unrelated events and phenomena. They are insightful as opposed to being superficial.

*“I guess wise managers couldn’t have been considered very wise if everything is very superficial. Some managers just skim really at the surface of the issues, and have no ability to delve into detail of anything. [...] Wise managers have that ability to go into detail of the things that matter, and of course to not do that on everything” (Informant 5).*

Informants also identified that wise managers are able to think differently and to develop new ideas. Informants pointed out that wise managers are creative in terms of proposing new alternatives or resolutions for problems. For example in the following comments the informants link wisdom to the ability to think outside the square:

*“They may come with new ideas, new perspectives, looking at something in different ways that you hadn’t thought is possible. [...] Wisdom is an ability to be able to think outside the square: to be innovative in thinking” (Informant 12).*

*“For me wisdom is the balance of factual information: what you get out of the computer, measurements, trends, those sort of things. [Mr. X] goes through the qualities just in broad. He knows how to combine*

*in sense of creativity; so he can think outside the square. He always comes up with new ideas” (Informant 10).*

In the feedback that was received following phase five from informants on the first findings of the data analysis, one of the informants offered an explanation and clarification on the quality of ‘thinking outside the square’ by suggesting that wise people:

*“can think both critically and creatively to generate unorthodox yet effective solutions” (Informant 8).*

Similarly, Informant 12 characterises one of the managers whom the informant considered as being wise as:

*“Looking at something in different ways, that you hadn’t thought is possible” (Informant 12).*

In the following section the emotion-related qualities that informants perceived to be associated wisdom and wise management decision making are presented.

### **5.3.2.2 Emotional Mastery**

Emotional mastery is a sub-core category that emerged during axial coding. As mentioned at the beginning of the previous section, Emotional mastery is categorised along with Cognitive mastery into a higher level of category, ‘Cognitive-Emotional Mastery’ to signify the balance that informants perceived as necessary to be drawn between cognition and emotion when a wise management decision is made.

Wise management decision making depends on one’s knowledge-related characteristics, abilities, skills and merits. Being epistemically virtuous, knowledgeable and experientially capable, according to informants, are critical for a manager to be able to make wise decisions. These qualities, however, are not sufficient for wise management decision making. In addition to Cognitive mastery, wise management decision making requires a high level of Emotional mastery, a set of emotional qualities that allows the wise manager not to be completely ignorant of or overly reliant on their emotions, when making and

taking decisions and actions. For example, one informant affirms the significance of emotions alongside learning and awareness:

*“I think many of much the managers’ growth and their ability to make appropriate decisions is as much internal as it is external. It is not just learning what is going on out there, it is about the manager who has not learnt yet how to control his own temper, and thinks that it is an acceptable behaviour in the work place” (Informant 10).*

The category of ‘Emotional mastery’ encompasses the emotion-related conceptual codes of ‘balanced reliance on insight and intuition (intuitively balanced)’, ‘emotional regulation’, ‘confidence’, ‘empathy’, and ‘courage’. These qualities identified and perceived by the informants to be associated with wisdom and wise management decision making are presented in the following paragraphs.

One emotion-related quality that informants referred to, in describing wise management decisions, is associated with the extent to which a decision is made based on intuition, as opposed to logically made decisions (a logically-thought-through process of the preference for one alternative over another). In this sense, Emotional mastery is not just an expression of the importance of, for example, regulating emotions when making decisions. Rather it refers to the degree to which the decision maker trusts his or her intuition in addition to logic in decision making. For example, the following informant does not even differentiate logic and intuition, and regards the management decisions that s/he called wise as being a sort of mixture of both:

*“I actually don’t think that you can separate logic and emotions in wise decision making process. I think the separation is artificial, and I don’t think it helps. Sometimes you can separate logic and emotion. I guess being logically, a business might be in a situation, where they are looking at the balance sheet and the numbers are telling them, that they are doing well or they are about to go under. And people might have this big amount of emotional investment in keeping the company going. But actually, logic would tell them that it is going to pass the point. I think there can be situations where one needs to prevail over another. But I think as human beings, you operate from*

*both. And I don't know that it is always constructive to separate them. I think they can be. But wisdom would involve saying in one situation or another 'we need to go with one or the other perhaps'; being able to use them together or separately, as may be needed" (Informant 23).*

The two terms of intuition and gut-feeling were used interchangeably by informants, although the concepts are not by definition the same in meaning. Either named as 'intuition' or 'gut-feeling', informants referred to the concepts as opposed to logic. By 'intuition' or 'gut-feeling', informants denoted the feeling based on which the decision maker prefers one specific alternative or decision to other alternatives and decisions at a given time, while he or she is not able to understand or explain the logical reason behind the preference at the time. Due to the similarity of informants' perceptions of the two concepts of 'gut-feeling' and 'intuition' in the statements that were referring to either of them, they were treated the same in terms of coding and analysis. So, whenever in the analysis the term 'intuition' is used, 'gut-feeling' is also signified.

As pointed out by informants, intuition is not disregarded or absent in wise management decisions. In the business world, facts and information are critically important for making successful management decisions. However, an informant suggests that intuition is not neglected when it comes to wise decision making. Wise managers were described by informants as able to make intuitive decisions. This sentiment is reflected by the following comments:

*"Personally I would say wise decisions are made based on a lot of logic. However, I've seen decisions that have been made, which to my mind are wise, being very kind of emotional-based. [...] And then you probably get into the rounds of a wise manager making a decision which is based on intuition which I have a kind of come across. But I think a majority of the decisions that I would say they've been wise decisions, are based on a sound logical kind of thought process" (Informant 14).*

Intuition was also expressed by informants as the way emotion comes through in management decisions. In the following comment, one informant mentions that emotion contributes to wise decisions in the form of intuition. For the informant

the degree to which either logic or emotion appears in the decisions varies from one person to another. Some decision makers make their decisions with more consideration of logic (compared to emotion) than others. And some others rely more on their intuition and gut-feeling, and they assess their decision against logic.

*“The wise decisions are mainly based on logic. And a degree of perhaps emotion comes into it in terms of intuition. Wise managers I think have gut feeling about what decisions are appropriate. Some people just run with their gut-feeling. Other people have a gut feeling and they challenge it, with perhaps logic and fact and test as a gut-feeling still correct” (Informant 17).*

The difference between the levels of emotions or logic which are involved in wise management decisions is also reflected in the following comment. While the previous informant placed more emphasis on logic than emotion, the informant below puts the emphasis on intuition, and regards logic just as a checking tool. What is reflected by the comments in both cases is that informants do not interpret wise management decisions as made based on only one of the two, logic or intuition, in the absence of the other. The following comment also suggests ‘empathy’ as another key quality for wise decision making. The comment suggests that intuition without empathy would lead to wrong decisions:

*“I think, very closely attached to wisdom, is ‘knowing yourself’ and ‘listening to your intuition and your gut feelings’. Intuition and feelings are important as long as you are empathetic. If you just make gut feelings and you have no empathy for people, then you make the wrong decision. I think logic is more for confirming that you’ve got the right answer. So, it is for checking: ‘Okay! This, this, and this all add up to this. So, it is Okay’. I think it is a good check” (Informant 28).*

One point that informants mentioned is that wise managers do not make rash decisions. Informants characterised wise managers as being calm and taking time before making decisions. For example, one informant characterises unwise

managers as making very quick decisions based on a quick assessment of a problem.

*“There are a lot of managers and business people that don’t have the experience of wisdom, all see a problem, make very quick assessment of what the problem is, and jump straight into solving it. And because of the process problem, solution doesn’t fit. But wise managers stop and completely analyse the problem: ‘what is it?’, ‘what is the problem?’, ‘what are the resources at hand in this case?’ and etc.”*  
(Informant 16).

Taking a reasonable amount of time before making decisions, according to informants, allows the manager to bring into consideration the relevant factors that are more likely to be ignored when the decision is made in haste. This statement is reflected in the following comment with the informant saying that the haste does not let the decision maker see the ‘entire picture’. Informant 13 refers to making decisions in haste as the reason that some managers are considered as being unwise:

*“I think, decisions being made in haste, that they haven’t focused on the sort of entire picture available to them. They’ve focused on a number of opinions that they’ve got only. And a sort of like, you listen to those but actually a vast majority. So, I think that’s unwise, to do with sort of rush and haste. And decisions that don’t look like this... that there has been thinking and consideration and consultation involved”* (Informant 13).

The same point is mentioned by another informant. He asserts that wise managers are slower than others in making decisions, and that it is because a deeper thought process is involved when making decisions.

*“You tend to see the wise managers as being thinkers potentially slower to respond but... you know?... that’s because they are in a far deeper thought process than other people”* (Informant 14).

Informant 34, when asked “what would be your recommendation for a manager to be able to make a decision that is critical and must be wise?”, similarly asserts that

taking time prior to the decision is important for the decision maker, in order to be able to think through different aspects and their impacts on the decision and its consequences.

*“Take a time and do your research to understand the issue you are being asked to make a decision on. Don’t make a rash decision. You must also consider the impacts of delay in making decisions, and the opportunities that might be passed up. And probably think your actions well in advance for whole series of different decisions that you might be faced to make” (Informant 34).*

Another quality that informants asserted to be associated with wisdom was confidence. Wise managers are identified by informants as being confident about dealing with issues at hand. Wise managers are confident about the decisions that they make.

*“I think wise managers are typically just by confidence and knowledge; people that are confident. They can sit back and deal with issues, projects, or whatever they may be” (Informant 20).*

As perceived by informants, confidence refers to the degree one believes that one is capable or correct in making a decision or taking an action at a given time. That is, when encountering the need to make a management decision, the wise manager ensures that he or she is the right person to make that decision. If they realise that they are not the right person in terms of, for example, having knowledge, information, and experience to make an appropriate decision at a given time, they would not make that decision. As one informant notes:

*“So, a manager who wants to make a wise decision needs to have some confidence on their own ability to sort of assimilate information and apply it to situation” (Informant 16).*

Informants linked confidence to the ability to apply knowledge. That is, wise managers’ confidence is rooted in their understanding that they can implement their knowledge and experience to make a decision. This sentiment is reflected in the following comments. For example, one of the informants notes that in order to

make a wise decision he would first assess his experience and knowledge to see if he has the confidence to make the decision.

*“An indication of wise managers is that whether they make use of their knowledge that instils confidence, which contributes to a sense of wisdom” (Informant 8).*

*“To make a wise decision I look at a problem and ask myself ‘Is this a problem I actually have experience or the knowledge or the confidence to make a call on it? Or should I go somewhere else?’” (Informant 6).*

Confidence is related to a person’s level of courage (as discussed under the category of ‘intellectual courage’). Based on the confidence someone has about their abilities and beliefs, their courage would grow enough to let them think differently or behave differently, as necessary, in a given time and in a given situation.

*“In a business context, for me, wisdom is around a level of confidence to think differently or behave differently and knowing that that is supported by something a kind of bigger than just maybe what people can see, but like who you are, the confidence that you have based on your personal beliefs and spirituality and values” (Informant 19).*

Empathy was broadly pointed out by informants as being critical in making wise management decisions. Being aware of the fact that management decisions may have impacts on others, either the internal members or the external stakeholders, is important in order for managers to be able to make wise decisions. Wise managers, as described by informants, show a level of empathy. Wise managers have the capacity to recognise the emotions that others would experience from the possible consequences of the managers’ decisions. They care about other people and have a desire to know what others think or feel about their decisions and actions. This sentiment is reflected in the following comments. In the second comment, the importance of empathy in a wise management decision is taken further by the informant by linking wisdom to the decisions in which ‘difficult people issues’ are involved:

*“I think having an emotional understanding of your business is important to make wise managerial decisions. Because you need to think how your decisions would influence both the people inside your business and external to it. And if you think of it as a machine, it is still a logical thought process. You need to have a level of emotional intelligence to figure that out. Because, if you make a decision that affects the emotional well-being of your business, or your customers, that would lead to a negative outcome” (Informant 18).*

*“I would say wisdom has come into my decision making would be when it really gets down to difficult people issues. So, rather than what the decisions is specifically about, it’s more to do with people management side” (Informant 13).*

Informant 22 points out the same concern, that when it comes to making decisions that are more likely to lead to affecting others, empathy plays a more critical role in wise decision making. So, wisdom, according to the informants, is accompanied by empathy as wise decisions are those ones that do not harm others.

*“A wise decision is one, where there is going to be somebody is likely to going to get hurt somehow, one way or the other. It is not like a necessarily a win-win. They are difficult decisions, and so that’s when wisdom comes in. Wisdom really comes in where you can say: ‘mmm... somebody is going to lose this. Somebody is going to have a negative impact out of this. How do I make sure that I’ve made the right decision? Because we don’t want the wrong person to be affected or the wrong outcome to achieve” (Informant 22).*

*“Sometimes you need to make a wise decision, but it is particularly difficult matter as sometimes the consequences of the decision may have great effects, and therefore you are going to make a wise decision, because you are not going to hurt people” (Informant 11).*

*“There need to be an empathetic quality to people in order for managers to be wise. They struggle with empathy” (Informant 24).*

Unlike the previous comments, Informant 28 does not limit the role of ‘empathy’ in wise decision making to the concern about ‘people’. Rather, he expands the meaning of ‘empathy’ to understanding ‘the important things beyond personal well-being’, which includes ‘people’ as well as the ‘physical’, ‘social’, ‘physiological’, and ‘situational’ concerns.

*“The most important thing is to be able to empathise with the physical, social, physiological, situational, and the people, and to understand their value, and then to be able to understand the important things beyond personal well-being. Often I see managers who are actually all about themselves. So, they are only managing for their own well-being. They are not managing for the best possible outcome. So, it is a wise decision, because they recognise the value of the people and the role they play, and the other one that is poor decision, is the one that do not value the people” (Informant 28).*

The same point is made by another informant, that unwise managers make selfish decisions, with no concern about the possible impacts that their decisions may have on the wider community and the surrounding environment. The informant characterises unwise managers as not caring about the surrounding environment and society:

*“I suppose those with lack of preparation, lack of understanding, lack of care about their surrounding environment. So, those people that would make selfish decisions, decisions that more fitted or they had a self-mandate. And that they would try to fill that self-mandate so selfish without really caring about the surrounding environmental impact on that. Environment I mean in a greater sense of environment. Society, profitability of the company, or profitability on the organisation you representing, human impacts, environmental impacts, social impacts, and all of those sort of things as well. As well as competitors and market impacts in the greater environment” (Informant 15).*

So as informants perceived, managers need to have an empathetic quality to be able to make wise decisions. They need to be able to understand others’ values,

and to empathise with other people, so they can look at situations from a higher point than just their own well-being. Wise managers consider the organisational well-being, individual well-being, as well as the well-being of the stakeholders outside the organisation. This sentiment is reflected by the following comments.

*“I think it is really important to consider people. And I think there are lots of wider considerations too. Because if you look at the managerial context, you’ve got organisational well-being, as well as that individual well-being. And you’ve got well-being of the stakeholders outside the organisation” (Informant 23).*

The same point is also mentioned by another informant, who explains the situation that he was in, when he had to make a wise decision. He asserts that in order to make a wise decision he would consider what those who are affected by his decisions feel:

*“I am in that situation right now. I am making decisions for the business, because we’ve come through a particular period, a five year period, where we’ve been looking at our sustainability. So, we had a five year plan in place. That plan comes to the end at the end of this month. And I’m advising the business on next plan. And obviously I have to make the wise decision. And the way I’ve done it is I’ve basically consulted stakeholders, people who could be impacted by this decision. So, I want to understand, how they feel about those impacts of the decision. So, I can come up with a decision that is wise” (Informant 14).*

Helping others may be another form of empathy which informants referred to as a characteristic of wise managers. As reflected in the following comment, wise managers help others, when others need their help. Wise managers do not withhold their knowledge from others. They help others to solve their problems.

*“I think they affect other people a lot. Wise managers are people whom other people gather around and learn from, and they have a good vibe, a sort of generous vibe about them. We have got a person like that here. You just have a sense that he knows... he is wise. He*

*knows the staff. He knows what to look for. And he will guide you to the same places. He is an example of a wise leader, a wise manager. When I go in to him with a problem, first of all I never feel like I am invading his space; I never feel like I am a problem walking through the door. When I talk to him about a situation, an idea, or a concept, he just gets the pins on the white board and starts writing all down and putting it into boxes and squares and stuff, and then you start to see a picture emerge” (Informant 31).*

Another emotion-related quality that informants perceived in association with making wise management decisions is ‘courage’. Wise managers are not afraid of challenging popularly held beliefs if those beliefs need to be questioned. The following comment reflects an example of ‘challenging a popularly held wrong belief’ in the business context:

*“I think courage is an important element for making wise decision: the courage to represent the needs of others. When operating within a hierarchy, sometimes there is a lot of pressure to not rock the boat. But those who are considered wise, I guess, are prepared to stand up and say ‘NO’, in appropriate occasions” (Informant 8).*

The same sentiment is echoed by another informant, who characterises the manager whom she considered wise as having the courage to challenge ideas whenever the ideas are wrong. So, it does not matter who and how many people hold a particular idea; wise managers are not afraid of questioning wrong or inappropriate beliefs and ideas:

*“He respects other’s opinion. But he would challenge any ideas that he thinks do not work. Doesn’t matter who and how many people believe that the idea is the best idea, or that it works” (Informant 31).*

In the following section, another sub-core category that was identified in selective coding is presented. The sub-core category encompasses two conceptual categories that are related to ‘awareness’, which were identified during axial coding: ‘Self-awareness’ and ‘Other-awareness’.

### 5.3.3 Self-Other Awareness

Self-Other Awareness (SOA) corresponds to the distinctive quality of ‘awareness’ that informants ascribed to wise managers. The quality includes two conceptual categories: ‘Self-awareness’ (awareness of self) and ‘Other-awareness’ (awareness of the surrounding environment). The former refers to the personal characteristics, behavioural patterns, or cognitive processes that are associated with understanding one’s own personal attitudes, abilities, knowledge, characteristics, interests and values. Other-awareness on the other hand represents the extent to which a person is aware of what is going on around them.

Self-awareness and Other-awareness were categorised together into the sub-core category of ‘Self-Other Awareness’, as firstly the two conceptual categories deal with *awareness*, and secondly the informants regarded Self-awareness and Other-awareness as being very closely linked to each other. Below is an example of an informant’s interpretation of Self-Other Awareness:

*“I think awareness of the surrounding environment is really important. And they are tied together with self-awareness very very closely. Because I think you need to see the outside environment and adapt your behaviour. And one can’t work one without the other. I think you can have a big awareness of other people and other people’s emotions, but then you might not know how you fit in with that. So, it needs to be quite balanced and fit to be effective, and respond effectively to make the change happen” (Informant 21).*

#### 5.3.3.1 Self-awareness

Self-awareness is perceived by informants as one of the fundamentally important personal qualities of wise managers. Awareness of one’s knowledge (both what one knows and what one does not know), strengths and weaknesses, abilities and inabilities, values and beliefs, and personal attributes and behavioural characteristics, was pointed out by informants as associated with wise management decision making. For example, in the following comment, one informant says that Self-awareness and awareness of one’s limitations is an important feature in making wise decisions.

*“I think self-awareness is an important feature. You need to be aware of your limitations to be able to make wise decisions” (Informant 34).*

In one case, one informant, in answer to the question ‘what do you think is the most important element to make a wise management decision?’ considers Self-awareness as the most important element in making wise decisions:

*“Probably self-awareness is the most important thing in wisdom” (Informant 19).*

Similarly;

*“I think very closely attached to wisdom is ‘knowing yourself’” (Informant 28).*

In the following comment, one informant links wisdom to ‘understanding of self’ and understanding of ‘all the things around them’, and that ‘self’ is where wisdom starts to develop from:

*“But wisdom for me is really about ‘self’. Because that’s where it has to start. Because, if you don’t understand yourself, the chances of you ever understanding anything else would be pretty slim. I suppose wisdom is about understanding of self, and understanding of oneself in the scheme of all the things around them. So, I suppose wisdom is a high level of self-awareness, and understanding of our character and of what drives us, and by extension, having that deeper understanding of other people and what drives them [...]. They are aware of what’s going on around them” (Informant 5).*

Similarly, another informant points out that Self-awareness includes both the awareness of what one knows, and what one does not know. This sentiment is reflected by the following comment, highlighting the importance of Self-awareness in wise management decision making.

*“Self-awareness is critical. And that to me is all about the ability to know what one knows and what one does not know” (Informant 35).*

Informants mentioned that lack of awareness of one's own limitations impedes wise decision making.

*“The first thing that actually comes to my mind regarding not being able to make a wise decision is a certain lack of self-awareness of own limitations. [...] I think it is a lack of knowledge of their limitations and abilities. That is possibly the first thing that comes to my mind”*  
(Informant 9).

Similarly another informant highlights the importance of the awareness of one's weaknesses in making wise decisions. The informant points out that being aware of their weaknesses helps the person to get help from others and/or build up a better team around them to overcome the weaknesses:

*“I think awareness is quite significant in considering a manager as being wise. If you are not aware of yourself, your strengths, your weaknesses, then if you consider only your strengths, then you're only going to get part of the job done. So, if you have weaknesses, which we all have, then you prop up your management with those areas of expertise... with greater expertise from someone else. And it is not a bad thing or wrong thing. It is all about piecing together what you can to make your team under your management direction strong”*  
(Informant 20).

Self-awareness helps the manager realise where he or she is able to make decisions. This prevents the decision maker from making decisions in the situations and areas where the manager may not be the right person to make the decision due to lack of knowledge, expertise, and experience, for example. Informant 18 points out that wisdom in the business environment is concerned with:

*“Knowing where you are strong or weak and trying to improve on those certain areas, to say ‘Hang on! Actually I can't ever be improved in those areas. I should be making decisions in those. But I might not be good in human resource management, I am a great business development manager. Therefore, I should be focusing my*

*efforts in that area.’ Therefore you will make the best decisions in that area. And not go ahead and make a poor decision in human resources. So, that is a kind of self-awareness, knowing what you are really strong at, what you are really weak at, and the understanding that ‘can I improve it? Yes or no?’. If yes, then you go ahead and work on it. If no, you don’t do it. You focus on what you are good at” (Informant 18).*

One informant asserts that Self-awareness is required for the manager to be able to feed wisdom into their organisation:

*“Feeding wisdom into organisation, I would say it starts with self-awareness. Wisdom allows you to judge where you need help. So, being self-aware is starting point for that understanding as well” (Informant 24).*

As mentioned by Informant 21, Self-awareness enables the wise manager to understand how his or her behaviour affects his or her decisions. Therefore, they would be able to direct their behaviour towards making appropriate decisions:

*“Wise managers are very very self-aware. I think to a large degree. I think self-awareness give them the ability to see how their behaviours impact other people, and how they can use their behaviour in a positive way to inform decisions, or to judge before making a decision. And then that helps in the communication of their decisions” (Informant 21).*

Self-awareness refers to understanding self and admitting weaknesses. In the following comment, the informant mentions self-awareness as being critical in association with wisdom, about understanding what motivates oneself, and one’s abilities, capacities, and weaknesses. The informant also links ‘admitting to the weaknesses’ to self-awareness.

*“If you understand yourself, you understand what motivates you, and what is driving the decision that you are making. And that understanding of self is the thing that allows you to understand whether or not the motives are the right ones, and that is the*

*important thing [...]. So, understanding of self is really critical in wisdom: understanding what you do, understanding your abilities, and your capacities, your strengths and your weaknesses, and being willing to admit to the weaknesses” (Informant 31).*

The informant then goes on to explain why she says self-awareness is critical. For the informant, self-awareness is not limited to just ‘understanding’, but rather to being willing to overcome the weaknesses by getting help from others. The informant links self-awareness to the success of the organisation, asserting that lack of self-awareness would ultimately lead the organisation to collapse.

*“Cos that is really important, and then being willing to find somebody to fill those gaps. Because if you can admit that you are not perfect, that there are gaps in your experience and knowledge, then that means that you can bring someone in to fill those. But if you say ‘No, I am going to do that all, because I am so good, and I am perfect’ then you are going to fall over. And the organisation will fall over. And the dreams will fall over, if you are building a dream. So, it is best not to go there. So, that is ‘understanding of self” (Informant 31).*

To be able to make proper decisions that effectively address issues at hand, yet for them to be regarded as wise decisions in any given time and situation, managers, according to the informants, need also to be as fully aware of the events going on around them as of self. This refers to another type of awareness that the informants considered as being associated with wisdom and wise management decision making.

### ***5.3.3.2 Other-awareness: Awareness of Surrounding Environment***

In addition to self-awareness, Other-awareness or awareness of the surrounding environment is considered by informants as being critical for a manager in order to be able to make wise decisions about business, social, and environmental issues. The interrelationship between businesses and the wider community (business community and society) within which the business is operating requires managers to take into account the possible impacts that their businesses may have

on the society or that the society may have on their businesses. This is indicated by the following comment:

*“There is an on-going side [and] indirect effects that you don’t even realise until later on; [then] you go: ‘Oh wow! I didn’t realize people thought that way’. You know? Good decision making around the business means it gets successful. And you are thinking that it is good for your own business and you are only looking at yours. But you don’t realise that others are looking from outside of your business [and they] think: ‘Hang on! They are doing pretty well. What decision have they made that it made them so successful?’ And you see that you punch a lot higher than your weight. So, judgment... you know? Being judged by others does make a huge difference on how people react to them [and] you realise that you don’t operate in a bubble” (Informant 4).*

Other-awareness also refers to awareness of the variety of perspectives that may exist about the issue the wise manager needs to make decisions on. It also refers to the awareness of the dominant values and beliefs of the wider community such as society and the business community. The following informant’s comment reflects this sentiment:

*“I think that they have to look at it from a number of different perspectives. And I think you have to have taken into account perspectives. You have to take into account other people’s point of view, even if they are different from your own” (Informant 13).*

Similarly, Informant 27 states that both Self- and Other-awareness are essential for making wise decisions, as the awareness takes wise decision making beyond being self-centric:

*“Self-awareness and awareness of your business environment are essential for wise decision making. A decision cannot be wise if it’s self-centric, it needs to take a broader context, including one’s own” (Informant 27)*

Other-awareness, moreover, includes the awareness of the abilities, knowledge, values and interests, attributes and characteristics, and strengths and weaknesses of all those with whom the manager works, or interacts. This awareness, informants believed, helps managers to better manage others, work with them, and also know who to approach to get advice, when needed. This is pictured in an analogy offered by an informant:

*“The conductor doesn’t need to know how to play the trumpet and drums, and the guitar and the violin; but he does need to know how to listen [and] bring those together in harmony to deliver some product better than any of the individuals alone. That is the conductor’s skill and that to me is the [wise] manager’s skill” (Informant 10).*

Similarly, another informant states:

*“Wise decision is actually recognising that you don’t have the full set of tools and to go and seek support from somebody else to inform your decision that you make” (Informant 2).*

The comment above is similar to what Informant 31 mentioned about ‘self-awareness’ (provided in the previous section). Informant 31 also asserts that understanding of the surrounding environment and people is important in order to excel:

*“Understanding the environment is also really important because, there are places where the people around them excel and do well, and there are places where a person and the people around them don’t. And that is actually understanding the environment, what the people need in order to excel, and providing that environment” (Informant 31).*

The awareness is not limited to only knowing others or the social values and beliefs. Businesses follow their own objectives, and their survival strongly depends on the achievement of their business goals. Whether the goals are selling products or providing services, understanding the marketplace is critical in making wise decisions and business success. The managers who were considered

wise by informants were described as understanding the market well. In the following comments, for example, this point is mentioned:

*“In terms of the community that I interact with, there are probably three or four people who I consider them as being wise managers. [...]. Mr. X is now a professor director, but he is very much a specialist in company culture, and high growth business development. [...] the wisdom that I ascribe to him, I guess centres on the way that he understands the marketplace” (Informant 11).*

Another informant links self-awareness with ‘reflection’ (as presented in the next section). According to the informant, self-awareness is the ability to reflect on previous decisions and actions:

*“Self-awareness is the ability to question yourself and say: ‘Was I wrong? Yes I was. I made a bad decision. I am weak in this particular area, so I need to work on those factors. And if you’ve got a good ability to do that, it would make a better manager, in terms of human resources, in terms of financial management, in terms of market strategy, or business development” (Informant 18).*

As presented by the foregoing comment, closely linked to SOA, another sub-core category was identified in association with wisdom and wise management decision making. According to the informants, reflection is a critical function in making wise management decisions, as it helps the decision maker to enhance both Self- and Other-awareness.

#### **5.3.4 Reflexivity**

According to the informants, wise managers implement reflexivity as the main strategy to enhance their SOA based on which they make wise decisions. Reflexivity includes two types of reflections that managers use to refine their understandings of self and their surrounding environment. Internal reflection is the strategy that helps with the development of self-awareness, and external reflection is more appropriate for the improvement of consciousness.

#### **5.3.4.1 Internal Reflection**

Wise managers use Internal reflection to enhance their self-awareness by learning from their own experiences and by (re)evaluating their own values, interests, knowledge and abilities. Wise managers, the informants believed, show a high level of inclination towards learning and developing their abilities and competencies. They actively reflect on their own thoughts and behaviour and always learn from mistakes as this informant explains:

*“Learning from your mistakes [helps with making wise decisions]. I think it’s about looking back to see what’s happened. [...] I think the unwise man is the person who makes some mistakes and never looks at what they did. And they make the same mistakes again. And they make it again, and they make it again. For me, being wise is making mistakes, being aware that you’ve just made a mistake, looking at what’s occurred and learning from it to ensure that you don’t make the same one again” (Informant 5).*

One informant states that although values and beliefs are involved in wisdom, checking those values and beliefs is also associated with wisdom. The sentiment that ‘challenging one’s own values and beliefs is a part of wisdom’ is described by the comment below:

*“Wisdom could involve applying one’s own values and beliefs to a complex situation, but it could also mean checking and challenging one’s own values and beliefs and coming to a different view – and knowing the difference is part of the wisdom dimension” (Informant 27).*

Similarly, another informant asserts that being wise requires the wise manager to always reflect on their own actions and direction:

*“Being wise is not always assumed to correct that they themselves in their own life. I think they do always evaluate on the whole... that they always sit back and say ‘What is going on with us?’ or ‘Where are we going?’” (Informant 30).*

According to informants, wisdom is not a matter of always making wise decisions; rather it is about how to avoid repeating the same mistakes by constantly learning from experience and mistakes. So, experience by itself does not necessarily lead to or facilitate the development of wisdom.

*“I think you can still be wise and make wrong decisions. [...] You can use your wisdom to make decisions. But that’s not always. You can be wise and make wrong decisions as well, as anybody can do that. I think wisdom is a bit more. It would be for example, if you make a wrong decision or a mistake, is being able to use that to [check] your values somehow and developing and growing from there. That would be how I define wisdom. [...] I think a wise manager would learn from [mistakes] and maybe teach others not to make the same mistake” (Informant 7).*

*“Those whom I consider as being wise, I think they are wise because they have not just experience, but they delve down to the real causes and effects of what they have learned from that experience” (Informant 35).*

In addition to learning from personal experiences, wise managers re-evaluate their own values. They know that they need to always check their own values systems against those held by others around them. This implies the mutual relation between awareness and reflection:

*“Wise managers do constant re-evaluation of their own values. They know that everything changes around them: people, market, technology, society’s values system, everything. So, wise managers always check their knowledge and beliefs for any changes” (Informant 35).*

Internal reflection helps one develop self-awareness. The sentiment is reflected by the following comment. In the comment, the informant says that in order to be wise he reflects on the decisions that he makes. Through the reflection, he tries to learn from his mistakes, and this, as he mentions, leads him to be ‘wiser’:

*“I am trying to be wise. I’d try it really hard to think through a logical process in decision making. I look back and I have a high level of self-analysis of ‘Was that a good decision? Was that a bad decision? What did I do wrong?’ And I’m not afraid to say ‘that was a bad decision. I shouldn’t have made that. I need to do something about it’. There are some times where, I make unwise decisions, and probably don’t address things as quickly as I should. And I have a reasonable awareness of that after the fact. And I do try to learn from that. So, I mean I think I am becoming a wiser decision maker as well” (Informant 18).*

The same interpretation is provided by another informant. Informant 9 links internal-reflection with self-awareness. He identifies self-awareness as the first personality trait for a wise manager to have. ‘Inability to reflect’ on one’s own capabilities is the characteristic that the informant attributes to unwise decision makers:

*“Of the psychological traits I would say self-awareness or lack of self-awareness is the first one. I have a question mark as to whether that is because of overconfidence, in fact... I am unsure whether poor decision makers or unwise decision makers are overconfident, but certainly I think overall they have an inability to reflect on their own capabilities” (Informant 9).*

In the following comment, the informant provides some questions that help with reflection. The questions also represent the category of ‘Consequences-anticipating’:

*“Being wise is sometimes just listening. It’s sometimes just absorbing. It’s sometimes making their comments. It’s sometimes being the fool, making the stupid remark, asking stupid questions. That’s sometimes wise, because today what happens, you want to think about tomorrow: ‘What am I doing today? What’s the impact on that tomorrow, on myself, my organisation, the people who are working for me, the community around me, the environmental situation, the environment?’, all of those sort of things” (Informant 15).*

It must be noted that learning from experience does not necessarily happen, based on personal experience. The following comment illustrates that learning from experience refers also to the lessons that are learned from others' mistakes. This brings up another type of reflection that is called, as discussed in the next section, external reflection.

*“Wisdom I mean would almost go without saying that it comes from experience. Um, and that can be either personal experience or watching others in decision making position” (Informant 4).*

#### **5.3.4.2 External Reflection**

Wise managers, according to the informants' perceptions, not only (re)evaluate their own decisions, practice, knowledge, abilities, values and beliefs, but they also constantly reflect on the dominant societal values and beliefs. They consider stakeholders' concerns and interests and make decisions for the greater good. It is important for a wise manager to know how others, who are somehow involved in the process of decision making, or affect or are affected by the process, react to the decision and the possible consequences of that decision.

*“When you have made the decision, how your team or your customers, or whoever is part of that process is going to respond. What they are thinking about what is happening” (Informant 16).*

The importance of considering society and the wider business community's perspectives and dominant values and beliefs is underlined by the following informant's comments:

*“You need to be outward-looking and understanding what is important to the community around you, their values and beliefs, [...] and being aware that in five years those things would be different. So, you have to continuously ask the question, have to be continually seeking information, trying to understand and then change the way you are doing things” (Informant 5).*

Due to the dynamic nature of cultures, and because of the continuous changes in societies' values and beliefs over time, wise managers engage in external

reflection constantly. They need to always be well aware of the contemporary values of the society within which they are operating.

*“If you look at history, there are decisions and approaches taken at that time in history that would have been considered very wise. But as our society values change over time, we look back and would say perhaps they weren’t ethical by today’s values, by today’s standards. So, [wisdom] is very much driven or shaped by the current contemporary values of a society within which we operate” (Informant 8).*

Another aspect of external reflection is learning from others’ mistakes. Informants considered wise managers as being able to learn from others. For them, wise managers not only learn from their own mistakes, they also try not to make the same mistakes as others. Informant 18 explicitly highlights that learning from experiences is not restricted to one’s own mistakes and successes. He asserts:

*“Wisdom is not just based on your experience, but also your ability to forward things through ramifications. [...] Wise managers need to have the ability to learn from other people’s mistakes and successes. So, not just your own personal experiences, but others as well. To look to others and see what they’ve done well and what they’ve done poorly, and to learn from those mistakes or successes. And to think how does that apply to me?” (Informant 18).*

Similarly, another informant mentions that the development of wisdom requires reflection through which the person would be able to learn from others:

*“I think wise managers learn from others, from others’ mistakes. Because by nature being wise would suggest that you have a degree of humbleness and openness. You didn’t get that wisdom when you are born, you got it from being open and exposing yourself to others. If you don’t invest in your wisdom, it’ll go away” (Informant 30).*

#### **5.4 Chapter Summary**

This chapter has presented the data and an explanation of the analysis process through which the raw data were interpreted. It explained how the categories have emerged over different coding phases (i.e. open, axial, and selective coding). The conceptual categories and the sub-core categories were identified and interpretively explained by providing some representative comments from informants. The interpretation is discussed in detail in the next chapter. Relevant literature is incorporated into the discussions.

<b>Part 1</b> The Nature of the Research Problem	Chapter 1	Introduction
	Chapter 2	Initial Review of the Literature
<b>Part 2</b> Methodology Design	Chapter 3	Research Methodology and Grounded Theory
	Chapter 4	Data Collection, Sampling, Interview Questions, Rigour, and Ethical Considerations
<b>Part 3</b> Findings	Chapter 5	Data Interpretation
	Chapter 6	Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)
<b>Part 4</b> Conclusion	Chapter 7	Implications, Limitations, and Directions for Future Research

## **Chapter 6 Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)**

### **6.1 Chapter Overview**

In the previous chapter the conceptual and core categories were introduced. This chapter discusses and elucidates the categories and their interrelationships in light of the wisdom and decision making literature, and the theory of Praxio-Reflexive Integrated Decision Making (PRIDM) is introduced. Multi-Perspective Consideration, Self-Other Awareness, Cognitive-Emotional Mastery, Reflexivity, and Praxis, which are the main elements of the theory, are discussed. Throughout the chapter, wherever appropriate, relevant comments from informants are provided to support the arguments by explicating and exemplifying the linkage between the discussion and the grounded data. At the end of the chapter a summary is provided.

### **6.2 The Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)**

PRIDM offers an understanding of wisdom that supports the general consensus about the multidimensionality of wisdom (Ardelt, 1997; Baltes & Staudinger, 2000; Birren & Fisher, 1990; Clayton & Birren, 1980; Küpers, 2007; Montgomery et al., 2002; Sharma, 2005; Webster, 2003). The understanding that PRIDM suggests is consistent with Kodish's (2006) definition of practical wisdom: "practical wisdom includes a mix of intertwined and equally important layers. It involves knowledge, perception, decision making, purposive action, grasp of the rational and the [non-rational] principles, character, virtue, experience, promotion of one's own personal interests, understanding of others and endorsing their interests, intuition, and transcendence" (p. 461). This understanding underlines the association and more importantly the integration of multiple qualities such as knowledge, experience, virtue, and action with and in wisdom and wise management decision making.

The emphasis of PRIDM on the integrated nature of wise management decision making accords with psychological studies of wisdom where the unitary and synthetic nature of wisdom is emphasised (Wink & Helson, 1997). Achenbaum

and Orwoll (1991) provide a model of wisdom and argue that the enhancement of wisdom requires the development of all the areas of personality. Orwoll and Perlmutter (1990) argue for the importance of a synthesis of cognition and affect with wisdom. Kunzmann (2004) emphasises that wisdom is different from other personal characteristics, as wisdom is “integrative and involves cognitive, affective, and motivational elements” (p. 505). Similarly, Ardelt (2004) and Bergsma and Ardelt (2012) conceptualise wisdom as an integration of cognitive, reflective and compassionate personality traits. König and Glück (2013) confirm the conceptualisation of wisdom as an integrative quality of cognition, reflection, and affect. Likewise, Pascual-Leone (1990) stresses that the integration of one’s affect, cognition, conation and experience is important in wisdom. And Kramer (1990, p. 296) argues for an “affective-cognitive integration” which is the integration of dialectical and relativistic suppositions about affect, thinking, and reflection. Even in some less secularised Asian traditions, as Baltes and Kunzmann (2004) mention, wisdom is treated as an integration of mind and virtue.

The findings of this study suggest that wisdom as a multidimensional quality manifests in management decision making through the *integration* of various qualities. The qualities include *Multi-Perspective Consideration (MPC)*, *Self-Other Awareness (SOA)*, *Cognitive-Emotional Mastery (CEM)*, *Reflexivity*, and *Praxis*. MPC, SOA, and CEM are integrated and manifested through reflexivity and praxis (Figure 6-2).

Qualities	Definition
Multi-Perspective Consideration (MPC)	The degree to which multiple perspectives, including societal values and beliefs as well as stakeholders’ interests, are <i>integrated</i> in making a management decision. Moreover, MPC refers to the extent to which possible consequences of the decision are taken into account, and ethical codes are considered.
Cognitive-Emotional Mastery (CEM)	The extent to which the decision maker’s cognitive abilities and emotional qualities are <i>integrated</i> throughout the decision making process.

Self-Other Awareness (SOA)	SOA refers to the degree that the decision maker's self-awareness (awareness of the internal world) is <i>integrated</i> with his/her Other-awareness (awareness of others, and the external world).
Reflexivity	Reflexivity <i>integrates</i> Internal and External reflection. Reflexivity is “making aspects of the self strange: focusing close attention upon <i>one's own</i> actions, thoughts, feelings, values, identity, and their effect upon others, situations, and professional and social structures” (Bolton, 2010, p. 14).
Praxis	<i>Integration</i> of MPC, CEM, and SOA in practice. In the literature, Praxis refers to morally committed, socially responsible, right conduct, and embodied experiences and actions (Kemmis, 2012; Küpers & Pauleen, 2013; Russell & Grootenboer, 2008).

**Table 6-1: Qualities Involved in Wise Management Decision Making, and their Definitions**

Table 6-1 outlines definitions of the qualities that are involved in making wise management decisions. In the following sections, the qualities and their interrelationships are discussed in detail.

### **6.2.1 Multi-Perspective Consideration**

The findings suggest that wise management decisions are made based on MPC. MPC refers to the extent to which a management decision is based on the consideration of various aspects, e.g. short- and long-term consequences, alternative points of view, and ethical codes. The different aspects are brought into consideration of a wise management decision through three qualities: ‘consequence-anticipating’, ‘perspective-taking’, and ‘ethics-considering’ (Figure 6-1). According to the findings, wise management decisions are based on a true understanding of the bigger picture and the subsequent impacts of the decision, alternative points of view, and individual and communal respected values and beliefs. MPC leads wise management decisions not only to result in the achievement of the manager's and organisation's desired goals, but also to enhance the well-being of those, either inside or outside the organisation, who are affected by the consequences of the decision. In this sense, wisdom manifests in management decision making as the ability to see the bigger picture (Cammock,

2003) and beyond the immediate horizon (Awad & Ghaziri, 2004), and enables the decision maker to consider long-term and far-reaching outcomes and consequences of their decisions and actions (Ackoff, 1999; Hays, 2007).

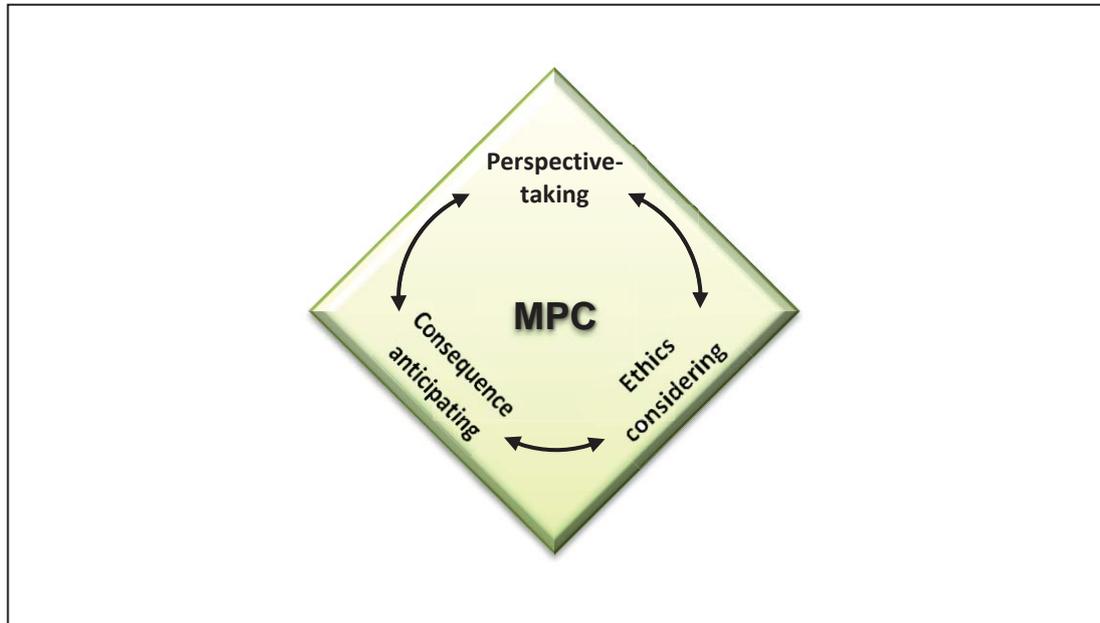


Figure 6-1: Multi-Perspective Consideration (MPC)

According to the findings, wise management decisions are based on an integration of different, and sometimes conflicting, values and interests through the individual and the communal levels. The individual level refers to either an employee *vis a vis* the organisation, or an organisation *vis a vis* the wider community or society within which the organisation is operating. The communal level refers to the wider community as a whole, whether it is the organization *vis a vis* individuals, or society *vis a vis* organisations and individuals. Wisdom, engaging a “holistic and integrative understanding of the world around us” (Lombardo, 2010, p. 34) serves as a “means to choose one’s behaviour based on knowledge and shared values, in order to enhance the well-being of all and awareness that personal actions have social consequences” (Blasi, 2006, p. 407). Being aware of these possible consequences, taking alternative perspectives into account, and considering ethical codes, link MPC to *praxis*.

As discussed later in this chapter (in section 6.2.5, ‘Praxis’), wise management decision making requires deliberation about the consequences of the managers’ actions, especially in uncertain situations where making decisions may not be very

easy due to the high likelihood of negative impacts on others. This means that wise management decisions are based on consideration and anticipation of the consequences of the decision (the conceptual category of ‘Consequence-anticipating’). As Kemmis and Smith, (2008a) put it: “to do the right thing (*praxis*) in uncertain circumstances, when we are faced by perplexity or puzzled about what one should do in any particular circumstances, requires *deliberation* – consideration of what one is *really* doing in this situation, and what different kinds of consequences will follow for different people if one decides to do one thing, rather than another” (p. 16). PRIDM suggest that understanding the reaction of those who are affected by the decision is important for making right decisions (Bazerman & Moore, 2009).

PRIDM’s suggestion of the criticality of MPC in wise management decisions concurs with Intezari and Pauleen (2013a), Grossman et al. (2012), Erikson (2009), Raznitskaya and Sternberg (2004), and Kitchener and Brenner (1990). Intezari and Pauleen (2013a) argue that individual and communal short- and long-term interests are harmonised by wisdom. Nonaka and Takeuchi (2011) note that knowledge alone does not result in wise leadership, and therefore businesses, as social phenomena, need to consider people’s goals, values and interests. PRIDM also supports Sternberg’s (1998) Balance theory, in that considering both individual and communal interests over the short and long terms is inextricably linked to wisdom.

Similarly, Grossman et al. (2012) and Kitchener and Brenner (1990) expound on the importance of MPC in wisdom. Grossman et al. (2012) argue that wisdom reflects the recognition of multiple perspectives. Kitchener and Brenner (1990) assert that in solving difficult problems, wise people are able to recognise, evaluate, and synthesise alternative interpretations and offer a solution to the problem. Biloslavo and McKenna (2013) refer to this quality as ‘cognitive complexity’ and explain that cognitive complexity refers to the decision maker’s ability “to view a given situation from multiple perspectives while screening out irrelevant factors, flexible thinking and possessing a multidimensional view of the world” (p. 118). Waddock (2010) argues that wise leaders can diagnose circumstances in a way that truth, creative possibilities, and morality are

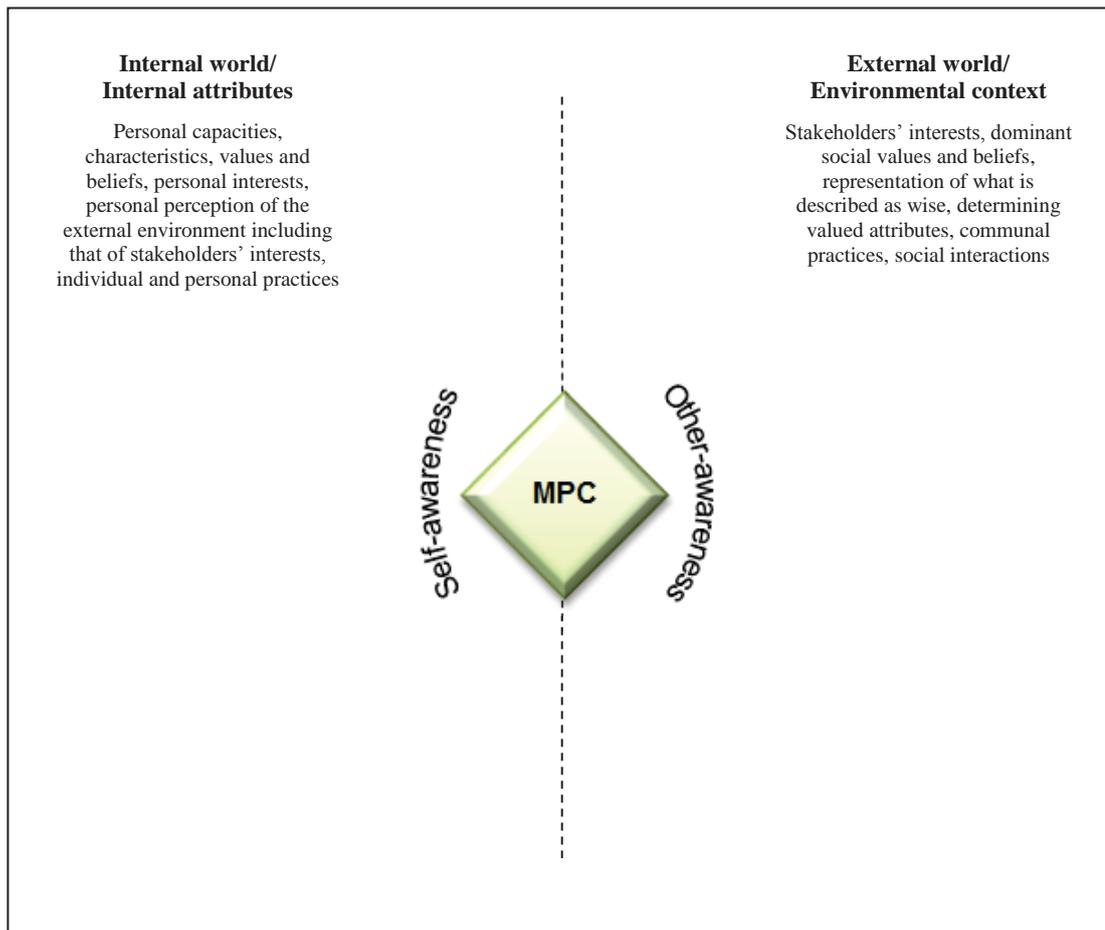
integrated. And Ackoff (1999) defines wisdom as “the ability to perceive and evaluate the long-run consequences of behavior” (p. 14).

MPC underlines the importance of ethical considerations in wise management decision making. This sentiment is supported by the literature, in that wisdom and ethics are intimately interlinked (Goede, 2011, p. 36). PRIDM suggests that ethics is a critical element of wise management decisions. Maddalena (2007) argues that good decisions, being congruent with organisation and social values, are “grounded in accepted values and management practice” (p. 72). Similarly, Nonaka and Takeuchi (2011) argue that decision makers will not be able to decide what is good or bad without a foundation of values.

MPC, according to the findings, is based on an integration of the decision maker’s awareness of self and the surrounding environment (SOA), as well as mastery in cognition and emotion (CEM). Consideration of ethical codes, as a part of MPC, engages one’s Emotional mastery in the form of empathy. Taking different perspectives and alternative points of view, unifying diverse interests at the individual and communal levels, and considering one’s own values and the societal shared values, all require a high level of awareness of self and others. SOA is discussed in the following section.

### **6.2.2 Self-Other Awareness (SOA)**

SOA refers to an integration of the decision maker’s inward-awareness, which is an awareness of their ‘Internal world’ (self-awareness), and outward-awareness, which is an awareness of the ‘External world’ (Other-awareness) (Figure 6-2). The ‘Internal world’ corresponds to one’s internal attributes which includes behavioural and cognitive characteristics, personal value systems, perceptions, capacities, and abilities. ‘External world’, on the other hand, refers to one’s surrounding environment and the environmental context which represents stakeholders’ interests, as well as community values and beliefs. According to the findings, the wise manager always considers the internal and external world together and continuously evaluates and re-evaluates his or her decision making position, knowledge, beliefs, values system, and attributes against both their Internal world and the External world.



**Figure 6-2: Self- Other Awareness (SOA)**

Self-awareness refers to one’s understanding of one’s personal (in)abilities, knowledge, what one does not know, strengths and weaknesses, values and interests, as well as personality traits and behavioural characteristics. The findings show that wise managers benefit from an accurate understanding of their own personal capacities, characteristics, interests, values and beliefs, and practices, as well as that of personal perception of the external environment including stakeholders’ interests. Hays (2010), Ardelt (2004), Sternberg (1998), Bigelow (1992), Clayton and Birren (1980), and Meacham (1983) argue that the essence of wisdom is rooted in recognition of one’s limitations and fallibility of knowledge. Meacham (1990) emphasises that awareness of one’s own fallibility, and of what one does not know, is an important aspect of wisdom. Drawing on the Aristotelian approach to wisdom, Korac-Kakabadse et al. (Korac-Kakabadse et al., 2001) hold that having a “healthy vision of self”, which is constructed based on knowledge and experience, is important for leaders (p. 209). The wise person ‘probes inside

knowledge' and excels in metacognition, i.e. knowledge about knowledge, which implies that wise people (Sternberg, 1990a, p. 152):

- Know what they know,
- Know what they do not know,
- Know what they can know given the limitations of present understandings and of knowledge itself, and
- Know what they cannot know, again given the limitations imposed on them.

Emphasising the importance of awareness in decision making, Bazerman and Chugh (2006) refer to 'bounded awareness' which leads the decision maker to overly focus on important information and to unknowingly ignore certain critical information. Bounded awareness may lead executives to make unsound decisions (Bazerman & Chugh, 2006) as it limits the decision maker's MPC. The findings of the current study suggest that awareness of what one does not know, and of the wrongness of one's own ideas, as well as admitting the fact that no one is perfect, in that he cannot know everything, is a prerequisite for one to be able to make wise decisions. Lack of awareness of what one does not know or, as Bazerman and Chugh (2006) emphasise, lack of awareness of the information that might remain out of focus, leads managers to fail to make appropriate decisions at a given time. The findings of this study show that wise managers admit when their ideas or thoughts are implausible or wrong. This awareness helps wise managers to be able to attract any ideas that might be useful in addressing a problem at hand. For example, one informant explicitly asserted that in order to be wise, managers need to admit when they are wrong, although it might be challenging: "The managers who are wise, they admit they are wrong when they are wrong" (Informant 34).

According to the findings, SOA helps wise managers with acquiring required knowledge and information. By knowing what one does not know, one would be able to seek advice to reduce that knowledge gap, for example. Informants believed that wise managers surround themselves with those who can complement the manager's knowledge and abilities. As one of the informants mentioned, wise managers do not consider themselves as being perfect, knowing everything, and

they are aware of the fact that there may always be the need to get advice from or consult others: “a wise manager would have people whom they trust around them. Like a really strong team. Who are not afraid to come and say ‘Hey, look! There is a little problem brewing here, we need to do something about it’. A wise manager would say: ‘That’s awesome. Thanks for bringing that to me. Let’s deal with it’. And an unwise manager would go: ‘It will be fine. Don’t worry about it’, and just ignores it. So, a wise manager would surround themselves with wise people” (Informant 18). Consistent with these findings, Baltes and Staudinger (2000) and Sternberg (1986) argue that wisdom is associated with such competences as the ability to listen to others, evaluate and weigh advice, and to give advice to others.

SOA also refers to the decision maker’s awareness of societal values and beliefs, which is critically important for making wise management decisions. The awareness of the values and beliefs that are respected by the wider community is important in making wise management decisions, because if the manager exhibits the personality traits and attributes that are valued and ascribed as wise in any given environment, then the manager is understood to be wise. The person may not be regarded as wise if these personality traits and behavioural characteristics are devalued or ignored (Sternberg, 1990a). Based on the awareness that is acquired through reflexivity, the wise manager may or may not change, develop or fortify their attributes and values to match the environmental context. This accords with Sternberg’s (1998) balance theory of wisdom, in that the wise manager may take one of three different responses to the environmental context: change, adaptation, or adopting a new environment.

In wise management decision making, self-awareness is accompanied by the manager’s (decision maker) understanding of the external world. Other-awareness, which is an outward-awareness, refers to the manager’s (decision maker) understanding of their surrounding environment. Other-awareness is critical in making wise management decisions. As Sharp (2007) put it, “It is a serious mistake – a very poor judgment – to think that one can think in terms of what is good for others who are different from oneself, without knowing what they think and believe is good for them” (p. 301). Robinson (1990) points out that knowing what values, principles and priorities one holds is the critical part of

wisdom. This quality enacts a fundamental role when it comes to the praxis of decision making.

Awareness of one's own and others' attributes and characteristics as well as that of the surrounding environment enables managers to make sound judgments and decisions, interact empathically with others, and effectively act in a given context by bearing in mind, and unifying, different points of view. As Stacey (2003) points out, people's awareness of self and others is important in individuals' interrelationships: "the nature of interaction between people depends upon the extent to which those people are aware of the nature of their own and each other's behaviour" (p. 134). Hess and Bacigalupo's (2011) understanding of self-awareness represents the interconnection of self-awareness, Other-awareness and empathy: "being self-aware also implies acknowledging one's weaknesses and having the confidence to recognize the strengths of others in decision making. Self-awareness also includes the skill of recognizing the impact of one's styles and behaviours on others" (p. 716). One informant points out:

*"I think self-awareness gives them the ability to see how their behaviours impact other people. And how they can use their behaviour in a positive way to inform decisions, or to judge before making a decision. And then that helps in the communication of their decisions" (Informant 21).*

In addition to enhancing the decision maker's understanding of the issue at hand and the context of the problem upon which the decision must be made, SOA (including awareness of others' abilities and knowledge) enables the wise manager to know where to seek advice or who to advise when needed (Holliday & Chandler, 1986; Korac-Kakabadse et al., 2001; Kramer, 1990).

Awareness is inter-connected with other qualities involved in wise management decision making. For example, Kramer (1990) asserts that "one must be able to first become aware of and then transcend one's projections before one can develop both the empathic skills and the cognitive processes associated with wisdom" (p. 296). The findings show that SOA is linked with emotion. As reflected by the following comment, self-awareness helps with acquiring better understanding of emotion-related characteristics in relation to one's decisions: "I think that if you

understand yourself, you understand what motivates you, and what is driving the decision that you are making. And that, understanding of self is the thing that allows you to understand whether or not the motives are the right ones. And that is the important thing” (Informant 31). Development of CEM is less likely to be achieved without incorporation of SOA. That is, in order for the manager to be cognitively and emotionally competent, he or she needs to be aware of self and the surrounding environment. CEM, on the other hand, helps a person enhance his or her SOA. The decision maker who is for example not overly confident is more likely to realise and admit their own limits of knowledge and experience.

Enhancement of SOA (and CEM, as discussed in the next section) depends on a high level of reflection. In the ‘Reflexivity’ section, it is suggested that an integration of internal and external reflection enhances the decision maker’s awareness of the problem at hand.

Moreover, SOA is interconnected to MPC. Based on SOA, wise managers are able to act effectively in a given context, interact empathically with others, and make sound judgments and decisions by bearing in mind and unifying different points of view. This interconnection also helps the decision maker with the most important decision: “Who is the best decision maker for this decision?” (Hess & Bacigalupo, 2011, p. 714). According to the findings, SOA can enable managers to gain a more comprehensive understanding of the interconnections between themselves, their organisations and the wider community (i.e. reflexivity, as discussed later in this chapter, section 6.2.4), which helps them establish a good relationship with others and their surrounding environment.

### **6.2.3 Cognitive-Emotional Mastery (CEM)**

The findings showed that wise management decisions are based on an integration of the manager’s cognition and emotion. Reason and emotion are harmonised by practical wisdom (Roca, 2007). Harmonisation here means considering both reason and emotion when making a decision at a given time. Harmonisation does not necessarily mean equal attention to either reason or emotion. Rather, the decision maker may rely more on reason than emotion on one occasion and vice versa on another. Making wise management decisions requires the manager to not only have knowledge and knowledge related qualities, but also be able to consider

emotions when making decisions. The importance of emotions in decision making is such that some neuroscientists such as Damasio (2005) empirically demonstrated that, when emotion is absent in decision making, it is almost impossible to make any decisions at all. Similar findings are reported in the wisdom literature. Baltes and Staudinger (2000), for example, argue that wisdom refers to the balanced and coordinated interplay of intellectual and motivational aspects of human functioning. Kramer (1990) takes an organismic framework (of which the central tenet is integration) in conceptualising wisdom and emphasises that cognition and affect are integrated and interdependently involved in wisdom.

CEM is one's integrated mastery of both cognition and emotions. CEM refers to the qualities that are related to the wise person's personal characteristics, and abilities to handle their knowledge and emotions, when making decisions, at any given time. As Meacham (1990) argues, wisdom is not knowing specific facts (in PRIDM, Cognitive mastery); rather it means knowing while balancing excessive confidence and excessive cautiousness (in PRIDM, Emotional mastery). CEM suggests that management of human variables such as logic and emotion is crucial to enhance the quality of decisions and the decision making process (Hess & Bacigalupo, 2011).

Cognitive mastery is associated with the cognitive aspect of wisdom which is the desire to know the truth (Bergsma & Ardelt, 2012). However, Cognitive mastery is not just a desire to know the truth, but is also concerned with one's knowledge and experience, and the extent to which one is able to apply that knowledge and experience at a given time, as well as to gain required knowledge and information. As Boyatzis (2002) argues, effective leaders and managers are able to implement their knowledge and make things happen. Cognitive mastery also refers to the degree to which one is insightful<sup>1</sup> (as opposed to superficial) and able to think outside the square (not being restricted to the conventional thought frameworks at a given time) in dealing with issues and problems. In psychology, 'insight' refers

---

<sup>1</sup> Insight can come through imagination and creativity (often referred to as 'Aha' moments), and/or normal cognitive functions of reason. In this study, it is 'insight' itself that is discussed not the sources of 'insight'. Intezari and Pauleen (2013b) define insight as a "deep understanding, concerning one's own condition(s) in a particular situation at a given time; as well as the capacity to explore possible meaningful relationships between apparently unrelated events and phenomena pertinent to that situation. Put simply, insight enables one to comprehend the obscure aspects of situations and events, recognize their interrelationships, and gain a true, deeper and wider understanding of the bigger picture and of the dynamics taking place" (p. 160).

to the understanding one obtains of the functional relationships between component parts of a specific situation in a particular way (Marková, 2005). Wisdom, however, is not a mere cognitive phenomenon, as it also involves emotional and motivational characteristics (Baltes & Kunzmann, 2003; Marker, 2013; Webster, 2007).

The findings showed that wise management decision making is, alongside with cognition, associated with Emotional mastery. Emotional mastery is concerned with the emotional involvement of the decision maker in the management decision making process in a way that emotions are considered in, yet do not overly dominate, decision making. George (2000) argues that emotion can enhance cognitive processes and decision making by directing the focus of attention, facilitating certain kinds of cognitive processes, helping with choosing among alternatives and making decisions, as well as broadening perspectives on problems. Hall (2010) points out the growing scientific consensus about the role of emotion in decision making, and notes that “emotion not only colours our perceptions and decisions; it appears, at the level of neurological circuitry, to be deeply embedded in the machinery of thought” (p. 65).

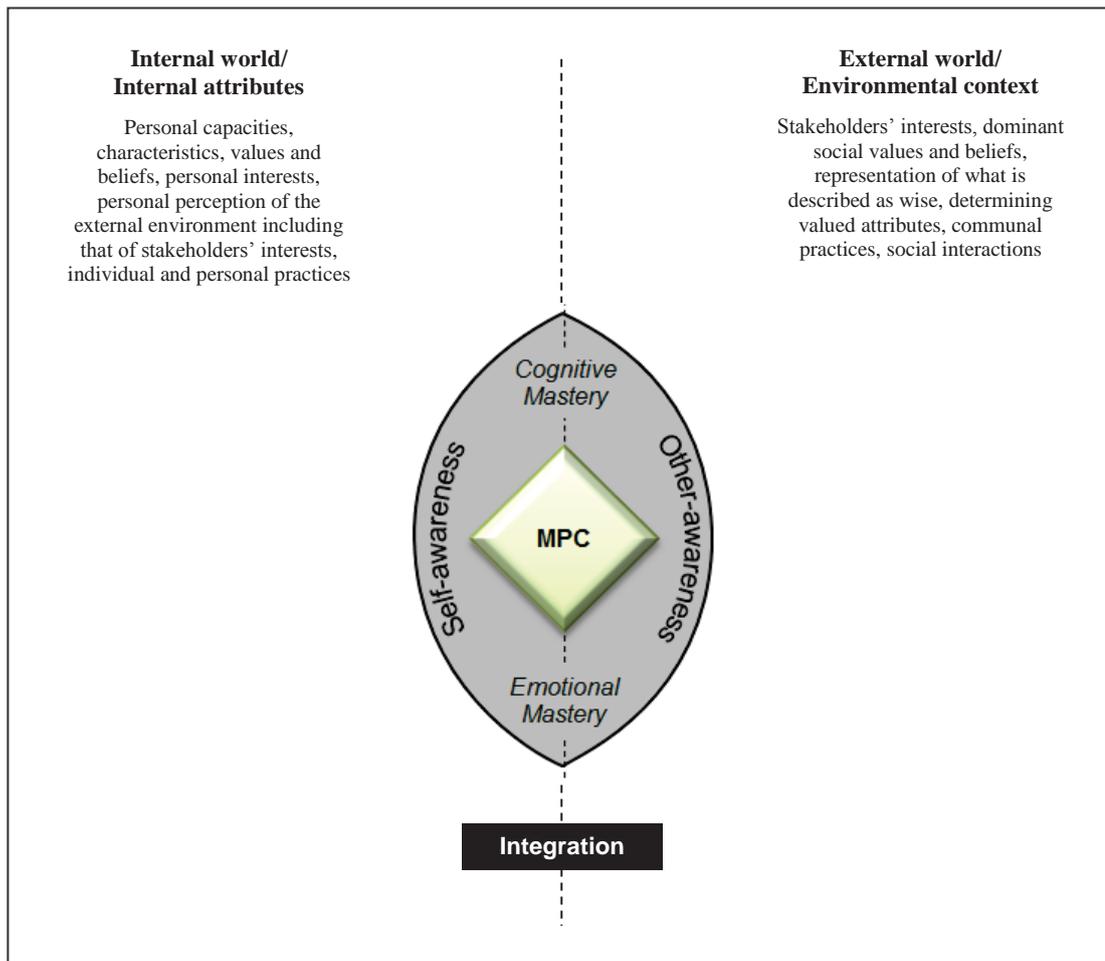
Emotional mastery refers to the characteristics or qualities that are relevant to the wise manager’s emotions, and the degree to which the manager is able to regulate his or her emotions and resist overwhelming emotion (Matthews, 1998), and is concerned about the consequences of their decisions and action on others (Blasi, 2006) when making decisions. Emotions are powerful, and as reflected by the following comment, lack of confidence is more likely to constrain wise decision making than lack of information:

*“If you’re trying to make decisions on things that you need information about, [and] you can’t get that information, clearly that’s a constraint. But I think, wise decision making is at least as often constrained by not having the courage to be able to make a decision, rather than having insufficient information. Quite often people seek more and more information to improve their confidence level. Sometimes insufficient information and sometimes insufficient*

*confidence to be able to say that I've actually got enough now"*  
(Informant 6).

As part of Emotional mastery, wise decision making requires contemplation. To make a wise decision, the decision maker should resist the tendency towards making rash decisions. This concern underlines the link between CEM and MPC. Considering multiple perspectives requires taking time and contemplation. Murnighan et al. (2001) argue that people's immediate reactions to decision situations are typically self-interested. Moore and Loewenstein (2004) point out that in situations where self-interest and professional responsibilities clash, self-interest provokes automatic responses to situations. Because the automatic responses are not controlled by conscious awareness, the individual's decision making and judgment are influenced by the automatic response. Contemplation and patience before decisions is critical in making appropriate decisions as they help the decision maker balance different aspects of the decision making situation (e.g. balancing economic considerations and personal values) (Bazerman & Malhotra, 2006; Keeney & Raiffa, 1993).

Hall (2010) argues that wisdom begins with a balance between passion and detachment (emotional regulation). According to Birren and Fisher (1990) wise people show "emotional mastery" such that their decisions are not dominated by such passions as anger and fear (p. 321). Birren and Fisher (1990) go on to argue that, since wise people are not completely detached from the situation, they maintain a reflective state of mind that enables them to generate solutions to problems. Figure 6-3 illustrates the integration of SOA and CEM.



**Figure 6-3: Integration of MPC, CEM, and SOA**

CEM allows wise managers to incorporate their feelings about the issues at hand into their decisions, and integrate them with the logical aspects of their decision making ability.

The integration of Cognitive and Emotional mastery in light of wisdom resonates with McKenna et al. (2006). Based on a study of Western philosophy of wisdom and contemporary psychological studies, McKenna et al. (2006) list principles that, they argue, identify wisdom in management. According to the principles, wisdom in management is “based on reason but specifically incorporates the non-rational; a humane and virtuous teleology; practical action; and articulate communication” (p. 287). McKenna et al. (2006) assert that based on reason, wisdom “evaluates the salience and truth-value of logical propositions when applying reason to decision making”, which “requires clear understandings of ontological categories that describe substance, process and quality to demonstrate, through logical argument, correct conclusions” (p. 287). They also argue that,

incorporating the non-rational, wisdom “acknowledges the sensory and visceral as important components of decision making, has a metaphysical, even spiritual, quality that does not bind it absolutely to the rules of reason, respects and draws upon experience and tradition as a means of apprehending who and what we are” (p. 287).

The findings also support Birren and Fisher’s (1990) understanding of wisdom as an amalgamation of cognition, affect, and conation (volition). They argue that wisdom develops as a balance of the three qualities, which results in wise decisions as a wise product of the balance. As Mathews (1998) puts it: “a wise person weighs the knowns and the unknowns, resists overwhelming emotion while maintaining interest, and carefully chooses when and where to take action” (p. 211). Similarly, Intezari and Pauleen (2013a) argue that in order to be able to make wise decisions and take wise actions in the business world, one needs to draw an appropriate balance between certainty and doubt.

The findings concur with Aristotle’s notion of the doctrine of the mean (*the Nicomachean Ethics 1107a*, 1-10), which posits that “excess and deficiency destroy perfection” (*the Nicomachean Ethics 1106b*, 12). The mean is an appropriate middle between two vices (Kleimann, 2013). The mean is not universal, but it is determined by the wise person (*the Nicomachean Ethics 1107a*, 1). That is, wise people behave in a mean state, and this is true of all other virtues. For instance, wise people are neither cowardly nor rash. So, the integration of Cognitive mastery and Emotional mastery does not mean that cognition and emotion are moderated in wise management decisions, but that the wise manager relies on various proportions of cognition and emotion depending on situations. In some circumstances the manager may need for example to make more rational decisions, while in others more intuitive. The balance between the two qualities also may vary from one person to another. This sentiment that managers need to be able to recognise when to rely on logic and when to rely on emotions in the decision making process is expressed in the following comment as well:

*“If you entirely remove emotion from the decision making process, it is probably too dry. There are times when taking emotion out of it entirely and particularly in terms of decisions that affect people in*

*your organisation, or if you are putting a programme together, that is likely to impact people on the personal basis. I think there are times where you have to apply more logic. I mean there is a balance. [...] you have to be so pragmatic on one hand and understand where emotion is helpful within the decision making process” (Informant 24).*

CEM cannot develop apart from SOA and Reflexivity. One’s cognitive process and empathy, as part of CEM, requires awareness of both self and others and reflection. This awareness is enhanced through reflection and reflexivity. Bergsma and Ardelt (2012) argue that reflectivity reduces self-centredness and, as a result, increases one’s compassionate love and sympathy for others by leading one to have deeper understanding of the motives and behaviours of self and others.

Moreover, as the findings showed, wise managers are confident about the decisions that they make. The confidence, according to the findings, is based on the manager’s awareness of their knowledge and abilities. ‘Confidence’ as part of ‘emotional mastery’ is developed based on awareness and reflection. For example in one comment (re-presented here from Chapter 4), both Self-awareness and Cognitive mastery are regarded as qualities that enhance confidence: “a manager who wants to make a wise decision needs to have some confidence in their own ability to sort of assimilate information and apply it to situation” (Informant 16). In this sense, CEM and SOA are inextricably interconnected. Similarly, a wise manager’s CEM is interconnected with reflection and reflexivity:

*“To make a wise decision I look at a problem and ask myself ‘is this a problem I actually have experience or the knowledge or the confidence to make a call on it? Or should I go somewhere else?’” (Informant 6).*

#### **6.2.4 Reflexivity**

According to the findings, wise management decisions require the manager to continuously reflect on their internal and external world. Reflection is an in-depth consideration of phenomena or events by which the person attempts to understand the situations, his or her thoughts and feelings about it, as well as of those who are

involved, in order to make situations and people more comprehensible, considering all the scenarios from as many angles as possible (Bolton, 2010). According to Bolton (2010), reflection “involves reviewing or reliving the experience to bring it into focus. Seemingly innocent details might prove to be key; seemingly vital details may be irrelevant” (p. 13).

It is evident in the findings of this study that wisdom is associated with reflection. Especially in making hard choices where the consequences of the decision influence others’ lives, reflection becomes a critical part of the decision making. Allee (1997) argues that a person making decisions and solving problems is trapped in a ‘data addiction’ loop if they attempt to solve the problem by objectifying knowledge and information, and merely relying on data. Allee (1997) suggests that “the only way to break this addictive cycle is by moving to a higher level of self-awareness, self-reflection, and creative choice” and that “the real solution for difficult decisions often is not more information, but more *reflection*. The ultimate solution for hard choices is not an *Information* solution, it is a *Wisdom* solution” (p. 14). According to Allee (1997) wisdom clarifies the decision maker’s values and purpose, and guides the decision maker to his or her best choices.

The findings of this study show that wise managers continuously evaluate and re-evaluate their own position in the decision making process against *Internal world and External world* contexts. Wise management decisions are based on two types of reflection: Internal reflection, and External reflection (Figure 6-4). By internal reflection, wise managers make decisions based on consideration and evaluation of their own attributes, capacities, values and beliefs, and by reflection on their own previous mistakes, successes and experiences. Internal reflection helps the decision maker acquire better understanding of self and personal capacities, (in)abilities, and knowledge by comparing one’s understanding of self with the realities of the external world. This sentiment is pointed out by one informant:

*“I think self-awareness, the ability to understand one’s own fallibilities and weaknesses. What I am talking about fits into experience. So, experience is a great teacher. Experience teaches us where we have made mistakes, if we can learn from our mistakes if we*

*can look back at our life, and we can say 'I did this, this and this. That worked, but those two didn't', that is part of self-awareness. It is a part of knowing where our limitations are, it is part of knowing where our strengths and weaknesses are, but it is also part of recognising what we did that worked and what we did that didn't work. Self-awareness is absolutely crucial" (Informant 29).*

The re-evaluation, however, is not limited to assessing one's own understanding, knowledge, beliefs and value systems, but also includes reflecting on the dominant values and beliefs of the external world (External reflection). External reflection is reflecting on society's values and beliefs, stakeholders' interests, and other's capacities, (in)abilities, and knowledge in relation to a particular decision at a particular time. Through external reflection wise managers can acquire better understanding of their surrounding environment which can help them overcome their possible internal shortcomings.

Reflection enhances one's awareness of self and others (Bergsma & Ardelt, 2012). This is evident in the findings of the current study that wise managers enhance their awareness through reflection, which is critical in making wise management decisions. Waddock (2010) emphasises that reflective practice is fundamental for developing wisdom, as it enhances one's awareness of self, others and systems. She argues that wisdom comprises three main components: moral imagination (considering the consequences of one's actions), systems understanding (realistic assessment of situations), and aesthetic sensibility (which combines logic/reason with perception/imagination). Waddock (2010) suggests that for one to be able to "see" the world "holistically" through these three components, one needs to have awareness of self, others, and systems.

This implies that reflection enhances the wise manager's MPC. Bergsma and Ardelt (2012) define the reflective dimension of wisdom as "a perception of phenomena and events from multi perspectives" that requires self-insight, self-examination, and self-awareness (p. 484). Csikszentmihalyi and Rathunde (1990) argue that wisdom from both traditional and contemporary discussions of wisdom is associated with "holistic cognitive processes that move beyond a fragmented and impassive relativity, toward a more 'universal' or metasystemic awareness of

interrelated systems” (p. 31). They emphasise that the capacity for self-examination and reflectivity provides the impetus to escape from relativistic intellectualisation.

Evident in the results of this study, wise managers use a combination of both internal and external reflection, ‘reflexivity’. Reflexivity, however, goes beyond the simple combination of the two types of reflections, and is more complex than just being reflective (Edwards & Küpers, 2014; Taylor & White, 2000). Reflexivity represents a mirror to practice, and enables “the practitioner to access, understand and learn through his or her lived experiences and as a consequence, take congruent action towards developing increasing effectiveness within the context of what is understood as desirable practice” (Johns, 1995, p. 226).

It is difficult to capture a single, generally agreed upon, definition of reflexivity, as it has been studied in divergent fields (Chia, 1996; Cunliffe, 2003; Hall & Callery, 2001; Holland, 1999; Taylor & White, 2000), and presented as different types and processes (Holland, 1999; Lynch, 2000). Reflexivity and reflectivity are two different things. Fook (2002) asserts that the difference between the two concepts is because they have emerged from two different fields, with reflectivity emerging from educational discourse and professional practitioners such as Argyris and Schön (1976), and reflexivity from social science researcher discourse, such as ethnographic researchers. Given the original fields of the two concepts, Fook (2002) concludes that reflectivity is “a *process* of reflecting upon practice”, while reflexivity is “a *stance* of being able to locate oneself in the picture, to appreciate how one’s own self influences [actions]” (p. 43), and how the actions affect other people (Bolton, 2010). According to Bolton (2010), reflexivity is “making aspects of the self strange: focusing close attention upon *one’s own* actions, thoughts, feelings, values, identity, and their effect upon others, situations, and professional and social structures” (p. 14).

While reflection is “learning and developing through examining what we think happened on any occasion, and how we think others perceived the event and us, opening our practice to scrutiny by others, and studying data and texts from the wider sphere” (Bolton, 2010, p. 13), reflexivity is “an ‘unsettling’, i.e., an insecurity regarding the basic assumptions, discourse and practices used in

describing reality” (Pollner, 1991, p. 30). Reflexivity “opens up to scrutiny what we take for granted in our practice” (Taylor & White, 2000, p. 138), with appreciation of the impacts of one’s action on others (Fook, 2002).

Reflexivity, compared to reflection, however, is not just questioning one’s own knowledge and action, it is questioning how one’s presence and perspectives influence the actions and knowledge that are taken and created (Fook, 2002). It is important to note that the two, nevertheless, are not mutually exclusive (Fook, 2002). As illustrated in Figure 6-4, reflexivity, being at the nexus of internal and external reflection, captures the integration of MPC, SOA, and CEM, and helps the decision maker to locate him or herself in relation to the internal world, the wider environment and the problem at hand. Reflexivity, according to Bolton (2010) is finding ways “to question our own attitudes, thought processes, values, assumptions, prejudices and habitual actions, to strive to understand our complex roles in relation to others” (p. 13).

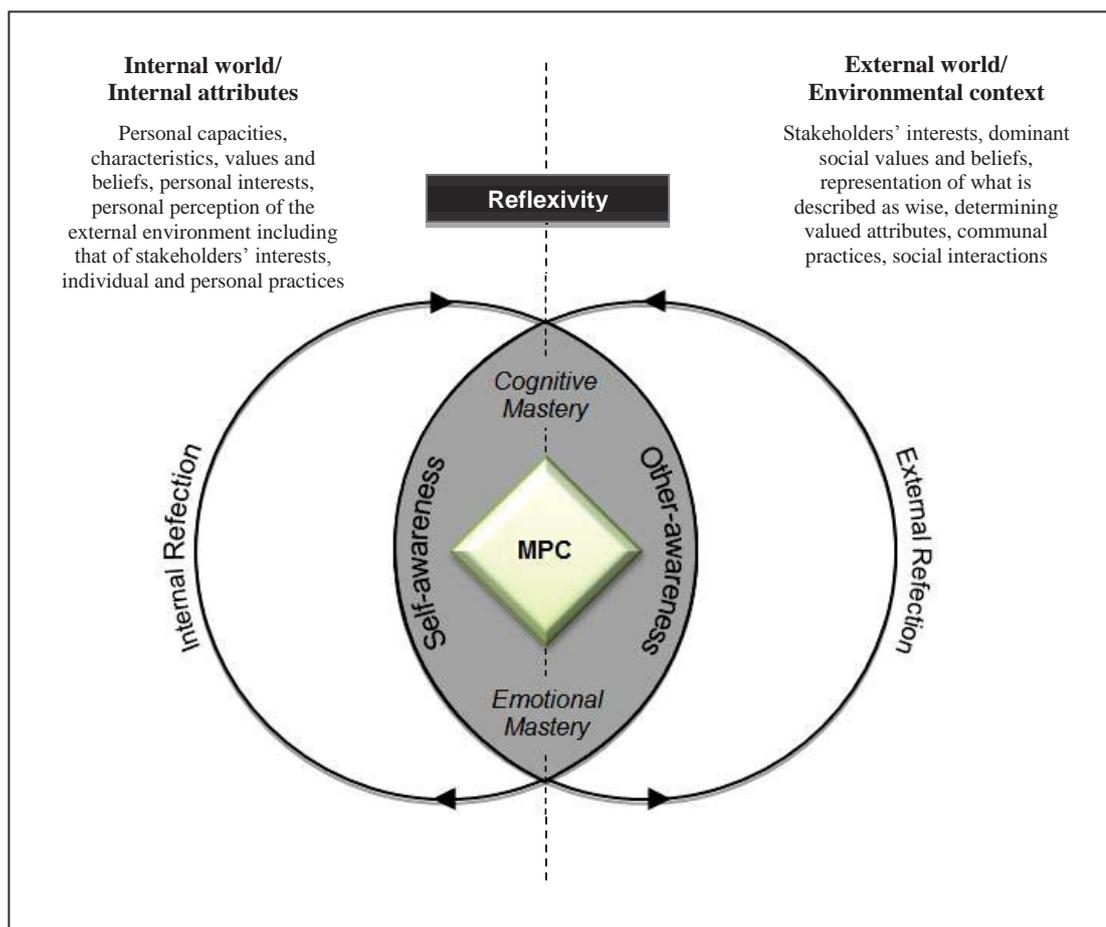


Figure 6-4: Reflexivity

Reflexivity engages internal and external reflection and links both internal and external worlds together through the wise manager's awareness of the close interrelationship between self and the surrounding environment. Reflexivity is questioning presence, perspectives (Fook, 2002), and one's interrelationship with the wider community and the social world, as well as the way an individual accounts for his or her experience (Cunliffe, 2003). In this sense, wise management decision making is based on the questioning of the core assumptions, and ways of being and doing. Edwards and Küpers (2014) argue that reflexivity "exposes and enables the questioning of ways of being and doing as well as its underlying structures. In so doing, reflexivity enables us to engage with the core assumptions and interpretative frames. Through this reflexive and critical re-turning the generation of alternatives and the emergence of deep change is made possible" (p. 3).

By questioning core assumptions of being and doing (Edwards & Küpers, 2014) the wise management decisions may be made based on and/or lead to an alternation of both internal and external worlds. The findings of this study show that wise managers are intellectually courageous, which refers to the extent to which one is intrinsically motivated and willing to conceive and examine alternative perspectives and ideas not popularly held. Reflexivity is one's awareness of one's behaviour and how one's practice contributes to the wider environment (Bolton, 2010). Through reflexivity, the manager recognises that he or she is actively engaged in shaping his or her internal world and the surrounding environment. This conveys that the wise manager may realise that his or her attitudes, core assumptions, values and beliefs must be altered. The change, however, is not limited to the internal world as the external world may need to be changed for the greater good (Baltes & Staudinger, 2000). This finding accords with Sternberg's (1998, 2004a) Balance theory, which proposes that wisdom is balancing various elements (e.g. short- and long-term, intra-, inter- and extra-personal interests) in order to adapt, alter, or move to a new environment. This is supported by the findings of this study. Making a wise decision may be based on an adoption of external belief frameworks. That is, the wise manager may adapt to the external belief systems rather than insisting on his or her own value system.

*“Wisdom could involve working through and applying an external belief framework, or it could involve working to change that external belief framework” (Informant 27).*

Biloslavo and McKenna (2013) refer to Nelson Mandela and Aung San Suu Kyi as cases in which their value system, the dominant social interests’ values system, and attitudes are reformed towards good ends. One informant identifies Gandhi and Pope John Paul II as wise influential leaders:

*“Gandhi was incredibly wise and knowledgeable. What he did for society was phenomenal. I think there were some things that John Paul II did that were phenomenal: from breaking down the Eastern bloc and Communism and things like that ... Their ability to influence, I think, is what has made them impressive to me. Wise people’s ability to influence is phenomenal” (Informant 4).*

An example at a micro level, compared to Mandela, Aung San Suu Kyi, Gandhi, and John Paul II’s, could be the simple advice one person gives another toward achieving a good end. This sentiment is captured by one informant’s observation: *“[wise managers] teach others not to make the same mistakes. [...] I think providing good advice, is an important component of wisdom” (Informant 7).*

In this sense, wisdom manifests as an other-regarding and unselfish quality (Prewitt, 2002), that generates pervasive positive effects (Küpers, 2007). Yang (2011b) argues that wise people may influence the external world at the societal and organisational levels: “outstanding leaders may display wisdom if they are able to produce positive influences on themselves, on others around them, on their organizations, and on the larger community” (p. 628). As Arlin (1990) puts it “wise decisions, solutions, and judgments are often acknowledged as wise, because they push standards to their limit or create types of meta-standards that redefine the acceptable” (p. 237).

In order for the wise manager to be reflexive, s/he needs “to stand back from belief and value systems, habitual ways of thinking and relating to others, structures of understanding themselves and their relationship to the world, and their assumptions about the way that the world impinges upon them” (Bolton,

2010, p. 14). Bolton (2010) goes on to suggest that “this can only be done by somehow becoming separate in order to look at it as if from the outside: not part of habitual experience processing” (p. 14). Thus, reflexivity (that is, being reflexive) is a manifestation of the integration of awareness, cognitive-emotional mastery, and reflection. Through the process of wise management decision making, reflexivity that equates critical assessing and questioning core assumptions and values, is then tested by praxis to result in applied wisdom.

### 6.2.5 Praxis

Praxis means *acting* based on prudent decisions and taking an active role in improving the world (Kodish, 2006). Unlike unwise people, wise people are able to apply what they know and to take right actions towards right ends. This is why wisdom is more than just accumulated knowledge (Intezari & Pauleen, 2013b). The findings show that the way that managers’ decisions appear in *practice* is critical in identifying wisdom. When informants were asked “what leads you to consider a manager as being wise?” most answers referred to ‘one’s track record of decisions and actions’. This informant captures this sentiment:

*“[Unwise people] talk a while but they don’t do anything. So, I’m looking for people, in my sense, who are wise and who’ve got some track record...[they]’ve got something to bring to the table, that I can respect [...]. Mr [X], who I have regarded as a wise person, has been around for a long time and done a lot of things. But there are other people who talked to me and I basically just wait for them to [be quiet] and go away, because I know they’ve never done anything” (Informant 3).*

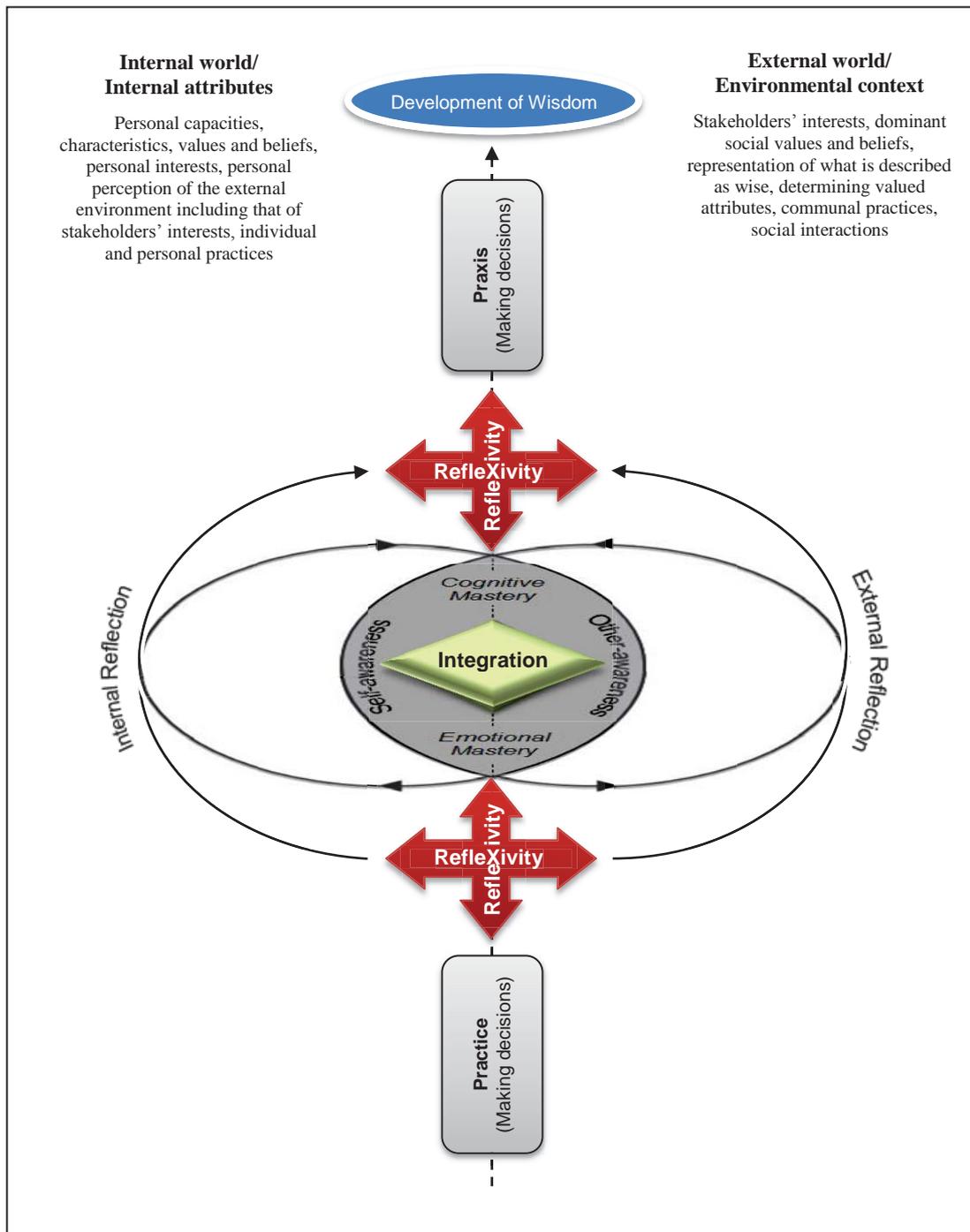
In addition to action, wisdom is understood to be concerned with ethics (Gygax & Fitzgerald, 2011; Robinson, 1990; Rowley & Slack, 2009), which through wise management decisions is embedded in and exhibited by action involving ethical considerations (Rowley, 2006b). In this sense, wise people deliberate about things that have good ends and can be brought about by action (the Nicomachean Ethics, 1141b 10-15). With respect to organisational wisdom, Bierly III et al. (2000) assert that since wisdom is related to applying organisational knowledge in the process of planning, decision making and in the implementation phase, wisdom is

an action-oriented concept, which according to Russell and Grootenboer (2008) is a “morally committed action”, *Praxis* (p. 109). This implies that being *practically* wise in the business world does not simply mean to be involved in any course of action, which may or may not have taken ethical considerations into account, as “Outstanding leaders may display wisdom if they are able to produce positive influences on themselves, on others around them, on their organizations, and on the larger community” (Yang, 2011, p. 628). Likewise, Rooney (2013a) asserts that “to be practical is to be able to navigate the challenges of thoughtfully and mindfully acting in social life; it means creating long-term well-being through praxis” (p. 90).

Praxis refers to morally committed, socially responsible, right conduct, and embodied experiences and actions (Kemmis, 2012; Küpers & Pauleen, 2013; Russell & Grootenboer, 2008). Praxis, involving practical reasoning about wise and proper actions in a particular situation (Kemmis, 2012), is the distinctive action to phronesis that is concerned with the rightness and properness of what is done in practice, in that the action leads to good consequences for all those who are involved in or affected by the action (Kemmis & Smith, 2008a). That is, praxis is doing the thing that is good for both individual and humankind. As Kodish (2006) put it: “praxis or doing [...] means acting upon one’s prudent decisions and, in a more general sense, taking an active role in the world for the sake of improving it” (p. 461).

In wise management decision making, as suggested by PRIDM, managers get involved in praxis as they become concerned about the impacts of their practice and actions on and in relation to others and the wider community (e.g. the organisation, society, and the environment). Kemmis and Smith (2008b) explain, “praxis is a particular kind of action [...] that is morally-committed, and oriented and informed by traditions in a field. It is the kind of action people are engaged in when they think about what their actions will mean in the world. Praxis is what people do when they take into account all the circumstances and exigencies that confront them at a particular moment and then, taking the broadest view they can of what it is best to do, they act” (p. 4).

Becoming concerned about the impacts of managerial decisions and actions on others, PRIDM suggests, takes place through reflexivity and integration. The theory of *Praxio-Reflexive Integrated Decision Making*, therefore, builds on the *integration* of SOA, CEM, and MPC through *praxis* and *reflexivity*, with praxis as a committed and ethically informed practice, that “is guided by critical reflection of practice traditions and one’s own practice” (Higgs, 2012, p. 75), and with reflexivity as a “critical re-turning” (Edwards & Küpers, 2014, p. 3) that is based on ethical inquiry. Through reflexivity, a wise management decision brings into consideration multiple perspectives, and focuses on the future consequences of the present actions for other people and groups (Edwards-Groves & Gray, 2008) (Figure 6-5). This implies that wise decision making, as a Praxio-Reflexive integration, not only values the decision makers’ personal traits, attitudes, feelings and propensities, but also requires the decision maker at the core of the decision making process constantly to (re-)define his or her position with regard to personal, organisational, and societal values and beliefs.



**Figure 6-5: Wise Management Decision Making: Praxio-Reflexive Integrated Decision Making (PRIDM)**

“Wisdom is not something that one learns as an isolated or free-floating entity apart from everyday practice; wisdom becomes apparent only in concrete human behavior” (Strijbos, 1995, p. 363). This is supported by the findings of this study. The development of praxis and reflexivity from practice and reflection happens through a spiral process (Figure 6-5), with changes over time (Glaser, 1978), which leads to the development of the decision makers’ practical wisdom. In this

sense wisdom, being concerned with learning and enhancing the capacity to learn (Hays, 2010), is “the orchestration of human development toward excellence” (Baltes & Staudinger, 2000, p. 122) that evolves over time toward achieving well-being of self (Internal world, in Figure 6-5) and others (External world, in Figure 6-5) (Lombardo, 2010). Thus, wise management decision making requires moving from a practice-reflection based learning towards an on-going praxis-reflexivity based learning integrating CEM, SOA, and MPC. This understanding is captured by the following informant:

*“[to develop wisdom,] I think there is a requirement to actually [have] practical experience with decision making in difficult situations. [...] But again, I think, it’s probably something that is quite a long journey, it is not something that can be talked about quickly. It’s a combination of theory, and practical experience. Reflecting on real life experience would be required. [...] It must move beyond the classroom, you must actually be out there in the coalface, [...] to exercise wisdom in certain situations” (Informant 08).*

Praxis, as the practical aspect of wise management decision making, brings together the other qualities (i.e. MPC, CEM, SOA, and Reflexivity) in the form of an integrated practice of decision making. Praxis is associated with reflecting (Internal and External Reflection), learning and open-mindedness (as part of MPC), creativity (suggested by PRIDM as the ability to think outside the square), deep understanding of the world (‘insightfulness vs. superficial’ in PRIDM), and far-sighted deliberation (as part of MPC) (Kemmis & Smith, 2008a; Kodish, 2006). PRIDM suggests that in wise management decision making, MPC, CEM, SOA, and Reflexivity are integrated and put into action through Praxis.

In other words, PRIDM implies that the praxio-reflexive integrated process of wise management decision making not only improves the quality of the management decisions at a given time, but also enables the manager to improve their decision making ability and develop their practical wisdom over time through praxis and reflexivity. The decisions that the wise manager makes and puts into praxis through a praxio-reflexive integrated process then become practices that are reflected on again and are involved in a new praxio-reflexive

integrated process of decision making. Throughout the process, the decision maker's SOA, CEM, and MPC continuously evolve over time, which in turn leads to the development of the decision maker's wisdom.

### **6.3 Chapter Summary**

This chapter has demonstrated the emergent theory of Praxio-Reflexive Integrated Decision Making and discussed the constructs of the theory with support from the literature and appropriate field data. It explained how wisdom in management decision making is achieved through an integration of Multi-Perspective Consideration (MPC), Self-Other Awareness (SOA), and Cognitive-Emotional Mastery (CEM), and how the integration is fostered by Reflexivity and Praxis. It also discussed how the wisdom of the decision maker is developed through and manifests in reflexivity and praxis.

Having discussed the nature of the research problem (Part 1), the methodology design (Part 2), and the findings (Part 3), the final part of this dissertation, Part 4, concludes the study by addressing the implications and contribution of the findings, identifying the limitations of the study, suggesting directions for future studies, and putting forward the researcher's recommendations to those who are new to research.

## Part 4

### Conclusion

<b>Part 1</b> The Nature of the Research Problem	Chapter 1	Introduction
	Chapter 2	Initial Review of the Literature
<b>Part 2</b> Methodology Design	Chapter 3	Research Methodology and Grounded Theory
	Chapter 4	Informants, Data Collection, Rigour, and Ethical Considerations
<b>Part 3</b> Findings and Discussion	Chapter 5	Data Interpretation
	Chapter 6	Discussion: An Emergent Theory of Praxio-Reflexive Integrated Decision Making (PRIDM)
<b>Part 4</b> Conclusion	Chapter 7	Implications, Limitations, and Directions for Future Research

## **Chapter 7 Implications, Limitations, and Directions for Future Research**

### **7.1 Chapter Overview**

The objective of this study was to investigate the relationship between wisdom and management decision making. Wisdom is globally called on to help with handling today's increasing crises and decision making is identified as a core management process. Using grounded theory, this study has developed a theory for wise management decision making that explains how managers and senior executives can make wise decisions. Considering that the theory is based on real life managers' perceptions, its relevance for practitioners is almost certain to some extent.

In Chapter 5, the categories that emerged during the data collection and analysis were identified by quoting appropriate field data. Chapter 6 discussed the findings of the study and introduced the emergent theory of Praxio-Reflexive Integrated Decision Making (PRIDM). This seventh chapter provides a conclusion for the study. Following a review of the research problem, objectives, and findings, the implications of the findings for practitioners, and the contribution of the study to the literature are discussed. This is followed by a discussion of the limitations of the study which include the limitations associated with research methodology, the limitations of findings, and the limitations of the theory. The chapter also suggests directions for future research on wisdom. Lastly a chapter summary is provided. Following the chapter summary, the study is summed up by presenting a concluding statement.

### **7.2 A Review of the Research**

Before the discussion of the contribution and implications of this study, a review of the research objectives and findings provides a clear picture of the place of the study in the extant literature and the practical world.

#### **7.2.1 Research Problem and Objectives**

Decision making, as the essence of management (Melé, 2010; Nutt & Wilson, 2010; Stewart, 2006), is increasingly becoming complex due to technological and

politico-socio-economic factors (Ahmed et al., 2012) in today's world. Societies' awareness and expectations of governments and businesses, with regard to their interactions with and impacts on society and the environment, have led government administrators', political leaders', and managers' decisions to be closely scrutinised by all stakeholders. Despite the considerable advances in technology to handle and manage the rapidly growing information and knowledge for improving the quality of management decisions, making appropriate decisions in the contemporary complex and rapidly changing business world has become a challenging task for managers. Numerous examples of crises resulting from bad management decisions can be found across the world, e.g. the 2001 Enron and 2002 WorldCom bankruptcies, and the oil spill in the Gulf of Mexico.

Recent financial crises and man-made environmental disasters, on the one hand, and the contemporary shift in organisational practitioners' and academics' view from managing knowledge and information towards developing wisdom, on the other, show that the expectations of information and knowledge management in improving management decisions have not been met.

Wisdom has been broadly studied in organisational and management studies, and various models have been provided with regard to leadership. Management decision making literature is still lacking the attention it deserves, and no empirically supported explanation of the contribution of wisdom to management decision making has been provided. Accordingly the objective of this study was to address the question: *what is the relationship between wisdom and management decision making?* To address the research question, grounded theory was adopted as the methodology to investigate managers' and senior executives' perceptions of wisdom and its relationship with management decision making.

### **7.2.2 Research Findings**

The findings show that wise management decision making is an integrated process that unifies a wide range of internal and external factors in a way that can lead to effective decision making. Supporting previous approaches to wisdom as a multidimensional quality, the findings indicate that wisdom is a multi-faceted entity whose contribution to management decision making engages and integrates numerous qualities. Based on the findings, the *Emergent Theory of Praxio-*

*Reflexive Integrated Decision Making* (PRIDM) was developed which provides a data-grounded and empirical explanation of the relationship between wisdom and management decision making.

The theory explains that wise management decision making is not merely a state of mind or a quality of character, rather it is a social process that is based on an integration of the qualities of Multi-Perspective Consideration (MPC) (Figure 6-4), Self-Other Awareness (SOA), and Cognitive-Emotional Mastery (CEM). The qualities are developed, further integrated, and manifest through the integrated recursive stages of constant refinement and reflection (reflexivity), and praxis (making decisions) (Figure 6-5). In this way, wise management decision making is not only a process of making appropriate decisions, but also a process of increasing the wisdom of the decision maker over time (repeated decision making). That is, practising wise management decisions leads the wisdom of the decision maker to flourish over time.

The main qualities that PRIDM suggests are involved in wise management decision making are briefly reviewed below. Chapter 6 has discussed these qualities in more detail.

**MPC:** According to the findings, wise management decisions are based on a consideration of alternative points of view (Kitchener & Brenner, 1990), ethical codes, and the anticipation of the possible consequences of the decisions. To make wise decisions, the decision maker must be able to see the bigger picture. Considering and anticipating the short- and long-term subsequent impacts of the decision on others is critical for a management decision to lead to wise outcomes. This implies that different interests at the individual, organisational, and communal levels are taken into consideration during the decision making process, which leads the wise management decision not only to be successful in terms of financial and organisational achievement, but also to be an ethically considered decision.

**SOA:** The findings indicate that a deep understanding of self and the surrounding environment is critical in making wise management decisions. To be able to make a wise management decision, the decision maker must be well aware of his or her personal capacities, characteristics, values and beliefs, personal interests, personal

perception of the external environment (including the perception of the stakeholders' interests), and individual and personal practices. Self-awareness must be fully integrated with an awareness of the external world and the surrounding environment (Other-awareness). The manager must be well aware of stakeholders' interests, dominant social values and beliefs, representation of what is described as wise, attributes that are valued, communal practices, and social interactions, and to be critically aware of what is going on around them.

**CEM:** The findings suggest that in wise management decisions cognition and emotion are integrated. CEM refers to the extent to which a manager is able to appropriately integrate his or her logic/reasoning/rational ability (i.e. Cognitive mastery) with his or her emotional/intuitive/non-rational capacity (Emotional mastery).

**Praxis:** Praxis means acting based on prudent decisions and taking an active role in improving the world. PRIDM draws on and emphasises the role of practice in both 'decision' and 'wisdom'. According to the theory, a wise management decision is morally committed, socially responsible, rightly conducted, and embodies experiences and actions. PRIDM indicates that through praxis, the decision maker considers his or her and others' thoughts, feelings, values, and actions, bearing in mind and showing concern about the impacts of their practice and actions on others and the wider community.

**Reflexivity:** The findings highlight the critical role of reflexivity in making wise management decisions and in developing wisdom. PRIDM suggests that it is important for a manager to continuously (re-)evaluate their position in the context of their Internal world (Internal reflection) and the External world (External reflection), by questioning core assumptions, perspectives, and ways of being and doing, and considering one's interrelationship with the wider community.

This study has significant implications for practice and research. In the section that follows, the implications of this study for practitioners are discussed.

### 7.3 Implications for Practitioners

Considering the findings are based on real life managers' perceptions, it would seem that relevance for practitioners is almost certain at least to some extent. The

findings of this study suggest several potential benefits for practitioners. The study proposes a persuasive practical guideline for making appropriate decisions in the current turbulent and rapidly changing business world. The study suggests that better management decision making requires scrupulous attention to integrating and developing a set of practical qualities, rather than the mere accumulation and management of information and knowledge. Although the theoretical sensitivity and practical concentration of the current work is significantly on the relationship between wisdom and management decision making, this does not mean that the contribution of wisdom to management is restricted to the management decision making process. Wisdom is a broad concept in meaning with a wide range of significant applications for the well-being of humanity through better daily and business lives.

The implications of the emergent theory of PRIDM to practitioners revolves around the improvement of management decision making as well as learning to make wise management decisions (developing wisdom). Table 7-1 summarises the implications for practitioners.

Implication	Description
Education	<p>This study supports the call for teaching wisdom in management programmes.</p> <p>The study identifies the qualities that are associated with wisdom. The qualities can be embedded in management pedagogies.</p> <p>PRIDM paves the way for a wisdom-based pedagogical system in management by offering an integrative approach that amalgamates knowledge-based and wisdom-based teaching systems.</p>
Sustainability	<p>Implications at the organisational level:</p> <p>PRIDM underlines the interrelationship between the manager and organisation with their surrounding biophysical environment. PRIDM explicates how awareness, skills, abilities, and knowledge are incorporated into management decisions in a way that improve the relationships between organisations and the environment by reducing the negative impacts on and from the environment.</p> <p>Implications at the government level:</p> <p>PRIDM helps governments to identify critical matters of human and global issues in a comprehensive manner and through an integrative lens. PRIDM points out the mutual</p>

	<p>impacts of what governments do in dealing with administrative, economic and political issues, on the one hand, and global and environmental concerns, on the other.</p> <p>At the societal level, where social welfare is the primary objective with significant emphasis on a good life, civilisation, justice, and order (Harrison, 1999), the findings of this study and the outcome theory (PRIDM) can serve as a practical guideline for administrators to make more appropriate decisions upon those matters.</p>
Knowledge Management	The findings of this study recommend a supplementary approach to the contemporary prevalent perspective of managing information and knowledge.
Improving decision making	<p>Reflexivity: Challenging the core assumptions:</p> <p>The role of reflexivity in management decision making is highlighted. How reflexivity contributes to decision making is articulated by PRIDM.</p> <p>It is recommended that consideration be given to reflexivity in developing decision making procedures in organisations and government administration.</p> <p>Balancing knowledge and doubt:</p> <p>The findings of this study indicate that the manager's experiences do not eliminate uncertainty, and that the manager's knowledge may fall short in handling the contemporary rapidly changing and extremely competitive business world.</p> <p>With an emphasis on the integration of knowledge-related qualities (Cognitive mastery) and emotion-related qualities (Emotional mastery) PRIDM suggests that a manager can make appropriate management decisions in a rapidly changing world.</p>
Developing an integrated multi-factor assessment tool	One implication of PRIDM for practitioners is more associated with the assessment of managers' decision making abilities. PRIDM can help with the development of an integrated assessment tool that provides a comprehensive evaluation of the extent to which a manager is able to make wise decisions.
Reconciling emotion-logic dualism in decision making	The study findings suggest that rational deliberation does not necessarily lead to better choices. Using such unconscious capacities as emotions, feelings, and intuition may lead to more satisfying choices.

**Table 7-1: Implications for Practitioners**

The quality of management and the success of organisations primarily depend on the decisions that are made by managers. Wise managers make better decisions than merely knowledgeable managers (Scharge, 1996), as wisdom helps the

decision maker see how their decisions contribute to the human good and form appropriate judgment at any given time (Gibson, 2008; Melé, 2010). Bierly III et al. (2000) suggest that at the organisational level: “a key to organizational wisdom is judgement and decision making, which requires an understanding of the complexity of a situation, but also requires the ability to make sense and simplify so that action can be taken” (p. 595). This study, by introducing the emergent theory of PRIDM, contributes to the improvement of practitioners’ decision making. The theory identifies the key components that are involved in wise management decision making and suggests how the components are interconnected and developed. The theory can be applied at the individual, organisational, and governmental levels.

### **7.3.1 Education**

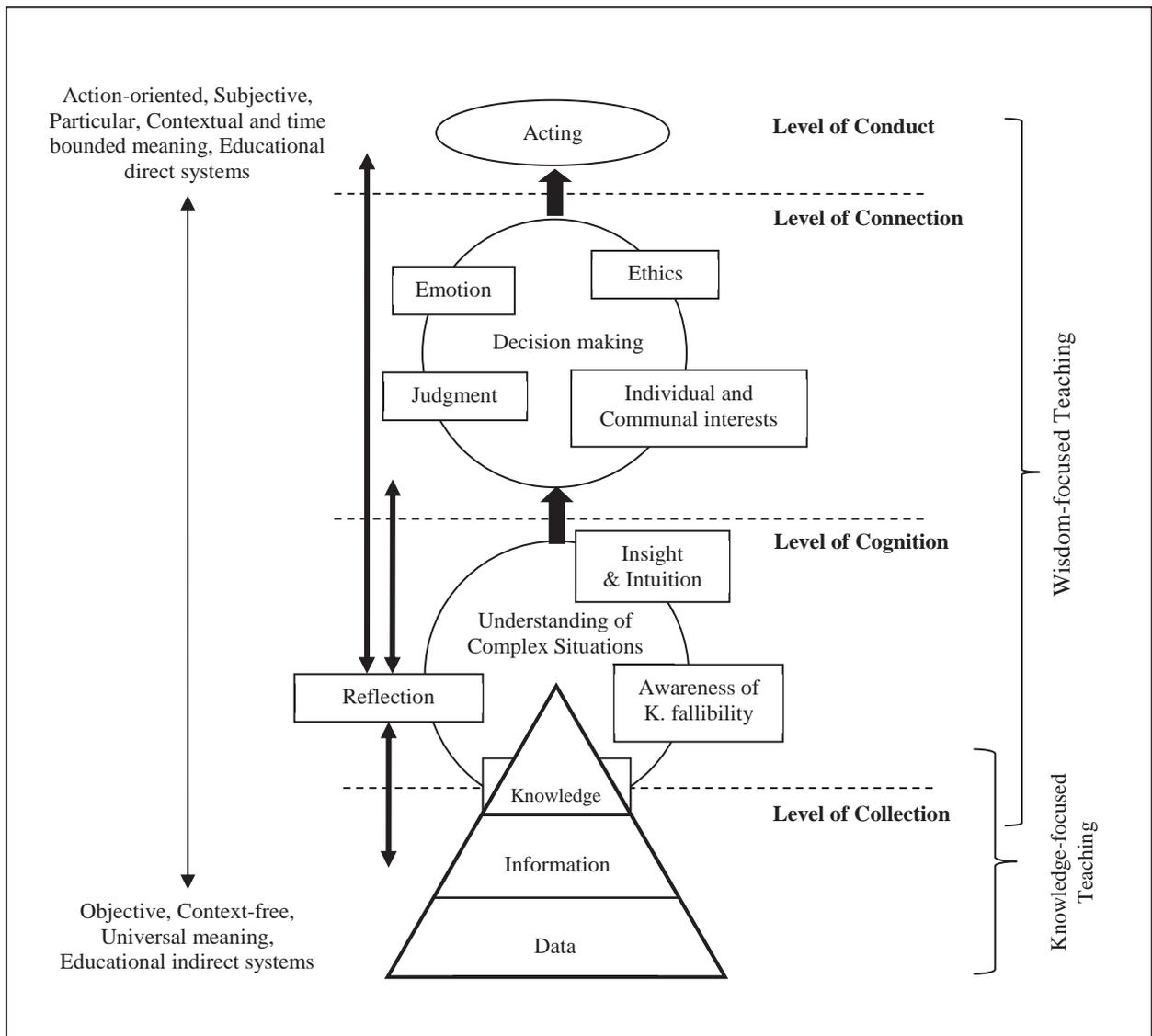
This study contributes to education in general, and management education in particular, by affirming the differences between, and by providing an integrative approach to, wisdom, knowledge, information, and data. The findings show that making appropriate decisions in the business world requires the wise use, rather than just an effective management of, data, information, and knowledge. PRIDM emphasises the necessity of including the study of wisdom in business courses and management development programmes. As Small (2004) points out, “recent financial scandals and management blunders suggest that the time is ripe to introduce, via management development programs, an introductory study into the nature of wisdom” (p. 751). Teaching wisdom is also important as it fosters and leads to creativity as well (Sternberg, 2003).

This study identifies the qualities that are associated with wisdom and can be embedded in management education programmes. The findings respond to Gibson’s (2008) call for developing practical wisdom in managers: “we need to know more about the nature of practical management wisdom – what its component ‘parts’ are and how it operates as a form of reasoning and deciding, if we are to discover procedures for its development” (p. 529). Considering the qualities, the study implies that the methods that are used for learning and developing knowledge and information may or may not be applicable in developing wisdom (Bierly III et al., 2000). Apparently, the courses or

programmes that are focused on teaching and transferring information and knowledge do not cover those features of learning needed for wisdom (e.g. teaching how to acquire, share and use wisdom).

Accordingly, it is recommended, based on the findings of this study, that at the organisational and government levels, as well as all the educational levels (primary, secondary, and tertiary), consideration be given to how technology and knowledge can be used in a responsible manner for the well-being of all, rather than focusing on how technology works, and how knowledge is created and shared. Higher education has a critical role in driving a society to become a wise society, where the scientific and economic use of knowledge and information are balanced with creative and spiritual dimensions (Goede, 2011). According to Goede (2011), in a democratic country (given that democracy has been the best way of governing a country) good solutions to social problems and environmental issues are obtained only with educated and responsible people (i.e. citizens, businesspeople, managers, administrators, and governors).

The integration of cognition and emotion, awareness of self and others, and internal and external reflection, are qualities that can be considered in the conventional business education systems that put more emphasis on knowledge dissemination than wisdom. PRIDM suggests a practical understanding of the contribution of wisdom to management decision making that can help business education experts who highlight the necessity of developing wisdom in management and leadership through an integrated approach (Bigelow, 1992; Ferrari & Potworowski, 2008; Grint, 2007). Such a combined approach would emphasise the implementation of a pedagogical system that unifies knowledge-based teaching with wisdom-based teaching in business education (Intezari & Pauleen, 2013b). Intezari and Pauleen (2013b) provide a multi-level teaching model of wisdom that gives some insight into the content and the techniques that can be considered in teaching and developing wisdom.



**Figure 7-1: Integration of an Integral Meta-competencies Theory of Practical Wisdom into Business Education Programs** (Intezari & Pauleen, 2013b, p. 165)

In teaching wisdom, reflection, as is the case with Reflexivity in PRIDM, plays a critical role. According to PRIDM, developing wisdom requires a continuous reflection on both one's internal and external worlds. As used in nursing programmes, there are methods and strategies that business programmes could emulate to foster the practice of reflection in students (Intezari & Pauleen, 2013b). Two broadly used strategies to facilitate the practice of reflection include writing tools and reflective group sessions (O'Connor & Hyde, 2005).

This study also supports Mintzberg and Gosling's (2002) suggestion on facilitating thoughtful reflection on experience for managers in management classrooms. Mintzberg (2005), in his response to reviewers' comments on his

book *Managers Not MBAs* (2004), reiterating the need for radical design in management programmes and business schools, emphasises that what matters in management education is a connection between learning and practice. Mintzberg (2011) explicates his criticism by saying “management is a practice, rooted in experience” (p. 26), and amplifies the necessity of teaching managers to learn from their own experiences (and not just other’s experiences) rather than just teaching them words while “ripping them out of their jobs” (Mintzberg, 2005, p. 246).

There is agreement between the findings of this study and that of Hess and Bacigalupo (2011). Hess and Bacigalupo (2011) offer a set of questions for developing self-awareness and self-management. The questions, although not specifically designed for CEM and MPC, can serve as a practical guide to the qualities of SOA, CEM, and MPC. The questions (Hess & Bacigalupo, 2011, pp. 715–716) and their PRIDM equivalents are outlined in Table 7-2.

PRIDM Qualities		Questions
<b>SOA</b>	Self-awareness	Are decision makers aware of their decision making skills and styles?
	Self-awareness	Are decision makers confident in their decision making skills?
	Other-awareness (Based on his or her awareness of others’ abilities, skills, and knowledge, the manager knows who is an appropriate person to whom the decision making authority can be delegated.)	Are decision makers willing to appropriately delegate decision making authority?
<b>CEM</b>	Emotional mastery (Balanced reliance on insight and intuition)	Is there a tendency to reach first for the emotional elements of a decision circumstance, or conversely, to reach for the rational analysis components?
	Emotional mastery (Confidence)	Are decision makers confident in their decision making skills?

	Emotional mastery (Empathy, as well as Perspective-taking & Ethics considering in MPC)	Are decision makers merely focused on their own interests or are they truly interested in achieving the best decision results?
	Cognitive mastery (Thinking outside the square)	Are decision makers willing to adapt to new decision making processes rather than relying upon the entrenched processes of the past?
<b>MPC</b>	Consequence-anticipating	Are decision makers overly focused on the desire for a speedy result?
	Perspective-taking	How can a decision making process be utilised to build trust, not only for decision makers, but also among all the appropriate constituents?
	Perspective-taking	Would others describe decision makers as inclusive or exclusive in decision making processes?
	Ethics considering	Are decision makers willing to accept the consequences of having delegated or shared the decision making authority?

**Table 7-2: PRIDM Qualities and Self-awareness Questions** (adapted from Hess & Bacigalupo, 2011, pp. 715, 716)

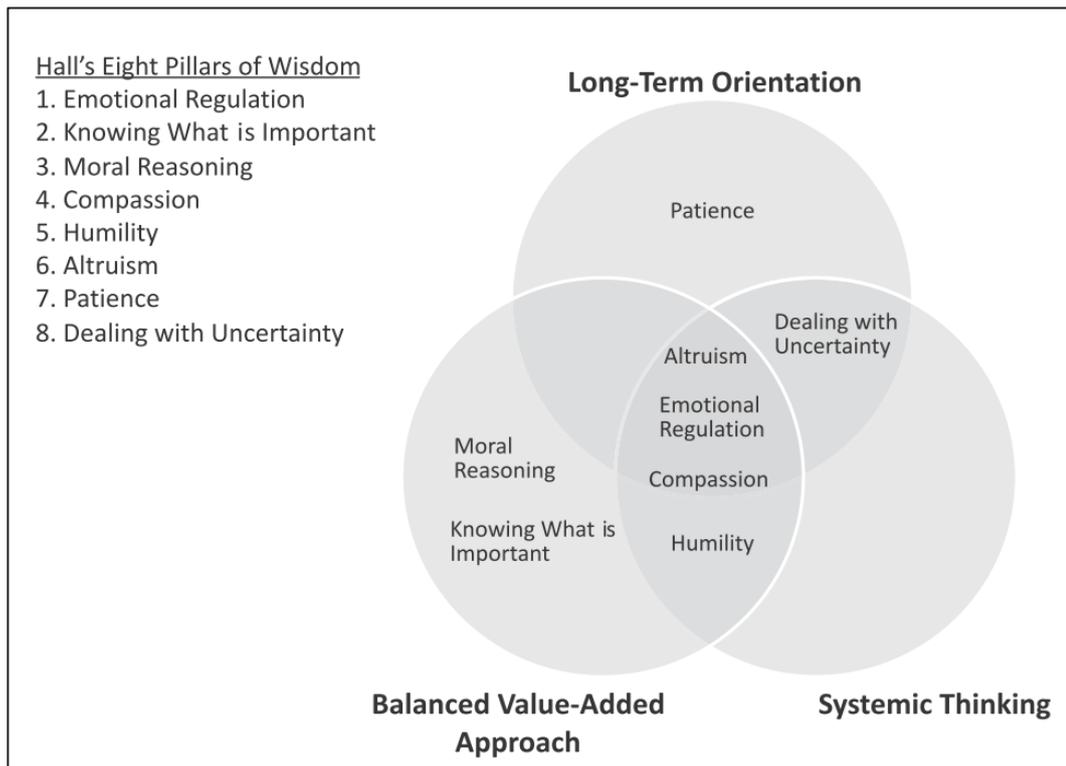
### 7.3.2 Sustainability: Implications for Organisations and Governments

The findings of this study broadly call for wisdom to solve the issues that are most significant to people today, at the personal, organisational, societal and global levels (Pantzar, 2000; Zeleny, 2006). Banerjee (2001) argues that considering the relationship between the organisations and the biophysical environment is critically important in decision making, given the environmental issues that industries face in today's world. Similarly Courtney (2001) reminds us that due to globalisation and the growing awareness of ethical issues, organisational decisions have to bring into consideration an increasing number of factors and stakeholders' perspectives. PRIDM helps governments with indicating critical matters of the human and global issues in a comprehensive manner and through an integrative lens. Mattila (2010) takes the open systems approach to understand practical wisdom in organisations and asserts that "while wise people are expected to act morally, it is more sustainable activities that need attention" (p. 19). PRIDM

points to the mutual impacts of what governments do in dealing with their administrative, economic and political issues, on one hand, and the global and environmental concerns, on the other.

The findings of this study put extra emphasis on the interaction between the organisation and the environment and highlight the need for considering stakeholders' perspectives in management decision making. PRIDM explicates the interrelationship between the manager and organisation awareness, skills, abilities, and knowledge with their surrounding biophysical environment, and explains how the critical factors are incorporated into management decisions.

Marker (2013) draws on Hall's (2010) classification of the neural pillars of wisdom including emotional regulation, knowing what is important, moral reasoning, compassion, humility, altruism, patience, and dealing with uncertainty, and links wisdom, human performance technology (HPT) and sustainability. Marker discusses 'the pillars' application for HPT. He specifies three areas that wisdom, HPT and sustainability overlap: long-term orientation, a systemic approach, and a balanced value-added approach. Figure 7-2 illustrates the link between wisdom (the eight pillars), HPT, and sustainability based on the three areas. Marker (2013) argues that in both HPT and sustainability, a long-term orientation approach avoids short-term solutions that may cause harm in the long term. The Balance value-added approach connotes sustaining financial, social and environmental values by balancing all three values. Systemic thinking has to do with finding solutions to root causes rather than just to symptoms.



**Figure 7-2: The Link between Wisdom, HPT, and Sustainability** (Marker, 2013, p. 20)

The eight pillars of wisdom are mostly included in PRIDM. PRIDM provides a practical framework and makes it possible for organisations and governments to implement the pillars in an integrated manner towards sustainability. PRIDM emphasises all the areas of long-term orientation, balanced value-added approach, and systemic thinking.

For governments, PRIDM can improve the quality of decisions through integrating different approaches, so that the decision leads to appropriate outcomes over the short and long terms. PRIDM indicates important matters at the societal level, where social welfare is the primary objective with significant emphasis on a good life, civilisation, justice, and order (Harrison, 1999), and shows how to make decisions upon those matters. Examples of these societal matters can be allocating limited resources to states, subsidies, and imposing new rules on abandonment or freedom of having firearms. In order for the decisions that are made to contribute to the well-being of the community, the decision maker must acquire and practice intellectual and moral excellence (Rooney & McKenna, 2008). This study shows how the virtues are integrated in wise decision making through praxis and reflexivity. PRIDM fosters wisdom in statesmanship

by providing a framework to make “enduring decisions that restructure systems so that, for the long term, the world begins to work better for everyone” (Etheredge, 1992, p. 197).

### **7.3.3 Knowledge Management**

According to Pantzar (2000) “[t]oday’s world, known as the information society, unquestionably has a greater need for wisdom than knowledge” (p. 236). Effective management of tangible sources does not necessarily lead to effective decisions. Even managing intangible resources such as intellectual assets and tacit knowledge may result in unintended inappropriate outcomes if other crucial factors such as emotions and ethics are not considered in decision making (Baltes & Kunzmann, 2003; Birren & Fisher, 1990; Courtney, 2001; Tredget, 2010). Allee (1997) argues that knowledge and information do not necessarily guide us on our way to success in the business world: “any framework of knowledge that does not include wisdom requires us to operate blind. Without wisdom there is no vision. Without vision we are lost in a sea of knowledge and information with no north star to guide us on our way” (p. 16). PRIDM’s emphasis on and practical framework for making decisions through the integration of MPC, SOA, and CEM suggests that it is more important for a manager to be able to make sound judgments, to determine the impacts of their decisions on others, and to know how they can appropriately apply what they already know, than to be just an effective manager of knowledge and information.

In knowledge management the concentration is on maximising knowledge creation, knowledge access, and sharing, and the concerns about what knowledge must be applied and institutionalised in the organisation are not sufficiently focused (Rowley, 2006a). In this regard PRIDM supplements knowledge management in organisations by creating a strong link between organisational strategic choices and organisational knowledge. PRIDM considers the critical role of knowledge in making appropriate decisions, and emphasises the integration of knowledge with other qualities in a praxio-reflexive process (as discussed in Chapter 6).

Further to this, knowledge has an axiological dimension (Kok, 2009), which challenges extensive organisational or governmental investments in technology,

IT, and IS that neglect the axiological dimension of knowledge. Considering the dominant learning networks such as social networks, communities of practice, and online learning, Kok (2009) stresses the axiological dimension of managing knowledge, and suggests that knowledge is completely exploited only when complemented by wisdom.

### **7.3.4 Improving Decision Making**

Based on the findings it is recommended that consideration is given to reflexivity and the balance of knowledge and doubt in wise management decision making.

#### ***7.3.4.1 Reflexivity: Challenging Core Assumptions***

The findings show that a wise response to the environmental context may require the wise person to change the environment in order to balance different interests (Sternberg, 1998). Arlin (1990) argues that “wise decisions, solutions, and judgments are often acknowledged as wise because they push standards to their limit or create types of meta-standards that redefine the acceptable” (p. 237). This implication is to a great degree associated with the quality that is represented in PRIDM as reflexivity.

Through reflexivity, practitioners would be able to acquire a more accurate understanding of their knowledge, and the way they implement that knowledge in their practice, to make sense of the situations and the events that they face (C. Taylor & White, 2000). This is, as Taylor and White (2000) put it, “a process of destabilizing taken-for-granted ideas and professional routines” (p. 6), which represents a mirror to practice and enables “the practitioner to access, understand and learn through his or her lived experiences, and as a consequence, take congruent action towards developing increasing effectiveness within the context of what is understood as desirable practice” (Johns, 1995, p. 226).

So being solely aware of and knowledgeable about the personal, organisation, and society (including the wise business community, where the manager’s organisation is operating) does not necessarily help with making wise management decisions. But rather, the wise person may influence their surrounding environment at multiple levels (society at a macro level and organisations at a micro level) (Yang, 2011b), which will generate a greater

pervasive positive effect (Küpers, 2007), and help more people to live a good life (Yang, 2011b). An example of the wise manager's active engagement in shaping their surrounding environment may be giving advice to peers and employees to help them live good lives, in which sense, wisdom manifests as an unselfish and other-regarding quality (Prewitt, 2002). So, in order to be able to make wise decisions in the business world, managers need to reflect on the dominant values and accepted standards in the surrounding environment with their own values and standards, and moreover do this as second nature.

This study emphasises the incorporation of reflexivity in management decision making. By encouraging managers to *continuously* and *critically* reflect on their assumptions and beliefs, reflexivity aids managers in achieving emancipation from perspective-limiting assumptions. As Hays (2007) argues, wisdom is concerned with continual learning, because the wise manager is well aware of his knowledge limits. Continuous reflexivity, as suggested by PRIDM for practitioners, underpins the important role of life-long learning in management. Moreover, reflective learning helps managers develop a comprehensive view of managerial practice by questioning and self-discovery (Kayes, 2002).

#### ***7.3.4.2 Balancing Knowledge and Doubt***

Given that one's wisdom is based on the recognition of the limits of one's knowledge (Holliday & Chandler, 1986), it is essential for managers and practitioners to be well aware that their experiences do not eliminate uncertainty (Buckley & Carter, 2004), and that their experiences and knowledge, although critical, may fall short in the turbulent unpredictable competitive business world today. An implication of PRIDM is concerned with this issue. That is, unreasonable and excessive confidence or caution about the compatibility of their experience and knowledge could possibly destroy their ability to make appropriate decisions (Intezari & Pauleen, 2011). According to PRIDM an appropriate management decision is based on a reasonable consideration of both logic/knowledge and intuition/emotion (Chapter 4). So, with an emphasis on the integration of both knowledge-related qualities (Cognitive mastery) and emotion-related qualities (emotional mastery), PRIDM suggests that a manager can make appropriate management decisions in the rapidly changing world. To explain this

implication more practically, it is recommended that managers trust and value the decisions that, being intuitively made, do not necessarily represent a logically-driven decision.

### **7.3.5 Developing an Integrated Multi-factor Assessment Tool**

Despite the critical role that decision making plays in the success of organisations, measuring the effectiveness of decisions is a challenging task for many organisations and companies (Blenko, Mankins, & Rogers, 2010a, 2010b). One implication of PRIDM for practitioners is more associated with the assessment of managers' decision making abilities. PRIDM can help with the development of an integrated assessment tool that provides a comprehensive evaluation of the extent to which a manager is able to make wise decisions. Based on the qualities it suggests are associated with making wise management decisions, an appraisal tool can be developed that helps with the assessment of managers' decision making ability. Such a tool may be designed based on an integrative approach to the key qualities of MPC, SOA, and CEM, and used to measure the success of a management decision based on the extent to which the decision has led to the achievement of the organisational goals, communal interests, and the development of the decision maker.

### **7.3.6 Reconciling Emotion-Logic Dualism in Decision Making**

Decisions that are made and the actions that are taken solely based on reason and fact are too limited (Pauleen et al., 2010). This study offers an understanding of wisdom to the decision making field that can bridge and integrate the rational prescriptive and naturalistic descriptive perspectives into the management decision making process. The findings also provide evidence that support the neuroscience (Dijksterhuis, Bos, Nordgren, & van Baaren, 2006) and management studies (Rooney, 2013a) that suggest that rational deliberation, i.e. 'deliberation-without-attention' does not necessarily lead to better choices. Consistent with Rooney (2013a), the findings suggest that using such unconscious capacities as emotions, feelings, and intuition may lead to more satisfying choices.

Together, the findings of this study can be incorporated into a wisdom-based decision making guideline that helps managers and senior practitioners make appropriate decisions.

## 7.4 Contribution to the Literature

The findings of this study add to the limited body of research that has investigated the relationship between wisdom and management decision making. As one of the early empirical studies in the area of wisdom in management, this study broadens and deepens our view of the practicability of wisdom praxis in management and organisational studies. The findings support and expand on the existing body of management literature. Addressing the research question, the study identifies and recommends more areas of potential study for the future. The inductively derived theory is provocative and novel and significantly provides an interpretation of the relationship between wisdom and management decision making. In this section, the contribution of the theory to wisdom studies in management and the management decision making area will be discussed. Table 7-3 outlines the key contributions of the findings to the literature.

Field	Description
Management Decision Making	<p>PRIDM provides evidence of the need for integration of cognition and emotions in decision making.</p> <p>PRIDM emphasises that the success and value of management decisions does not solely rely on the achievement of management and organisational goals and objectives.</p> <p>The findings show that making appropriate decisions is not necessarily based on a linear process of defining, diagnosing, designing, and deciding.</p>
DIKW Pyramid	<p>This study deepens and broadens the understanding that knowledge management scholars provide of wisdom.</p>
Management Learning	<p>The study findings support and expand on the reflective practitioner models (Experiential Learning Theory) in management learning. PRIDM underlines, in addition to reflection and practice, the critical role that reflexivity and praxis play in the learning and development of wisdom.</p> <p>PRIDM expands on ELT in management development by underlining the essential role of emotion, intuition, and social interaction in learning.</p> <p>PRIDM takes experiential learning beyond the mere post-action learning to during- and prior-action learning.</p>

**Table 7-3: Contribution of the Study to the Literature**

### **7.4.1 Management Decision Making**

The contribution of the findings of this study to the management decision making literature is significant. The contribution can be described in three areas: the integration of rationality and non-rationality, the evaluation of management decision success, and the process through which the decision is made.

The findings confirm and expand on recent studies in management (Rooney, 2013a) and in neuroscience (Dijksterhuis et al., 2006) of the need for integration of cognition and emotions in decision making. In line with Damasio's (2005) findings that show that emotion and cognition complement each other in decision making, PRIDM suggests that wise management decisions are based on an integration of cognitive and emotional qualities, not just a sum of them. In addition, PRIDM does not assume that emotion is opposite to cognition.

In addition, the success and value of management decisions does not solely rely on the achievement of management and organisational goals and objectives. Consistent with the understanding that wisdom underlies successful human development (Ardelt, 2005; Erikson, 1963; Hart, 1987; Sharma, 2005), the findings suggest that the success of a management decision should be evaluated by the extent to which the decision leads to the well-being of the decision maker, and those who are affected by the decision, as well as the achievement of organisational goals.

Moreover, the findings accord with those of Mintzberg and Westley (2001), in that the conventional approach to decision making, 'thinking first', must be supplemented with two different modes: 'seeing first' and 'doing first' (Mintzberg & Westley, 2001, p. 89). Mintzberg and Westley (2001) argue that the quality of managers' decisions is improved if the managers have the capacity for and use all three models (i.e. thinking first, seeing first, and doing first). The 'thinking first' model is based on the traditional understanding of decision making as a linear process of defining the problem, diagnosing causes, designing possible solutions, choosing the best solution, and implementing the choice (Mintzberg & Westley, 2001) (the other two models have been discussed in detail in Chapter 2, section 2.3.3.2, 'Decision Making as a Non-sequential Process'). The findings of the current study support Mintzberg and Westley's (2001) argument. PRIDM focuses

on integration with a strong emphasis on the recursive interrelationships of MPC, CEM, SOA, Reflexivity, and Praxis. According to PRIDM, a wise management decision is integrative in nature, and the relationship between its components may or may not be linear.

#### **7.4.2 Management Learning: Experiential Learning Theory**

The emphasis that PRIDM puts on the development of wisdom through the practice-reflection and praxis-reflexivity interaction resonates with Kolb's (Kolb & Kolb, 2001, 2005; Kolb, 1984; Vince, 1998) Experiential Learning Theory (ELT). ELT is highly respected in management learning. The study findings support and expand on the reflective practitioner models (ELT) in management learning.

Learning from mistakes is an important way to gain wisdom (Liew, 2013). PRIDM supports the application of ELT in management learning. The findings underline the importance of experiential learning in management learning and development. The enhancement of MPC, SOA, and CEM is interwoven with the interaction of practice and reflection. Learning and development as suggested by PRIDM, however, engages more than just reflection on practice and experiences.

PRIDM does not assume that wisdom in general, and wise management decision making in particular, are based solely on ELT. PRIDM expands on ELT in management development by underlining the essential role of emotion (Vince, 1998), intuition (Michelson, 1996), social interaction (Beard & Wilson, 2006; Miettinen, 2000), selflessness (humility) (Brown, 2004; Grint, 2007; Hinterhuber, 1996), and virtue and morality (Driver, 2003; Melé, 2010) in developing wisdom through praxis and reflexivity. Praxis-reflexivity requires reflection on individual and community values, beliefs, and interests. Moreover, in PRIDM, reflexivity emphasises the questioning of core assumptions, and acknowledges the multi-layer nature of learning, and the role of second-order oriented learning (Gergen, 1992).

Moreover, PRIDM takes experiential learning beyond mere post-action learning to during- and prior-action learning (Desmond & Jowitt, 2012; Yalom, 1985). Prior-action learning in wise management decision making refers to learning by

reflecting on *possible alternative actions*, and *anticipated* and *expected* consequences and reactions. Wise management decision making is not simply generalising memories and learning from previous mistakes to enhance future actions. Taking learning beyond post-action learning to during- and prior-action reflective learning is critically important in management learning, as post-action learning and solely relying on past experience may lead to ignorance or avoidance of what is in the present (Vince, 1998).

The findings also showed that wise management decision making uses praxio-reflexive integration as a means towards achieving more inclusive levels of integration (i.e. MPC, CEM, and SOA) in order to weigh up and choose from various alternatives in decision making. In this sense, PRIDM expands on experiential learning as “the process whereby knowledge is created through the transformation of experience” (Kolb, 1984, p. 38), by aiming at the development of wisdom through praxio-reflexivity and integration of MPC, SOA, and CEM.

### **7.4.3 DIKW Pyramid**

The findings of this study deepen and broaden the understanding that knowledge management scholars have provided of wisdom. Wisdom is a neglected concept in the information systems and knowledge management literature (Rowley, 2007), and the conventional approach of the DIKW pyramid to wisdom and its relationship with knowledge, information and data (Ackoff, 1989; Alter, 1999) do not reflect the nature of wisdom. PRIDM provides a more comprehensive understanding of the nature of wisdom and its relationship with knowledge and information. PRIDM underlines the critical role of other qualities such as intuition and emotion in wisdom, and shows that wisdom is not a mere accumulation of knowledge.

To sum up, it must be noted that in the management literature the interest in the area of wisdom is still growing (McKenna et al., 2013), and this study introduces a promising arena for future research to address related questions: how does wisdom emerge in practice? How can it be taught and shared at the individual, group, organisation, and social levels? What is organisational wisdom? How is it

different from individual wisdom? Does philosophical wisdom differ from managerial wisdom? Can wisdom be applied to organisations? If so, how? Is it possible to teach managers how to manage wisely? How can managers make wise decisions for the organisation? And how can it be applied to the decision making process in dealing with the complexity and unpredictability of the postmodern world?

- Is the role of wisdom dissimilar in different stages of the management decision making process?
- How does wisdom contribute to the decision making process at the individual and organisational levels?
- Given the relationship between wisdom and knowledge, what is the role of knowledge and knowledge management in developing wisdom and supporting wise management decision making?
- How is knowledge managed in order to achieve such decisions?
- How should the organisational environment be shaped to facilitate wise management decision making? What organisational factors do (not) support making wise management decisions?

## 7.5 Limitations of the Research

Like any other academic research, this study is subject to some limitations. The limitations of this research can be grouped into three main categories: limitations associated with the research methodology, limitations of the findings, and limitations of the theory.

### 7.5.1 Limitations Associated with Research Methodology

The methodological limitations include ‘participant as typical informant’, ‘sample composition’, and ‘one person coding’. The methodological limitations are presented below.

**Participants as typical informants:** None of the informants who have participated in this study was invited because they were or were thought to be wise. This was because of three reasons: 1) lack of a globally agreed upon pre-

developed set of criteria in the management literature to identify ‘wise managers’; 2) paucity of empirical studies on the relationship between wisdom and management decision making (Ardelt, 2004; Melé, 2010); and 3) the compulsion of grounded theory methodology to not adopt preconceived theories prior to the data collection and analysis (Glaser & Strauss, 1967; Glaser, 1992, 1998). So it must be considered that the findings are based on the interpretation of managers and executives, as typical practitioners, not as though they were or were thought to be wise. The findings of this study may or may not explain the way that management decisions are made by ‘wise’ or ‘thought-to-be-wise’ managers.

**Sample composition:** This limitation is associated with the asymmetric distribution of gender and age among informants. While in the spirit of theoretical sampling, attempts were made to interview a diverse sample of informants, a lower proportion of women (12 out of 37) participated, which compared to 25 men, is a significant difference. Moreover, the number of informants aged under forty is lower than those over forty. This may be a result of trying to target senior management.

**One person coding:** One of the methodological limitations of the study is due to one person doing the coding. The relationships within and among codes and categories were complicated. Some of the codes and categories were overlapping and some were redundant. So, following Glaser (1978), the coding was done in the most parsimonious way. As a PhD student I could not get other people to do coding as well, which means that someone else may come up with different sorts of codes, categories, and explanations of the relationships between categories, if he or she codes the same data set.

### **7.5.2 Limitations of Findings**

The findings of this study have limitations, which include ‘generalisability’, ‘individual decision making versus group decision making’, ‘concentration on senior managers, rather than operational managers or employees’, and ‘non-exclusive list of qualities’.

**Generalisability:** All grounded theory is local theory in the sense that it is a reflection of the sample interviewed. So, the impact of chronological and

geographical elements should not be disregarded in this research. Praxio-reflexive integration is the basic social process that underpins PRIDM as an emergent and local theory, grounded in the experience and knowledge of in-situ managers. The theory as a local theory (Schibeci & Grundy, 1987) needs confirmation based on a larger data set. Wisdom is a context-specific quality (Bigelow, 1992; Sternberg, 1990a) and accordingly, its relationship with management decision making may be perceived differently by people from different countries and cultures.

The context-restricted conceptualisation of wisdom also implies that who is considered wise in a particular business field, organisational setting or culture may or may not be regarded as such in other fields and settings. Accordingly, the implications of the findings of the current study may or may not be transferable to other business or life settings, since if the same study with the same procedures is conducted in another country or in another time, it may yield different results.

**Individual decision making versus group decision making:** The theory is about individual decision making, not group decision making. So, due to the differences between individual and group decision making processes (Miner, Jr., 1984; Simons, Pelled, & Smith, 1999), the findings of this study may or may not be relevant for group or board decision makers.

**Concentration on senior managers rather than operational managers or employees:** The findings are derived from an analysis of CEOs, top managers, and senior executives' interpretations of the concept of wisdom and its relationship with management decision making. The findings, therefore, may or may not reflect the interpretations of other groups. If suppliers, customers, and employees are studied, different explanations of the relationship between wisdom and management decision making may be provided.

**Non-exclusive list of qualities:** PRIDM does not suggest that the list of the qualities (i.e. MPC, SOA, CEM, and their subset qualities, e.g. Cognitive mastery, and Internal reflection) identified as associated with wise management decision making is exclusive. This implies that there might be other qualities or factors such as 'mindfulness' or 'the decision maker personality type' (see 'Directions for future research' section) that significantly contribute to wise management decision making, and they are not represented by PRIDM.

### 7.5.3 Limitations of the Theory

This study, which brings to the fore praxis and reflexivity, has encouraged me to think carefully about limitations of the theory. The limitations of the theory are discussed below.

**It may be challenging to identify the level of contribution of wisdom to a decision prior to its actual manifestation.** That is, wise decisions are identified based on the consequences of the decision. So, although the findings of this study suggest that making management decisions based on the emergent theory of PRIDM would be more likely to lead to wise action, the level of wisdom contribution to a management decision is primarily judged based on the actual consequences of the decision.

**The initial or starting conditions and/or the boundary conditions in making wise decisions may not be well known.** The theory does not assume any priority among MPC, SOA, and CEM in wise decision making. By emphasizing the integration of these qualities, the theory may be argued that what would be the starting point for making a wise management decision?

**How far can and must reflection go?** The theory does not provide a clear boundary around how far and deep should/can internal/external reflection go in terms of assessing, challenging, and suggesting substitutions for the substantive widely accepted values and beliefs in society and social institutes. This may be an acknowledgement of the impact of the societal and cultural aspects of the chronological and geographical position of the decision maker on the decision. While in one society critical and theological reflection, for example, may be strictly boycotted, in others profound reflections on the widespread and fundamental assumptions and value systems may be encouraged. The extent to which reflection is required for making wise management decisions is not explicitly covered by the theory. Moreover, the theory does not suggest what kind of value systems must be reflected on. Is it just financial assumptions, organizational assumptions, societal assumptions, or all of them? Implicit in the theory is the understanding that the extent and content of reflection may change or evolve according to the decision maker's wisdom.

**Not an accurate description:** The objective of grounded theory is to develop only a theory, not an accurate description (Glaser, 2005). PRIDM as an emergent theory is not claimed by this study to be an accurate description of the way wise management decisions are made. The emergent theory of PRIDM is, therefore, open to further testing, interpretation, and development.

**Theory as process:** With an emphasis on “theory as process”, the graphical pictorials used in Chapter 4 represent the theory as a “momentary product”, not a “perfected product” (Glaser & Strauss, 1967, p. 32). So, it is re-emphasized here in the limitation section that the grounded theory of ‘Praxio-Reflexive Integrated Decision Making’ is an “ever-developing entity” that is still developing (Glaser & Strauss, 1967).

## 7.6 Directions for Future Research

The findings reveal important areas in need of further research. This study, emphasising the centrality of decision making in management tasks, aimed to investigate the relationship between wisdom and management decision making. The findings, however, do not underestimate the need for further investigation of the contribution of wisdom to management or other fields. The recommended directions for future research are categorised into three main groups: recommendations based on the research limitations (Table 7-4), recommendations based on the findings (Table 7-5), and recommendations based on the theory limitations.

### 7.6.1 Directions for Future Research Based on Limitations of the Research

Considering the limitations of the current study (section 7.5, this chapter), the following areas of research are recommended for future studies on wisdom. Table 7-4 outlines the directions for future studies.

Research Areas	Research Queries
Constraints and supports in wise management decision making	Whether wise or unwise, not all managers always make wise or unwise decisions. The question that arises here is: What differentiates a wise manager from a typical manager if they both are likely to make wrong decisions?

Investigating the managers who are or are thought to be wise	Future studies of wisdom in management are encouraged to investigate wise managers. Would typical managers' perceptions of wisdom be different from those of <i>wise</i> managers?
Strategic vs. operational decisions	Is there any difference between wise strategic decisions and wise operational decisions?
Wise collective decisions	How would wise management decision making at the individual level differ from collective levels?

**Table 7-4: Directions for Future Studies: Recommendations Based on the Research Limitations**

**Constraints and supports in wise management decision making:** Almost all the informants held similar views that wise people did not necessarily make right decisions all the time. Informants believed that, although wise managers are able to make wise decisions, that is not always the case. Even wise managers may make wrong decisions. Future studies are recommended to investigate: What supportive factors are involved in wise management decision making? What barriers, constraints, or factors would lead management decisions to unwise outcomes? And, how can typical managers become wise? How often and why do wise managers make wrong decisions? Does the lack of any of the qualities that have been identified in this study necessarily lead to unwise management decisions? Would individuals with less managerial experience and those with substantial managerial experience pay similar levels of attention to the qualities that PRIDM introduces?

**Investigating the managers who are, or are thought to be, wise:** Since the informants were not interviewed as though they were wise or thought to be wise, it would be beneficial for research to examine the consistency of the emergent theory of PRIDM with the actual decision making of those managers who are thought to be wise. The possible research could involve interviewing the 'wise people' identified in this study and asking them to indicate the level of their agreement or disagreement on the emergent theory of PRIDM. Such research, however, requires adopting a theory or characterisation of wise managers that can help to identify and locate wise managers. A potential research question is: would typical managers' perceptions of wisdom be different from those of *wise* managers?

**Strategic vs. operational decisions:** Future studies can be focused on the relationships between wisdom and different types of management decisions. Is there any difference between wise strategic decisions and wise operational decisions? If so, how are the two types of decision different with respect to wisdom? How is wisdom defined at the operational level? How can wise operational decisions be made? To what extent does making wise decisions at the operational level support making wise management decisions at the strategic level? Are those who have demonstrated wisdom in their decisions and actions at the operational level necessarily able to make wise management decisions at the strategic levels?

**Wise collective decisions:** Informants' interpretations of wise managers as individuals lead the findings of this study to mainly revolve around wise management decision making at the individual level, not collective (e.g. team and board decision making) decision making. So, a potential area of study could be the investigation of the relationship between wisdom and collective decision making. Recommended research topics could also be the investigation of the difference between individual and collective wisdom in management. How would wise management decision making at the individual level differ from collective levels? How would Praxio-reflexive integrated decision making be implemented in group decision making?

### 7.6.2 Directions for Future Research Based on Limitations of the Research Findings

Based on the findings, future studies are recommended to be focused on five main areas: cross-cultural research, teaching wisdom in schools and universities, information- and knowledge- related technology, decision support systems, and mindfulness in management. Table 7-5 outlines the potential areas for future studies.

Research Fields	Rationale and Research Queries
Cross-cultural research	Cross-cultural studies of wisdom are important as wisdom has a critical role to play in managing knowledge effectively in international businesses (considering that knowledge as an ingredient of wisdom is profoundly linked with culture), and in dealing with the complexity of the current global economy. Future studies of wisdom are highly

	<p>recommended to investigate wisdom through cross-cultural lenses.</p> <ul style="list-style-type: none"> <li>• How differently is wisdom perceived in different cultures?</li> <li>• How are the Western, Eastern, and Middle Eastern philosophies of wisdom different/similar?</li> <li>• How can a critical comparative analysis of the traditions expand our understanding of wisdom in the modern era?</li> <li>• How can wisdom be developed in culturally diverse international businesses?</li> <li>• How can cross-cultural conceptions of wisdom lead to wise leadership and management?</li> </ul>
Teaching wisdom in schools and universities	<p>Wisdom is still neglected in educational settings. This may be due to numerous reasons. Future research is strongly encouraged to be focused on the following questions:</p> <ul style="list-style-type: none"> <li>• How can wisdom be taught in education settings?</li> <li>• How can students learn wisdom? How can the learning be facilitated in different cultures? Are there any differences in terms of learning wisdom in different cultures?</li> <li>• What components must be taught? Do they differ in terms of the material and techniques of teaching?</li> <li>• Who is responsible for developing wisdom-focused pedagogies?</li> <li>• What constraints preclude the development of wisdom-focused pedagogies? How can the obstacles be overcome?</li> </ul>
Decision Support Systems	<p>Considering the findings of the study it is important for future studies to investigate how the technology and information systems can be implemented to support and facilitate making wise decisions.</p> <ul style="list-style-type: none"> <li>• How can Information Technology lead to the wisdom development of the user, rather than just helping with managing data and information?</li> <li>• In what way must DSS be designed to support wise management decision making?</li> <li>• How can MPC, SOA, and CEM be supported in decision making processes by DSS?</li> <li>• How can DSS assist the decision maker in the Praxio-Reflexive Integration of MPC, SOA, and CEM?</li> </ul>
Information- and knowledge-related technologies and concerns	<p>Examining how the different aspects of wisdom (as identified in this study, e.g. MPC, SOA, CEM, Praxio-Reflexive Integration) can drive information- and knowledge- related technologies toward a good life would</p>

	<p>be highly important in future studies.</p> <ul style="list-style-type: none"> <li>• What is the ‘wise use’ of information technology? How is it defined?</li> <li>• How would MPC, SOA, and CEM lead to the wise use of information technology?</li> <li>• How does ‘praxio-reflexive integration’ positively influence the implementation of technology?</li> <li>• In what way must the new technologies be designed and developed that lead to the good life?</li> <li>• How can technology be used towards the development of individual and communal wisdom?</li> <li>• Given the conception of ‘information technology’, how would it be possible to differentiate it from ‘wisdom technology’?</li> </ul>
Mindfulness in Management	<p>Mindfulness and meditation are suggested to be facilitating factors for acceptance and transcendence of negative emotions (Bergsma &amp; Ardel, 2012; Farb et al., 2010). Below are recommended research queries:</p> <ul style="list-style-type: none"> <li>• How can meditation facilitate the enhancement of MPC, CEM, SOA, and ultimately making Praxio-Reflexive Integrated decision making?</li> <li>• What mechanisms can one implement towards drawing a balance between self-awareness and Other-awareness through reflection?</li> <li>• What mechanisms can/must be implemented to develop one’s cognitive-emotional mastery?</li> </ul>

**Table 7-5: Areas for Further Research**

**Cross-cultural studies:** Wisdom is a context bounded quality. This means that studying wisdom independent of the environmental context is impossible (Sternberg, 1990a). The approach, however, does not preclude interests in studying wisdom from a cross-cultural perspective. Cross-cultural studies of wisdom are especially important as wisdom has a critical role to play in managing knowledge effectively in international businesses (considering that knowledge as an ingredient of wisdom is profoundly linked with culture), and in dealing with the complexity of the current global economy (Pauleen et al., 2010). Future studies of wisdom are highly recommended to investigate wisdom through cross-cultural lenses.

**Teaching wisdom in schools and universities:** While it has been broadly emphasised that wisdom must be taught in schools (Ferrari & Potworowski, 2008;

Maxwell, 2012b; Stanovich, 2001; Sternberg, 2001), wisdom is still neglected in educational settings. This may be due to numerous reasons. It could be because of the lack of a consensus on the concept of wisdom and its component parts among scholars. It might be because of the lack of a systematic approach to teaching wisdom. Or it might be because of the ambiguity surrounding the measurement of wisdom in terms of methods and techniques. Accordingly, future research is strongly encouraged to focus on such questions as: How can students learn wisdom? And, who is responsible for developing wisdom-focused pedagogies?

**Decision Support Systems:** With the findings of this study, that underlines and explicates the profound link between wisdom and management decision making, it is of primary concern to investigate how the technology and information systems can be designed to support and facilitate making wise decisions. Although such information systems as Decision Support Systems (DSS) can assist the decision maker in accessing, acquiring, analysing, and disseminating data, information and knowledge, all the factors involved in a decision can not necessarily be implemented algorithmically, due to the complexity of the factors (Pinto, Mettler, & Taisch, 2013) or the complexity inherent in the interactions of factors (Liu, Lee, & Chen, 2011). The current study shows that making appropriate decisions engages numerous factors that may not be accurately represented by data, information, and knowledge. Concerns related to empathy, intuition, emotions, and ethics are these types of factors. Given the extensive studies that have been done in the field of DSS (Ben-Zvi, 2012; Courtney, 2001; Kohli & Devaraj, 2004; Paradice, 2007; Shibl, Lawley, & Debus, 2013; Tian, Wang, Li, Li, & Wang, 2007) and given the findings of the current study, the potential areas of study in the field of DSS are recommended to be centred on the link between wisdom and DSS.

**Information- and knowledge-related technologies:** (Information Technology, Information and Communication Technology, Information Systems, and knowledge management systems): In the current world, society is broadly characterised as an information or knowledge society (Pantzar, 2000). And with the considerable advances in technology, it would seem critical to ask ‘how can information- and knowledge-related technologies, e.g. information and communication technologies, information systems, and knowledge management

systems, contribute to the good life?'. Spence (2011) argues that wisdom as an epistemological, axiological, and eudemonic concept is a type of meta-knowledge and meta-virtue, that can enable one to know what a good life is and how information and knowledge can be applied to live such a life in practice. So, examining how the different aspects of wisdom (as identified in this study, e.g. MPC, SOA, CEM, Praxio-Reflexive Integration) can drive information- and knowledge- related technologies toward the good life would be highly important in future studies.

**Mindfulness in management:** 'Mindfulness' is another potential area of study that will considerably contribute to the management literature and practice. Mindfulness and meditation are suggested to facilitate factors for acceptance and transcendence of negative emotions (Bergsma & Ardel, 2012; Farb et al., 2010; Hill & Updegraff, 2012), and to promote self-awareness (Kemeny et al., 2012). Mindfulness as "a conscious exclusion of other elements of life, apart from that which is being attended to, is achieved when senses and awareness are tuned into present action: the opposite of multi-tasking" (Bolton, 2010, p. 15), is argued to have implications for organisations and leadership in today's world (Case, 2013). It is recommended that future studies give consideration to the investigation of mindfulness in management education and practices.

### **7.6.3 Direction for Future Research Based on Limitations of the Theory**

It might be quite difficult to convince information age managers that what they need more than anything else is wisdom to succeed in the challenges that they face in the business world. They are inevitably engaged in handling a mass volume of data and information to understand situations and make decisions about their current and future actions. Figures and numbers may give them the sense that they can easily understand what is going on around them, how they can react, and what the possible results of a particular decision or performance would be. They might simply look for wisdom through numbers. For those managers who desperately look for simplification to understand the complex world around them, it might be disappointing to accept that the world that is represented by numbers does not necessarily reflect the numerous and inextricably interwoven social, environmental, political, and economic aspects of the business world. They may

not easily accept getting involved in the wise management decision making process: a process clearly not as simple as managing reality through the lens of numbers. Accordingly it is strongly suggested that future studies investigate how to bridge a manager's desires for short-term tangible presentations of reality and the more complex requirements that are suggested by the theory proposed in this study. How can the theory be developed in such a way that shows both the strengths and limitations of data, information, and knowledge in the wise management decision making process?

Other possible questions include, how critically reflective a manager must be to make wise management decisions? How deep must they go in terms of reflecting on the substantial assumptions of others? How can managers present these reflections to others to justify their decisions (if data and information in form of numbers and figures do not allow them to do so)?

## **7.7 Chapter Summary**

The chapter reviewed the research problem, objectives, and findings. The implications of the study can be categorised into seven fields: education, sustainability (implications for organisations and governments), knowledge management, improving decision making, developing an integrated multi-factor assessment tool, and reconciling emotion-logic dualism in decision making. The study's limitations associated with research methodology and findings were discussed. The limitations of the study include 'participants as typical informants', 'sample composition', 'one person coding', 'generalisability', 'individual decision making versus group decision making', 'concentration on senior managers rather than operational managers or employees', 'non-exclusive list of qualities', 'identification of the level of wisdom contribution to a decision', 'not an accurate description', and 'theory as process'. The chapter also suggested directions for future research.

## 7.8 Concluding Statement

In order to examine the relationship between wisdom and management decision making, managers and executives based in New Zealand were interviewed. Using the Glaserian approach of grounded theory (the Classic grounded theory), through five phases of data collection, and analysis of the informants' interpretations of wisdom, the relationship of wisdom to management decision making was examined. Based on the findings, a theory emerged that provides an understanding of making wise management decisions. The Emergent Theory of PRIDM provides an understanding of how wisdom is understood by practitioners in the business world, and how wisdom contributes to management decision making.

The findings showed that wise management decision making engages and integrates diverse yet interrelated qualities: MPC, CEM, SOA, using Reflexivity, and Praxis. According to the findings, wise management decisions are based on a consideration of multiple perspectives, which encompasses anticipating consequences, taking different perspectives, and considering ethics (MPC). Further, wise management decisions are based on an integration of both cognition and emotion (CEM). The third quality that is critical in making wise management decisions refers to the decision maker's awareness of self and others (SOA). These three qualities are enhanced and integrated through the reflections that the decision maker makes on their internal world and the external environment. The findings also suggested that, through an unremitting continuous reflexivity and praxis, the decision maker's wisdom develops over the process of wise management decision making.

I hope that the findings and contributions of this research study broaden our scholarly understanding of the concept of wisdom in organisational and management studies and in relation to management decision making. In addition, I hope that the findings, grounded in practitioners' interpretations, and theoretically supported by the literature, contribute to the improvement of managers' and executives' decision making skills in the current turbulent business world.

## **Bibliography**

- Abraham, W. (2006). Education, social transformation, and intellectual virtue. *Christian Higher Education, 5*, 3–19.
- Achenbaum, A. W., & Orwoll, L. (1991). Becoming wise: A psychogerontological interpretation of the book of job. *The International Journal of Aging and Human Development, 32*(1), 21–39.
- Ackoff, R. L. (1989). From data to wisdom. *Journal of Applied Systems Analysis, 16*, 3–9.
- Ackoff, R. L. (1999). On learning and the systems that facilitate it. *Reflection, 1*(1), 14–29.
- Ahmed, A., Hasnain, N., & Venkatesan, M. (2012). Decision making in relation to personality types and cognitive styles of business students. *The IUP Journal of Management Research, XI*(2), 20–30.
- Alavi, M., & Leidner, D. (1999). Knowledge management systems: Issues, challenges and benefits. *Communications of the Association for Information Systems, 1*(7), 2–36.
- Aldwin, C. M. (2009). Gender and wisdom: A brief overview. *Research in Human Development, 6*(1), 1–8.
- Allee, V. (1997). *The knowledge evolution: Expanding organizational intelligence*. London: Butterworth-Heinemann.
- Alter, S. (1999). *Information systems: A management perspective*. Auckland, New Zealand: Addison-Wesley Publishing Co.
- Alvesson, M., & Sköldbberg, K. (2009). *Reflexive methodology* (2nd ed.). London: Sage Publications.
- Andrews, T. (2011). Reflections of generating a formal grounded theory. In V. B. Martin & A. Gynnild (Eds.), *Grounded theory: The philosophy, method, and work of Barney Glaser* (pp. 277–282). Boca Raton: BrownWalker Press.

- Aquinas, T. (1948). *Summa Theologica*. (Fathers of the English Dominican Provinc, Trans.). New York, NY: Benziger Broders.
- Ardelt, M. (1997). Wisdom and life satisfaction in old age. *Journal of Gerontology: Psychological Sciences*, 52B(1), 15–27.
- Ardelt, M. (2003). Empirical assessment of a three-dimensional wisdom scale. *Research On Aging*, 25(3), 275–324.
- Ardelt, M. (2004). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development*, 47, 257–285.
- Ardelt, M. (2005). How wise people cope with crises and obstacles in life. *Revision*, 28(1), 7–19.
- Ardelt, M. (2010). Are older adults wiser than college students? A comparison of two age cohorts. *Journal of Adult Development*, 17(4), 193–207.
- Ardelt, M. (2011). The measurement of wisdom: A commentary on Taylor, Bates, and Webster's comparison of the saws and 3D-WS. *Experimental Aging Research*, 37(2), 241–255.
- Aristotle. (2009). *The Nicomachean Ethics*. (D. Ross, Trans.). Oxford: Oxford University Press.
- Arlin, P. K. (1990). Wisdom: The art of problem finding. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 230–243). New York: Cambridge University Press.
- Arnold Sr, D. F., Dorminey, J. W., Neidermeyer, A. A., & Neidermeyer, P. E. (2013). Internal and external auditor ethical decision-making. *Managerial Auditing Journal*, 28(4), 300–322.
- Awad, E. M., & Ghaziri, H. M. (2004). *Knowledge management*. Upper Saddle River, NJ: Prentice Hall.
- Baggini, J., & Fosl, P. S. (2007). *The ethics toolkit: A compendium of ethical concepts and methods*. Malden: Blackwell Publishing.

- Baltes, P. B. (1991). The many faces of human ageing: Toward a psychological culture of old age. *Psychological Medicine*, *21*, 837–854.
- Baltes, P. B. (2004). Wisdom as orchestration of mind and virtue. Book in preparation. Retrieved from [http://library.mpib-berlin.mpg.de/ft/pb/PB\\_Wisdom\\_2004.pdf](http://library.mpib-berlin.mpg.de/ft/pb/PB_Wisdom_2004.pdf)
- Baltes, P. B., Dittmann-Kohli, F., & Dixon, R. (1984). *New perspectives on the development of intelligence in adulthood: toward a dual-process conception and a model of selective optimization with compensation*. New York: Academic Press.
- Baltes, P. B., & Freund, A. M. (2003). Human strength as the orchestration of wisdom and SOC. In U M Staudinger & L. Aspinwall (Eds.), *A psychology of human strengths: Perspectives on an emerging field* (pp. 23–35). Washington, DC: APA Books.
- Baltes, P. B., & Kunzmann, U. (2003). Wisdom: The peak of human excellence in the orchestration of mind and virtue. *The Psychologist*, *16*(3), 131–133.
- Baltes, P. B., & Kunzmann, U. (2004). The two faces of wisdom: Wisdom as a general theory of knowledge and judgment about excellence in mind and virtue vs. wisdom as everyday realization in people and products. *Human Development*, *47*(5), 290–299.
- Baltes, P. B., & Smith, J. (1990). Toward a psychology of wisdom and its ontogenesis. In R. J. Sternberg (Ed.), *Toward a psychology of wisdom and its ontogenesis* (pp. 87–120). New York: Cambridge University Press.
- Baltes, P. B., & Staudinger, U. M. (1993). The search for a psychology of wisdom. *Current Directions in Psychological Science*, *2*(3), 75–80.
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist*, *55*(1), 122–136.

- Baltes, P. B., Staudinger, U. M., Maerker, A., & Smith, J. (1995). People nominated as wise: A comparative study of wisdom-related knowledge. *Psychology and Aging, 10*(2), 155–166.
- Banerjee, S. B. (2001). Managerial perceptions of corporate environmentalism: Interpretations from industry and strategic implications for organizations, *38*(4), 489–513.
- Bass, B. M. (1983). *Organizational decision making*. Homewood, Illinois: Richard D. Irwin Inc.
- Bazerman, M. H. (2006). *Judgment in managerial decision making* (6th ed.). New Caledonia: John Wiley & Sons.
- Bazerman, M. H., & Chugh, D. (2006). Decisions without blinders. *Harvard Business Review, 84*(1), 88–97.
- Bazerman, M. H., & Malhotra, D. (2006). It's not intuitive: Strategies for negotiating more rationally. *Negotiation, 9*(5).
- Bazerman, M. H., & Moore, D. A. (2009). *Judgment in managerial decision making* (7th ed.). Hoboken, NJ: John Wiley & Sons.
- Beach, L. R., & Connolly, T. (2005). *The psychology of decision making: People in organizations* (2nd ed.). Thousand Oaks: Sage Publications.
- Beard, C., & Wilson, J. P. (2006). *Experiential learning: A best practice handbook for educators and trainers* (2nd ed.). London: Kogan Page.
- Beauchamp, T. L. (1991). *Philosophical ethics: An introduction to moral philosophy* (2nd ed.). New York: McGraw-Hill.
- Beck, S. (1999). Confucius and Socrates: The teaching of wisdom. Retrieved from <http://www.san.beck.org>
- Beck, U. (2000). Risk society revisited: Theory, politics and research programs. In B. Adam, U. Beck, & J. van Loon (Eds.), *The risk society and beyond: Critical issues for social theory* (pp. 211–229). London: Sage.

- Begley, A. M. (2006). Facilitating the development of moral insight in practice: Teaching ethics and teaching virtue. *Nursing Philosophy: An International Journal for Healthcare Professionals*, 7(4), 257–265.
- Bennet, A., & Bennet, D. (2008). Moving from knowledge to wisdom, from ordinary consciousness to extraordinary consciousness. *VINE: The Journal of Information and Knowledge Management Systems*, 38(1), 7–15.
- Bennis, W. G., & O'Toole, J. (2005). How business schools lost their way. *Harvard Business Review*, 83(5), 96–104.
- Ben-Zvi, T. (2012). Measuring the perceived effectiveness of decision support systems and their impact on performance. *Decision Support Systems*, 54(1), 248–256.
- Bergsma, A., & Ardel, M. (2012). Self-reported wisdom and happiness: An empirical investigation. *Journal of Happiness Studies*, 13(3), 481–499.
- Betsch, T., & Held, C. (2012). Rational decision making: Balancing RUN and JUMP modes of analysis. *Mind & Society*, 11(1), 69–80.
- Bierly III, P. E., Kessler, E. H., & Christensen, E. W. (2000). Organizational learning, knowledge and wisdom. *Journal of Organizational Change Management*, 13(6), 595–618.
- Bigelow, J. (1992). Developing managerial wisdom. *Journal of Management Inquiry*, 1(2), 143–153.
- Biloslavo, R., & McKenna, B. (2011). Wisdom and transformational leadership: A conceptual model. In *The Seventh International Critical Management Studies (CMS) Conference, 11-13 July*. Naples.
- Biloslavo, R., & McKenna, B. (2013). Testing a 4-dimensional model of wisdom on wise political leaders. In W. M. Küpers & D. J. Pauleen (Eds.), *Handbook of practical wisdom: Leadership, organization and integral business practice*. Aldershot: Gower.
- Binder, M., & Edwards, J. S. (2010). Using grounded theory method for theory building in operations management research: A study in inter-firm

- relationship governance. *International Journal of Operations & Production Management*, 30(3), 232–259.
- Birks, M., & Mills, J. (2011). *Grounded theory: A practical guide*. London: Sage.
- Birren, J. E., & Fisher, L. M. (1990). The elements of wisdom: Overview and integration. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 317–332). Cambridge: Cambridge University Press.
- Birren, J. E., & Svensson, C. M. (2005). Wisdom in history. In R. J. Sternberg & J. Jordan (Eds.), *A handbook of wisdom: Psychological perspectives* (pp. 3–31). New York, NY: Cambridge University Press.
- Blasi, P. (2006). The European university - Towards a wisdom-based society. *Higher Education in Europe*, 31(4), 403–407.
- Bluck, S., & Glück, J. (2005). From the inside out: People's implicit theories of wisdom. In R. J. Sternberg & J. Jordan (Eds.), *A handbook of wisdom: Psychological perspectives* (pp. 84–109). New York: Cambridge University Press.
- Boal, K. B., & Hooijberg, R. (2000). Strategic leadership research: Moving on. *Leadership Quarterly*, 11(4), 515–549.
- Bolton, G. (2010). *Reflective practice: Writing & professional development* (3rd ed.). London: Sage.
- Bourdreau, A., & Couillard, G. (1999). Systems integration and knowledge management. *Information systems management*, 16(4), 24–32.
- Boyatzis, R. E., Stubbs, E. C., & Taylor, S. N. (2002). Learning cognitive and emotional intelligence competencies through graduate management education. *Academy of Management Learning and Education*, 1(2), 150–162.
- Brown, S. C. (2004). Learning across the campus: How college facilitates the development of wisdom. *Journal of College Student Development*, 45(2), 134–148.
- Brugman, G. M. (2006). *Wisdom and aging*. Amsterdam: Elsevier.

- Bryman, A. (2008). *Social research methods* (3rd ed.). New York: Oxford University Press.
- Buchanan, L., & O'Connell, A. (2006). A brief history of decision making. *Harvard Business Review*, 84(1), 32–41.
- Buckley, P. J., & Carter, M. J. (2004). A formal analysis of knowledge combination in multinational enterprises. *Journal of International Business Studies*, 35(5), 371–384.
- Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organizational analysis*. London: Heinemann.
- Cabantous, L., & Gond, J.-P. (2011). Rational decision making as performative praxis: Explaining rationality's éternel retour. *Organization Science*, 22(3), 573–586.
- Cabantous, L., Gond, J.-P., & Johnson-cramer, M. (2008). The social construction of rationality in organizational decision making. In G. P. Hodgkinson & W. H. Starbuck (Eds.), *The oxford handbook of organizational decision making* (pp. 399–417). Oxford: Oxford University Press.
- Cammock, P. (2003). *The dance of leadership: The call for soul in 21st century leadership* (2nd ed.). Auckland, New Zealand: Prentice Hall.
- Cannon-Bowers, J. A., & Salas, E. (Eds.). (1998). *Making decisions under stress*. Washington, DC: American Psychological Association.
- Carey, M. (2012). *Qualitative research skills for social work: Theory and practice*. Surrey: Ashgate.
- Carnevale, J. J., Inbar, Y., & Lerner, J. S. (2011). Individual differences in need for cognition and decision-making competence among leaders. *Personality and Individual Differences*, 51(3), 274–278.
- Carroll-Garrison, M. M. (2012). *An exploration of managers' awareness and reaction to workplace incivility: A grounded theory study*. Unpublished doctoral dissertation, University of Phoenix, Phoenix, Arizona.

- Case, P. (2013). Cultivation of wisdom in the Theravada Buddhist tradition: Implications for contemporary leadership and organization. In W. Küpers & D. J. Pauleen (Eds.), *Handbook of practical wisdom: Leadership, organization and integral business practice*. Aldershot: Gower.
- Cavana, R. Y., Dellahaye, B. L., & Sekaran, U. (2001). *Applied business research: Qualitative and quantitative methods*. Queens Land: John Wiley & Sons Australia Ltd.
- Charmaz, K. (1990). “Discovering” chronic illness: Using grounded theory. *Social Science & Medicine*, 30(11), 1161–1172.
- Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 509–536). Thousand Oaks: Sage.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: Sage.
- Chia, R. (1996). The problem of reflexivity in organizational research: Towards a postmodern science of organization. *Organizations*, 3(1), 31–59.
- Christiansen, Ó. (2007). A simpler understanding of classic GT: How it is a fundamentally different methodology. In B. G. Glaser & J. A. Holton (Eds.), *The grounded theory seminar reader* (pp. 401–418). Mill Valley, CA: Sociology Press.
- Churchman, C. W. (1971). *The design of inquiring systems: Basic concepts of systems and organization*. New York: Basic Books.
- Clayton, V. (1975). Erikson’s theory of human development as it applies to the aged: Wisdom as contradictory cognition. *Human Development*, 18(119-128).
- Clayton, V. (1976). *A multidimensional scaling analysis of the concept of wisdom*. Dissertation, University of Southern California, Graduate School, Psychology.

- Clayton, V. (1982). Wisdom and Intelligence: The nature and function of knowledge in the later years. *International Journal of Aging and Human Development*, 15(4), 315–320.
- Clayton, V., & Birren, J. E. (1980). The development of wisdom across the life-span: A re-examination of an ancient topic. In P. B. Baltes & O. G. Brim Jr. (Eds.), *Life-span development and behavior* (Vol. 3, pp. 103–135). New York: Academic Press.
- Cohen, M. S. (1993). Three paradigms for viewing decision biases. In G. Klein, J. Orasanu, R. Calderwood, & C. E. Zsombok (Eds.), *Decision making in action* (pp. 36–50). Norwood, NJ: Ablex.
- Collis, J., & Hussey, R. (2009). *Business research: A practical guide for undergraduate & postgraduate students* (3rd ed.). Basingstoke, UK: Palgrave Macmillan.
- Cooper, K., & White, R. (2012). *Qualitative research in the post-modern era: Context of qualitative research*. London: Springer.
- Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles: Sage.
- Courtney, J. F. (2001). Decision making and knowledge management in inquiring organizations: Towards a new decision-making paradigm for DSS. *Decision Support Systems*, 31(1), 17–38.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks: Sage Publications.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles: Sage.
- Crook, C., & Garratt, D. (2011). The positivist paradigm in contemporary social research: The interface of psychology, method and sociocultural theory. In B. Somekh & C. Lewin (Eds.), *Theory and methods in social research* (2nd ed., pp. 212–219). Los Angeles: Sage.

- Csikszentmihalyi, M., & Rathunde, K. (1990). The psychology of wisdom: An evolutionary interpretation. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 25–51). New York: Cambridge.
- Cunliffe, A. L. (2003). Reflexive inquiry in organizational research: Questions and possibilities. *Human Relations*, *56*(8), 983–1003.
- Curnow, T. (1999). *Wisdom, intuition, and ethics*. Aldershot, UK: Ashgate.
- Curtis, S., Gesler, W., Smith, G., & Washburn, S. (2000). Approaches to sampling and case selection in qualitative research: Examples in the geography of health. *Social Science & Medicine*, *50*(7-8), 1001–1014.
- Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing*, *31*(6), 1476–1484.
- Dahlsgaard, K., Peterson, C., & Seligman, M. E. P. (2005). Shared virtue: The convergence of valued human strengths across culture and history. *Review of General Psychology*, *9*(3), 203–213.
- Damasio, A. R. (2005). *Descartes' error: Emotion, reason, and the human brain*. New York: Penguin Books.
- Davenport, T., & Prusak, L. (1998). *Working knowledge*. Boston: Harvard Business School Press.
- Deslauriers, M. (2002). How to distinguish Aristotle's virtues. *Phronesis*, *47*(2), 101–126.
- Desmond, B., & Jowitt, A. (2012). Stepping into the unknown: Dialogical experiential learning. *Journal of Management Development*, *31*(3), 221–230.
- Dijksterhuis, A., Bos, M. W., Nordgren, L. F., & van Baaren, R. B. (2006). On making the right choice: The deliberation-without-attention effect. *Science*, *311*(5763), 1005–1007.
- Douglas, D. (2006). Intransivities of managerial decisions: A grounded theory case. *Management Decision*, *44*(2), 259–275.

- Douglas, D. (2010). A grounded case of enterprise acquisition. *The Electronic Journal of Business Research Methods*, 8(2), 63–72.
- Driver, J. (2003). The conflation of moral and epistemic virtue julia driver. *Metaphilosophy*, 34(3), 367–383.
- Drucker, P. F. (1967). The effective decision. *Harvard Business Review*, 45(1), 92–98.
- Edwards, M. G. (2013). Wisdom and integrity: Metatheoretical perspectives on integrative change in an age of turbulence. In W. M. Küpers & D. J. Pauleen (Eds.), *A handbook of practical wisdom: Leadership, organization and integral business practice* (pp. 197–216). Surrey: Gower.
- Edwards, M. G., & Küpers, W. M. (2014). *Integral science*. Albany: The State University of New York Press SUNY Press.
- Edwards-Groves, C., & Gray, D. (2008). Developing praxis and reflective practice in pre-service teacher education. In S. Memmis & T. J. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 85–107). Rotterdam: Sense Publishers.
- Eisenhardt, K. M. (1989). Making fast strategic decisions in high-velocity environments. *The Academy of Management Journal*, 32(3), 543–576.
- Elkin, G., Martin-Niemi, F., & Cathro, V. (2013). Developing wisdom in future managers: Encouraging practical wisdom via voluntary engagement during undergraduate business education. *International Journal of Economics and Business Research*, 5(2), 214–225.
- Elliott, N., & Higgins, A. (2012). Surviving grounded theory research method in an academic world: Proposal writing and theoretical frameworks. *The Grounded Theory Review*, 11(2), 1–12.
- Elqayam, S., & Over, D. (2012). Probabilities, beliefs, and dual processing: The paradigm shift in the psychology of reasoning. *Mind & Society*, 11(1), 27–40.
- Emerson, R. W. (1929). *The complete works of R. W. Emerson*. New York: Wise.

- Erikson, E. H. (1959). *Identity in the life cycle*. New York, NY: International Universities Press.
- Erikson, E. H. (1963). *Childhood & Society*. New York: Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Erikson, M. (2009). Authentic leadership: Practical reflexivity, self-awareness, and self-authorship. *Journal of Management Education* 2, 33(5), 747–771.
- Etheredge, L. S. (1992). Wisdom and good judgment in politics. *Political Psychology*, 13(3), 497–516.
- Etheredge, L. S. (2005). Wisdom in public policy. In R. J. Sternberg & J. Jordan (Eds.), *A handbook of wisdom: Psychological perspectives* (pp. 297–328). Cambridge: Cambridge University Press.
- Evans, J. S. B. T. (2009). How many dual-process theories do we need? One, two, or many? In J. S. B. T. Evans & K. Frankish (Eds.), *In two minds: Dual processes and beyond* (pp. 33–54). Oxford: Oxford University Press.
- Evans, J. S. B. T. (2012). Spot the difference: Distinguishing between two kinds of processing. *Mind & Society*, 11(1), 121–131.
- Farb, N. A. S., Anderson, A. K., Mayberg, H., Bean, J., McKeon, D., & Segal, Z. V. (2010). Minding one's emotions: mindfulness training alters the neural expression of sadness. *Emotion*, 10(1), 25–33.
- Faucher, J.-B. P. L., Everett, A. M., & Lawson, R. (2008). Reconstituting knowledge management. *Journal of Knowledge Management*, 12(3), 3–16.
- Fearn, N. (2005). *Philosophy: The latest answers to the oldest questions*. London: Atlantic Books.
- Ferrari, M., & Potworowski, G. (Eds.). (2008). *Teaching for wisdom: Cross-cultural perspectives on fostering wisdom*. Dordrecht: Springer.
- Firestone, J. M. (2003). *Enterprise information portals and knowledge management*. Massachusetts: Butterworth-Heinemann.

- Fook, J. (2002). *Social work: Critical theory and practice*. London: Sage.
- Fraser, W., & Hyland-Russell, T. (2011). Searching for Sophia: Adult educators and adult learners as wisdom seekers. *New Directions for Adult and Continuing Education*, 2011(131), 25–34.
- Galotti, K. M. (2002). *Making decisions that matter: How people face important life choices*. London: Lawrence Erlbaum Associates.
- Galotti, K. M., Ciner, E., Altenbaumer, H. E., Geerts, H. J., Rupp, A., & Woulfe, J. (2006). Decision-making styles in a real-life decision: Choosing a college major. *Personality and Individual Differences*, 41(4), 629–639.
- Garrett, R., & College, B. (1996). Three Definitions of Wisdom. In K. Lehrer, B. J. Lum, B. A. Slichta, & N. D. Smith (Eds.), *Knowledge, Teaching, and Wisdom* (pp. 221–232). Dordrecht: Kluwer Academic Publishers.
- Gayle, R. (2011). Befriending wisdom. *Analytic Teaching And Philosophical Praxis*, 31(1), 70–78.
- George, J. M. (2000). Emotions and leadership: The roles of emotional intelligence. *Human Relations*, 53(8), 1027–1055.
- Gergen, K. J. (1992). Organization theory in the postmodern ear. In M. Reed & M. Hughes (Eds.), *Rethinking organization: New directions in organization theory and analysis* (pp. 207–227). London: Sage.
- Gibcus, P., Vermeulen, P. A. M., & Radulova, E. (2008). The decision-making entrepreneur: A literature review. In P. A. M. Vermeulen & P. L. Curşeu (Eds.), *Entrepreneurial strategic decision-making: A cognitive perspective* (pp. 11–40). Cheltenham: Edward Elgar Publishing Limited.
- Gibson, P. S. (2008). Developing practical management wisdom. *Journal of Management Development*, 27(5), 528–536.
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Mill Valley, California: The Sociology Press.

- Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs. forcing*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (1999). The future of grounded theory. *Qualitative Health Research*, 9(6), 836–845.
- Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2003). *The grounded theory perspective II: Description's remodeling of grounded theory methodology*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2007). *Doing formal grounded theory: A proposal*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2011). Generating formal theory. In V. B. Martin & A. Gynnild (Eds.), *Grounded theory: The philosophy, method, and work of Barney Glaser* (pp. 257–275). Boca Raton, Florida: BrownWalker Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine De Gruyter.
- Glück, J., & Bluck, S. (2011). Laypeople's conceptions of wisdom and its development: Cognitive and integrative views. *The Journals of Gerontology*, 66(3), 321–324.
- Goede, M. (2011). The wise society: Beyond the knowledge economy. *Foresight*, 13(1), 36–45.
- Goulding, C. (1998). Grounded theory: The missing methodology on the interpretivist agenda. *Qualitative Market Research: An International Journal*, 1(1), 50–57.

- Goulding, C. (2002). *Grounded theory: A practical guide for management, business and market researchers*. London: SAGE.
- Greene, J. A., & Brown, S. C. (2009). The wisdom development scale: Further validity investigations. *International Journal of Aging and Human development*, 68(4), 289–320.
- Grint, K. (2007). Learning to lead: Can Aristotle help us find the road to wisdom? *Leadership*, 3(2), 231–246.
- Grossmann, I., Karasawa, M., Izumi, S., Na, J., Varnum, M. E. W., Kitayama, S., & Nisbett, R. E. (2012). Aging and wisdom: Culture matters. *Psychological Science*, 23(10), 1059–1066.
- Gugerell, S. H., & Riffert, F. (2011). On defining “wisdom”: Baltes, Ardelt, Ryan, and Whitehead. *Interchange*, 42(3), 225–259.
- Gygax, M., & Fitzgerald, S. (2011). Enriching the positive organizational behavior framework with wisdom. *International Journal of Business Research*, 11(2), 23–41.
- Hakim, A. B. (2006). *Historical introduction to Philosophy* (5th ed.). New Jersey: Upper Saddle River.
- Hall, J., & Hofer, C. (1993). Venture capitalists decision criteria in new venture evaluation. *Journal of Business Venturing*, 8(1), 25–42.
- Hall, S. (2010). *Wisdom: From philosophy to neuroscience*. New York: Alfred Knopf.
- Hall, W. A., & Callery, P. (2001). Pearls, pith, and provocation: Enhancing the rigor of grounded theory: Incorporating reflexivity and relationality. *Qualitative Health Research*, 11(2), 257–272.
- Halpern, D. F. (2001). Why wisdom? *Educational Psychologist*, 36(4), 253–256.
- Hammer, M. (2002). *The getting and keeping of wisdom: Inter-generational knowledge transfer in a changing public service*. Ottawa: Public Service Commission of Canada. Retrieved from <http://epe.lac->

bac.gc.ca/100/200/301/psc-cfp/getting\_keeping\_wisdom-  
e/html/research/knowledge/wisdom\_e.htm

- Hammond, J. S., Keeney, R. L., & Raiffa, H. (1999). *Smart choices: A practical guide to making better life decisions*. New York: Broadway.
- Hanson, J. D., Melnyk, S. A., & Calantone, R. A. (2011). Defining and measuring alignment in performance management. *International Journal of Operations & Production Management*, 31(10), 1089–1114.
- Haralambos, M., Holborn, M., & Heald, R. (1995). *Sociology: Themes and perspectives* (4th ed.). London: Collins Educational.
- Harris, P. R. (2005). *Managing the knowledge culture*. Amherst, Massachusetts: HRD Press.
- Harrison, F. E. (1999). *The managerial decision-making process* (5th ed.). Boston: Houghton Mifflin Company.
- Hart, W. (1987). *The art of living: Vippsna meditation taught by S.N. Goenka*. San Francisco: Harper.
- Harwood, L. D. (2011). Sagely wisdom in Confucianism. *Analytic Teaching And Philosophical Praxis*, 31(1), 56–63.
- Hay, C. (2011). Interpreting interpretivism interpreting interpretations: The new hermeneutics of public administration. *Public Administration*, 89(1), 167–182.
- Hay, Colin. (2011). Interpreting interpretivism interpreting interpretations: The new hermeneutics of public administration. *Public Administration*, 89(1), 167–182.
- Hayes, R. H. (2000). Toward a new architecture for POM. *Production and Operations Management*, 9(2), 105–110.
- Hays, J. M. (2007). Dynamics of organizational wisdom. *The Business Renaissance Quarterly*, 2(4), 77–122.

- Hays, J. M. (2010). The ecology of wisdom. *Management & Marketing*, 5(1), 71–92.
- Hays, J. M. (2013). Transformation and transcendence: The emergence and sustainment of wise leaders and organizations. In W. M. Küpers & D. J. Pauleen (Eds.), *Handbook of practical wisdom: Leadership, organization and integral business practice* (pp. 133–154). Aldershot: Gower.
- Hearn, G., Rooney, D., & Mandeville, T. (2003). Phenomenological turbulence and innovation in knowledge systems. *Prometheus*, 21(2), 231–246.
- Hess, J. D., & Bacigalupo, A. C. (2011). Enhancing decisions and decision-making processes through the application of emotional intelligence skills. *Management Decision*, 49(5), 710–721.
- Hickson, D. J., Butler, R. J., Cary, D., Mallory, G. R., & Wilson, D. C. (1989). Decision and organization - Processes of strategic decision making and their explanation. *Public Administration*, 67(4), 373–390.
- Higgs, J. (2012). Realising practical wisdom from the pursuit of wise practice. In E. A. Kinsella & A. Pitman (Eds.), *Phronesis as professional knowledge: Practical wisdom in the professions* (pp. 73–85). Rotterdam: Sense Publishers.
- Hill, C. L. M., & Updegraff, J. A. (2012). Mindfulness and its relationship to emotional regulation. *Emotion*, 12(1), 81–90.
- Hinterhuber, H. (1996). Oriental wisdom and western leadership. *The International Executive*, 38(3), 287–302.
- Hintze, J. (2006). Why do we make bad decisions? In *Making smart decisions* (pp. 123–130). Boston: Harvard Business School Press.
- Holian, R. (2002). Management decision making and ethics: Practices, skills and preferences. *Management Decision*, 40(9), 862–870.
- Holland, R. (1999). Reflexivity. *Human Relations*, 52(4), 463–484.

- Holliday, S. G., & Chandler, M. J. (1986). *Wisdom: Explorations in adult competence*. Basel, Switzerland: Karger.
- Holton, J. A. (2007). Rehumanising knowledge work through fluctuating support knowledge: A grounded theory. In B G Glaser & J. A. Holton (Eds.), *The grounded theory seminar reader*. Mill Valley: Sociology Press.
- Hudson, L. A., & Ozanne, J. L. (1988). Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research*, 14(4), 508–521.
- Huehls, F. (2005). An evening of grounded theory: Teaching process through demonstration. *The Qualitative Report*, 10(2), 328–338.
- Idrees, I., Vasconcelos, A. C., & Cox, A. M. (2011). The use of grounded theory in PhD research in knowledge management: A model four-stage research design. *Aslib Proceeding: New Information Perspectives*, 63(2/3), 188–203.
- Ihidero, S. O. (2012). *Examining the relationships between organizational communication and conflict management, and the leader-member exchange (LMX) theory*. Unpublished doctoral dissertation, University of Maryland University College, Maryland, USA.
- Inglis, D., & Thorpe, C. (2012). *An invitation to social theory*. Cambridge: Polity Press.
- Intezari, A. (2011). The role of wisdom in managerial decision-making: Preliminary empirical findings. *Practical Wisdom: Leadership, Organization and Integral Business Practice - A Symposium*. Auckland, New Zealand.
- Intezari, A. (2012). From Wisdom to Praxis: Empirical findings on practical wisdom and decision-making. *Wise Management in Organizational Complexity*. China Europe International Business School (CEIBES), Shanghai.
- Intezari, A., & Pauleen, D. J. (2011). Wisdom, management and extreme unpredictability. In *Spirituality Leadership & Management (SLaM)*. Sydney, Australia.

- Intezari, A., & Pauleen, D. J. (2012). When knowledge is insufficient: Wisdom in a complex world. In *Americas Conference on Information Systems (AMCIS)*. Seattle, Washington.
- Intezari, A., & Pauleen, D. J. (2013a). Management wisdom in perspective: Are you virtuous enough to succeed in volatile times? *Journal of Business Ethics*.
- Intezari, A., & Pauleen, D. J. (2013b). Students of wisdom: An integral Meta-competencies theory of practical wisdom. In W. M. Küpers & D. J. Pauleen (Eds.), *Handbook of practical wisdom: Leadership, organization and integral business practice* (pp. 155–174). Aldershot: Gower.
- Jablow IV, L. R. (2012). *Exposing experience: A grounded theory study exploring the influence of experience on executive decision processes*. Unpublished doctoral dissertation, Capella University, Minnesota.
- Jarvis, P. (2011). Teaching, learning, and the human quest: Wisdom. *New Directions for Adult and Continuing Education*, (131), 85–93.
- Jashapara, A. (2004). *Knowledge management: An integrated approach*. Harlow: FT/Prentice Hall.
- Jeste, D. V, Ardelt, M., Blazer, D., Kraemer, H. C., Vaillant, G., & Meeks, T. W. (2010). Expert consensus on characteristics of wisdom: A Delphi method study. *The Gerontologist*, 50(5), 668–80.
- Johns, C. (1995). Framing learning through reflection within Carper's fundamental ways of knowing in nursing. *Journal of Advanced Nursing*, 22, 226–234.
- Johnston, R., Brignall, S., & Fitzgerald, L. (2002). The involvement of management accountants in operational process change: Results from field research. *International Journal of Operations & Production Management*, 22(12), 1325–1338.
- Jones, R., & Noble, G. (2007). Grounded theory and management research: A lack of integrity? *Qualitative Research in Organizations and Management: An International Journal*, 2(2), 84–103.

- Kahneman, D., & Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 49–81). New York: Cambridge University Press.
- Kaldjian, L. C. (2010). Teaching practical wisdom in medicine through clinical judgement, goals of care, and ethical reasoning. *Journal of medical ethics*, *36*, 558–562.
- Kayes, C. D. (2002). Experiential learning and its critics: Preserving the role of experience in management learning and education. *Academy of Management Learning & Education*, *1*(2), 137–149.
- Keast, S., & Michael, T. (2009). *Rational Decision-making for Managers*. West Sussex: John Wiley and Sons.
- Keeney, R. L., & Raiffa, H. (1993). *Decisions with multiple objectives: Preferences and value tradeoffs*. Cambridge: Cambridge University Press.
- Kekes, J. (1995). *Moral wisdom and good lives*. Ithaca and London: Cornell University Press.
- Kemeny, M. E., Foltz, C., Cavanagh, J. F., Cullen, M., Giese-Davis, J., Jennings, P., ... Ekman, P. (2012). Contemplative/emotion training reduces negative emotional behavior and promotes prosocial responses. *Emotion (Washington, D.C.)*, *12*(2), 338–50.
- Kemmis, S. (2012). Phronēsis, experience, and the primacy of praxis. In Elizabeth Anne Kinsella & A. Pitman (Eds.), *Phronesis as professional knowledge: Practical wisdom in the professions* (pp. 147–161). Rotterdam: Sense Publishers.
- Kemmis, S., & Smith, T. J. (2008a). Personal praxis: Learning through experience. In S. Kemmis & T. J. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 15–35). Rotterdam: Sense Publishers.

- Kemmis, S., & Smith, T. J. (2008b). Praxis and praxis development. In S. Kemmis & T. J. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 3–13). Rotterdam: Sense Publishers.
- Kessler, E. H. (2006). Organizational wisdom: Human, managerial, and strategic implications. *Group & Organization Management*, 31(3), 296–299.
- Khatri, N., & Ng, H. A. (2000). The role of intuition in strategic decision making. *Human Relations*, 53(1), 57–86.
- Kincheloe, J. L., & McLaren, P. (2008). Rethinking critical theory and qualitative research. In Norman K. Denzin & Y. S. Lincoln (Eds.), *The landscape of qualitative research* (3rd ed., pp. 403–456). Los Angeles: Sage Publications.
- Kitchener, K. S., & Brenner, H. G. (1990). Wisdom and reflective judgment: Knowing in the face of uncertainty. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 212–229). New York: Cambridge University Press.
- Kleimann, B. (2013). University presidents as wise leaders? Aristotle's *phronêsis* and academic leadership in Germany. In W. M. Küpers & D. J. Pauleen (Eds.), *A handbook of practical wisdom: Leadership, organization and integral business practice* (pp. 175–195). Surrey: Gower.
- Klein, J., & Weiss, I. (2007). Towards an integration of intuitive and systematic decision making in education. *Journal of Educational Administration*, 45(3), 265–277.
- Kock Jr, N. F., McQueen, R. J., & Baker, M. (1996). Learning and process improvement in knowledge organizations: A critical analysis of four contemporary myths. *The Learning Organization*, 3(1), 31–41.
- Kodish, S. (2006). The paradoxes of leadership: The contribution of Aristotle. *Leadership*, 2(4), 451–468.
- Kohlberg, L. (1984). *The philosophy of moral development*. New York: Harper & Row.

- Kohli, R., & Devaraj, S. (2004). Contribution of institutional DSS to organizational performance: evidence from a longitudinal study. *Decision Support Systems*, 37(1), 103–118.
- Kok, A. (2009). Realizing wisdom theory in complex learning networks. *Electronic Journal of e-Learning*, 7(1), 53–60.
- Kolb, A. Y., & Kolb, D. A. (2001). *Experiential learning theory bibliography*. Boston: McBer and Co.
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193–212.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs: Prentice Hall.
- Kolbe, R. H., & Burnett, M. S. (1991). Content-analysis research: An examination of applications with directives for improving research reliability and objectivity. *Journal of Consumer Research*, 18(2), 243–250.
- König, S., & Glück, J. (2013). Individual differences in wisdom conceptions: Relationships to gratitude and wisdom. *International Journal of Aging and Human Development*, 77(2), 127–147.
- Korac-Kakabadse, N., Korac-Kakabadse, A., & Kouzmin, A. (2001). Leadership renewal: Towards the philosophy of wisdom. *International Review of Administrative Sciences*, 67(2), 207–227.
- Kramer, D. A. (1990). Conceptualizing wisdom: The primacy of affect-cognition relations. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 279–313). New York: Cambridge University Press.
- Kreiner, K. (2002). Tacit knowledge management: The role of artifacts. *Journal of Knowledge Management*, 6(2), 112–123.
- Krill, D. F. (1990). *Practice wisdom: A guide for helping professionals*. Newbury Park: Sage.

- Kunzmann, U. (2004). Approaches to a good life: The emotional-motivational side of wisdom. In P. A. Linley, S. Joseph, & M. E. P. Seligman (Eds.), *Positive Psychology in Practice* (pp. 504–517). Hoboken, NJ: Wiley.
- Kunzmann, U., & Baltes, P. B. (2005). The psychology of wisdom: Theoretical and empirical challenges. In R. J. Sternberg & J. Jordan (Eds.), *Handbook of wisdom: Psychological perspectives* (pp. 110–135). New York: Cambridge University Press.
- Küpers, W. M. (2007). Phenomenology and integral pheno-practice of wisdom in leadership and organization. *Social Epistemology: A Journal of Knowledge, Culture, and Policy*, 21(2), 169–193.
- Küpers, W. M., & Pauleen, D. J. (2013). Introducing a handbook of practical wisdom for our times. In W. M. Küpers & D. J. Pauleen (Eds.), *A handbook of practical wisdom: Leadership, organization and integral business practice* (pp. 1–18). Surrey: Gower.
- Labouvie-Vief, G. (1990). Wisdom as integrated thought: Historical and developmental perspectives. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 52–83). New York: Cambridge University Press.
- Langley, A., Mintzberg, H., Pitcher, E., Posada, E., & Saint-Macary, J. (1995). Opening up decision-making: The view from the black stool. *Organization Science*, 6(3), 260–279.
- Le, T. N. (2008). Cultural values, life experiences, and wisdom. *The International Journal of Aging and Human Development*, 66(4), 259–281.  
doi:10.2190/AG.66.4.a
- LeBon, T. (2001). Wise therapy: Philosophy for counsellor. *Practical Philosophy*, 4(3), 24–32.
- Leedy, P. D., & Ormrod, J. E. (2013). *Practical research: Planning and design* (10th ed.). Boston: Pearson.

- Lehrer, K., & Smith, N. D. (1996). Introduction. In K. Lehrer, B. J. Lum, B. A. Slichta, & N. D. Smith (Eds.), *Knowledge, teaching, and wisdom* (pp. 3–17). Dordrecht: Kluwer Academic Publishers.
- Levanon, M. (2011). The dialogical path to wisdom education. *Analytic Teaching And Philosophical Praxis*, 31(1), 64–69.
- Levenson, M. R., Aldwin, C. M., & Cupertino, A. P. (2001). Transcending the self: Towards a liberative model of adult development. In A. L. Neri (Ed.), *Maturidade & Velhice: Um enfoque multidisciplinar* (pp. 99–115). Sao Paulo, BR: Papirus.
- Levenson, M. R., Jennings, P. A., Aldwin, C. M., & Shiraishi, R. W. (2005). Self-transcendence: Conceptualization and measurement. *International Journal of Aging & Human Development*, 60(2), 127–143.
- Liew, A. (2013). DIKIW: Data, information, knowledge, intelligence, wisdom and their interrelationships. *Business Management Dynamics*, 2(10), 49–62.
- Lillrank, P. (2003). The quality of information. *International Journal of Quality & Reliability Management*, 20(6), 691–703.
- Lincoln, Y. S., & Guba, Egon, G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In *Handbook of qualitative research* (pp. 163–188). London: Sage Publications.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Liu, Y., Lee, Y., & Chen, A. N. K. (2011). Evaluating the effects of task-individual-technology fit in multi-DSS models context: A two-phase view. *Decision Support Systems*, 51(3), 688–700.
- Locke, K. (2001). *Grounded theory in management research*. London: Sage Publications.
- Lombardo, T. (2010). Wisdom facing forward: What it means to have heightened future consciousness. *The Futurist*, September-.

- Longhofer, J., Floersch, J., & Hoy, J. (2013). *Qualitative methods for practice research*. Oxford: Oxford University Press.
- Lynch, M. (2000). Against reflexivity as an academic virtue and source of privileged knowledge. *Theory, Culture & Society*, 17(3), 26–54.
- MacIntyre, A. (1985). *After virtue: A study in moral theory*. London: Duckworth.
- Maddalena, V., & Canada, H. (2007). A practical approach to ethical decision-making. *Leadership in Health Services*, 20(2), 71–75.
- March, R. (2000). Buyer decision-making behavior in international tourism channels. *International Journal of Hospitality & Tourism Administration*, 10(1), 11–25.
- Marker, A. W. (2013). The development of practical wisdom: Its critical role in sustainable performance. *Performance Improvement*, 52(4), 11–21.
- Martin, P. Y., & Turner, B. A. (1986). Grounded theory and organizational research. *The Journal of Applied Behavioral Science*, 22, 141–157.
- Marková, I. S. (2005). *Insight in Psychiatry*. Cambridge: Cambridge University Press.
- Matthews, P. (1998). What lies beyond knowledge management: Wisdom creation and versatility. *Journal of Knowledge Management*, 1(3), 207–214.
- Mattila, S. S. A. (2010). Wise organisations, unwise people or the other way around? Understanding phronesis through open systems. Presented at 26th EGOS Colloquium, Sub-theme 12: Wisdom in Organizations and Wise Organizing, Lisbon.
- Maxwell, J. A. (2005). *Qualitative research design: An interactive approach* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Maxwell, N. (1984). *From knowledge to wisdom: A revolution in the aims & methods of science*. Oxford: Basil Blackwell.
- Maxwell, N. (2007). Can the world learn wisdom? *The E-Newsletter of Solidarity, Sustainability, and Non-Violence*, 3(4).

- Maxwell, N. (2010). Universities: From knowledge to wisdom. *Scientists for Global Responsibility Newsletter*, 18, 18–20.
- Maxwell, N. (2012a). Wisdom: Object of study or basic aim of inquiry? In M. Ferrari (Ed.), *Personal wisdom*. Dordrecht: Springer.
- Maxwell, N. (2012b). Arguing for wisdom in the university: An intellectual autobiography. *Philosophia*, 40(4), 663–704.
- Maxwell, N. (2012c). How universities can help humanity learn how to resolve the crises of our times - from knowledge to wisdom: The University College London experience. In D. Rooney & G. Hearn (Eds.), *Handbook on the knowledge economy, Volume two* (pp. 158–180). Cheltenham, UK: Kastelle, Tim.
- Maxwell, N. (2013). From knowledge to wisdom: Assessment and prospects after three decades. *Integral Review*, 9(2), 76–112.
- McAdams, D. P., & de St Aubin, E. De (Eds.). (1998). *Generativity and adult development: How and why we care for the next generation*. Washington, DC: American Psychological Association.
- McCallin, A. M. (2003). Designing a grounded theory study: Some practicalities. *Nursing in Critical Care*, 8(5), 203–208.
- McClain, L., Ylimaki, R., & Ford, M. P. (2010). Sustaining the heart of education: Finding space for wisdom and compassion. *International Journal of Children's Spirituality*, 15(4), 307–316.
- McDowell, J. (1998). *Mind, value, and reality*. Cambridge: Harvard University Press.
- McElroy, M. W. (2003). *The new knowledge management*. Oxford: Butterworth-Heinemann/Elsevier Science.
- McKenna, B. (2005). Wisdom, ethics and the postmodern organization. In D. Rooney, G. Hearn, & A. Ninan (Eds.), *Handbook on the knowledge economy* (pp. 37–53). Cheltenham: Edward Elgar.

- McKenna, B. (2013a). The multi-dimensional character of wisdom. In M. J. Thompson & D. Bevan (Eds.), *Wise Management in Organizational Complexity* (pp. 13–33). London: Palgrave Macmillan.
- McKenna, B. (2013b). Teaching for wisdom: Cross cultural perspectives on fostering wisdom. *Academy of Management Learning & Education*, 12(2), 319–320.
- McKenna, B., & Rooney, D. (2007). Wisdom in organizations: Whence and whither. *Social Epistemology*, 21(2), 113–138.
- McKenna, B., & Rooney, D. (2008). Wise leadership and the capacity for ontological acuity. *Management Communication Quarterly*, 21(4), 537–546.
- McKenna, B., & Rooney, D. (2009). Book review: Kessler, E. H. & Bailey, J. R. (Eds.) *Handbook of organizational and managerial wisdom*, 2007 Sage. *Organization Studies*, 30(4), 447–449.
- McKenna, B., Rooney, D., & Boal, K. B. (2009). Wisdom principles as a meta-theoretical basis for evaluating leadership. *The Leadership Quarterly*, 20, 177–190.
- McKenna, B., Rooney, D., & Hays, J. M. (2011). Wisdom and the good life. *Philosophy of Management*, 10(1), 1–8.
- McKenna, B., Rooney, D., & Kenworthy, A. L. (2013). Introduction: Wisdom and Management - A guest-edited special collection of resource reviews for management education. *Academy of Management Learning & Education*, 12(2), 306–311.
- McKenna, B., Rooney, D., & Liesch, P. W. (2006). Beyond knowledge to wisdom in international business strategy. *Prometheus*, 24(3), 283–300.
- McKenna, B., Rooney, D., Liesch, P. W., & Boal, K. (2008). Snapshot: Knowledge in the absence of wisdom. In D. Barry & H. Hansen (Eds.), *The sage handbook of new approaches in management and organization* (pp. 344–345). London: Sage Publications.

- McKenna, B., Rooney, D., & ten Bos, R. (2007). Wisdom as the old dog... with new tricks. *Social Epistemology*, 21(2), 83–86.
- McKenna, R. J., & Martin-Smith, B. (2005). Decision making as a simplification process: New conceptual perspectives. *Management Decision*, 43(6), 821–836.
- Meacham, J. A. (1983). Wisdom and the context of knowledge: knowing that one doesn't know. In D. Kuhn & J. A. Meacham (Eds.), *On the development of developmental psychology* (pp. 111–134). Basel, Switzerland: Karger.
- Meacham, J. A. (1990). The loss of wisdom. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 181–211). New York: Cambridge University Press.
- Meeks, T. W., & Jeste, D. V. (2009). Neurobiology of wisdom: A literature overview. *Archives of General Psychiatry*, 66(4), 355–365.
- Mehmetoglu, M., & Altinay, L. (2006). Examination of grounded theory analysis with an application to hospitality research. *Hospitality Management*, 25(1), 12–33.
- Melé, D. (2010). Practical wisdom in managerial decision making. *Journal of Management Development*, 29(7/8), 637–645.
- Melkas, H., & Harmaakorpi, V. (2008). Data, information and knowledge in regional innovation networks: Quality considerations and brokerage functions. *European Journal of Innovation Management*, 11(1), 103–124.
- Merriam, S. B., & Caffarella, R. S. (1999). *Learning in adulthood: A comprehensive guide* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Messick, D. M., & Bazerman, M. H. (2001). Ethical leadership and the psychology of decision making. *The New Phase of Business Ethics*, 3, 213–238.
- Michel, L. (2007). Understanding decision making in organizations to focus its practices where it matters. *Measuring business excellence*, 11(1), 33–45.

- Michelson, E. (1996). Usual suspects: Experience, reflection and the (en) gendering of knowledge. *International Journal of Lifelong Education*, 15(6), 438–454.
- Miettinen, R. (2000). The concept of experiential learning and John Dewey's theory of reflective thought and action. *International Journal of Lifelong education*, 19(1), 54–72.
- Miller, B., Malloy, M. A., Masek, E., & Wild, C. (2001). Towards a framework for managing the information environment. *Information and Knowledge Systems Management*, 2, 359–384.
- Miller, S. J., Hickson, D. J., & Wilsdon, D. C. (2002). Decision-making in organizations. In G. Salaman (Ed.), *Decision making for business: A reader* (pp. 74–92). London: Sage Publications.
- Miner, Jr., F. C. (1984). Group versus individual Decision making: An investigation of performance measures, decision strategies, and process losses/gains. *Organizational Behavior and Human Performance*, 33(1), 112–124.
- Mintzberg, H. (2004). *Managers not MBAs: A hard look at the soft practice of managing and management development*. San Francisco: Berrett-Hoehler.
- Mintzberg, H. (2005). The magic number seven - Plus or minus a couple of managers. *Academy of Management Learning & Education*, 4(2), 244–247.
- Mintzberg, H. (2011). From management development to organization development with IMPact. *OD Practitioner*, 43(3), 25–29.
- Mintzberg, H., & Gosling, J. (2002). Educating Managers Beyond Borders. *Academy of Management Learning & Education*, 1(1), 64–76.
- Mintzberg, H., Raisinghani, D., & Théorêt, A. (1976). The structure of “unstructured” decision processes. *Administrative Science Quarterly*, 21(2), 246–275.
- Mintzberg, H., & Westley, F. (2001). Decision making: It's not what you think. *MIT Sloan Management Review*, 42(3), 89–94.

- Mintzberg, H., & Westley, F. (2010). Decision making: It's not what you think. In P. C. Nutt & D. C. Wilson (Eds.), *Handbook of decision making* (pp. 73–81). West Sussex: Wiley.
- Moberg, D. J. (2007). Practical Wisdom and Business Ethics: Presidential Address to the Society for Business Ethics. *Business Ethics Quarterly*, 17(3), 535–561.
- Montgomery, A., Barber, C., & McKee, P. (2002). A phenomenological study of wisdom in later life. *International Journal of Aging and Human Development*, 54(2), 139–157.
- Moody, H. R. (1983). Wisdom and the search for meaning. In *36th Annual Meetings of the Gerontological Society of America*. San Francisco.
- Moore, D. A., & Loewenstein, G. (2004). Self-interest, automaticity, and the psychology of conflict of interest. *Social Justice Research*, 17(2), 189–202.
- Morera, O. F., & Budescu, D. V. (2001). Random error in analytic hierarchies: A comparison of holistic and decompositional decision strategies. *Journal of Behavioral Decision Making*, 14, 223–242.
- Murnighan, K. J., Cantelon, D. A., & Elyashiv, T. (2001). Bounded personal ethics and the tap dance of real estate agency. In J. A. Wagner III, J. M. Bartunek, & K. D. Elsbach (Eds.), *Advances in qualitative organizational research*. New York, NY: Elsevier.
- Neuman, W. L. (2003). *Social research methods: Qualitative and quantitative approaches*. Boston: Allyn and Bacon.
- Newton, E. (2012). *Exploration of follower perceptions of leadership effectiveness: A grounded study of leadership in governmental organizations*. Unpublished doctoral dissertation, University of Phoenix, Phoenix, Arizona, USA.
- Nichols, R. (1996). Maxims, “Practical Wisdom,” and the Language of Action: Beyond Grand Theory. *Political Theory: An International Journal of Political Philosophy*, 24(4), 687–705.

- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 17–37.
- Nonaka, I., & Takeuchi, H. (2011). The big idea: The wise leader. *Harvard Business Review*, 89(5), 58–67.
- Nozick, R. (1989). What is wisdom and why do philosophers love it so? In R. Nozick (Ed.), *The examined life* (pp. 267–278). New York: Touchstone.
- Nunamaker Jr., J. F., Romano Jr., N. C., & Briggs, R. O. (2002). Increasing intellectual bandwidth: Generating value from intellectual capital with information technology. *Group Decision and Negotiation*, 11, 69–86.
- Nunes, M. B., & Al-Mamari, S. (2008). Inductive approaches using a priori coding in information systems research: A discussion. In *Proceedings of the 7th European Conference on Research Methodology for Business and Management Studies* (pp. 36–72). London: Regent's College.
- Nutt, P. C. (1989). *Making tough decisions*. San Francisco: Jossey-Bass.
- Nutt, P. C. (2002). *Why decisions fail: Avoiding the blunders and traps that lead to debacles*. San Francisco: Berrett-Koehler Publishers.
- Nutt, P. C., & Wilson, D. C. (2010). Crucial trends and issues in strategic decision making. In P. C. Nutt & D. C. Wilson (Eds.), *Handbook of decision making* (pp. 3–29). West Sussex: John Wiley and Sons.
- O'Callaghan, J. (1996). Grounded theory: A potential methodology. *Counselling Psychology Review*, 11(1), 23–28.
- O'Connor, A., & Hyde, A. (2005). Teaching reflection to nursing students: A qualitative study in an Irish context. *Innovations in Education and Teaching International*, 42(4), 291–303.
- O'Sullivan. (2005). Some theoretical propositions on the nature of practice wisdom. *Journal of Social Work*, 5(2), 221–242.
- O'Toole, C. J. (1938). The teaching of intellectual and moral virtues. *Ethics*, 49(1), 81–84.

- Ofstad, H. (1961). *An inquiry into the freedom of decision*. Oslo: Norwegian Universities Press.
- Oktaý, J. S. (2012). *Grounded theory*. Oxford: Oxford University Press.
- Orwoll, L., & Perlmutter, M. (1990). The study of wise persons: Integrating a personality perspective. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and developmen* (pp. 160–177). New York: Cambridge University Press.
- Ostenfeld, E. N. (2003). Socratic wisdom: The model of knowledge in Plato's early dialogues by H. H. Benson. *The Classical Review*, 53(1), 44–48.
- Pantzar, E. (2000). Knowledge and wisdom in the information society. *Foresight, The Journal of Future Studies, Strategic Thinking and Policy*, 2(2), 230–236.
- Paradice, D. (2007). Expanding the boundaries of DSS. *Decision Support Systems*, 43(4), 1549–1552.
- Parker, L. D., & Roffey, B. H. (1997). Methodological themes: Back to the drawing board: revisiting founded theory and the everyday accountant's and manager's reality. *Accounting, Auditing & Accountability Journal*, 10(2), 212–247.
- Pascual-Leone, J. (1990). An essay on wisdom: Toward organismic processes that make it possible. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 244–278). New York: Cambridge University Press.
- Pasupathi, M., & Staudinger, U. M. (2001). Do advanced moral reasoners also show wisdom? Linking moral reasoning and wisdom-related knowledge and judgement. *International Journal of Behavioral Development*, 25(5), 401–415.
- Pasupathi, M., Staudinger, U. M., & Baltes, P. B. (2001). Seeds of wisdom: Adolescents' knowledge and judgment about different life problems. *Developmental Psychology*, 37(3).
- Pauleen, D. J., Rooney, D., & Holden, N. (2010). Practical wisdom and the development of cross-cultural knowledge management: A global leadership perspective. *European Journal of International Management*, 4(2), 382–395.

- Pettigrew, A. M. (2002). Decision-making as a political process. In G. Salaman (Ed.), *Decision making for business: A reader*2 (pp. 97–107). London: Sage Publications.
- Phillips, D. C., & Burbules, N. C. (2000). *Postpositivism and educational research*. Lanham, MD.: Rowman and Littlefield.
- Pieper, J. (1966). *The four cardinal virtues*. Notre Dame: University of Notre Dame Press.
- Pinto, R., Mettler, T., & Taisch, M. (2013). Managing supplier delivery reliability risk under limited information: Foundations for a human-in-the-loop DSS. *Decision Support Systems*, 54(2), 1076–1084.
- Pless, N. M., Maak, T., & Stahl, G. K. (2011). Developing responsible global leaders through international service-learning programs: The Ylysses experience. *Academy of Management Learning & Education*, 10(2), 237–260.
- Polansky, R. (2000). Phronesis on tour: Cultural adaptability of Aristotelian Ethical Notions. *Kennedy Institute of Ethics Journal*, 10(4), 323–336.
- Polit, D. F., & Beck, C. T. (2004). *Nursing research: Principles and methods* (7th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Pollner, M. (1991). Left of ethnomethodology: The rise and decline of radical reflexivity. *American Sociological Review*, 56(3), 370–380.
- Prasad, P. (2005). *Crafting qualitative research: Working in the postpositivist traditions*. Armonk, New York: M.E. Sharpe.
- Prewitt, V. R. (2002). Wisdom in the workplace. *Performance Improvement Quarterly*, 15(1), 84–98.
- Prusak, L., & Davenport, T. H. (2003). Who are the gurus' gurus. *Harvard Business Review*, 81(12), 14–16.

- Puleo, G. (2011). *Causes and maintenance factors of employee burnout during transformational*. Unpublished doctoral dissertation, Walden University, Minnesota, USA.
- Razzouk, N., Seiz, V., & Capo, K. P. (2007). A comparison of consumer decision-making behavior of married and cohabiting couples. *Journal of Consumer Marketing*, 24(5), 264–274.
- Rest, J. R. (1984). The major components of morality. In W. Kurtines & J. Gewirtz (Eds.), *Morality, moral behaviour, and moral development* (pp. 24–40). New York: John Wiley & Sons.
- Rest, J. R. (1986). *Moral development: Advances in research and theory*. New York: Praeger.
- Reznitskaya, A., & Sternberg, R. J. (2004). Teaching students to make wise judgments: The “teaching for wisdom” program. In A. Demetriou (Ed.), *Positive psychology in practice* (pp. 181–196). New York: Wiley.
- Robinson, D. N. (1990). Wisdom through the ages. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 13–24). New York: Cambridge University Press.
- Roca, E. (2007). Intuitive practical wisdom in organizational life. *Social Epistemology*, 21(2), 195–207.
- Roca, E. (2008). Introducing practical wisdom in business schools. *Journal of Business Ethics*, 82(3), 607–620.
- Rooney, D. (2013a). Being a wise organizational researcher: Ontology, epistemology and axiology. In W. M. Küpers & D. J. Pauleen (Eds.), *A handbook of practical wisdom: Leadership, organization and integral business practice* (pp. 79–98). Surrey: Gower.
- Rooney, D. (2013). Empirical wisdom research: A community approach. In M. J. Thompson & D. Bevan (Eds.), *Wise Management in Organizational Complexity* (pp. 34–52). London: Palgrave Macmillan.

- Rooney, D., Hearn, G., & Kastle, T. (2012). *Handbook on the knowledge economy, Volume two*. Cheltenham, UK: Edward Elgar.
- Rooney, D., Hearn, G., & Ninan, A. (2005). *Handbook on the knowledge economy*. Cheltenham, UK: Edward Elgar.
- Rooney, D., & McKenna, B. (2005). Should the knowledge--based economy be a savant or a sage? Wisdom and socially intelligent innovation. *Prometheus*, 23(3), 307–323.
- Rooney, D., & McKenna, B. (2008). Wisdom in public administration: Looking for a sociology of wise practice. *Public Administration Review*, 68(4), 709–721.
- Rooney, D., & McKenna, B. (2009). Knowledge, wisdom and intellectual leadership: A question of the future and knowledge-based sustainability. *International Journal of Learning and Intellectual Capital*, 6(1/2), 52–70.
- Rooney, D., McKenna, B., & Keenan, T. (2006). Copyright and cultural production: A knowledge and wisdom theory perspective on education policy. *Policy Futures in Education*, 4(4), 380–395.
- Rooney, D., McKenna, B., & Liesch, P. (2010). *Wisdom and management in the knowledge economy*. New York: Routledge.
- Roos, J. (2006). *Thinking from within: A hands-on strategy practice*. Basingstoke: Palgrave Macmillan.
- Rosanas, J. M. (2013). *Decision-making in a organizational context: Beyond economic criteria*. Hampshire: Palgrave Macmillan.
- Rosen, M. A., Salas, E., Lynos, R., & Fiore, S. M. (2008). Expertise and naturalistic decision making in organizations: Mechanisms of effective decision making. In G. P. Hodgkinson & W. H. Starbuck (Eds.), *The oxford handbook of organizational decision making* (pp. 211–230). Oxford: Oxford University Press.
- Rowe, A. J., & Boulgarides, J. D. (1983). Decision styles: A prespective. *Leadership & Organization Development Journal*, 4(4), 3–9.

- Rowley, J. (2006a). What do we need to know about wisdom? *Management Decision*, 44(9), 1246–1257.
- Rowley, J. (2006b). Where is the wisdom that we have lost in knowledge? *Journal of Documentation*, 62(2), 251–270.
- Rowley, J. (2007). The wisdom hierarchy: Representations of the DIKW hierarchy. *Journal of Information Science*, 33(2), 163–180.
- Rowley, J., & Gibbs, J. (2008). From learning organization to practically wise organization. *The Learning Organization*, 15(5), 356–372.
- Rowley, J., & Slack, F. (2009). Conceptions of wisdom. *Journal of Information Science*, 35(1), 110–119.
- Russell, H., & Grootenboer, P. (2008). Finding praxis? In S. Kemmis & T. J. Smith (Eds.), *Enabling praxis: Challenges for education* (pp. 109–126). Rotterdam: Sense Publishers.
- Ryan, S. (1996). Wisdom. In K. Lehrer, B. J. Lum, B. A. Slichta, & N. D. Smith (Eds.), *Knowledge, Teaching, and Wisdom* (pp. 233–242). Dordrecht: Kluwer Academic Publishers.
- Ryan, S. (1999). What is wisdom? *Philosophical studies*, 93, 119–139.
- Rycroft, R. W., & Kash, D. E. (1999). *The complexity challenge: Technological innovation for the 21st century*. London: Thomson Learning.
- Saaty, T. L. (1994). How to make a decision: The analytic hierarchy process. *Informs*, 24(6), 19–43.
- Scharge, M. (1996). Why stop at knowledge management? *Computerworld*, 30(46), 37.
- Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.
- Schibeci, R. A., & Grundy, S. (1987). Local theories. *Journal of Educational Research*, 81(2), 91–96.

- Schollmeier, P. (1989). Aristotle on Practical Wisdom. *Zeitschrift für philosophische Forschung*, 43, 124–132.
- Schraagen, J. M., Klein, G., & Hoffman, R. R. (2008). The macrocognition framework of naturalistic decision making. In J. M. Schraagen, L. G. Militello, T. Ormerod, & R. Lipshitz (Eds.), *Naturalistic Decision Making and Macrocognition* (pp. 3–25). Hampshire: Ashgate Publishing Limited.
- Schreiber, R. S., & Stern, P. N. (2001). *Using grounded theory in nursing*. New York, NY: Springer Publishing Company.
- Sevdalis, N., Petrides, K. V., & Harvey, N. (2007). Trait emotional intelligence and decision related emotions. *Personality and Individual Differences*, 42(7), 1347–1358.
- Shambaugh, J. C., Reis, R., & Rey, H. (2012). The Euro's three crises [with comments and discussion]. *Brookings Papers on Economic Activity*, Spring, 157–231.
- Sharma, R. (2005). Five factors of personality and wisdom. *Gyanodaya*, 2(2), 82–87.
- Sharp, A. M. (2007). Let's go visiting: Learning judgment-making in a classroom community of inquiry. *Gifted Education International*, 23, 301–312.
- Shibl, R., Lawley, M., & Debus, J. (2013). Factors influencing decision support system acceptance. *Decision Support Systems*, 54(2), 953–961.
- Shiloh, S., Koren, S., & Zakay, D. (2001). Individual differences in compensatory decision-making style and need for closure as correlates of subjective decision complexity and difficulty. *Personality and Individual Differences*, 30(4), 699–710.
- Simha, A. N. (2012). *The role of IT assets in organizational accumulation and appropriation of social capital for business risk mitigation and inter-organizational innovation*. The State University of New York, Buffalo, USA.

- Simmons, O. E. (2011). Why classic grounded theory. In V. B. Martin & A. Gynnild (Eds.), *Grounded theory: The philosophy, method, and work of Barney Glaser* (pp. 15–30). Roca Raton, Florida: BrownWalker Press.
- Simon, H. A. (1945). *Administrative behaviour* (2nd ed.). New York, NY: Free Press.
- Simon, H. A. (1955). A behavioral model of rational choice. *The Quarterly Journal of Economics*, 69(1), 99–118.
- Simon, H. A. (1959). Theories of decision-making in economics and behavioral science. *The American Economic Review*, 49(3), 253–283.
- Simon, H. A. (1960). *The new science of management decision*. New York: Harper & Row.
- Simons, T., Pelled, L. H., & Smith, K. a. (1999). Making use of difference: Diversity, debate, and decision comprehensiveness in top management teams. *Academy of Management Journal*, 42(6), 662–673.
- Singleton, R. A., & Straits, B. C. (2005). *Approaches to social research* (4th ed.). New York: Oxford University Press.
- Small, M. W. (2004). Wisdom and now managerial wisdom: Do they have a place in management development programs? *Journal of Management Development*, 23(8), 751–764.
- Small, M. W. (2011). Developing wisdom and moral duty in management. *Journal of Management Development*, 30(9), 836–846.
- Smith, G. F. (2008). Teaching decision making. In G. P. Hodgkinson & W. H. Starbuck (Eds.), *The oxford handbook of organizational decision making* (pp. 455–474). Oxford: Oxford University Press.
- Smith, J., & Baltes, P. B. (1990). Wisdom-related knowledge: Age/Cohort differences in response to life-planning problems. *Developmental Psychology*, 26(3), 494–505.

- Spence, E. H. (2011). Information, knowledge and wisdom: Groundwork for the normative evaluation of digital information and its relation to the good life. *Ethics and Information Technology, 13*(3), 261–275.
- Spielthener, G. (2004). Moral virtues. *Florianoópolis, 3*(1), 27–35.
- Stacey, R. D. (2003). *Strategic management and organizational dynamics: The challenge of complexity* (4th ed.). Harlow: Pearson Education.
- Stanovich, K. E. (2001). The rationality of educating for wisdom. *Educational Psychologist, 36*(4), 247–251.
- Stanovich, K. E., & Toplak, M. E. (2012). Defining features versus incidental correlates of Type 1 and Type 2 processing. *Mind & Society, 11*(1), 3–13.
- Stanovich, K. E., & West, R. F. (2000). Individual differences in reasoning: Implications for the rationality debate? *Behavioral and Brain Sciences, 23*, 645–726.
- Statler, M., & Roos, J. (2006). Reframing strategic preparedness: An essay on practical wisdom. *International Journal of Management Concepts and Philosophy, 2*(2), 99–117.
- Statler, M., & Roos, J. (2007). *Everyday strategic preparedness: The role of practical wisdom in organizations*. New York: Palgrave Macmillan.
- Staudinger, Ursula M. (1996). Wisdom and the social-interactive foundation of the mind. In P B Baltes & U. M. Staudinger (Eds.), *Interactive Mind: Life-span perspectives on the social foundation of cognition* (pp. 276–315). New York: Cambridge University Press.
- Staudinger, Ursula M. (2008). A psychology of wisdom: History and recent developments. *Research in Human Development, 5*(2), 107–120.
- Staudinger, Ursula M., Smith, J., & Baltes, P. B. (1992). Wisdom-related knowledge in a life review task: Age differences and the role of professional specialization. *Psychology and Aging, 7*(2), 271–281.

- Stern, P. N., Allen, L., & Moxley, P. (1982). The nurse as a grounded theorist: History, process and uses. *Review Journal of Philosophy and Social Science*, 7(2), 200–215.
- Sternberg, R. J. (1985). Implicit theory of intelligence, creativity, and wisdom. *Journal of Personality and Social Psychology*, 49(3), 607–627.
- Sternberg, R. J. (1986). Intelligence, wisdom, and creativity: Three is better than one. *Educational Psychologist*, 21(3), 175–190.
- Sternberg, R. J. (1990a). Wisdom and its relations to intelligence and creativity. In R J Sternberg (Ed.), *Wisdom: Its nature, origins, and developmen* (pp. 142–159). NY: Cambridge University Press.
- Sternberg, Robert J. (1990b). *Wisdom: Its nature, origins, and development*. New York: Cambridge.
- Sternberg, Robert J. (1998). A balance theory of wisdom. *Review of General Psychology*, 2(4), 347–365.
- Sternberg, Robert J. (2000). Wisdom as a form of giftedness. *Gifted Child Quarterly*, 44, 252–260.
- Sternberg, Robert J. (2001). Why schools should teach for wisdom: The balance theory of wisdom in educational settings. *Educational Psychologist*, 36(4), 227–245.
- Sternberg, Robert J. (2003). *Wisdom, intelligence, and creativity synthesized*. New York: Cambridge University Press.
- Sternberg, Robert J. (2004a). What is wisdom and how can we develop it? *Annals of the American Academy of Political and Social Science*, 591, 164–174.
- Sternberg, Robert J. (2004b). Words to the wise about wisdom? *Human Development*, 47(5), 286–289.
- Sternberg, Robert J., & Dobson, D. M. (1987). Resolving interpersonal conflicts: An analysis of stylistic consistency. *Journal of Personality and Social Psychology*, 52(4), 794–812.

- Steutel, J., & Spiecker, B. (1997). Rational passions and intellectual virtues: A conceptual analysis. *Studies in Philosophy and Education*, 16, 59–71.
- Stewart, T. (2006). Did you ever have to make up your mind? *Harvard Business Review*, 84(1), 12–12.
- Strauss, A. L. (1987a). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.
- Strauss, A. L. (1987b). *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.
- Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park: Sage.
- Strauss, A. L., & Corbin, J. M. (1994). Grounded theory methodology: An overview. In Norman K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 273–285). London: Sage.
- Strauss, A. L., & Corbin, J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). London: Sage Publications.
- Strijbos, S. (1995). How can systems thinking help us in bridging the gap between science and wisdom? *Systems Practice*, 8(4), 361–376.
- Symon, G., & Cassell, C. (2012). *Qualitative organizational research: Core methods and current challenges*. London: Sage Publications.
- Tan, J. (2010). Grounded theory in practice: Issues and discussion for new qualitative researchers. *Journal of Documentation*, 66(1), 93–112.
- Tang, Z. T., Chen, X., & Xiao, J. (2010). Using the classic grounded theory approach to understand consumer purchase decision in relation to the first customized products. *Journal of Product & Brand Management*, 19(3), 181–197.
- Taranto, M. A. (1989). Facets of wisdom: A theoretical synthesis. *International Journal of Aging and Human Development*, 29(1), 1–29.

- Taylor, C., & White, S. (2000). *Practising reflexivity in health and welfare: Making knowledge*. Buckingham: Open University Press.
- Taylor, M., Bates, G., & Webster, J. D. (2011). Matthew Taylor Glen Bates. *Experimental Aging Research*, 37(2), 129–141.
- Telfer, E. (1990). The unity of the moral virtues in Aristotle's Nicomachean Ethics. *Proceeding of the Aristotelian Society*, 90, 35–48.
- Thaler, R. H. (2000). From homo economicus to homo sapiens. *Journal of Economic Perspectives*, 14(1), 133–141.
- Thompson, V., & Morsanyi, K. (2012). Analytic thinking: Do you feel like it? *Mind & Society*, 11(1), 93–105.
- Tian, J., Wang, Y., Li, H., Li, L., & Wang, K. (2007). DSS development and applications in China. *Decision Support Systems*, 42(4), 2060–2077.
- Tinsley, H. E. A., & Weiss, D. J. (1975). Interrater reliability and agreement of subjective judgements. *Journal of Counseling Psychology*, 22(4), 358–378.
- Tinsley, H. E. A., & Weiss, D. J. (2000). Interrater reliability and agreement. In H. E. A. Tinsley & S. D. Brown (Eds.), *Handbook of Applied Multivariate Statistics and Mathematical Modeling* (pp. 95–124). San Diego: Academic Press.
- Tredget, D. A. (2010). Practical wisdom and the rule of benedict. *Journal of Management Development*, 29(7/8), 716–723.
- Trowbridge, R. H. (2011). Waiting for Sophia: 30 years of conceptualizing wisdom in empirical psychology. *Research in Human Development*, 8(2), 149–164.
- Tuomi, I. (2000). Data is more than knowledge. *Journal of Management Information Systems*, 16(3), 103–117.
- Urmson, J. O. (1998). *Aristotle's Ethics*. Oxford: Basil Blackwell.

- Vaillant, G. E. (2002). *Aging well: Surprising guideposts to a happier life from the landmark Harvard study of adult development*. Boston: Little, Brown and Company.
- Veal, A. J. (2005). *Business research methods: A managerial approach* (2nd ed.). Frenchs Forest: Pearson Education Australia.
- Vince, R. (1998). Behind and beyond Kolb's learning cycle. *Journal of Management Education*, 22(3), 304–319.
- Waddock, S. (2010). Finding wisdom within-The role of seeing and reflective practice in developing moral imagination, aesthetic sensibility, and systems understanding. *Journal of Business Ethics Education*, 7(1), 177–196.
- Walker, L. J. (2005). Toward a virtuous future: The framing of wisdom. *Journal of Financial Planning*, 18(9), 30–34.
- Wastell, D. G. (2001). Barriers to effective knowledge management: Action research meets grounded theory. *Journal of Systems & Information Technology*, 5(2), 21–35.
- Webster, J. D. (2003). An exploratory analysis of a self-assessed wisdom scale. *Journal of Adult Development*, 10(1), 13–22.
- Webster, J. D. (2007). Measuring the character strength of wisdom. *International Journal of Aging and Human development*, 65(2), 163–183.
- Webster, J. D. (2010). Wisdom and positive psychosocial values in young adulthood. *Journal of Adult Development*, 17(2), 70–80.
- Whitehead, A. N. (1967). *The aims of education and other essays*. New York: Free Press.
- Wilsdon, R. S., & Arvai, J. L. (2006). Evaluating the quality of structured environmental management decisions. *Environmental Science & Technology*, 40(16), 4831–4837.
- Wink, P., & Helson, R. (1997). Practical and transcendent wisdom: Their nature and some longitudinal findings. *Journal of Adult Development*, 4(1), 1–15.

- Winterfeldt, D. V., & Edwards, W. (1986). *Decision analysis and behavioral research*. New York: Cambridge University Press.
- Wolcott, H. F. (2009). *Writing up qualitative research* (3rd ed.). Los Angeles: Sage.
- Woodman, K. L. (2011). *Towards an organizational strategic vitality theory: A study of a public sector board of directors*. Unpublished doctoral dissertation, Old Dominion University, Norfolk, Virginia, USA.
- Yalom, I. D. (1985). *The theory and practice of group psychotherapy* (3rd ed.). New York: Basic Books.
- Yang, S. (2011a). East meets West: Cross-cultural perspectives on wisdom and adult education. *New Directions for Adult and Continuing Education, Fall 2011*(131), 45–54.
- Yang, S. (2011b). Wisdom displayed through leadership: Exploring leadership-related wisdom. *The Leadership Quarterly, 22*(4), 616–632.
- Yang, S. (2013). Wisdom and good lives: A process perspective. *New Ideas in Psychology, 31*(3), 194–201. doi:10.1016/j.newideapsych.2013.03.001
- Zeleny, M. (2006). knowledge-information autopoietic cycle: Towards the wisdom system. *International Journal of Management and Decision Making, 7*(1), 3–18.
- Zins, C. (2007). Conceptual approaches for defining data, information, and knowledge. *Journal of the American Society for Information Science and Technology, 58*(4), 479–493.
- Zsombok, C. E. (1997). Naturalistic decision making: Where are we now? In C. E. Zsombok & G. Klein (Eds.), *Naturalistic decision making* (pp. 3–16). Mahwah, NJ: Erlbaum.

## Appendices

### Appendix A: Conceptual Codes and Categories

Open Coding	Axial Coding	Selective Coding	
<i>Conceptual Codes</i>	<i>Conceptual Categories</i>	<i>Sub-core Categories</i>	<i>Core Category</i>
Analysing outcomes and ramifications	<b>Consequence-anticipating</b>	<b>Multi-Perspective Consideration (MPC)</b>	<b>Praxio-Reflexive Integration</b> <i>(Basic Social Process)</i>
Short-term and long-term thinking			
Representing alternative points of view (including impartiality - openness to others' ideas)	<b>Perspective-taking</b>		
Reconciling individual and communal (different stakeholders') interests			
Consideration of moral and ethical codes	<b>Ethics considering</b>		
Possessing appropriate knowledge (Having expertise)	<b>Cognitive Mastery</b>		
Ability to gain the required knowledge and information			
Ability to apply knowledge			
Using experience			
Insightfulness (insightful as opposed to superficial)			
Thinking outside the square			
Balanced reliance on insight and intuition	<b>Emotional Mastery</b>	<b>Cognitive-Emotional Mastery (CEM)</b>	
Emotional regulation (balanced emotion, and resistance against making rash decisions)			
Confidence (feeling confident, not overly confident)			
Empathy			
Courage			
Awareness of personal abilities	<b>Self-awareness</b>	<b>Self-Other Awareness (SOA)</b>	
Awareness of personal inabilities			
Knowing what one knows			
Knowing what one does not know			
Awareness of personal strengths			
Awareness of personal weaknesses			
Being aware of personal values & interests			
Awareness of personal attributes & behavioural characteristics			

Awareness of others' abilities	<b>Other- awareness</b>		
Awareness of others' inabilities			
Knowing what others know			
Knowing what others do not know			
Awareness of others' strengths			
Awareness of others' weaknesses			
Being aware of others' values & interests			
Awareness of others' attributes & behavioural characteristics			
Situational awareness			
Learning from one's own mistakes	<b>Internal Reflection</b>	<b>Reflexivity</b>	
(re)Evaluating one's own values system			
(re)Evaluating one's own interests & goals			
(re)Evaluating one's own knowledge			
(re)Evaluating one's own abilities			
Learning from others' mistakes	<b>External Reflection</b>		
Reflecting on others'/society's values and beliefs			
Reflecting on stakeholders' interests			
(re)Evaluating others' knowledge			
(re)Evaluating others' abilities			

## Appendix B: Informants Demography

	Name	Gender	Age	Experience (year)	Position	Organization	Type of Organisation	Field	Academic Qualification	Formal Training in Management	Ethnicity
1	B. Y.	Female	-	20	Manager	M. U.	Public	IT	Diploma	Degree in communication	NZ
2	R. G.	Male	51	13	Manager	G. E.	Public	Utilities (power)	Diploma	Dip. In Journalism	NZ
3	S. M.	Male	58	20+	CEO	M. U.	Public	Educational	Bachelor	-	NZ
4	R. D.	Male	52	30+	Managing Director	I. NZ	Private	Distribution	Diploma	Business, Personal Management	USA
5	M. F.	Male	35	14	Manager	A New Zealand Bank	Private	Banking	A Level Business	-	USA
6	J. B.	Male	45	21	CEO	S. G.	Private	Utilities (Water)	PhD	Dip. Mgm.	Europe
7	W. M.	Male	45	23	Manager	B. NZ Ltd.	Private	Health care & Nutrition	Diploma	Various short training courses	NZ
8	P. M.	Male	44	25	Manager	M. U.	Public	Educational	Diploma	Yes	NZ
9	D. V.	Male	50	25	Director	I. C.	Private	Educational	PhD	-	Europe
10	I. R.	Male	55	10+	Director	I. A. L.	Public	Law Enforcement	-	-	NZ
11	P. C.	Male	50	-	Past: Director & Chairman	S. G. & T. M. H.	Private	Management Consulting	-	-	NZ
12	A. G.	Male	63	45	Director	S. P. C.	Private	Paper & Forest Products	Bachelor	-	NZ
13	K.R.J.	Female	44	11.5	Manager	NZ T. E.	Public	Medical Devices	PhD	Leading growth, accounting & Finance	NZ

	Name	Gender	Age	Experience (year)	Position	Organisation	Type of Organization	Field	Academic Qualification	Formal Training in Management	Ethnicity
14	M. F.	Male	46	20	Past: Manager	A. I. A.	Public	Airlines/Aviation	Pst. Dip. Advanced Environmental	Various courses in Mgm.	NZ
15	R. E.	Male	43	25	CEO	S. + GE	Private	Renewables & Environment	BA Mgm.	-	NZ
16	R. M.	Male	49	28	Chairman, Manager	L. M.	Private	Business Development	Bachelor	Various	NZ
17	A. D.	Male	-	25+	CEO	T.	Private	Electrical/Electronic Manufacturing	Bachelor	-	NZ
18	A. A.	Male	38	11	CEO, Director, Owner	A. S.	Private	Resource Management Consulting	BA Science	-	NZ
19	J. H.	Female	40	8	CEO	W. G. B. C.	NGO	Building Sector	BA Science	Accounting/Finance, Short Courses	-
20	S. C.	Male	62	40+	General Manager	T. G. E. M.	Private	Recycling/Consultancy	-	-	NZ
21	K. P.	Female	32	6	Senior Manager	A New Zealand Bank	-	Baking	BA Communication	-	NZ
22	P. R.	Male	-	20	Founder & CEO	O.	Private	Food & Beverages	-	-	NZ
23	C. F.	Female	59	39	Director	E. C.	Private	Environmental Services	Master	-	NZ
24	F. M.	Female	53	30	Founder & Director	M. C. & S. S.	Private	Communication & Graphic	-	-	Europe
25	L. S.	Female	62	45	Manager	A. W. P.	Public	Health	BA Psychology	Certificate Management.	NZ
26	J. B.	Male	37	15	Managing Director	S. E. E.	Private	Renewables & Environment	MBA. BA Business	-	USA

	Name	Gender	Age	Experience (year)	Position	Organization	Type of Organisation	Field	Academic Qualification	Formal Training in Management	Ethnicity
27	P. B.	Male	49	27	CEO	B. R. A.	Private	Construction Research	LLB. National Certificate Carpentry	MBA & Short Courses in Leadership	NZ
28	J. P.	Male	47	20+	Manager	J.	Private	Design & Construction	Dip. BA Architecting	-	Europe
29	A. C.	Male	48	33	CEO	N. B. A.	Non-government Voluntary Association	Multiple Sectors	-	No	NZ
30	A. H.	Male	44	21	CEO	T. I.	Private	Business Growth	BA Commerce	-	NZ
31	S. D.	Female	60	30+	CEO	T. S. M.	Private	Technology	PG. Dip. Broadcast Communication, MA Creative Writing	PG. Dip. Business Administration	NZ
32	K. M.	Female	54	35	General Manager	S. T.	Private	Manufacturing	Pg. Dip. in business Administration	-	NZ
33	D. W.	Female	37	15	Manager	A New Zealand Company	Private	Energy	Bachelor of Law	Dip. in Management	NZ
34	G. B.	Male	54	13	CEO	E. B.	Private	Energy	-	No	NZ
35	M. F.	Male	44	25	General Manager	A New Zealand Company	Private	Energy	Accounting	Leadership Courses	NZ
36	M. A.	Female	34	8	Manager	N. A.	Private	Design	Bachelor Business	No	NZ
37	M. S.	Female	38	15	Executive Director	A. S. A.	Not-for-profit Organisation, Private	Social Field	Bachelor of Design	None	-

## Appendix C: Interview Questions

Data Collection and Analysis Phases	Interview Questions and Rationale
<b>Phase 1</b>	<p>Rationale: how wisdom and its relationship with management decision making is perceived by informants.</p> <p><i>Concept of wisdom</i></p> <ul style="list-style-type: none"> <li>- What does first come in mind when you hear the term ‘wisdom’?</li> <li>- How do you identify wisdom in the real world of management? How do you identify it in your business community?</li> </ul> <p><i>Wise management decision making</i></p> <ul style="list-style-type: none"> <li>- What does the phrase ‘wise management decision’ mean to you?</li> <li>- How do you identify wise management decisions? Would you give typical examples from the real world?</li> <li>- How do you think a wise management decision can be made?</li> <li>- What element(s) do you think are important for making a management decision that lead the decision to be considered as a wise decision?</li> <li>- How do the elements incorporate into management decision making?</li> <li>- If a manager came to you asking for advice on handling a situation where he or she must make a wise decision, what advice would you give them?</li> <li>- If you were in a position that you <b>MUST</b> make a wise decision, how would you make that decision?</li> <li>- What would you do in your career to be able to make (more) wise management decisions, if you were given a chance of traveling back in time to your early days of your career and to start your career again?</li> <li>- Imagine yourself sitting in your office, and you just hear of a decision made in your business field, your first reaction is that ‘Wow, that was a wise decision’ or ‘Oh! That is not a wise decision’. Please explain what would those decisions look like?</li> <li>- Have you ever made (or seen in your business community) a management decision that you now consider it as a(n) (un)wise decision? Why do you think the decision was a(n) (un)wise one?</li> </ul>
<b>Phase 2</b>	<p>In addition to the previous questions, the following questions were also asked.</p> <p>Rationale: what is the informants’ perception of the categories and concepts emerged during the analysis of the previous data in Phase 1.</p> <p><i>Looking at the decision problem from different angles</i></p> <ul style="list-style-type: none"> <li>- Do you think that it is important to analyse a decision problem must from different angles in order to make a wise decisions? (If Yes) To what extent? and why? What angles (if this is important)?</li> <li>- To what extent do you think it is important to consider others’ perspectives in order to make wise decisions? Please explain why? The perspective of what groups of people do you think must be considered?</li> <li>- (If the element is important) How do you think ‘considering others’</li> </ul>

	<p>perspectives' can incorporate into management decisions? How do you think the element can be created, improved, or enhanced?</p> <p><b><i>Knowledge, Experience, Emotion</i></b></p> <ul style="list-style-type: none"> <li>- To what extent do you think knowledge is important for a manager to be able to make wise decisions? What kind of knowledge? Why?</li> <li>- To what extent do you think experience is important for a manager to be able to make wise decisions? What experiences? Why?</li> <li>- Do you think a wise management decision is more based on knowledge or emotion? Please explain.</li> </ul> <p><b><i>Ethics and Morality</i></b></p> <ul style="list-style-type: none"> <li>- Would you consider a financially successful, yet unethical, management decision as a wise decision? Why?</li> </ul> <p><b><i>Awareness</i></b></p> <ul style="list-style-type: none"> <li>- Do you think Self-awareness is important for making a wise management decision? Why?</li> <li>- What about awareness of others and the surrounding environment?</li> <li>- (If awareness is important) How the awareness can be developed?</li> </ul>
<p><b>Phase 3</b></p>	<p>In this phase the following questions were added to the previous questions.</p> <p>Rationale: what is the informants' perception of the categories and concepts that have been emerged during the analysis of the data collected in Phase 1 and Phase 2. The main concentration in this phase was on the interrelationship and development of the previously emerged concepts and categories. The contribution of the qualities to wise management decision making was further investigated.</p> <ul style="list-style-type: none"> <li>- How do you think knowledge/experience/emotions/ethics/awareness/considering others' perspectives are interrelated with regard to wise management decision making?</li> <li>- How do you think the qualities are developed?</li> </ul>
<p><b>Phase 4 &amp; 5</b></p>	<p>The following questions were added to the interview questions previously asked in the first three phases.</p> <p>Rationale: what is the informants' perception of the categories and concepts that have been emerged during the analysis of the data collected in Phase 1, Phase 2, and Phase 3.</p> <ul style="list-style-type: none"> <li>- To what extent do you think it is important for a manager to be aware that their behavior and decisions affect others in order to be able to make wise management decisions?</li> <li>- Would the awareness be sufficient to make a wise management decision, or do you think it must be incorporated into the management decision and actions? Why?</li> </ul>

## Appendix D: Invitational Template for Informants

Dear -----

I am a Doctoral researcher at Massey University in Auckland. I am conducting a research, with the supervision of A.Professors David J. Pauleen and Wendelin Kupers, about 'The Role of Wisdom in the Management Decision Making Process', an emergent and under-researched field. So, you as a manager might be interested in this area and as someone who could help in developing this field.

I am wondering if you would be able to find time in your busy schedule to be interviewed by me.

An invitational abstract is below, and an Information Sheet is attached. If you are unable to participate then your recommendations for other senior managers who might be willing to be interviewed would be greatly appreciated.

Kindest Regards

Ali Intezari  
*Doctoral Researcher*  
*School of Management*  
*Massey University*  
*Auckland*  
*New Zealand*  
Tel: +64 9 4140800  
Ex: 9242

### Wisdom for the Management Decision Making Process

#### Abstract

What is wisdom and what role does it play in management, in particular management decision making? Wisdom has been held up as a philosophical ideal for thousands of years. More recently, scholars have looked at the concept of Practical Wisdom and have tried to apply it to management and in organisational settings. However, until now, very little empirical work has been done in this area. By providing empirical support this research aims to investigate the role of wisdom in the management decision making process and to find out how integrating wisdom and decision making can lead to 'wise actions'.

With this in mind, I am humbly requesting that you, as a business leader, take part in this study by agreeing to an interview (details are provided on the attached information sheet). Please email me back with your reply, a contact phone number and one or two times that would be convenient for you.

Regards  
Ali

## Appendix E : Synopsis



MASSEY UNIVERSITY  
COLLEGE OF BUSINESS  
KAUPAPA WHAI PĀKIHI

### Wise Management Decision Making: Wisdom as a Praxio- Reflexive Integrated Decision Making Capacity

Ali Intezari

a.intezari@massey.ac.nz

Tel: +64 9 414 0800 extn. 9242

Mobile: 021 024 66756

School of Management, Private Bag 102904, North Shore,  
Auckland 0745, New Zealand

Dear -----,

What follows is a synopsis of my doctoral research project (in progress) findings that are based on the analysis of responses that participants (like you) provided in the academic interviews that I conducted during the research project. With this synopsis, I am sharing the research findings with you, before I finalize the theory of wisdom, for two reasons:

- To show my respect and gratitude for the time that you have taken to participate in this project and for your kind help in the advancement of this study; and
- To invite you to look at the first findings and provide me some feedback on the outcome before I progress to complete the project and release the findings.

I would be grateful if you would give your feedback on the findings that are presented here in this synopsis. Please identify whatever changes that you think are required to be made to the model, and email your responses to me. Your feedback at this stage would be very helpful for further development of this study.

I will briefly outline the main aspects of the research project. Then I will explain the findings with illustrations of the model.

## Project summary

The main objective of this PhD project is to investigate the relationship between ‘wisdom’ and ‘management decision making’ to examine how management can benefit from the understanding of wisdom that has been held by philosophers through the ages and which began to re-emerge in recent psychological and organizational studies. The objective of the research is to help managers improve the quality of their decision making in the current rapidly changing business environment, where unpredictability calls for new approaches to the implementation of knowledge and experience over the mere reliance on past information. To achieve the research objective, I interviewed 37 CEOs, general managers, senior executives, and entrepreneurs from different business fields in New Zealand. The theory that was developed based on the findings is explained below.

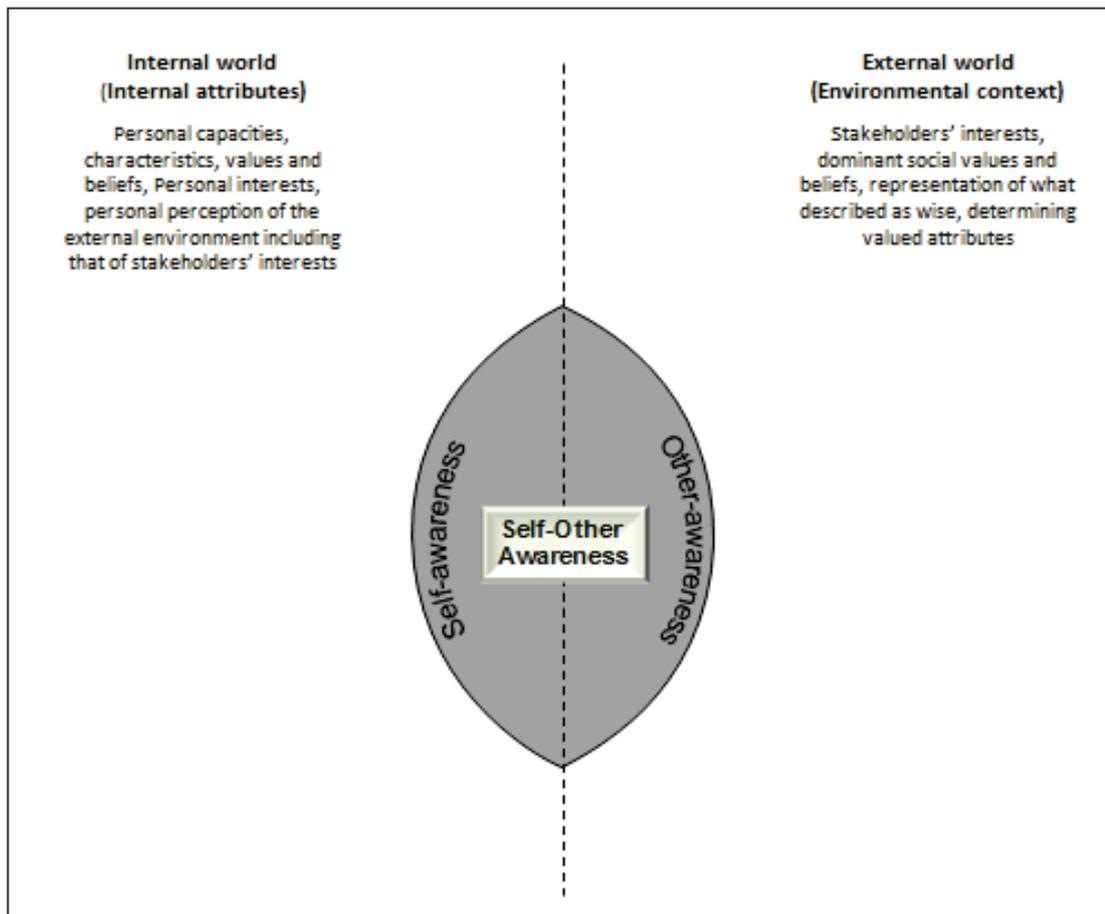
## The Theory

The findings led to the conclusion that managers understand wisdom as an individual’s capacity to integrate a wide range of internal and external factors in a way that can lead to effective decision making. This capacity can be used when making managerial decisions. Wisdom is an ‘integrative’ capacity because it: 1) is developed based on an integration of one’s awareness of both self and the surrounding environment, as well as one’s knowledge and emotions; 2) fosters managerial decisions with an integrative approach to stakeholders’ (personal, organizational, and societal) interests; and 3) evolves through an integrative and continuous internal/external reflection on one’s internal and external worlds.

**1. a)** The findings show that the wisdom of a managerial decision depends on the level of the decision maker’s awareness of his or her personal (in)abilities, weaknesses and strengths, personal traits, and values and interests (*Self-awareness*). The wisdom also depends on the decision maker’s awareness of what is going on around them both within their organization and in the wider business and social communities (*Other-awareness*)<sup>1</sup>. These two types of awareness, Self-awareness and Other-awareness, are/need to be integrated to be able to make a wise managerial decision (Figure 1). We call the integration of Self-awareness and Other-awareness, ‘*Self-Other Awareness*’.

---

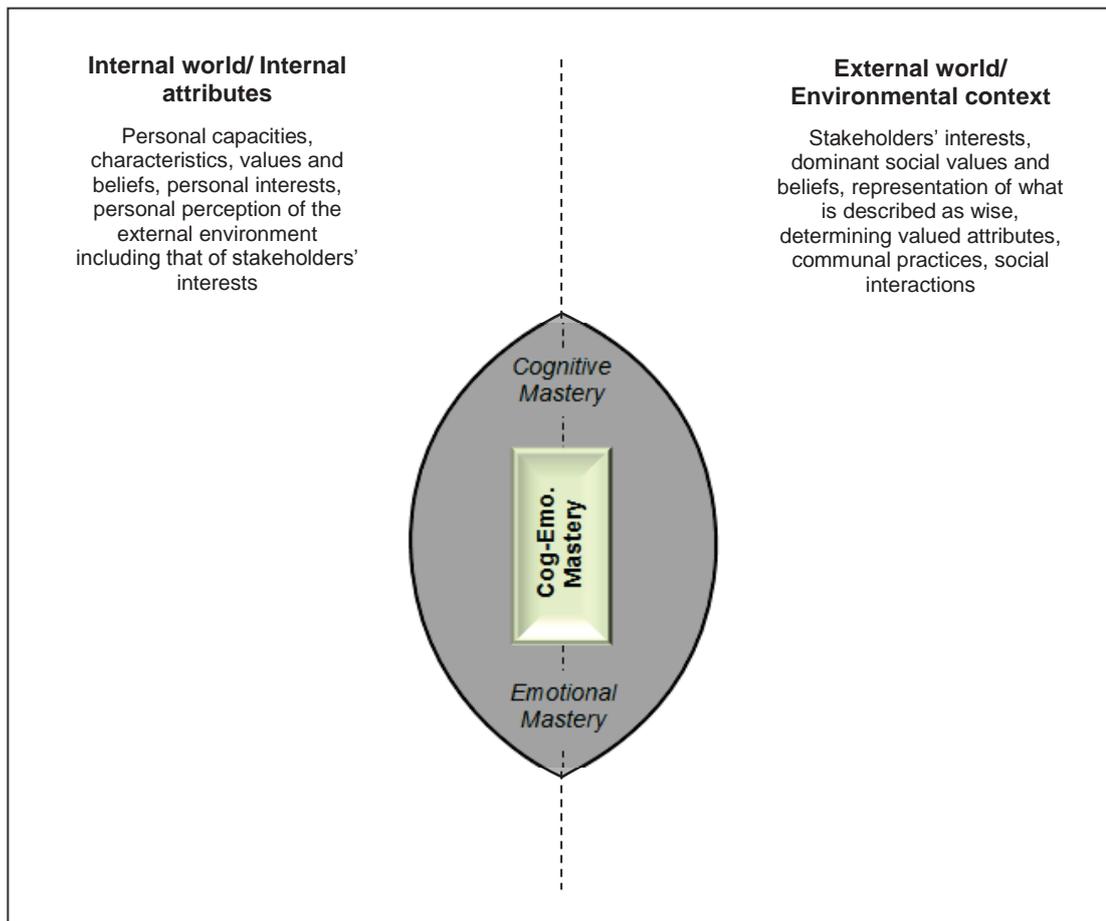
<sup>1</sup> Just a clarification: ‘Other-awareness’ refers to the awareness of others, NOT others’ awareness.



**Figure 1: Integration of Self-awareness and Other-awareness**

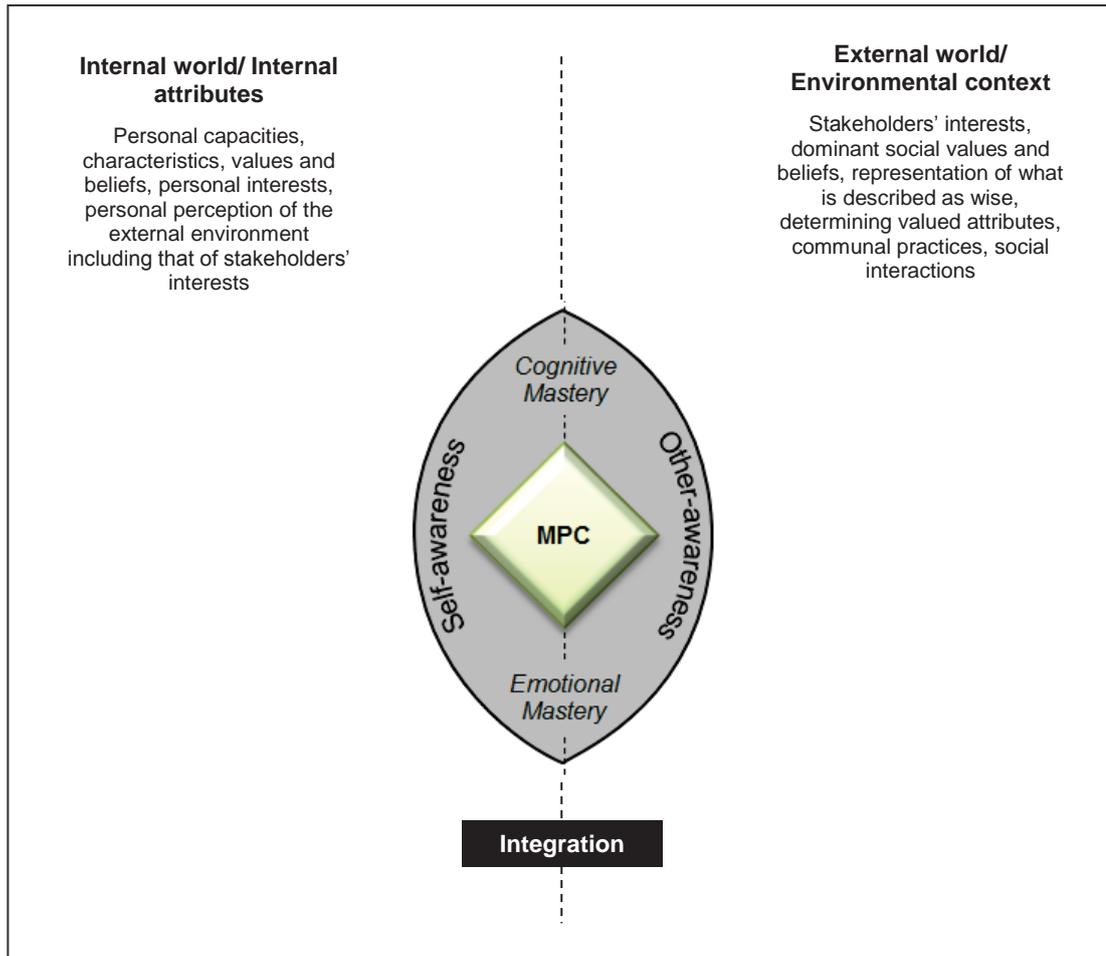
**1. b)** The findings also suggest that making wise managerial decisions requires an integration of one's knowledge and emotions. In other words, in order to be able to make wise managerial decisions, the manager must be master of both knowledge and emotions (respectively called *Cognitive mastery* and *Emotional mastery*). By Cognitive Mastery we mean the extent to which the manager: has appropriate relevant knowledge and experience; is able to acquire and apply the information and knowledge he or she requires for a particular decision; can apply their experiences; is insightful (insightful as opposed to superficial); and can think outside the square. Emotional mastery refers to the extent to which the manager is able to: regulate his or her emotions; draw a balance between solid logic and pure intuition; feel confident; resist against the tendency to make not-thought-through rash decisions; show empathy; and be courageous when making decisions.

Making wise managerial decisions necessitates integrating both Cognitive and Emotional mastery. In other words the manager needs to have 'Cognitive-Emotional Mastery' (Figure 2).



**Figure 2: Integration of Cognitive and Emotional Masteries.**

Self- Other-awareness and Cognitive-Emotional Mastery are inter-connected. That is, Self-awareness and Other-awareness are required to enhance Cognitive and Emotional masteries, and vice versa (Figure 3).

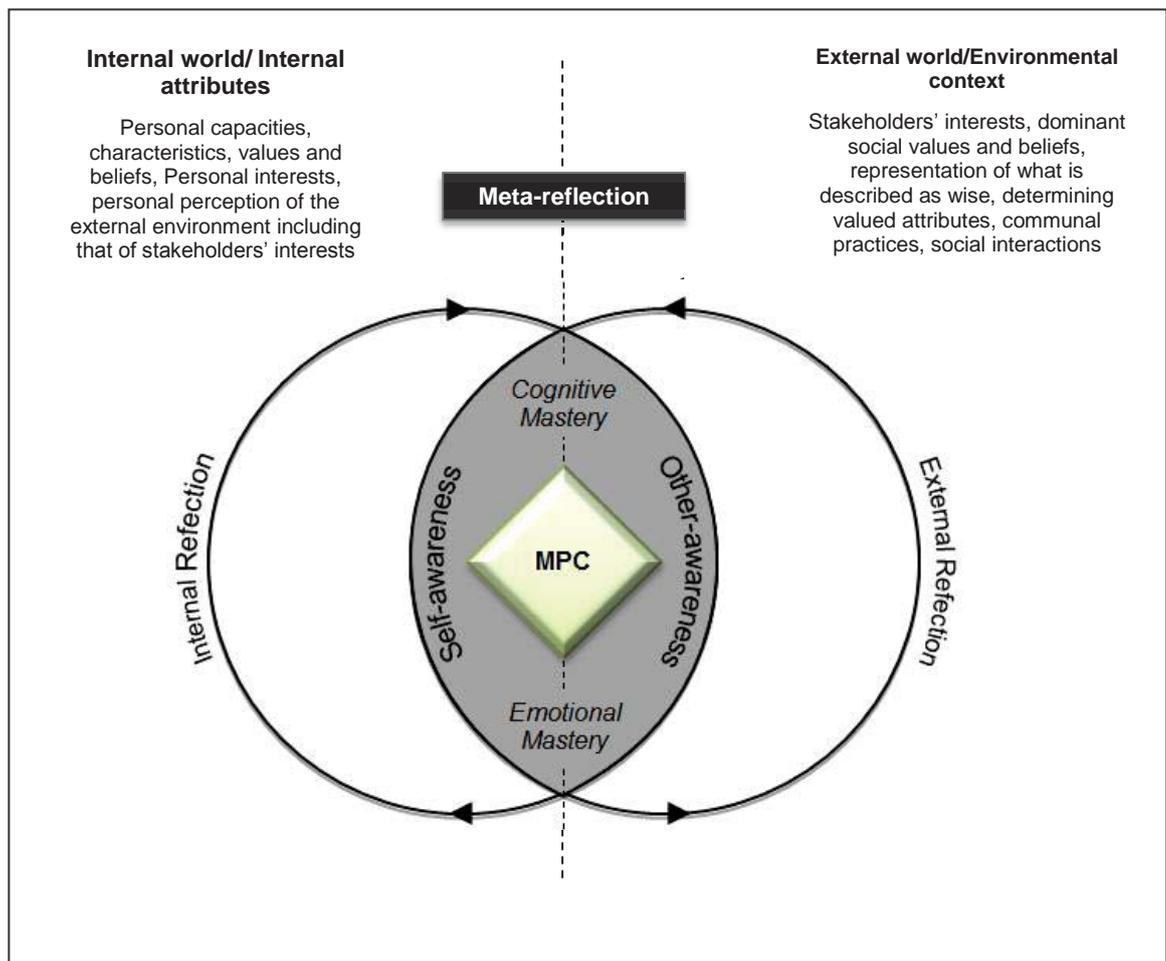


**Figure 3: Integration of Meta-awareness and Epistemotional Mastery**

2. The findings also show that wise managerial decisions are distinctively characterized as *integrative*, being made through an anticipating, perspective-taking, and ethics-considering analysis. That is, wise managerial decisions were identified by the participants as being made based on an understanding of the bigger picture that brings into attention both short- and long-term consequences, and strategic impacts; as well as being made based on an analysis of the decisions outcomes and ramifications, a representation of alternative points of view, impartiality, reconciliation of individual and communal interests, and the consideration of moral and ethical codes.

3. Making such holistic and integrative decisions requires constant reflection on the internal and external worlds, through which the wise manager is able to: gain a true understanding of the bigger picture of the decision making situation; consider and integrate stakeholders' interests; and analyze ramifications of the decision. It is interpreted from the findings that, the managers who possess Cognitive-Emotional Mastery have a greater tendency towards reflecting on the internal world (Internal Reflection), and on the

surrounding environment (External Reflection) in order to grow their Meta Awareness. We call the combination of Internal Reflection and External Reflection, 'Meta-reflection' (Figure 4).



**Figure 4: Meta-reflection**

Moreover, Internal and External Reflections help managers to constantly develop their integrative capacity through *Practice*. Internal reflection helps wise managers learn from their own mistakes. And through external reflection, wise managers learn from others' mistakes. Internal and external reflections are done continuously and thus enhance wisdom capacity (Figure 5).

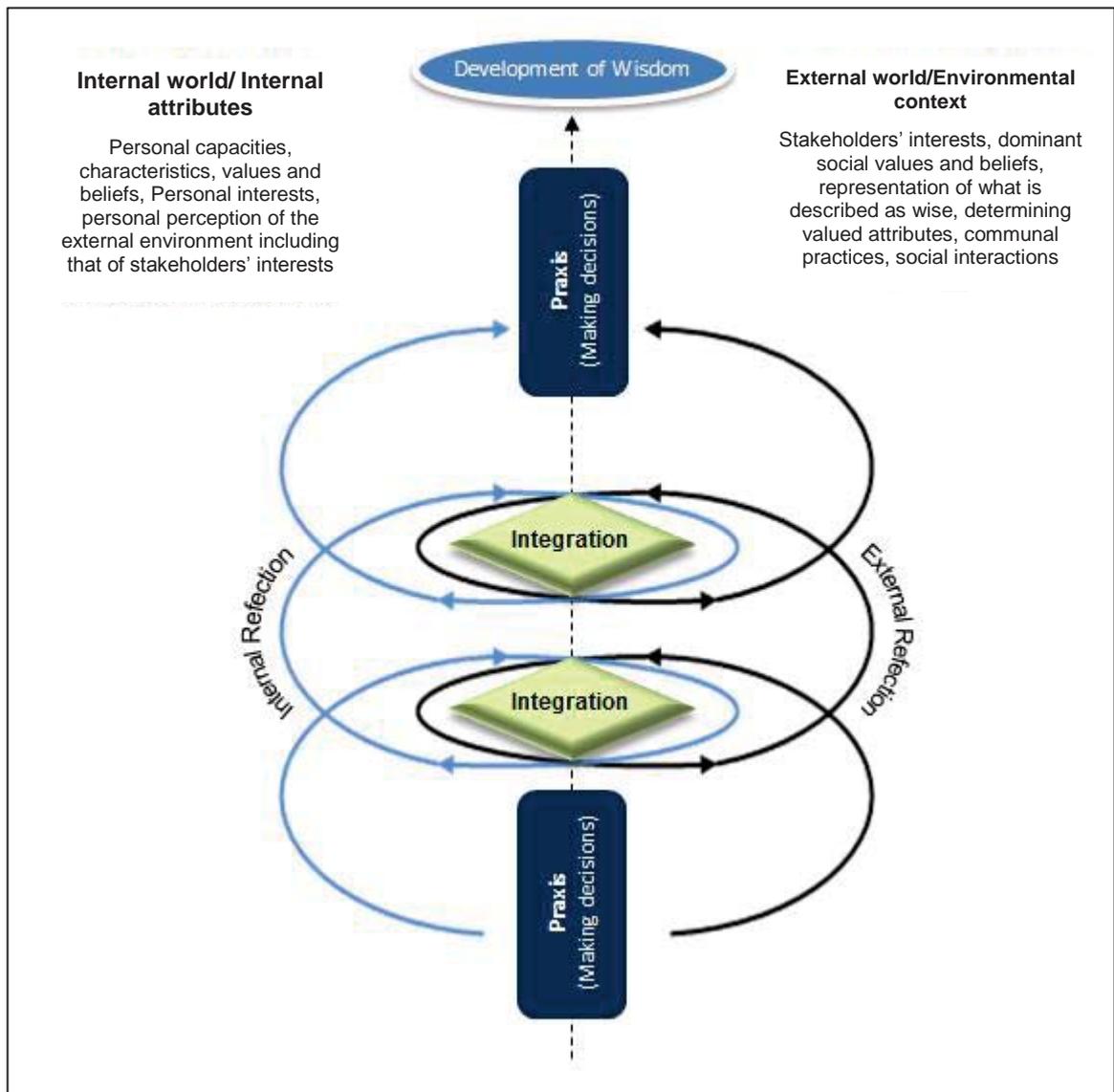


Figure 5: Praxis and the integrative capacity

To sum up, in the business world, wisdom

*Manifests in the managerial decision making process through the implementation of an anticipating, perspective-taking, and ethics-considering approach into the decision making process based on the decision maker's Self-/Other-awareness and cognitive-emotional mastery, which are developed through constant internal/external reflection and practice.*

## Appendix F : MUHEC Approval Letter



**MASSEY UNIVERSITY**  
ALBANY

17 August 2011

Ali Intezari  
c/- Associate-Professor D Pauleen  
College of Business  
Massey University  
Albany

Dear Ali

**HUMAN ETHICS APPROVAL APPLICATION – MUHECN 11/051**  
**Wisdom and the Managerial Decision Making Process**

Thank you for your application. It has been fully considered, and approved by the Massey University Human Ethics Committee: Northern.

Approval is for three years. If this project has not been completed within three years from the date of this letter, a reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'R Bathurst'.

**Dr Ralph Bathurst**  
**Chair**  
**Human Ethics Committee: Northern**

cc: Associate-Professor D Pauleen  
College of Business

## Appendix G: Information Sheet



MASSEY UNIVERSITY  
COLLEGE OF BUSINESS  
KAUPAPA WHAI PĀKIHI

Doctoral Research Project:

### *Wisdom and the Managerial Decision Making Process*

#### INTERVIEW INFORMATION SHEET

This interview is being undertaken as part of the researcher's, Ali Intezari, doctoral research project in the School of Management, Massey University. The research project is supervised by A/Prof. David Pauleen and A/Prof. Wendelin Küpers.

I am conducting this research to gain an understanding of the contribution of wisdom to the managerial decision making process. The research project is focused on how managers and business leaders can make wise business decisions especially when faced with unforeseen circumstances. Your participation would be helpful in better understanding of the wise managerial decision making process in the business world.

If you decide to participate, you will be asked to participate in one interview which will be conducted at a time suitable for you and in a place according to your choice and convenience. The interview will take approximately one hour and, with your permission, I will tape record the interview, however you do not need to state your name on the recording.

No information with regard to your personal details will be revealed without your express permission. You will be given a chance to read and make necessary changes to the transcript of your interview. The transcript of your discussion, without your name, will be kept confidential. Then it will be disposed by the project supervisor.

The data that are collected in the interview will be used only for research analysis and may be used in subsequent research publications and reports. I will not use any information that would identify you in the publications. The results of the research (i.e. the thesis) will be available through the library of Massey University and subsequently in academic publications.

We appreciate your participation. However, your participation is completely voluntary and you are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the interview at any time; and you may withdraw from the study at any time within two weeks of the interview.
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.
- ask for the recorder to be turned off at any time during the interview.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 11/051. If you have any concerns about the conduct of this research, please contact:

Dr. Ralph Bathurst  
The Chair of Massey University Human Ethics Committee: Northern  
Telephone: 09 414 0800 x 9570  
Email: [humanethicsnorth@massey.ac.nz](mailto:humanethicsnorth@massey.ac.nz).

Should you have any questions about the project, please do not hesitate to contact me, Mr. Ali Intezari, or the supervisors, A/Prof. David Pauleen and A/Prof. Wendelin Küpers.

Kind regards,  
Ali Intezari

<b>Contacts:</b>	Mr. Ali Intezari	<a href="mailto:A.Intezari@massey.ac.nz">A.Intezari@massey.ac.nz</a>	+64 9 414 0800	Ex. 9242
	Dr. David Pauleen	<a href="mailto:D.Pauleen@massey.ac.nz">D.Pauleen@massey.ac.nz</a>	+64 9 414 0800	Ex. 9467
	Dr. Wendelin Küpers	<a href="mailto:W.Kupers@massey.ac.nz">W.Kupers@massey.ac.nz</a>	+64 9 414 0800	Ex. 9235

## Appendix H: Participant Consent Form



MASSEY UNIVERSITY  
COLLEGE OF BUSINESS  
KAUPAPA WHAI PĀKIHI

Doctoral Research Project:

### *Wisdom and the Managerial Decision Making Process*

Researcher: Ali Intezari

#### PARTICIPANT CONSENT FORM FOR INTERVIEW- INDIVIDUAL

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the interview being sound recorded.

I wish/do not wish to have my recordings returned to me.

I wish/do not wish to have data placed in an official archive.

I agree to participate in this study under the conditions set out in the Information Sheet.

**Signature:**

**Date:**

**Full Name - printed**