CASE STUDIES IN SOUTH AFRICAN PUBLIC ADMINISTRATION MASTER’S DISSERTATIONS IN THE PERIOD 2005 TO 2012

by

J Nkosinathi Zongozzi

submitted in accordance with the requirements for the degree of

MASTER OF ADMINISTRATION

in the subject of

PUBLIC ADMINISTRATION

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR J.S. WESSELS

DATE: JUNE 2015
Student Number: 5078-553-2

I declare that CASE STUDIES IN SOUTH AFRICAN PUBLIC ADMINISTRATION MASTER’S DISSERTATIONS IN THE PERIOD 2005 TO 2012 is my work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

……………………….. ……………….
Date…………………………..

SIGNATURE

(MR JN ZONGOZZI)
ACKNOWLEDGEMENTS

I would like to acknowledge and express my sincere appreciation to the following individuals and institutions who contributed in the preparation of this dissertation, from the proposal stage to the completion of this study:

- The Almighty for guiding me throughout my studies.
- My supervisor (Prof JS Wessels) for the dedication of his indisputable supervisory expertise in assisting me succeed with my studies.
- My family and friends for understanding the time requirements of my research journey. They have supported me despite my absence in certain social gatherings.
- A special word of thanks to the following people who made a significant contribution to the success of this project: Mr Andries Masenge (Statistician), Ms Melanie Malan (Librarian), Ms Marti Gerber (language editor) and Dr Retha Visagie (Former colleague in the CEMS Office of Graduate Studies and Research).
- All the colleagues and former colleagues in the CEMS Office of Graduate Studies and Research and the Bureau of Market Research for their support especially in the initial stages of my research.

I would also like to acknowledge the assistance by the following institutions:

- The Directorate of Student Funding for their financial assistance.
- The UNISA CEMS Office of Graduate Studies and Research and the College of Graduate Studies for their support in terms of the research workshops they have offered me.
- The Graduate Development Fellowship Programme for the financial support and training opportunities which made a huge contribution in the final stages of this study.
Abstract

Case studies have been frequently used by Public Administration students enrolled for master’s degrees by coursework and mini-dissertation. There are apparently various meanings of and a lack of clarity about the concept “case study” when used in the titles of South African Public Administration master’s dissertations. The purpose of this study was to analyse case studies reported on in South African Public Administration master’s dissertations in order to determine the characteristics of these studies. The study examined case studies in South African Public Administration master’s dissertations completed between 2005 and 2012. It began by reviewing the various components of a case study, then went further to analyse the way in which case studies were applied in the field. The study defined case study as a research process determined by a combination of the following components: a specific strategy for selecting the unit of analysis (the case), a specific research design, research purpose, the methods of data collection and data analysis, and a specific nature of the expected outcomes of the study. The major findings of the study were that most case studies in the analysed dissertations have used interventions (60,9%) as their case. About (43,5%) of the analysed dissertations were evaluative in nature. There is, however, an uneven distribution in terms of the case study design used by a significant proportion of the dissertations (83%) employing the single-case design as opposed to the multiple-case design (17%). The results presented in relation to case selection strategies used show that typical cases were the most investigated. Moreover, a number of the dissertations seemed to be more aligned towards qualitative methods, although mixed methods were mostly used. These dissertations preferred interviews as sources of evidence. Meanwhile, pattern matching appeared to be the dominant technique used to analyse case study evidence in these dissertations. Hypothesis generating was also identified as the outcome in most of the dissertations.

Key terms:
Case study, Public Administration and dissertation
# Contents

## CHAPTER 1: GENERAL INTRODUCTION

1. **Introduction** ................................................................................................................................. 1  
2. **Rationale of the study** ..................................................................................................................... 2  
3. **Problem statement** .......................................................................................................................... 5  
4. **Research purpose** ............................................................................................................................ 5  
5. **Research questions** .......................................................................................................................... 5  
6. **Research objectives** .......................................................................................................................... 6  
7. **Conceptual analysis** .......................................................................................................................... 6  
8. **Delineation of the study** ...................................................................................................................... 8  
   8.1 **Geographical dimension** ............................................................................................................. 8  
   8.2 **Time dimension** ............................................................................................................................ 8  
   8.3 **The unit of analysis and unit of observation** ................................................................................... 8  
9. **Applicable method of this study (data analysis)** ............................................................................... 9  
10. **Outline of chapters** ......................................................................................................................... 11

## CHAPTER 2: A THEORETICAL PERSPECTIVE ON "CASE STUDY"

1. **Introduction** ................................................................................................................................. 13  
2. **Philosophical underpinnings** ........................................................................................................... 16  
   2.2.1 **Positivism** .............................................................................................................................. 16  
   2.2.2 **Interpretivism** .......................................................................................................................... 17  
3. **Various characteristics of “case study”** ......................................................................................... 17  
4. **Investigated phenomenon in Public Administration research** ......................................................... 19  
5. **Case study designs** .......................................................................................................................... 22  
   5.1 **Single case study design** ............................................................................................................ 22  
   5.1.1 **Theory testing** ....................................................................................................................... 23  
   5.1.2 **Theory building** ..................................................................................................................... 26  
   5.2 **Multiple case study design** ........................................................................................................... 28  
   5.2.1 **Generalising** .......................................................................................................................... 28  
6. **Strategies for selection of cases** ......................................................................................................... 30
3.7 Conclusion ........................................................................................................................................... 55

CHAPTER 4: DATA ANALYSIS AND INTERPRETATION .................................................................................. 56

4.1 Introduction ........................................................................................................................................ 56

4.2 Typical case studies reported on by South African Public Administration master’s dissertations .......................................................... 56

4.3 Research purpose in South African Public Administration master’s case study dissertations ..................................................................... 58

4.4 Case study designs .................................................................................................................................. 60

4.5 Case selection strategies ............................................................................................................................ 62

4.6 Data collection methods ............................................................................................................................ 63

4.7 Sources of evidence used in Public Administration master’s case study dissertations .............................................. 64

4.8 Data analysis techniques in South African Public Administration master’s case study dissertations .......................................................................................... 66

4.9 The research outcomes in the South African Public Administration master’s case study dissertations ........................................................................ 68

4.10 Case selection strategy and case study results ............................................................................................ 70

4.11 Case study design and case selection strategy .............................................................................................. 72

4.12 Summary .................................................................................................................................................. 72

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .......................................................... 75

5.1 Introduction ............................................................................................................................................ 75

5.2 The conceptual framework used for analysing case study as reported in South African Public Administration master’s dissertations ................................................................ 76

5.3 The analysis of case studies as reported in South African Public Administration master’s dissertations .......................................................................................... 77

5.3 Conclusion ............................................................................................................................................. 79

5.4 Recommendations ..................................................................................................................................... 80

List of sources .............................................................................................................................................. 82
LIST OF TABLES

Table 2.1: Categories of units of analysis in Public Administration Research ........................................... 21
Table 2.2: Conceptual framework for analysing case studies ............................................................................. 41
Table 4.1: Typical units of analysis (cases) used for the case studies .............................................................. 57
Table 4.2: The frequencies and percentages of purposes used in case studies ........................................... 59
Table 4.3: Case study designs ......................................................................................................................... 61
Table 4.4: Case selection strategy .................................................................................................................. 62
Table 4.5: Data collection methods ................................................................................................................. 64
Table 4.6: Research techniques and sources of evidence used in case studies ........................................... 65
Table 4.7: Data analysis techniques .............................................................................................................. 67
Table 4.8: Case study results ........................................................................................................................ 68
Table 4.9: Case study design and case study results ....................................................................................... 69
Table 4.10: Case selection strategy and case study results .......................................................................... 71
Table 4.12: Case study design and case selection strategy ............................................................................. 72

GRAPHS

Graph: 4.1: Typical units of analysis (cases) used for the case studies .............................................................. 58
Graph 4.2: The frequencies of purposes used in case studies ....................................................................... 59
Graph 4.3: Case study designs ....................................................................................................................... 61
Graph 4.4: Case selection strategy ................................................................................................................ 63
Graph 4.5: Data collection methods .............................................................................................................. 64
Graph 4.7: Data analysis techniques ............................................................................................................. 67
Graph 4.8: Case study results ........................................................................................................................ 69
ANNEXURES

1 CODE LIST FOR EVALUATION OF DISSERTATIONS................................................................. 95
2 DISSERTATIONS ..................................................................................................................100
CHAPTER 1

GENERAL INTRODUCTION

1.1 Introduction

Various master’s dissertations in South African Public Administration contain the concept “case study” in their titles. For example, “Public service delivery in the Democratic Republic of Congo: a case study approach” (Tshiyoyo 2006); “Systemic corruption in public enterprises in the Harare metropolitan area: a case study” (Dube 2011); and “Assessing challenges in public appointments and recruitment processes in Chris Hani District Municipality: a case study of human resource department in Lukhanji Local Municipality (2008–2010)” (Gijana 2011). It is not clear whether the concept “case study” have the same meaning (concept1) when used in the various dissertations. Scholars in the social sciences (Bailey 1978; Yin 1984; Creswell 2007; Zainal 2007) attach different meanings (concepts) to the words ‘case study’. For some scholars ‘case study’ refers to either a research method (Adams & White 1994; Yin 2004; Zainal 2007) or a research design (Cronbach 1975). A preliminary review of the literature shows that this concept may refer to case study as a method of obtaining, organising and presenting information (Runyan 1982:445), a data collection method, a main method within which different sub-methods are used (Gillham 2000:13).

This study focuses on case studies in Public Administration Master’s research in South Africa. This chapter outlines the rationale and problem statement of the study. The subsequent research questions will determine the research objectives of the study. This chapter further summarised the reasons for selecting the research methods for this
study and will provide an outline of the research design for the study as well as the provisional outline of the chapters of the dissertation.

1.2 Rationale of the study

Case studies are commonly used in the social sciences like in Psychology (Hersen & Barlow 1976), Sociology (Hamel 1992; Ragin & Becker 1992), Political Science (George & Bennett 2005; Gerring 2004), and Public Administration (Perry & Kraemer 1986; Agranoff & Radin 1991). A study reviewing research methodologies in articles published in Public Administration Review (PAR) between 1975 and 1984 discovered that 56 (approximately 20%) out of 287 articles were classified as case studies (Perry & Kraemer 1986:223). The 1984 findings of McCurdy and Cleary (1984) that the case study was during that period the mostly preferred method in Public Administration research, has been confirmed ten years later by Adams and White (1994:574) who found that 69% of the dissertations used case studies. Similarly, at the Sixteenth National Conference on Teaching Public Administration held in St Louis Missouri in March 1993, it was revealed that almost 70% of Public Administration dissertations were case studies (Orosz, McKenna & Reding 1997:1983).

Brower, Abolafia and Carr (2000:371) reaffirmed this trend in 2000 when they also found that researchers in Public Administration continue to use case studies in their research. These authors show that 94% of articles in the PAR reported on case studies, followed by 82% in Administration and Society (A&S), and 72% in the Journal of Public Administration Research and Theory (JPART) (Brower, Abolafia & Carr 2000:373). The preference for case studies is unsurprising to these scholars as they state that a case can be an individual, an organisation, a role, an event or process or even a period of time making it appropriate for Public Administration research.

Despite the above, case studies have been subjected to criticisms from various scholars. McCurdy and Cleary (1984:49) argue that methods developed in other
disciplines might not be suitable for Public Administration needs, as case studies are deemed to have limited validity. Hence, Perry and Kraemer (1986:224) suggest that the quality of case study research needs to be improved. Adams and White (1994:573) have a slightly different view on the improvement of the quality of dissertations in Public Administration, namely by eliminating practice research, foreign research foci or case study research. Nevertheless, a majority of articles and doctoral programmes in Public Administration, especially in the United States of America, continue to allow case studies regardless of the uncertainties over the quality of this approach (Garson 2002:209).

Various researchers contributed to the literature on the case study. Some of the literature (Perry & Kraemer 1986; Yin 1994; Yin 2004; Yin 2009) refers to the case study as a research method. Others, such as Brower, Abolafia and Carr (2000), Rowley (2002) and Baxter and Jack (2008) regard case study as a research design.

Although the above discussion seems to show a preference for case studies in Public Administration research, there is no consensus regarding the meaning of the concept and the methodological status of case study. Hence, case studies are seen as either a method, design, methodology, strategy or approach by researchers. For example, Brower et al. (2000:371) refer to case study research design while McCurdy and Cleary (1984:49) see case studies as a technique. Other scholars refer to case study approach (Adams & White 1994:567), case study methodology (Perry & Kraemer 1986:224) or case study method (Garson 2002:209).

Though various Public Administration scholars, especially in the United States of America (hereafter refer to as the US), have focused on the quality of Public Administration research including that of case study research, they have not sufficiently clarified the concept “case study”. For example, studies were conducted in the US to assess research methods and research quality (McCurdy & Cleary 1984; Cleary 1992; Houston & Delevan 1990; Adams & White 1994; Lowery & Evans 2004; Dodge &
dissertations studied by them do not meet their criteria for quality research, and that
most researchers (including those who do case studies) do not employ acceptable
methods and designs. In view of McCurdy and Cleary's findings, it is not clear whether
the problem lies in the ability of researchers to understand the various meanings of the
concept "case study" or the application thereof.

Similar studies on the nature and quality of Public Administration research have been
conducted in South Africa by Wessels (1999), Cameron and McLaverty (2008) and
doctoral theses while Cameron and McLaverty (2008) assessed articles published in
South African journals of Public Administration to determine the quality of research in
this field. In a study reported on in the *Journal of Public Administration*, Schurink and
Auriacombe (2010) view case study as a research strategy. However, no studies have
been done in Public Administration to clarify the meaning of the concept “case study”
and to understand the application of case studies in the field. Instead, studies such as
that of Schurink and Auriacombe (2010) seek to enhance the quality of case studies in
qualitative research. A slightly relevant study includes that of Rule, Davey and Balfour
(2011) although that was conducted in the field of education. This reaffirms the above
assertion that despite these ambiguities, no studies have been conducted in Public
Administration on the characteristics of the various meanings of the concept “case
study” as employed in dissertations or theses.

Considering that case study research is widely used by Public Administration
researchers in an effort to contribute to valid scientific knowledge in the field, the need
has arisen to determine whether case studies by South African master's students have
the characteristics necessary for making valid scientific statements.
1.3 Problem statement

The above discussion has shown that although the concept “case study” is often used in titles of Public Administration master’s dissertations in South Africa, there is a lack of clarity on the meaning of the concept and on the application of case studies by researchers. The research problem can therefore best be presented in the following question: What are the distinct characteristics of case studies in South African Public Administration master’s dissertations?

1.4 Research purpose

The purpose of this study is thus to analyse case studies reported on in South African Public Administration master’s dissertations completed in the period 2005 to 2012 in order to determine the distinct characteristics of case studies as done in the field of South African Public Administration.

1.5 Research questions

The study seeks to address the following questions:

- What are the distinct components characterising the concept case study?
- What are the distinct characteristics of the distinct components of the case studies reported on in South African Public Administration master’s dissertations?
1.6 Research objectives

The research objectives set for this study are:

- To identify the distinct components characterising case studies through a review of generic and Public Administration scholarly literature.
- To develop an instrument containing the distinct characteristics of case study research.
- Apply the above-mentioned instrument by way of content analysis to recent South African Public Administration master’s dissertations to determine the application of case studies.

1.7 Conceptual analysis

The purpose of this section is to operationalize the key concepts in the research problem statement, namely “concept”, “case study”, “Public Administration”, “characteristics”, “master’s dissertation” and “mini-dissertation”. These concepts are used as follows in this dissertation:

**Concept**: Pauw & Louw (2014:8) distinguish between a word and a concept. They assert that a word is a language tool, while a concept is a thinking tool that has one meaning which can be expressed in different words. In this research, the word “concept” is regarded as similar to “meaning”.

**Case study**: The words “case study” in this dissertation constitutes a concept and also the unit of analysis (section 1.8.3) for this study. The purpose of this study is to understand the meaning (characteristics and usability) of this concept within the context of Public Administration.
**Public Administration:** In this dissertation the concept “Public Administration” is used with a different meaning to the concept “public administration”. The two concepts are distinguished by means of the use of capital letters and lower cases respectively, and refer to a subject or that which is investigated by the subject. Public Administration is viewed as the study of government activities, namely “the organized, non-political, executive functions of the state” (Pauw & Louw 2014:7). This study will focus on the characteristics of the concepts “case study” used in master's dissertations within the subject field Public Administration.

**Characteristics:** The Collins English Dictionary (1991:272) defines “characteristic” as a distinguishing quality, attribute or trait. Characteristic means indicative of a distinctive quality. Therefore, the concept “characteristics” in this research means the distinctive qualities of the various components of case studies used in master's dissertations in Public Administration in South Africa.

**Master's dissertation:** In this study the definition of “master’s dissertation” provided by the Higher Education Qualifications Sub-Framework (HEQSF) is used (2013:32). This policy document defines “master’s degree by dissertation” as “a single advanced research project culminating in the production and acceptance of a dissertation or other forms of research”. Master's dissertations are thus included in the unit of observation for this study.

**Mini-dissertation:** The HEQSF also provides for another type of master’s degree, namely a “Master’s degree by coursework and mini-dissertation” (South Africa 2013:32). The mini-dissertation is thus the culmination of a research project of limited scope “demonstrating the ability to relate knowledge to a range of contexts for professional practice” (South Africa 2013:32).

Therefore, when this study refers to “master’s dissertations” it includes full research dissertations, mini-dissertations and dissertations of limited scope. In this study the
word “dissertation” will be used to refer to full research dissertations, mini-dissertations and dissertations of limited scope.

1.8 Delineation of the study

The following aspects were taken into consideration in the design of this study:

1.8.1 Geographical dimension

This study is limited to South Africa and focuses primarily on Public Administration master’s dissertations from all South African universities offering the programme whose dissertations are available on the Nexus database and accessible online.

1.8.2 Time dimension

This study will focus on Public Administration master’s dissertations completed between 2005 and 2012 depending on the accessibility of the dissertations.

1.8.3 The unit of analysis and unit of observation

According to Wessels and Thani (2014:173) the unit of analysis refers to the “‘what’ of the study”. It thus refers to the “object, phenomenon, entity, process”, events or “concepts” (Babbie & Mouton 2001:84) a researcher is interested in and examines. The unit of analysis for this study is the concept “case study” within the context of master’s dissertations in Public Administration in South Africa.

The unit of observation refers to the element or source from which information or data is collected (Babbie & Mouton 2001:174). The unit of observation for this study is thus South African Public Administration master’s dissertations completed between 2005 to 2012. The reason for selecting master’s dissertations as the unit of observation is
because a provisional survey of the Nexus database has shown that the words “case study” appear in the titles of most Public Administration dissertations (See section 1.2 of chapter 1).

1.9 Applicable method of this study (data analysis)

Considering that a content analysis is a method for analysing the content of texts or documents (Mouton 2001:165), “categorising subjective information based on frequency of occurrence” (Krauss 2009:1501), a systematic content analysis has shown to be the most appropriate method for this study. According to McNabb (2002:24), Miller and Brewer (2003:2) and Mathison (2012:2) a content analysis can either be of a qualitative or quantitative nature or the combination of both. It is a method developed within the empirical social research that focuses on text analysis (Martin & Gaskell 2000:4). McLaverty (2007:62) defines “content analysis” as a method that focuses primarily on the reduction of information in a text to a series of variables in order to assess their correlations. Pierce (2008:8) refers to content analysis as a textual analysis that is concerned with “bits and pieces – words – of communication rather than the generality”. This method is used to examine the presence of concepts in texts like interviews, newspaper headlines, discussions, documents, speeches, conversations, articles, advertisements, drawings and images (Mathison 2012:2). Content analysis as (Druckman 2005:5) observed, is useful to arrange the bits and pieces of words systematically for time series and comparative analysis purposes. A content analysis consists thus of the following characteristics:

- It focuses on text analysis.
- It is concerned with bits and pieces of words.
- It is used for comparative analysis purposes.
- It focuses primarily on the reduction of information.
- It is a method used to construct indices.
The researcher will identify the various meanings of the concept “case study” and the conditions under which case studies are conducted in order to categorise the collected dissertations under study. This predetermined set of codes is aligned with the second objective of this research and is also known as a coding frame and constitutes a theoretical selection that embodies the research purpose. Martin and Gaskell (2000:12) describe a coding frame as a “systematic way of comparing”. Both methods (qualitative and quantitative) will be employed when applying content analysis in this research. Pierce (2008: 3) maintains that researchers using content analysis have the following advantages which include:

- Quantifiability
- Easy access to text;
- Simple, covert research method which minimises the research effect
- Consequently, claims to objectivity

Martin and Gaskell (2000:12) point out the following strengths of content analysis:

- It is systematic and public.
- It can deal with large amounts of data.
- The researcher determines the emphasis once data is gathered.
- It offers a set of mature and well-documented procedures.

The researcher also has considered the shortcomings of the content analysis apart from its advantages or strengths. Pierce (2008:3) outlines the following disadvantages of using content analysis:

- Researcher bias in the selection of texts
• Problem of identifying the population of texts and, therefore, of obtaining a random, representative sample of texts

• Conceptual assumptions are highly contestable.

Another criticism is that content analysis focuses largely on frequencies and for that reason no attention is given to the rare and the absent (Martin & Gaskell 2000:24). However, these valid concerns have been mitigated by means of a latent content analysis (see chapter 3 for a detailed description).

1.10 Outline of chapters

This dissertation consists of the following five chapters:

Chapter 1 provides a general introduction to the entire study. The background and rationale of the study, the statement of the problem, the research questions encountered, and the objectives of the study. The research design and data collection will also be explained in chapter 1.

Chapter 2 provides a theoretical perspective for this study to identifying the typical components and the distinct characteristics of case studies.

Chapter 3 reports on the development of an instrument for analysing the content of recent South African Master’s case study research in Public Administration in order to determine their distinct characteristics.

Chapter 4 reports on the results of the content analysis of recent South African Public Administration Master’s dissertations where case study research is conducted.
Chapter 5 provides a summary of the main findings of the research, the final conclusions and recommendations for further research.
CHAPTER 2

A THEORETICAL PERSPECTIVE ON “CASE STUDY”

2.1 Introduction

This chapter provides a review of the literature to obtain a theoretical perspective on the meanings of the concept “case study” as used in different disciplines and to identify the distinct characteristics of case studies. The researcher begins by exploring the different meanings of case studies and their characteristics. Cognisance is also given to the different case study designs, the purpose and/or the reasons for conducting case studies and the data collection and analysis methods used in case studies. This will help the researcher to understand the concept in question and how scholars in different disciplines apply case studies.

Furner (2006:233) proposes that when analysing a concept, the researcher should precisely define the meaning of the given concept “by identifying and specifying the conditions under which any entity or phenomenon is (or could be) classified under the concept in question”. In this context, it implies that the researcher should identify the conditions under which a study is regarded a case study. Therefore, in this literature review the researcher strives to identify those reasons and conditions for conducting case studies on which a common understanding among researchers exist by looking at the different meanings they attach to a case study and the distinct characteristics of and the types of case studies. These reasons will later be combined into a conceptual framework for analysing the case studies in South African Public Administration master’s dissertations completed during the period 2005 to 2012.
This review, however, does not only focus on developing a conceptual framework but to deal with a number of issues. As Hofstee (2006:91) observes, a good literature review should be comprehensive, critical and contextualised. He also argues that a literature review should be able to present the results of similar works, relate the present study to the on-going dialogue in the literature, and provide a framework for comparing the results of your study with that of others (Creswell 1994; Boote & Beile 2005:5). Therefore, this review achieves these requirements by providing the reader with a survey of published studies relevant to this research, and an analysis of that work.

Moreover, when conducting a literature review, a conscientious decision also needs to be made to determine which literature to include and which to exclude. Coverage is arguably the most distinct facet of the literature review. The degree to which researchers collect and include relevant literature is a single activity that sets this expository form apart from all others (Cooper 1985:12; Boote & Beile 2005:7). However, a good literature review is not limited to the coverage of relevant literature but must have the following attributes (Leedy & Ormrod 2001:66; Hofstee 2006:91):

- Providing awareness of what is going on in the field, thus the researcher's credentials
- Providing a theoretical base for the studies you are proposing to do
- Providing a detailed context for your study
- Showing the significance of your study
- Offering new ideas
- Showing how other researchers have handled methodological and design issues in similar studies
- Revealing data sources a researcher may not have known
- Revealing measurement tools that other writers have developed
- Helping with interpreting and making sense of the findings
• Ensuring that the researcher does not duplicate previous studies
• Ascertain what the most widely accepted definitions of key concepts in the discipline are
• Discovering the most widely accepted empirical findings in the field.

Taking into account the above necessities for a good literature review, the ultimate purpose of this chapter is thus to ascertain what has been published on the methodology of case studies with special reference to the meanings of and the reasons for conducting case studies. The literature review in this study will, inter alia; provide a theoretical base on case study, give a detailed context of this study, reveal measurement tools that other researchers have developed and ascertain what the most widely accepted meanings of “case study” are.

The review is based on scholarship from various subject fields employing case studies, such as Public Administration, Psychology, Business Management and Sociology (Adams & White 1994:573) to name but a few. In order to narrow the scope of the review, articles and books containing the concepts “case study”, “case study method”, “case study design”, “case study strategy”, “case study methodology” and “case study approach” in their titles or abstracts were the most preferred. This is due to the fact that in most cases, these concepts are used interchangeably when referring to case studies as it is shown in the first chapter. Databases such as Sage research methods and Taylor and Francis were instrumental in providing access to most of the journals consulted.

In terms of how this chapter will be articulated, Hofstee (2006:94) proposes a funnel method as an approach to structure a literature review. The first rule of this approach is to group works by commonality. The selected works will be grouped under the themes case study meaning, purpose of case studies, case study designs, case selection strategies, case study data collection, sources of evidence in case studies and case
study data analysis techniques. This will help the researcher expand his analysis instead of just focusing on the meaning. Since there is no consensus as to what constitutes current literature, the researcher reviews work published in the past decade pertaining to understanding the meaning of case studies.

2.2 Philosophical underpinnings

It is believed that philosophical assumptions are important in research since they shape the way the researcher formulates his problem and research questions to study and how the researcher seeks information in order to answer the questions (Creswell 2013:18). Even though there are several assumptions that underlie social science research, a dichotomy is usually drawn between positivist and interpretivist paradigms (Daymon & Holloway 2011:119).

2.2.1 Positivism

Positivism is entrenched in the ontological belief that objective reality exists and contends that social reality is believed to exist independently of the perceptions of the individual. Thus, the positivist paradigm can be associated with quantitative research (Golafshani 2003:597; Daymon & Holloway 2011:11) where the researcher distances himself from data in an attempt to be “objective” about the way data are gathered and prefers numbers and statistics over words during the analysis stage (Daymon & Holloway 2011:11). They argue that the aim of research grounded in this paradigm is to discover universal laws and provide an objective picture of the world (Daymon & Holloway 2011:101).
2.2.2 Interpretivism

This paradigm is also known as social constructivism wherein people seek understanding of the world they live and work in by developing subjective meanings of their experiences. These meanings are directed towards certain objectives, varied and multiple, and they lead the investigator to search for the complexity of views instead of narrowing the meanings into a few categories or ideas. Therefore, the objective of the study is to rely as much as possible on the views of the participants about the situation (Creswell 2013:24–25). Hence, Baxter and Jack (2008:545) reiterates by stating that this paradigm perceives truth as relative and dependant on one’s view. This is a paradigm in which qualitative research methods are used (Golafshani 2003:600; Daymon & Holloway 2011:104).

This study is based on both the interpretivism and the positivism paradigm since the researcher values the significance of the subjective human creation of meaning and relies on numbers and statistics, yet does not reject outright the notion of objectivity.

2.3 Various characteristics of “case study”

There is no agreed upon meaning of case study. Instead most scholars point to its focus on a single instance of a phenomenon, its location and interaction with a particular setting, its in-depth investigation and the richness of data, and its use of multiple sources which are believed to be merely its characteristics rather than definitions (Rule, Davey & Balfour 2011:302).

A number of scholars refer to case study as an “empirical enquiry that investigates a contemporary phenomenon in-depth and within its real life context, especially when the boundaries between the phenomenon and context are not clearly evident” and uses multiple sources of evidence (Rowley 2002:18; Yin 2003:13; Walshe, Caress, Graham
The notion that researchers conduct case studies in order to have an in-depth understanding of a real life phenomenon is justified by Yin (2009:18) who maintains that such understanding encompasses important contextual conditions, that is, because they are pertinent to the studied phenomenon.

Stake (1995: xi) provides an arguably less detailed definition of case study as a “study of the particularity and complexity of a single case, coming to understand its activity within important circumstances”. Gerring (2004:342) adds that a case study is an intensive study of a single unit aimed at understanding a larger class of similar units, where a unit represents a spatially bounded phenomenon, for example, a revolution or a person observed at a single point or delimited period of time. These two definitions place more emphasis on the premise that case studies focus on a single unit or case. Perhaps one needs to probe in order to grasp what is meant by a single unit or case.

Odell (2001:162) states that what can be regarded as a case can be as flexible as the researcher’s definition of the subject. In accordance with Gerring and Stake, Odell regards a case study as a single instance of a phenomenon or event such as a trade negotiation, a decision taken to devalue a currency, or an application of economic sanctions. It is no surprise that Rule et al (2011:302) from the field of Education state that case studies in their field focus on a single instance which can include a classroom, an educational project, a curriculum, individual learner or a teacher. These examples of cases seem relevant in the field of Education and substantiate Odell’s view that what can be considered as a case can be/is flexible.

Djuric, Nikolic and Vukovik (2010:176) echo the aforesaid by viewing a case study as an instance of a more general category and that to conduct a case study means investigating something which has significance beyond its boundaries. They state that a project only turns into a case study when it becomes clear what the study is a case of or what the focus of the study is, for example, lawyers study cases that are considered to
define legal principles with wide applicability. This is another typical example where the case seems to be aligned with the researcher’s definition of the subject.

It seems like Rule et al. (2011:302) are correct in their assertion that there is no agreed upon definition of case study and that emphasis is placed more on its characteristics which include its focus on a single instance of a phenomenon, its location and interaction with a particular setting, and its use of multiple sources of evidence. Although there may be no definition that encompasses all aspects pertaining to a case study, the literature shows that what can be considered a case study can have the following attributes:

- It investigates a contemporary real life phenomenon.
- It focuses on a single instance of a phenomenon which is flexible.
- Boundaries between phenomenon and context are not clear.
- It uses multiple sources of evidence.

The different studies above relate to each other especially on aspects such as the flexibility of the case or investigated phenomenon, the location and interaction of the case with a particular setting. The argument that the studied phenomenon can be as flexible as the researcher’s definition of the subject could mean that researchers are likely to define a case in relation to their context or subject field based on what they want to gain understanding of.

2.4 Investigated phenomenon in Public Administration research

The issue of the flexibility of a case or the phenomenon investigated through case studies (as mentioned above) is reflected in a number of studies. For example, an investigated phenomenon is shown to range from a person (Gerring 2004; Walshe et al 2004), process (Andrade 2009), organisation (Walshe et al 2004; Cooper & Morgan 2008), programme (Baxter & Jack 2008), or revolution (Gerring 2004). This perceived
flexibility of the case study causes the need for the researcher to understand what might be regarded as constituting a case study in the Public Administration context.

Brower, Abolafia and Carr (2000:371) justify the predominance of case studies in Public Administration research on the grounds of its essence of focusing on an individual, an organisation, a role, an event, process or even a period of time. Meanwhile, Adams and White (1994:573) state that case studies might range from a single, small country agency to an entire state government, or even a policy area of the federal government.

The above are amongst what Wessels and Thani (2014:169) regard as units of analysis in Public Administration. These include, inter alia “public servants, political office-bearers, public institutions, public servants’ associations or unions, public policy, procedures, constitutions, acts, concepts, models and theories”. Wessels, Pauw and Thani (2009:10–12) then classify the typical units of analysis in the field into the following categories as presented in table 2.1: individuals, groups or collectives, institutions and organisations, social actions and events, social artefacts and cultural objects, and constructs.

A typical example of a Public Administration research reaffirming the above discussion involves that of Burke’s (2010) study which focuses on the apartheid system as a case study representing a policy issue. This example shows the relationship between the case study and the context of the researcher which is the Public Administration subject field. Another evidence of a phenomenon investigated in Public Administration case study research stems from Auriacombe (2009:6) whose study investigates the process of work-integrated learning in the Department of Public Administration and Management at Unisa. Amongst other issues that the study investigates are the different roles of the lecturer. The table below details the different categories on investigated phenomena in Public Administration research:
Table 2.1: Categories of units of analysis in Public Administration Research

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individuals</strong></td>
<td>Researchers seek to know more about individual human beings, that is: their behaviour, orientations or characteristics within a specific historical context (Babbie &amp; Mouton 2001:648; Houston &amp; Delevan 1990:679).</td>
</tr>
<tr>
<td><strong>Groups or collectives</strong></td>
<td>This refers to “people who are (or define themselves as) members of larger geographical, political or cultural entities”. These may include, for example nations, developing countries, provinces, cities, towns, communities and tribes (Mouton 1996a:48).</td>
</tr>
<tr>
<td><strong>Organisations and institutions</strong></td>
<td>This category consists of groups of people with a formal structure. Typical examples include the South African Defence Force, Public Service and the Office of the Premier (Wessels &amp; Thani 2014:170).</td>
</tr>
<tr>
<td><strong>Social actions and events</strong></td>
<td>The researcher is interested in actions as a phenomenon rather than the individuals, group or organisations involved and their actions or behaviour (Babbie &amp; Mouton 2001:87). Public Administration examples may include public participation, intergovernmental relations, disaster management (Wessels &amp; Thani 2014:170).</td>
</tr>
<tr>
<td><strong>Social artefacts or cultural objects</strong></td>
<td>These entail the “study of the products of human beings and their behaviour”. Examples include code of conduct, books, scientific journals and articles in these journals (Wessels &amp; Thani 2014:170).</td>
</tr>
</tbody>
</table>
| **Interventions**         | This category refers to the “set of actions and decisions that are structured in such a way that their successful implementation would lead to clearly identifiable
outcomes and benefits” (Mouton 2001:88). Examples may include “legislation, policies, plans, programmes, courses and systems” (Wessels & Thani 2014:170).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>This category consists of articles that do not have empirical units of analysis (non-empirical units). These may include theories, models, concepts and research methods (Babbie &amp; Mouton 2001:16).</th>
</tr>
</thead>
</table>

Sources: Wessels, Pauw and Thani (2009:10–12); Wessels and Thani (2014:170)

Although the different units of analysis in Public Administration research (table 2) may have been generalised to all levels, there is a need to further explore the specific nature of units of analyses used in case studies, especially in the context of South African Public Administration master’s dissertations. The next section illustrates views of the various scholars on the relation between the choice of the unit of analysis for a study and the different case study designs.

### 2.5 Case study designs

A case study is believed to consist of different designs. In fact, the literature has shown that case study designs can be categorised as follows: **type 1** – single-case (holistic) designs, **type 2** – single-case (embedded) designs, **type 3** – multiple-case (holistic) designs, and **type 4** – multiple-case (embedded) designs (Yin 2009:47; Baxter & Jack 2008:548).

#### 2.5.1 Single case study design

Daymon and Holloway (2011:119) suggest that a single case study design provides the researcher with an opportunity to conduct an in-depth (but narrow) exploration of a
phenomenon. The interest of the researcher in this instance is on small numbers which are thoroughly examined at single or delimit point.

Single case study designs can be divided into two sub-categories, namely single-holistic designs or single-embedded designs. By “single” the researcher implies that case study researchers employing this design focus on only one case, examine only the global nature of a phenomenon if it is of a holistic design (Yin 2009:50) and draw conclusions about the phenomenon as a whole (Bengtsson 1999:4). This suggests that a single-case (holistic) design focuses on one unit of analysis. For example, if a college is selected as a unit of analysis, the researcher draws conclusions only about the college as a whole.

In contrast to the holistic design, Yin (2009:50) states that the single-embedded case study can have more than one unit of analysis. In this instance, attention is paid by the researcher to the subunit or subunits. The author labels this a single-case (embedded) design. Bengtsson (1999:6) concurs by stating that embedded designs draw a conclusion by investigating and analysing the subunits of the studied phenomenon. Using the previous example, in this instance the researcher draws conclusions by analysing the subunits which can include the various departments within the college. The next subsections present the functions of the single case study design.

2.5.1.1 Theory testing

It is argued that although single case studies can be used as a pilot study (Rowley 2002:21; Yin 2009:49), it can confirm, challenge, or extend a theory if it meets all of the conditions for testing the theory (Yin 2009:47). Theory testing means investigating whether a specific theory is supported by empirical facts. For example, if a researcher has a theory about a specific issue, the researcher embarks on research pertaining to that issue to determine whether the facts support that theory (Hillebrand, Kok & Biemans 2001:652).
Hillebrand et al (2001:652) argue that case studies face criticism from its opponents that the findings from case study research cannot be utilised for theory testing since the results of the case study cannot be generalised. These researchers thus provide a formula to bypass the criticism. They proclaim that case study researchers can use the theory to predict the results for specific cases and subsequently investigate these cases to determine if the theory holds true to them. In a nutshell, the argument of these authors is that theory in single case studies can be tested through a deductive approach where the single case study researcher begins with a previously developed theory to determine its relevance or correctness in the investigated phenomenon.

Yin (2009:47) contends that one condition for testing theory through this case study design is that the single case must represent the critical case in testing a well-established theory. This has been reaffirmed by Bengtsson (1999:3) who upholds that critical cases can be used to either challenge, confirm or extend a formulated hypothesis. By doing so, the single case can determine if a theory’s propositions are correct or whether a certain alternative set of explanations may be relevant (Yin 2009:47).

Gerring (2007:232) uses either the term “critical” case or “crucial” case. As such, Flyvbjerg (2006:231) advises that a critical case can be identified by looking for “most likely” or “least likely” cases. These cases have strategic importance in relation to the general problem and are likely to either confirm or falsify hypotheses and propositions. Instead of a representative sample, a strategic sample is selected with the intention that a proposition or hypothesis will be falsified or confirmed if specific results are achieved.

Yin (2009:47) iterates and adds that in critical cases a theory specifies a “clear set of propositions as well as the circumstances within which the propositions are believed to be true”. An example of this scenario is when a clinic, for instance, strategically locates
a single workplace wherein all safety regulations relating to cleanliness, air quality and the like, are in place. This model enterprise become a critical case in a sense that if, for instance brain damage that is related to organic solvents could be found at this specific facility, then there is a great likelihood for the prevalence of the same problem at other enterprises that were less careful with safety regulations for organic solvents (Flyvbjerg 2006:14). In a nutshell, crucial/critical cases may be distinguished according to their principal goal: to confirm (least likely) or refute (most likely) a given theory (Gerring 2007:246). This logic seems to provide a strong justification for theory testing and theoretical generalisation through the single case study.

In accordance with the above scholars, the typology of case studies by Litjpart (1971:692) illustrates that theory confirming and theory-refuting case studies involve the “analysis of single cases within the framework of established generalisations. Prior knowledge of the case is limited to a single variable or to none of the variables that the proposition relates”. According to Litjphart (1971:692) the intention of the case study is to test the proposition which it can confirm or infirm (Litjphart 1971:692). He subsequently argues that the case study strengthens a proposition if it is of the theory confirming type. By the same token, theory refuting case studies weaken the generalisations marginally.

What is even more interesting is that the literature reveals not only one but different approaches to theory testing. One of the approaches includes the deductive theory testing which is associated with the positivist wherein the researcher follows a deductive mode of reasoning in his attempt to test theory (Alaranta 2006:2; Bitektine 2008:160) as the researcher begins by stating a hypothesis and tests it through a hypothetic-deductive logic and analysis (Alaranta 2006:2).

The other approach to theory testing by means of single case studies is the qualitative deductive approach, associated with the interpretivist paradigm. This qualitative deductive approach to theory testing can be achieved through techniques such as
pattern matching and alternate theoretical templates strategy (Bitektine 2008:162–163). In this instance, the researcher applies different theoretical templates to a single case study in order to contrast the assumptions, explanations and recommendations that form each of the alternate theories. Through this approach, a “real life” case is used to subject different theoretical approaches to falsification (Bitektine 2008:162).

It is worth noting that the literature reveals the single critical case as not only useful to test theories but also hypotheses and propositions. The discussion shows that a single critical case provides “the strongest sort of evidence possible in a non-experimental, single-case study” (Gerring 2007:115). However, providing the “theory yields fairly precise predictions, if the researcher specifies in advance the kinds of evidence that would lead him to accept or to reject the theory, and if cases are selected in a way that maximizes leverage on the theory” (Levy 2008:13).

There seems to be an agreement between the various scholars that theory testing case studies, whether quantitative or qualitative, follow a deductive approach. This common trend may signify a parallel approach to theory testing between the positivist and the interpretivist paradigm although different methods are used for the analysis of data.

2.5.1.2 Theory building

Parallel to the deductive theory testing is inductive theory building. Wacker (1998:373–375) classifies theory building research into analytical and empirical and positions case study research under the latter. Andrade (2009:45) argues that the inductive theory building is more than simply generating a hypothesis, where the alleged “goal is not to conclude a study but to develop ideas for further study” (Yin 2003:120).

Mintzberg (as cited in Sonali & Kevin 2006:1821) believe that theory building requires a rich description, the richness that comes from a story. They argue that many kinds of relationships can be uncovered in “hard” data yet it is only through the use of “soft” data that the relationships can be explained. Their argument is that quantitative data without
anecdote to support researchers makes it difficult for the researcher to explain interesting relationships.

Reynolds (as cited in Lynham 2002:225) proposes a research-to-theory strategy that can be used for theory building. This strategy can be associated with the process of developing the laws of nature through careful examination of all the data available. In such studies, the researcher follows the following strategy: He or she

- selects a phenomenon and lists all its characteristics
- measures all the characteristics of the selected phenomenon in diverse situations
- carefully analyses the resulting data to determine if any systematic patterns among the data are worthy of further attention
- once the patterns are found, “formalization of these patterns as theoretical statement constitutes the laws of nature”

Carlile and Clayton (2005:2) provide a three step iterative process of theory building, namely observation, classification and defining relationships. In observation, the researcher observes a phenomenon, carefully describes it and then measures what he or she sees. The second step is for the researcher to classify the phenomenon into categories. Subsequently, the researcher explores the relationship between the category – defining attributes and the outcomes observed.

In the context of case studies, Andrade (2009:45–46) proposes a combined fashion of a case study with grounded theory as a systematic process for theory building. Andrade commends the complementary nature of the two approaches stating that while the case study is useful in defining the study boundaries and unit of analysis, grounded theory focuses on the existing processes where theory will be ultimately constructed.
2.5.2 Multiple case study design

Researchers can adopt a multiple case study design also known as a collective case study design (Daymon & Holloway 2011:119). According to Yin (2009:59) researchers employing this design focus on two or more cases. These cases may involve either holistic or embedded units as in the single case study design. This means that each individual case within these multiple cases may still be holistic or embedded as discussed above (Yin 2009:59). It is therefore important for one not to confuse this case study design with the single embedded case study design because here the context for each of these cases is different. This design allows the investigator to analyse within setting and across settings as opposed to a holistic study with embedded units whose goal is to understand either one unique or critical case (Baxter & Jack 2008:550).

According to Daymon and Holloway (2011:119) the multiple case study design entails the use of two or more cases in order to identify their distinctive features by exploring their similarities and contrast. Similarly, Leedy and Ormord (2010:137) believe multiple case studies are useful to researchers in order to make a comparison between cases. Meanwhile, Schurink and Auriacombe (2010:438) write that multiple case studies can be used to capture varieties between cases. By doing this, the multiple case study design allows the researcher to generalise to some extent to a wider universe (Daymon & Holloway 2011:119).

2.5.2.1 Generalising

In multiple case studies, generalisation is based on the replication logic. Replication refers to the degree to which a study repeats the results or findings of a previous study and can be claimed when two or more cases support the same theory (Rowley 2002:20–21). This is done by comparing and contrasting the conclusions from one case with the results from another case (Bengtsson 1999:2). Yin (2009:54) advises that researchers need to develop a rich, theoretical framework stating the conditions under
which a specific phenomenon is more likely to be found (lateral replication) and the conditions under which a phenomenon is not likely to be found (theoretical replication).

Yin’s (2009:54) replication logic seems to counter that of Lee (1989:40) who believes that replication studies should be performed by an “independent investigator” other than the researcher who has conducted the preliminary study. The author argues that case studies can be replicated by following the same way another researcher conducted the study by applying the same theories, same set of conditions, same predictions and testing these predictions against the same observations made by the preliminary researcher. However, this study argues that although one might think it is easy to consider replicated case studies as more validated than single case studies, the scantiness of extreme and critical cases as well as the amount of time and resources needed to replicate case studies poses a challenge and therefore the conditions might be different.

Nevertheless, Yin (2009:38) distinguishes between two types of generalisations, that is, statistical and analytical generalisation. The former is less relevant when conducting case studies where an inference is made about a population on the basis of data gathered about a sample from that population. Rowley (2002:20) concurs that analytical generalisation is the method for generalisation for case studies as opposed to statistical generalisation where a previously developed theory is employed as a template with which the empirical results of the case study are compared. This statement is supported by Daymon and Halloway (2011:124–126) who argue that the quantitative notion of generalisations is inappropriate for qualitative case studies since these case studies are not statistically selected to represent a large population.

However, Gerring (2004:348) argues that single unit studies provide cases with a greater likelihood for comparability as they are drawn from the same unit (by definition). According to Gerring, cases drawn from different units often influence the researcher to
make “heroic assumptions about the comparability of concepts and causal relationships across the chosen cases” (Gerring 2004:348).

2.6 Strategies for selection of cases

The previous section implies a direct relationship between case study designs and the selection of the cases. The literature, however, reveals a lack of conceptual clarity with regard to the selection of cases and the discussion of the process of sampling in case study research. This section focuses primarily on strategies for the selection of cases (the unit of analysis) and not the units of observation. Daymon and Holloway (2011:120) made a similar distinction, although they use the word “sampling” for both actions. They refer to the following two levels of sampling: first the selection of cases and then sampling of participants. This section will focus on the first level, namely the selection of cases.

As Daymon and Holloway (2011:120), Meyer (2001:333) also refers to the selecting of cases as ‘sampling’. He qualifies this type of sampling by arguing that the logic of sampling cases in case studies is primarily not of a statistical nature, but of a theoretical nature as the goal of the researcher is to replicate or extend emergent theory. Meyer, to some extent also resonates with Flyvbjerg (2006:230) by suggesting that the criteria for selection cases should be representativeness or purposiveness to ensure that the cases are information rich.

Yin (2009:55–56) unambiguously dismisses the use of the sampling logic in case studies and maintains that any application of a sampling logic to case studies would be misplaced. He argues that the sampling logic requires an operational list of potential respondents in order to apply statistical procedures for selecting a particular subset within the pool to be studied (Yin 2009:55–56). The resulting data is thus assumed to reflect the entire pool. His argument is based on the premise that a single case study is not a single respondent in a survey or a single subject in an experiment (Yin 2009:38). The author’s arguments provide justification for a variety of selection strategies, such as
attending to critical cases, extreme cases, representative or typical cases, revelatory cases, longitudinal cases and replication logic in multiple case studies.

2.6.1 Critical cases

The first strategy for selecting cases, is the selection of critical cases. Bengtsson (1999:3) argues that critical cases can be used to either challenge, confirm or extend a formulated hypothesis. According to Flyvbjerg (2006:230) critical cases allow researchers to obtain information that allows them to draw logical deductions (See section 2.5.1.1).

2.6.2 Extreme cases

Another strategy researchers can apply in single case studies is to select cases because they are unique or extreme. This applies when the phenomenon is rare or extreme and thus worth documenting and analysing (Bengtsson 1999:3; Yin 2009). Such selections commonly occur in psychology such as a specific rare injury or disorder (Yin 2009:47). Bengtsson (1999:3) argues that such situations are also relevant in medicine to falsify or reject a hypothesis that, for example, a specific rare virus is unconditionally deadly. However, these researchers do not provide a criterion to identify such cases especially what might constitute an extreme case in a different discipline such as social or human sciences. Perhaps the case study researcher’s discretion can be deemed good enough criteria to determine whether or not a specific case is an extreme or unique case. Therefore, it makes sense that the researcher provides a rationale for selecting a specific case in case study research.

2.6.3 Representative or typical cases

Case study researchers also select case studies that are representative or typical. The terms representative or typical can be associated with words such as distinctive,
symbolic, common, classic, characteristic, etcetera (Yin 2009:48). Yin argues that the goal of the representative or typical study is to “capture the circumstances and conditions of an everyday or common place situation”. For example, the case study can represent a typical project amongst different projects or a manufacturing company that is believed to be typical of manufacturing companies in that industry (Yin 2009:48).

2.6.4 Revelatory cases

As the term revelatory suggests, this type of case can be seen as an opportunity for researchers since it allows these scholars to study a phenomenon that was previously inaccessible to social science research (Bengtsson 1999:4; Yin 2009:48). Since there is an absence of theory, it is also not possible to formulate hypotheses to be tested. Consequently a revelatory case study is used to explore a phenomenon never studied before (Bengtsson 1999:4).

2.6.5 Longitudinal cases

The single longitudinal case involves studying the same case at two or more different points in time. In such instances, the theory of interest would likely stipulate how certain conditions and their underlying processes change over a specific period. “The desired time intervals would presumably reflect the anticipated stages at which the changes should reveal themselves” (Yin 2009:49).

2.6.6 Replication logic in multiple case studies

The replication logic in multiple case studies consists of the selection of multiple case studies involving two selection types: First, the researcher can select similar cases with similar predicted results, known as literal replication. Choosing similar cases could imply that the contextual conditions are the same in all cases. Secondly, cases can be selected based on the assumption that they will produce contrasting results –
specifically for theoretical replication purposes (Bengtsson 1999:3; Yin 2009:60). In this instance cases may be purposefully selected because of their different conditions with the assumption that they will produce contrasting results.

2.7 The purposes of case study research

The purposes of case studies are three-fold, namely exploratory, descriptive and explanatory (Yin 2009:7). Yin upholds that every research method can be used to achieve these three purposes. The only distinguishing factor between case studies from the rest is their ability to answer “how” and “why” questions, when the researcher has no control of behavioural events, and to focus on a contemporary phenomenon (Yin 2009:7–8). The three purposes of research, namely exploratory, descriptive and explanatory are consequently discussed within the context of case study research, which, in view of the previous statement, should be understood in the light of the three contextual conditions.

2.7.1 Exploratory case studies

The goal of an exploratory case study (single or multiple) is to define research questions or hypotheses of a subsequent study or to determine the viability of the desired study procedures (Yin 2003:5). Kohn (1997:3) concurs by stating that exploration case studies seek to explore areas or issues wherein “little theory is available or measurement is unclear”. As exploratory case studies explore new topics or areas previously not being researched (Babbie & Mouton 2001:79–81), these studies primarily aim to answer “what” questions (Auriacombe 2001:46; Yin 2009:9).

2.7.2 Descriptive case studies

Leedy and Ormrod (2010:182) view descriptive research as examining a situation as it is. This implies that the researcher avoids changing or modifying the investigated
phenomenon establishing cause-and-effect relationships. In doing so, it can be argued that this type of research is more relevant when the researcher seeks to answer “how” questions (Auriacombe 2001:46).

In accordance with descriptive research in general, descriptive case studies provide a description of a phenomenon with its context (Yin 2003:50). Generally, in descriptive research this is done through careful scientific observation, conceptual analysis, historical analysis, case studies and multivariate descriptive statistics (Babbie & Mouton 2001:80).

2.7.3 Explanatory case studies

Mouton (2001:81) considers explanatory research as seeking to discover why a phenomenon has specific characteristics. These studies are meant to indicate causality between variables and events. Explanatory case studies thus present “data bearing on cause-effect relationships explaining how events happened” (Yin 2003:5). These studies are directed by “how” and “why” questions and are more likely to compel the application of case studies, historical studies and experiments (Yin 2009:9). A single explanatory case study thus provides the basis for developing explanations about the occurrence of a phenomenon. These explanations can subsequently be further investigated by applying them to additional cases in other contexts (Darke, Shanks & Broadbent 1998:281).

2.8 Techniques and sources of evidence in case studies

Although case studies are located among an array of qualitative approaches, they are not just a form of qualitative research (Yin 2009:19). This section will consequently argue that case studies go beyond being merely a type of qualitative research to using a mix of both qualitative and quantitative evidence or can even be limited to quantitative evidence.
2.8.1 Qualitative techniques in case studies

Qualitative research seeks to describe, translate, or understand the meaning of a specific phenomenon through a collection of interpretive techniques (Cooper & Schindler 2006:196). Some of the methods and techniques used to collect qualitative data include: focus groups interviews, in-depth interviews with individuals, ethnography, action research, participant observation, document analysis, the study of artefacts and grounded theory (Bassey 1999:81; Creswell 2013:105; Yin 2009:11). Cresswell (2013:45) argues in this regard that qualitative methods provide for the gathering of multiple types of rich data which can be gathered in qualitative research in comparison with quantitative methods most commonly relying primarily on the results of surveys.

Daymon and Holloway (2011:104) place researchers employing qualitative methods under the interpretive paradigm since they focus on meanings instead of measurements. They argue that obtaining understanding of an event is a process that can never be complete and the research outcomes are thus provisional. As such researchers begin from the particular to the general and that they do not begin with a hypothesis or theory but develop these over the course of the research.

Golafshani (2003:600) concurs by stating that qualitative research uses a naturalistic approach and aims to understand a phenomenon within a real life setting without attempting to manipulate the phenomenon of interest. He also places qualitative research under the interpretivist paradigm and argues that interviews and observations are dominant in this paradigm and just supplementary in the positivist paradigm.

2.8.2 Quantitative techniques in case studies

Cooper and Schindler (2006:198) purport that quantitative research attempts to provide a precise measurement of something where surveys are predominantly a method for
collecting data. They further assert that quantitative methods are useful for theory testing.

Golafshani (2003:597) as well as Daymon and Holloway (2011:11) observe that quantitative research methods go hand in hand with positivism aiming at the generating of a hypothesis to be tested. They argue that the techniques in this type of research distance the researcher from data in an attempt to enhance objectivity. For example, a researcher may distribute surveys and interpret the responses instead of listening to voices. Moreover, the quantitative researchers prefer to analyse numbers and statistics to words. Researchers in this paradigm depart from a general theory or hypothesis to be either confirmed or refuted (Daymon & Holloway (2011:104). 

Although case studies are usually located among an array of qualitative approaches (Yin 2009:19), the evidence does show that they can also be quantitative or be the combination of both. Case study researchers have been shown to apply both quantitative and qualitative methods (Lapan, Quartaroli & Riemer 2012:256; Meyer 2001:336). Consequently, case study researchers have been shown to be part of both the positivist and the interpretivist paradigm.

2.9 Analysing case study evidence

Following the above observation, it can be expected from case study researchers to be able to utilise a wide spectrum of methods and techniques for data analysis, including pattern matching, explanation building, time-series analysis, logic models and cross-case synthesis (Yin 2009:136–156).
2.9.1 Pattern matching

Pattern matching is a predictive approach to an intervention in that it specifies post-intervention results that would either show effects or no effects. This is done through a series of data for different intervals over a specific period of time and with enough data pre-intervention to make claims for changes or improvements to be credible. For example, if one has accident statistics for one year pre-intervention, and the results of the post-intervention rates appear to be better, it might mean that that one specific year was not typically as bad as it seemed and that the pattern for previous years had been no different from the "improved" rates. But, if one has data for four or five years before the intervention, and the post-intervention rates several years later are lower, or are steadily declining, then it is reasonable for one to presume that there is some causal relationship (Gillham 2010:82). This type of analysis also compares an empirically based pattern with a predicted one. The results of such analysis can strengthen case studies’ validity if the patterns coincide (Yin 2009:136). In a nutshell, the researcher seeking to analyse data through pattern matching does so by providing a predicted pattern for specific variables prior to collecting data.

2.9.2 Explanation building

Yin (2009:141) regards explanation building as a special type of pattern matching whose goal is to analyse data by building an explanation about the case. The researcher argues that better case studies are the ones wherein explanations reflect some theoretically significant propositions compared to most case studies in which explanation occurs in narrative form which cannot be precise. One can argue that its reliability stems from the iterative process followed in explanation building which includes:

- beginning with an initial theoretical statement or proposition about a specific phenomenon
• comparing the results from an initial case against the initial statement or proposition
• revising the statement or proposition
• comparing other details of the initial case against the revision
• comparing the revision with the facts of a second, third or even more cases
• repeating the same process as many times as necessary

This type of analysis differs from pattern matching mentioned above as the final explanation is not fully specified at the beginning of the study. Instead, the evidence is examined, theoretical positions revised and the evidence is re-examined from a different point in an iterative manner (Yin 2009:143).

2.9.3 Time-series analysis

According to Yin (2009:144) time-series analysis can follow many complex patterns and the more intricate and precise the pattern, the more time-series lays a firm foundation for the conclusion of the study. It allows the researcher to match the observed (empirical) trend with either the theoretically significant trend which is specified before the beginning of the investigation or with some rival trend, which also is specified earlier. There are different designs of the time series: First; is a simple-time series wherein there may only be a single dependent or independent variable. Second, is a complex-time series design in which the trends within a given case are considered to be complex, for instance, when a researcher identifies some rise followed by a decline trend within the same case instead of merely rising or declining (or flat) trends. The strength of the case study would thus be to develop a rich explanation for the complex pattern of outcomes and comparing the explanation with the outcomes. Lastly, it is the chronological compilation of events that allows the researcher to trace events over time (Yin 2009:144–148).
2.9.4 Logic models

Logic model refers to a program’s roadmap in that it highlights how a program is expected to work, the activities that need to come before others and how desired outcomes are achieved. It is, therefore a picture of how a program works – the theory and assumptions underlying the program (W.K. Kellogg Foundation 1998:39). This technique is valuable specifically in case study evaluations. It “deliberately stipulates a complex chain of events over an extended period of time” (Yin 2009:149). According to this author, the use of this model entails matching the observed events (empirically) to theoretically predicted events. Conceptually, one would consider this another form of pattern matching (Yin 2009:149).

2.9.5 Cross-case synthesis

This is the fifth technique which has shown to be used specifically in multiple case study design as opposed to the other four which can be used with either of the case study designs (Yin 2009:156). It can be used whether the individual case studies have previously been conducted by different persons (independent research studies) or as part of the same study. Anyhow, this analysis technique treats each individual case study separately where the researcher begins by creating word tables displaying data from the individual cases according to some uniform framework. The examination of these tables for cross-case patterns rely strongly on argumentative interpretation instead of numeric tallies (Yin 2009:160).

2.10 Summary

The literature reveals a number of case study characteristics. Most scholars seem to adopt Yin’s definition of a case study. Generally, a case study appears to consist of the following: investigates a contemporary real life phenomenon, boundaries between phenomenon and context are not clear and it denotes a single instance of a phenomenon. What can be considered as a case is believed to be as flexible as the
researcher’s definition of the subject. This means that a case in the context of Public Administration would refer to the issues or units investigated in the field. These range from individuals, groups or collectives, organisations or institutions, social actions and events, social artefacts of cultural objects, cultural objects, interventions and constructs.

The review also reveals different types of case study designs which are categorised as follows: type 1 – single-case (holistic) designs, type 2 – single-case (embedded) designs, type 3 – multiple-case (holistic) designs, and type 4 – multiple-case (embedded) designs. Single designs studies one case whereas multiple case study designs focuses on two or more cases.

The different types of research were also explored in the context of case studies. These include exploratory, explanatory and descriptive research. What makes a case study unique is that although every research method can be used to achieve the aforementioned, a case study does so under special contextual conditions. These include its ability to answer “how” and “why” questions, when the researcher has no control of behavioural events, and to focus on a contemporary phenomenon.

The different scholars also provide strategies for the selection of cases in order to reach the study objectives of theory testing, theory building and generalising. These include the selection of critical, extreme, representative, revelatory and longitudinal cases. The literature review also shows that case study researchers advocate for the use of the replication logic rather than sampling logic when selecting multiple case studies. The argument is that a case on its own is a comprehensive study, not a single respondent in a survey.

The literature review further dismissed the fallacy that a case study is only qualitative. Instead it can use either qualitative methods or quantitative or a combination of both in
data collection and analysis or even be limited to quantitative. For this reason, a case study is deemed to fit into both the interpretive and positivist paradigm.

The chapter further presented the different techniques used to analyse case study evidence. These techniques include pattern matching, explanation building, time series, logic models, cross-case synthesis and alternate theoretical templates strategy. If all the above are applied adequately, a case study can test theory or hypotheses and theoretical generalisations can be made.

The different studies above relate to one another especially on issues such as the selection of cases and theory testing. There are contrasting views regarding the generalisation of single case study findings between the positivist and the interpretivist paradigm, an issue that needs further investigations. Nevertheless, the literature demonstrates a shift in paradigm, especially in terms of data collection to mixed methods. It is therefore important to further investigate these issues in the context of Public Administration.

Table 2.2 below summarises the findings of this chapter which serve as a conceptual framework for analysing case studies reported in South African Public Administration master's dissertations.

Table 2.2: Conceptual framework for analysing case studies

<table>
<thead>
<tr>
<th>Component</th>
<th>Indicators</th>
<th>Description of indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case/unit of analysis</td>
<td>Individual</td>
<td>Researchers seek to know more about individual human beings – their behaviour, orientations or characteristic within a specific historical context</td>
</tr>
<tr>
<td>Classification</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Groups or collectives</td>
<td>People who are (or define themselves as) members of larger geographical, political or political entities. These may include, for example, nations, developing countries, provinces, cities, towns, communities and tribes (Mouton 1996:48).</td>
<td></td>
</tr>
<tr>
<td>Organisations or institutions</td>
<td>Groups of people with a formal structure, for example; South African Defence Force, Public Service and the Office of the Premier (Wessels &amp; Thani in Wessels et al. 2014:170).</td>
<td></td>
</tr>
<tr>
<td>Social actions and events</td>
<td>The researcher is interested in actions as a phenomenon rather than the individuals, group or organisations involved and their actions or behaviour (Babbie &amp; Mouton 2001:87). For example, public participation, intergovernmental relations, disaster management (Wessels &amp; Thani in Wessels et al 2014:170).</td>
<td></td>
</tr>
<tr>
<td>Social artefacts or cultural objects</td>
<td>The study of the products of human beings and their behaviour. Examples include code of conduct, books, scientific journal and articles in these journals (Wessels &amp; Thani in Wessels et al 2014:170).</td>
<td></td>
</tr>
<tr>
<td>Interventions</td>
<td>Refers to the “set of actions and decisions that are structured in such a way that their successful implementation would lead to clearly identifiable outcomes and benefits” (Mouton 2001:88). Examples may include legislation, policies, plans, programmes, courses and systems (Thani &amp; Wessels in Wessels et al 2014:170).</td>
<td></td>
</tr>
<tr>
<td>Constructs</td>
<td>Articles that do not have empirical units of analysis (non-empirical units). These may include theories, models, concepts and research methods (Babbie &amp; Mouton 2001:16).</td>
<td></td>
</tr>
<tr>
<td>Case study design</td>
<td>Single Researcher studies and draws conclusions about one case (Yin 2009:50; Bengtsson 1999:4).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multiple The researcher studies two or more cases (Yin 2009:59).</td>
<td></td>
</tr>
<tr>
<td>Case selection strategy</td>
<td>Critical case selection</td>
<td>Extreme case</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Explanatory</td>
<td>Answers “how” and “why” questions (Yin 2009:9). Determines causal relationships (Yin 2003:5).</td>
<td>A rare or extreme phenomenon worth documenting and analysing (Bengtsson 1999:3; Yin 2009). Such situations commonly occur in psychology such as a specific rare injury or disorder (Yin 2009:47)</td>
</tr>
<tr>
<td>Method</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Manufacturing company that is believed to be typical of manufacturing companies in that industry (Yin 2009:48).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revelatory</td>
<td>Scholars study a phenomenon that was previously inaccessible to social science research (Bengtsson 1999:4; Yin 2009:48).</td>
<td></td>
</tr>
<tr>
<td>Longitudinal</td>
<td>Studying the same case at two or more different points in time (Yin 2009:49)</td>
<td></td>
</tr>
<tr>
<td>Replication logic in multiple case studies</td>
<td>Applies in the selection of multiple case studies which involves two selection types: First, the researcher can select similar cases with similar predicted results. This process is known as literal replication. Choosing similar cases could imply that the contextual conditions are the same in all cases. Conversely, cases can be selected based on the assumption that they will produce contrasting results for theoretical replication purposes (Bengtsson 1999:3; Yin 2009:60).</td>
<td></td>
</tr>
<tr>
<td>Data collection methods and techniques</td>
<td>Qualitative data collection methods</td>
<td></td>
</tr>
<tr>
<td>Interviews, observations, documents, archives, administered questionnaires, case studies, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quantitative data collection methods</td>
<td>Surveys and questionnaires.</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td>Mixed methods</td>
<td>A combination of qualitative and quantitative data collection methods.</td>
<td></td>
</tr>
<tr>
<td>Data analysis methods/techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pattern matching</td>
<td>Compares an empirically based pattern with a predicted one (Yin 2009:136).</td>
<td></td>
</tr>
<tr>
<td>Explanation building</td>
<td>The evidence is examined, theoretical positions are revised and the evidence is re-examined from a different point in an iterative manner (Yin 2009:143).</td>
<td></td>
</tr>
<tr>
<td>Time series</td>
<td>The researcher matches the observed (empirical) trend with either the theoretically significant trend which is specified before the beginning of the investigation or with some rival trend, which also is specified earlier (Yin 2009:145).</td>
<td></td>
</tr>
<tr>
<td>Logic models</td>
<td>It “deliberately stipulates a complex chain of events over an extended period of time”. A logic model entails matching the observed events (empirically) to theoretically predicted events (Yin 2009:149).</td>
<td></td>
</tr>
<tr>
<td>Cross-case synthesis</td>
<td>This technique is useful in multiple cases. The researcher begins by creating word tables displaying data from the individual cases according to some uniform framework. The examination of these tables for cross-case patterns relies strongly on argumentative interpretation instead of numeric tallies (Yin 2009:160).</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Case study result</td>
<td>Deductive theory testing (quantitative) The researcher follows a deductive approach by beginning with a hypothesis which is then tested through quantitative methods.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Deductive theory testing (qualitative) Theory is tested by means of pattern matching and alternate theoretical templates strategy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analytical generalisation A previously developed theory is employed as a template with which the empirical results of the case study are compared (Rowley 2002:20).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hypothesis generating Does not conclude a study but instead it develops ideas for further research (Yin 2003:120).</td>
<td></td>
</tr>
</tbody>
</table>
2.11 Conclusion

The purpose of this chapter was to obtain a theoretical perspective on the concept “case study” as understood by scholars in different disciplines. The literature was obtained from books and articles containing the words “case study” in their titles and which were published mainly in the Social Sciences. The conceptual framework developed in this chapter shows that the concept “case study” refers to a research process determined by a combination of the following components: a specific strategy for selecting the unit of analysis (the case), a specific research design, research purpose, the methods of data collection and data analysis, and the specific nature of the expected outcomes of the study. This conceptual framework furthermore consists of indicators for each of these components as well as specific descriptions of each indicator. Chapter 3 will explain how this conceptual framework will be applied as an instrument for the content analysis of the selected South African Public Administration master’s dissertations.
CHAPTER 3

RESEARCH METHODS

3.1 Introduction

In the previous chapter, the researcher developed a conceptual framework for analysing case studies. The conceptual framework, consisting of components of case studies, indicators for each component, as well as descriptions for each indicator, has been used for the content analysis of the selected South African Public Administration master’s dissertations reporting on case studies. This chapter provides a detailed report on how the researcher designed and conducted this analysis by attending to the research design, the selection of the appropriate method, the selection of the population and sampling methods, the actual analysis and coding, and the verification of trustworthiness.

3.2 Research design

Considering that the purpose of this study is to analyse case studies reported in South African Public Administration master’s dissertations, a single-embedded case study design has been used with South African master’s dissertations reporting of case studies as the “single-imbedded case” (Yin 2009:52). This design enabled the researcher to draw conclusions by investigating and analysing the subunit(s) (dissertations reporting on case studies) of the studied phenomenon (South African master’s dissertations). This “investigation” will be done through a content analysis (see section 3.5) by applying the conceptual framework designed for this purpose (table 2.2 in chapter 2).

It is prudent that the researcher also acknowledges the pitfalls associated with the single-embedded case study. Yin (2009:52) believes that a major pitfall occurs when the
study focuses only on the subunit level and fails to return to the main unit of analysis. Nevertheless, as Furner (2006:233) suggested, the researcher should precisely define the meaning of the given concept “by identifying and specifying the conditions under which any entity or phenomenon is (or could be) classified under the concept in question”. Therefore, by focusing on the sub-units of analysis for this study the researcher knew that the outcomes of this study would shed light on the main unit.

3.3 Selecting appropriate methods

As indicated in section 1.8.4 of chapter 1 the researcher has selected a systematic content analysis as the most appropriate method for analysing the selected master's dissertations. This method has been selected because it has been developed specifically for text analysis, and the systematic categorisation of information obtained from the analysis (Carter & Little 2007:1316; Druckman 2005:5; Martin & Gaskell 2000:4; Mathison 2012:2; McLaverty 2007:62; Mouton 2001:165).

The purpose of this section is to explain how this method has been operationalised in order to meet the research purpose, namely to analyse case studies reported on in South African Public Administration master’s dissertations completed in the period 2005 to 2012 in order to determine the distinct characteristics of case studies as done in the field of South African Public Administration (see section 1.4 of chapter 1). The specific research methods and related strategies have been selected to maximise the validity and credibility of the results of this study (Mouton 1996: vii).

As the research purpose explicitly expects the researcher to “analyse case studies”, the “content analysis” as method has been pre-determined. However, the researcher has to decide on the nature of the analysis (see also the discussion in section 1.8.4 of chapter 1). The considerations in this regard are reported in section 3.5 below. The systematic process to determine the characteristics (and their indicators) of case studies reported in South African Public Administration master’s dissertations has been enhanced
through the application of the conceptual framework (table 2.2) developed for this purpose in the previous chapter.

3.4 Population and sampling

The “case” for this study is South African Public Administration master’s dissertations. This case consists of a “population” of dissertations. This population is for the subject of research interest (Stuart & Wayne 1996:29). The researcher used the Nexus database (NRF 2013), currently the most comprehensive and reliable database of South African master’s and doctoral dissertations and theses, to obtain a list of South African master’s dissertations in Public Administration.

For the purpose of this research project, the researcher limited the sample population to a specific timeframe to include all the dissertations of master’s degrees in Public Administration conferred by South African universities in the years from 2005 until 2012. This list was further refined to include only those 43 dissertations which titles contained the words “case study”. A limitation of this selection method is that it excluded those case study dissertations with titles not revealing the fact that the dissertation reports on a case study.

Considering that the concept “sampling” refers to the process of choosing a certain fraction of the population to represent the entire population (Madzidzela 2008:40), the researcher eventually used all 23 (out of a sample population of 43) available dissertations in the sample population. Although this selection method shares some of the characteristics of the convenient sampling method, the researcher suggests that the 23 available dissertations represent the universum of the sample population. Annexure 1 (page 95) shows a code list for the evaluation of these dissertations, while annexure 2 (page 99) presents a list of the dissertations used. As shown in annexure 2, the dissertations are spread between nine tertiary institutions. A majority of the dissertations were of limited scope (19) as opposed to only four full dissertations.
3.5 Analysis and coding

Two techniques of content analysis were used to analyse the dissertations in this study, namely manifest analysis and latent analysis (Thayer, Evans, McBride, Queen & Spyridakis 2007:269). Manifest analysis entails the “counting of words, phrases, or other ‘surface’ features of the text itself”. This technique is thus of a quantitative nature yielding reliable quantitative data that can be analysed through inferential statistics. As manifest content analysis forms part of the approach directed content analysis, its goal is also “to validate or extend conceptually a theoretical framework or theory” (Hsieh & Shannon 2005:1280).

Latent analysis is of a more qualitative nature and occurs when the researcher interprets the underlying meaning of text. This requires the researcher to have a clearly stated idea of what has been measured by rigorously defining the latent variables (Thayer et al 2007:270). The strength of this analysis is its ability “to expose previously masked themes, meanings, and cultural values within texts” (Thayer et al 2007:269). This analysis is intended to support the summative content analysis aiming to assist the researcher to understand the contextual use of words or content in text (Hsieh & Shannon 2005:1283).

As the researcher started with a manifest/directive content analysis, this section describes the steps followed to apply the conceptual framework (table 2.2) as an instrument for analysing and coding the contents of the dissertation. The researcher read and underlined every statement in the dissertation that appeared to be relevant to the conceptual framework at first glance. The content of the dissertations was then structured with a colour scheme after reconsidering the developed categories. This allowed the researcher to summarise every statement by order of colour into the category system. The researcher was compelled to develop new categories, especially in instances where the contents did not fit in with the pre-determined categories (Kloss
Some statements were quoted directly whereas others were paraphrased and interpreted in the researcher's own words.

The coding process discussed in the previous paragraph was conducted by using the indicators provided for each of the following questions in the conceptual framework (Table 2.2):

- What is the case (unit of analysis) of the particular study?
- What is the purpose of the case study dissertation?
- Which case study design has been employed?
- Which data collection methods were used?
- Which case selection strategy has been used?
- Which data collection methods and techniques have been used?
- What data analysis techniques were applied?
- What is the outcome of the study?

The codes of the above analysis were captured on an Excel spread sheet and analysed and interpreted after the coding process was completed. This analysis and interpretation were complemented by the application of the latent analysis technique to enhance the understanding of the underlying meaning of coded texts. The combination of the two techniques assisted the researcher “to expose previously masked themes, meanings, and cultural values within texts” (Thayer et al 2007:269).

3.6 Verification of trustworthiness

Although this part of the study may be predominantly of a quantitative nature, the qualitative dimension of the analysis required the researcher to interpret the various texts carefully before an applicable answer was selected. Subsequently it was necessary for the researcher to ensure that the procedures used to generate the
findings comply with the principle of trustworthiness (Graneheim & Lundman 2004:109), specifically with regard to credibility and transferability. For example, in quantitative research concepts such as validity, reliability and generalisability are common whereas qualitative research often uses concepts like credibility, dependability and transferability (Graneheim & Lundman 2004:109). However, considering the conclusion of Long and Johnson (2000:31) that validity and reliability “have the same essential meaning” and that nothing is achieved from confusing the issue by changing labels, the researcher opted for qualitative concepts.

3.6.1 Credibility

As far as credibility is concerned, the goal of the researcher is to demonstrate that the study is conducted in such a manner as to ensure that the investigated phenomenon is identified and described accurately and that it is credible to those who construct the original realities. Credibility thus “emphasises striving for truth through the qualitative research process” (Schurink & Auriacombe 2010:441).

One way to enhance credibility in qualitative research is through triangulation. This means researchers collect data about different events and relationships from different perspectives (Webb 2009:125). Hence, Baxter and Jack (2008:556) argue that triangulation of data sources in case study research would support the principle that the studied phenomenon be explored from multiple points of view. Section 3.5 has shown that this researcher increased the credibility of the data by applying two different techniques of content analysis.

3.6.2 Transferability

Transferability refers to “the extent to which the findings can be transferred to other settings or groups” (Polit & Hungler in Graneheim & Lundman 2004:110). For this reason, Schurink and Auriacombe (2010:441) ask: “Can the findings of the research be
transferred from a specific situation or case to another?” With reference to this study, transferability refers to the extent to which the results can be transferred to other disciplines, qualifications (eg honours or doctoral research) and periods in time. In response to this question, the transferability of this study is enhanced through the selection of a typical case, which is a case that typifies the nature of Public Administration research. As such, the findings of the study may be applicable to honours research, doctoral research or research for non-degree purposes within the field of Public Administration. The findings may also be transferable to other periods of time. As research traditions may differ between countries, additional research will be necessary to determine the transferability to research done within other countries such as the United States of America.

3.7 Conclusion

This chapter describes the design, methods and techniques used to analyse case studies in South African Public Administration master’s dissertations. The procedure for coding the contents of the dissertation was also discussed in this chapter. The chapter concluded by explaining the measures employed to ensure the trustworthiness of the procedures employed to collect and analyse the data on which the findings and conclusions were subsequently based. The next chapter provides an analysis and interpretation of the data collected through the systematic content analysis as described in chapter 3.
CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 Introduction

The purpose of this chapter is to provide an analysis and interpretation of the data resulted from the systematic content analysis as described in chapter 3. As the content analysis, the data analysis and interpretation have also been guided by the conceptual framework as provided in table 2.2 in chapter 2. This chapter consequently presents the empirical results (quantitative and qualitative) obtained from the content analyses of the selected dissertations completed between the period 2005 until 2012. The chapter is structured according to the various components of a case study as listed in the first column of table 2.2.

4.2 Typical case studies reported on by South African Public Administration master’s dissertations

The first component of the conceptual framework relates to the nature of the cases (unit of analysis) studied by the case studies. The researcher consequently set out to find an answer to the question: What is the case (unit of analysis) of the particular study?

However, the analysis revealed a general lack of explicitness in the dissertations on the unit of analysis of the study. This compelled the researcher to interpret the title, the problem statement or the purpose of the specific dissertation in order to identify the unit of analysis and the subsequent nature of the case investigated (Thani 2009:55).

The content analysis reveals that merely four types of units of analysis or cases (out of the seven possible categories) were studied by the reported research (see table 4.1 and
The dominant unit of analysis appears to be interventions (60.9%), followed by groups and collectives (17.4%), organisations and institutions (13.0%) and social actions or events (8.7%). The dominance of interventions in this category reiterates the findings by Thani (2009:56) that there is a strong preference for investigating interventions in South African Public Administration research. This can be attributed partly to the dominant role of public policy and related interventions within the subject field and practice of public administration (Wessels & Thani in Wessels et al 2014:171). Case studies as reported by South African Public Administration master's dissertations thus mainly use interventions (eg policies, programmes and procedures), as the case of the study. Due to the nature of the subject field, this finding comes as no surprise.

Table 4.1: Typical units of analysis (cases) used for the case studies

<table>
<thead>
<tr>
<th>Unit of analysis</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Groups or collectives</td>
<td>4</td>
<td>17.4%</td>
</tr>
<tr>
<td>Organisations or institutions</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td>Social actions or events</td>
<td>2</td>
<td>8.7%</td>
</tr>
<tr>
<td>Interventions</td>
<td>14</td>
<td>60.9%</td>
</tr>
<tr>
<td>Social artefacts or cultural objects</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Constructs</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100%</td>
</tr>
</tbody>
</table>
Graph 4.1: Typical units of analysis (cases) used for the case studies

4.3 Research purpose in South African Public Administration master’s case study dissertations

The second question to be answered in the content analysis, was “What is the purpose of the case study dissertation?” It was difficult for the researcher to identify the research purpose from the analysed Public Administration dissertations. This is due to the fact that some scholars were ambiguous about their research purpose. This researcher was obliged to closely read through the entire first chapter of certain dissertations in an attempt to understand the non-explicit research purpose.
The analysis of Public Administration case study dissertations displays a range of purposes. These purposes are classified under the following categories: exploration, description, explaining, evaluating a phenomenon and reflecting. The results are as follows: exploratory (30.4%), descriptive (8.7%), explanatory (13.0%), evaluating (43.5%), and reflecting (4.3%).

Table 4.2: The frequencies and percentages of purposes used in case studies

<table>
<thead>
<tr>
<th>Case study purpose</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explore</td>
<td>7</td>
<td>30.4%</td>
</tr>
<tr>
<td>Describe</td>
<td>2</td>
<td>8.7%</td>
</tr>
<tr>
<td>Explain</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td>Evaluate</td>
<td>10</td>
<td>43.5%</td>
</tr>
<tr>
<td>Reflect</td>
<td>1</td>
<td>4.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Graph 4.2: The frequencies of purposes used in case studies, n = 23
Table 4.2 and graph 4.2 show a dominance (43.5\%) of the evaluative purpose for case studies reported in Public Administration Master’s dissertations. This is followed by the exploratory purpose (30.4\%). These results not only confirm the literature review (chapter 2), but are expected considering that 60.9\% of the selected dissertations report on the study of interventions as cases. The second highest percentage (30.4\%) of dissertations have been shown to have exploratory purposes. This implies case studies investigating new topics where little theory is available (Babbie & Mouton 2001:79–81). Although this also supports the literature review on case study purposes, this finding might be a reason for concern as it indicates that 30\% of case studies most probably have a low theory base.

A matter of even more serious concern is the fact that only 13\% of the case studies have explanatory purposes (table 4.2 and graph 4.2). Since explanatory case studies sought to explain causal relationships (Yin 2009:42) through theoretical techniques, one can argue that the small percentage of explanatory case studies confirms the possible lack of theoretical substance as observed by McCurdy and Cleary (1984:50) within the US context. Related to the high percentage (30.4\%) and low percentage (13\%) of explanatory studies the near absence (4\%) of reflective studies signifies a shortage of studies reflecting on better ways of thinking and a critique on theoretical applications within a limited context. The analysis thus reveals a near nonexistence of case studies aiming at thinking about the efficiency and effectiveness of concepts in context (Wessels & Pauw 1999:465; Wessels & Thani 2014:172).

### 4.4 Case study designs

This researcher did not experience any difficulties in answering the question “Which case study design has been employed?” Although the designs were not specifically identified and mentioned in the analysed dissertations, it was possible to discover through an interpretive reading of the texts no less than 82.6\% of the selected dissertations employed single case study designs as opposed to 17.4\% multiple case study designs
(table 4.3 and graph 4.2). The low frequency of multiple case studies signifies a limited low preference for comparative analysis of different but related cases.

**Table 4.3: Case study designs**

<table>
<thead>
<tr>
<th>Case study designs</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>19</td>
<td>82.6%</td>
</tr>
<tr>
<td>Multiple</td>
<td>4</td>
<td>17.4%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**Graph 4.3: Case study designs, n = 23**
4.5 Case selection strategies

In searching for an answer on the question “Which case selection strategy has been used?” the content analysis has revealed a lack of clarity on the rationale of selecting specific cases for the studies. However, by applying the latent analysis technique, it was possible to identify the selection strategies followed by at least 74% of the case studies (table 4.4). The fact that it was not possible to identify the case selection strategies in 26,1% of the studies is an indication of the relevant researchers’ lack of familiarity with the theoretical literature on case selection strategies. The results show that 34,8% of the studies used the typical case selection strategy (for example, a typical public accounts committee), while 17,4% used the critical case selection strategy, 13% used the replication logic strategy, while the extreme case selection strategy and a sampling logic were both used in 4,3% of the studies. Therefore a majority of the studies seem to exemplify case studies in South African Public Administration Master’s dissertations as typifying a type within a class of cases.

<table>
<thead>
<tr>
<th>Case selection strategy</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical</td>
<td>8</td>
<td>34,8%</td>
</tr>
<tr>
<td>Extreme</td>
<td>1</td>
<td>4,3%</td>
</tr>
<tr>
<td>Critical</td>
<td>4</td>
<td>17,4%</td>
</tr>
<tr>
<td>Replication logic</td>
<td>3</td>
<td>13,0%</td>
</tr>
<tr>
<td>Sampling logic</td>
<td>1</td>
<td>4,3%</td>
</tr>
<tr>
<td>Not clear</td>
<td>6</td>
<td>26,1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>100,0%</strong></td>
</tr>
</tbody>
</table>
4.6 Data collection methods

In searching for an answer on the question “What data analysis techniques were applied?” this researcher was confronted by the reality that case studies can apply either qualitative methods, quantitative methods, or a combination of both. Consequently this researcher refers to those dissertations that used only qualitative data collection methods as purely qualitative, those that employed only quantitative methods as purely quantitative, and those that combined the two as mixed methods. As illustrated in table 4.5 and graph 4.5 the surveyed dissertations fall predominantly within the methodological category of mixed methods (52.2%), followed by purely qualitative (47.8%). None of the studies were purely quantitative and none relied solely on secondary data. Instead, secondary data was used in conjunction with other qualitative methods. This implies that most dissertations are more qualitative in their orientation towards data collection and analysis (if not mixed method) and are more likely to be located within the interpretivist than the positivist paradigm.
### Table 4.5: Data collection methods

<table>
<thead>
<tr>
<th>Data collection methods</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purely qualitative</td>
<td>11</td>
<td>47.8%</td>
</tr>
<tr>
<td>Mixed methods</td>
<td>12</td>
<td>52.2%</td>
</tr>
<tr>
<td>Total</td>
<td>23</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Graph 4.5: Data collection methods, n = 23

#### 4.7 Sources of evidence used in Public Administration master’s case study dissertations

It is evident from section 4.6 that although mixed method is mostly preferred in South African Public Administration Master’s case study dissertations, most of these dissertations have shown a preference for the qualitative paradigm with regard to data collection, analysis and interpretation. The dissertations analysed in this study have applied a variety and combination of data collection methods and techniques related to
the two main research paradigms, namely the quantitative and qualitative paradigm. The choice of methods and techniques seems to result from the diversity of sources used.

The content analysis provided for seven possible answers to the question “What sources of evidence were used in the case studies?” The possibilities were the following: direct observations; documents; individual interviews; archival sources; focus groups; survey results; questionnaires. The analysis has shown that the selected case studies have relied on a variety of sources of evidence obtained from a diversity of research methods and techniques (see table 4.6).

Table 4.6: Research techniques and sources of evidence used in case studies

<table>
<thead>
<tr>
<th>Sources of evidence</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>n = 23</strong></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>Yes</td>
<td>4</td>
</tr>
<tr>
<td>Documents</td>
<td>Yes</td>
<td>15</td>
</tr>
<tr>
<td>Interviews</td>
<td>Yes</td>
<td>20</td>
</tr>
<tr>
<td>Archives</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>Focus groups</td>
<td>Yes</td>
<td>5</td>
</tr>
<tr>
<td>Surveys</td>
<td>Yes</td>
<td>2</td>
</tr>
<tr>
<td>Questionnaires</td>
<td>Yes</td>
<td>12</td>
</tr>
</tbody>
</table>
The high preference of interviews in Public Administration Master’s case study dissertations (87%) reaffirms the notion that case studies are predominantly qualitative in nature. However, the simultaneous use of questionnaires (52.2%) and surveys (8.7%) to obtain data provides empirical evidence of the preference for mixed sources and methods in Public Administration case study research.

4.8 Data analysis techniques in South African Public Administration master’s case study dissertations

In searching for an answer to the question “What data analysis methods and techniques were applied?”, various answers were provided. These answers range between pattern matching, logic model, explanation building, cross case synthesis and time series analysis.

An analysis of the results reveals that most case studies used pattern matching logic (52.2%). The other techniques were all used in 13% or less of the case studies (table 4.7 and graph 4.7). The preferences for these techniques are as follows: logic models (13.0%), statistical techniques (13.0%), time series analysis (8.7%), explanation building (8.7%) and cross case synthesis (4.3%). An explanation for this pattern is the relatively low percentage (17.4% – see table 4.4) of case studies employing multiple case designs. The dissertations that were identified to have applied statistical techniques seem to have relied on the results of their statistical analysis, whereas, theoretically, case study researchers may require a systematic approach towards explanation building, replication and theory testing among other things.
Table 4.7: Data analysis techniques

<table>
<thead>
<tr>
<th>Data analysis technique</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern matching</td>
<td>12</td>
<td>52.2%</td>
</tr>
<tr>
<td>Logic models</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td>Explanation building</td>
<td>2</td>
<td>8.7%</td>
</tr>
<tr>
<td>Cross-case synthesis</td>
<td>1</td>
<td>4.3%</td>
</tr>
<tr>
<td>Time series</td>
<td>2</td>
<td>8.7%</td>
</tr>
<tr>
<td>Statistical</td>
<td>3</td>
<td>13.0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Graph 4.7: Data analysis techniques, n = 23
4.9 The research outcomes in the South African Public Administration master’s case study dissertations

This section presents the results on the question “What were the outcomes of the case studies?” Case studies may yield a range of outcomes (as shown in table 2.2), namely theory testing, generalising, hypothesis testing, explanation building and theory building. The analysis of Public Administration Master’s dissertations in relation to the aforesaid shows the following results: theory testing (13,0%), generalisations (13,0%), and hypothesis testing (17,4%), explanation building (4,3%) and theory building (52,2%).

Table 4.8: Case study results

<table>
<thead>
<tr>
<th>Case study outcome</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory testing</td>
<td>3</td>
<td>13,0%</td>
</tr>
<tr>
<td>Generalising</td>
<td>3</td>
<td>13,0%</td>
</tr>
<tr>
<td>Hypothesis testing</td>
<td>4</td>
<td>17,4%</td>
</tr>
<tr>
<td>Explanation building</td>
<td>1</td>
<td>4,3%</td>
</tr>
<tr>
<td>Theory building</td>
<td>12</td>
<td>52,2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23</strong></td>
<td><strong>100,0%</strong></td>
</tr>
</tbody>
</table>
The small number of case study dissertations looking to test the theory confirms Houston and Delevan’s (1990:678) argument that research in this field is less engaged in theory testing. Unsurprisingly, a large number of these dissertations contribute to theory building, a phenomenon the literature associates with qualitative case study research, though their contribution is through generating hypotheses in most instances.

Table 4.9: Case study design and case study results

<table>
<thead>
<tr>
<th>Case study design</th>
<th>Theory testing</th>
<th>Generalising</th>
<th>Hypothesis testing</th>
<th>Explanation building</th>
<th>Theory building</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>2</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>Multiple</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>12</td>
<td>23</td>
</tr>
</tbody>
</table>
4.10 Case selection strategy and case study results

The few researchers (17.4%) who adopted the critical case seem to understand the reasons for the selection of such cases as they tested either theory or hypothesis which is in harmony with the literature. The literature review presented that cases in case study research are selected because they are information rich, that is, they have a strategic importance to the problem (Flyvbjerg 2006:230). This will therefore require a researcher to provide a clear justification for the case they have selected. The majority (26.1%) of the analysed dissertations however, were not clear as to why they selected their cases, which makes it difficult to anticipate the outcomes of their study. Consequently an association was difficult to determine.
Table 4.10 Case selection strategy and case study results

<table>
<thead>
<tr>
<th>Case selection strategy</th>
<th>Theory testing</th>
<th>Generalising</th>
<th>Hypothesis testing</th>
<th>Explanation building</th>
<th>Theory building</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Extreme</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Critical</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Replication logic</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Sampling logic</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Not clear</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>12</td>
<td>23</td>
</tr>
</tbody>
</table>
4.11 Case study design and case selection strategy

A number of researchers who applied the multiple case study design appear to understand the selection strategy used in multiple cases. This entails the use of replication logic as opposed to the sampling logic. This understanding is also shown in the generalisations made from multiple cases as it was also established in the literature reviewed.

Table 4.11: Case study design and case selection strategy

<table>
<thead>
<tr>
<th>Case study design</th>
<th>Typical</th>
<th>Extreme</th>
<th>Critical</th>
<th>Replication logic</th>
<th>Sampling logic</th>
<th>Not clear</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Multiple</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td></td>
<td>23</td>
</tr>
</tbody>
</table>

4.12 Summary

The chapter presented the results obtained after analysing South African Public Administration case study dissertations completed between the period of 2005 and 2012. The obtained results were categorised as follows: typical cases in South African Public Administration case study dissertations, purpose of case study dissertation, case study
designs, case selection strategies, data collection methods, techniques and the sources of evidence used, data analysis techniques and the research outcomes of the case study dissertations.

The study indicates an absence of studies focusing on individuals, confirming that individuals are not typical units of analysis in Public Administration research, although they may be typical units of observation. An important finding resulting from the content analysis is the predominant focus on interventions as units of analyses. This confirms the expectation that the units of analysis most frequently used in South African Public Administration case studies, are interventions such as public policies and programmes.

Although some researchers were not clear about the purpose of their dissertations, the latent analysis of the documents revealed that Public Administration Master’s case study dissertations were mainly conducted for the following purposes:

- Evaluating (43,5%)
- Exploring (30,4%)
- Explaining (13,0%)
- Describing (8,7%)
- Reflecting (4,3%)

The chapter further reveals that 82,6% of the dissertations employed a single case study design while 17,4% employed a multiple case study design. It also provides that most researchers select their case mainly because it is typical or representative of the studied phenomenon. The chapter reveals that 47,8% of the Public Administration master’s dissertations employ purely qualitative methods while 52,2% used mixed methods. This phenomenon is confirmed by the data collection techniques used in these dissertations. These included, amongst others, interviews (87%) and questionnaires (52,2%). The use of interviews and questionnaires comes as no surprise
as it confirms the previous finding that a majority of the analysed dissertations evaluate a phenomenon which is often done by means of these techniques.

Amongst the different outcomes perceived to result from conducting case studies, hypothesis generating (52,2%) appears to be the most likely outcome compared to theory testing (13,0%), hypothesis testing (17,4%) and generalising (13,0%). There seems to be an association between case study design and the research results. Nevertheless, it is difficult to determine any association between the following variables: Case selection strategy and research output; and case study design and case selection strategy. This is because of the unclear rationale for the selection of cases. The next chapter entails the discussion of the main findings and the recommendations made in this study.
CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study was inspired by a pre-scientific observation that several Public Administration master’s dissertations in South Africa contain the concept “case study” in their titles. A preliminary literature review confirmed that case studies are widely used by researchers in the social sciences in general and Public Administration in particular (see section 1.2 of chapter 1). However, the literature also exposed several ambiguities and debates on the use of case studies in scholarly research. The critique on the use of case studies includes, inter alia, its perceived limited validity, inability of researchers to generalise from the results of case studies, and the unclear methodological status of case study. Nevertheless, the literature shows a relative consensus amongst researchers on aspects relating to the definition of “case study”, the flexibility of the case, its use of multiple sources of evidence and the types of questions pursued through case studies. Most of these scholars take cognisance of the works of case study advocates such as Yin (2003) and Stake (1995).

Although case studies have been shown to be widely used in Public Administration research, especially in master’s dissertation research, the literature has shown that the words “case study” may have different meanings for different authors (see section 1.2 of chapter 1). In order to understand the meaning and application of the words “case study” by these researchers, the purpose of this research project was to analyse South African Public Administration master’s dissertations that reported on case studies. This dissertation focused on dissertations completed during the period 2005 to 2012.

The research was done through identifying the distinct components characterising case studies (chapter 2) and the application of a combination of the manifest and the latent
content analyses on those selected (chapter 3). Chapter 4 presented the findings on case studies in South African Public Administration master’s dissertations completed between the period 2005 to 2012. This chapter will interpret these findings within the context of the various components of case studies (chapter 2) in order to make conclusions and recommendations regarding the research problem statement as formulated in chapter 1.

5.2 The conceptual framework used for analysing case study as reported in South African Public Administration master’s dissertations

Chapter 2 of this dissertation consists of a thorough literature review on the concept “case study” in order to obtain a theoretical perspective for the analysis of case studies as used in different disciplines. This search for a theoretical perspective resulted in a conceptual framework (table 2.2 in chapter 2) used to analyse case studies. The framework differentiates between distinct components of case studies, the indicators of each component as well as a description of each indicator.

The components of this framework are as follows: the unit of analysis (the case), a distinct design of the study, the purpose of the study, the methods and techniques of data collection and data analysis, and the specific nature of the expected results of the study (See table 2.2 in chapter 2).

In order to identify the cases or units of analysis in Public Administration case studies, the following indicators were included in the framework: groups or collectives, organisations or institutions, social actions and events, social artefacts or cultural objects, interventions, or constructs. For identifying the design used in a particular case study, the framework provides for two indicators, namely the single case design and the multiple case design. The indicators used to describe the purpose of a case study, are exploratory, explanatory or descriptive. The framework furthermore provides for six
indicators to describe the “case selection strategy”, namely the critical, extreme, representative (typical), revelatory, longitudinal and replication logic. To determine the data collection methods and techniques component of case studies, the framework provides for three indicators, namely qualitative, quantitative or mixed methods. The indicators for the data analysis component are pattern, explanation, time series, logic or cross-case synthesis. The last component in the conceptual framework is the result of the case study, which can lead to amongst others quantitative deductive theory testing, qualitative deductive theory testing, analytical generalisation or hypothesis generation.

5.3 The analysis of case studies as reported in South African Public Administration master’s dissertations

The conceptual framework (table 2.2 of chapter 2) as briefly summarised in section 5.2, was used as coding framework for the content analysis of the selected master’s dissertations. This process is described in chapter 3 of this dissertation. Chapter 4 provides a detailed summary, analysis and interpretation of the data obtained from the content analysis of case study research as reported between 2005 and 2012 in South African Public Administration master’s dissertations. Chapter 4 of this study presented the findings obtained from the analysis of the South African Public Administration master’s case study dissertations completed during the period 2005 to 2012. The study data is summarised under the following components: cases in South African Public Administration case study dissertations, case study designs, purpose of case study, case selection strategy, data collection methods, sources of evidence, data analysis techniques and case study outcomes. Considering these components of a case study chapter 4 has revealed the following profile of these case studies:

Typical units of analysis (cases): Chapter 4 has shown that mainly interventions (60.9%) have been selected as cases for investigation. In view of the nature of the subject field which focuses on government policies and programmes (Wessels & Thani 2014:171), this finding comes as no surprise.
The case selection strategy: Although it was only possible to identify the applied selection strategy in 74% of dissertations analysed, the typical selection strategy (selecting cases that are characteristic of the nature of the subject field) has shown to be the most popular strategy amongst researchers.

The distinct design of the study: The single case design, used in 82% of the studies, has been shown to characterise the designs used in these case studies.

The purpose of the study: The finding that 44% of the case studies aimed at the evaluation of the case, while another 30% aimed at exploring the selected case, supports the findings related to the typical cases, the selections strategy and the preference for single case study design.

The methods and techniques of data collection: Case studies reported on in South African Public Administration master's dissertations have been shown not to use purely quantitative methods, but predominantly mixed methods or qualitative methods. This finding corresponds with the reasons for selecting these methods as provided by Graneheim and Lundman (2004:109) as well as Schurink and Auriacombe (2010:441).

The methods and techniques of data analysis: As expected from research using predominantly mixed methods and qualitative data collection methods, a variety of data analysis techniques were used of which the pattern matching technique (Yin 2009:136) was used in most (52.2%) of the studies.

The results or outcomes of the case studies: The majority of the case studies have been shown to result in theory building. This finding is especially important considering the long standing concern about the value of case studies to contribute to theory (eg Perry & Kraemer 1986:224; Houston & Delevan 1990:678). Although case studies do not necessarily test theories, it is evident that they contribute to theory building.
Chapter 4 also finds that an appropriate selection strategy in case studies is essential for reaching a specific outcome or result. Distinct selection strategies seem to be used for the specific case study designs, as illustrated by the use of single case study designs where the typical or critical selection strategies were followed (table 4.12). However, in studies where the replication logic case selection strategy was followed, the multiple case study design was applied. This finding confirms the findings of Bengtsson (1999:3) and Yin (2009:60) in this regard. It is thus evident from the analyses of case studies reported in South African Public Administration master's dissertations, that there is indeed a coherent relationship between the various components of a case study, in most of these studies.

5.3 Conclusion

This study originated from a concern whether case studies by South African master's students have the characteristics necessary for making valid scientific statements. The essence of the problem to be solved was thus the lack of a coherent picture of the characteristics of case studies in South African Public Administration master's dissertations. Consequently, the purpose of this study was to analyse case studies in South African Public Administration dissertations completed between the period 2005 to 2012 in order to determine these characteristics.

In response to the first research question, the main distinct components of a case study were identified and included in the conceptual framework (table 2.2). In applying this conceptual framework, the second research question was answered by identifying the predominant characteristics of case studies as reported in the selected master's dissertations as being the study mainly of interventions (60,9% of the case studies), commonly selected through the typical selection strategy, by using the single case design (82% of the case studies), aiming at evaluating (44% of the case studies) or exploring (30% of the case studies) through the use of predominantly mixed methods or
Based on the above, this research has shown that case studies in South African Public Administration master’s research do have the characteristics needed to make a valid scientific contribution to the field of Public Administration. It is especially the methodological and paradigmatic flexibility of case study research, that not only explain its evident popularity amongst scholars, but also its applicability to the field of Public Administration.

5.4 Recommendations

The limitation of this study is that the imprecise reasons for the selection of cases made it difficult for the researcher to determine any association between case selection strategy and research outcomes and between case study design and case selection strategy. Taking into account the conclusions of this study and the knowledge obtained from the literature reviewed, the following recommendations are suggested. These recommendations concern the application of case study especially for the following components:

- A follow-up study is recommended to establish the challenges associated with theory testing in Public Administration case studies.

- Since sampling is not an appropriate way of selecting cases – cases are selected because they are information rich. Although a criterion to select cases has been identified, it has not been contextualised into Public Administration research. Hence, the researcher advocates for a follow-up study to establish a criterion to identify case selection strategies in Public Administration research. That is, how to identify extreme, typical, revelatory or crucial cases in the field.
• Although this study has identified the different case study data analysis techniques, it is necessary to conduct a study to assess the application of such techniques in South African Public Administration case study dissertations.

• In consideration of the above, this study recommends a follow-up study to be conducted to test the validity of the various components of case study as identified in this study.
List of sources


Accessed: 22 may 2013


Lapan, SD, Quartaroli, MT & Riemer, FJ. 2012. Qualitative research: an introduction to methods and designs. San Francisco: Jossey-Bass.

Laws, K & McLeod, R. 2006. Case study and grounded theory: sharing some alternative qualitative research methodologies with systems professionals. Sydney: The University of Sydney NSW.


Madzidzela, L. 2008. An analysis of factors affecting housing delivery in the Nyandeni local municipality with specific reference to the extension 4 housing project: a case of


Accessed: 03 September 2012


CODE LIST FOR EVALUATION OF DISSERTATIONS

A: PROJECT NUMBER
B: NAME OF RESEARCHER
C: TITLE CODE
D: TITLE
E: LANGUAGE
F: QUALIFICATION
G: QUALIFICATION 2 (CODE)
H: YEAR
I: INSTITUTION

1 Stellenbosch University (SU)
2 University of the Western Cape (UWC)
3 University of KwaZulu Natal (UKZN)
4 North-West University (UWN)
5 University of Cape Town (UCT)
6 University of Pretoria (UP)
7 University of South Africa (UNISA)
8 University of Limpopo (UL)
9 University of the Witwatersrand (WITS)
10 Nelson Mandela Metropolitan University (NMMU)
11 University of the Free State (UFS)
12 Tshwane University of Technology (TUT)
13 Cape Technikon (CT)
14 University of Johannesburg (UJ)
15 Central University of Technology (CUT)
16 University of Fort Hare (UFH)
17 University of Venda (UV)
18 Vista University (VISTA)
19 HSRC
20 Public Service (PS)
21 Foreign universities (FOREIGN)
22 Vaal University of Technology (VUT)
23 IDASA
24 CSIR
25 Private consultants

J: DEPARTMENT

K: QUALIFICATION
1 Masters

L: INSTITUTION CODE

M: INVESTIGATED PHENOMENON
1. Individuals
2. Groups or collectives
3. Organizations or institutions
4. Social actions or events
5. Interventions
6. Social artifacts of cultural objects
7. Constructs

N: PURPOSE
1. Explore
2. Describe
3. Explain
4. Evaluate
5. Other (Reflect)

O: DESIGN
1. Single
3. Multiple

P: CASE SELECTION STRATEGY
1. Typical
2. Extreme
3. Critical
4. Replication logic
5. Sampling logic
6. Not stated/Clear
Q: METHODS
1. Qualitative
2. Quantitative
3. Mixed method

R: SOURCES OF EVIDENCE
1. Observations
2. Documents
3. Interviews
4. Archives
5. Focus groups
6. Surveys
7. Questionnaires

S: DATA ANALYSIS TECHNIQUES
1. Pattern matching
2. Logic model
3. Explanation building
4. Cross case synthesis
5. Time series analysis
6. Statistical

T: OUTPUT
1. Theory testing
2. Generalizing
3. Hypothesis testing
4. Explanation building
5. Theory building
## DISSEPTIONS

<table>
<thead>
<tr>
<th>Project nr</th>
<th>Researcher</th>
<th>Title</th>
<th>Language</th>
<th>Qualification</th>
<th>Qualification year</th>
<th>Institution</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>173134</td>
<td>Makwede F</td>
<td>Investigating gaps in the application of financial management systems by schools receiving section 21 funding: case study for Mthatha education district schools - Eastern Cape</td>
<td>English</td>
<td>MPA</td>
<td>2012</td>
<td>SU</td>
<td>Faculty of Economic and Management Science</td>
</tr>
<tr>
<td>144470</td>
<td>Rajin J</td>
<td>Employee assistance programme in the South African Police Service: a case study of Moroka Police Station</td>
<td>English</td>
<td>M Tech (Public Management)</td>
<td>2012</td>
<td>UNISA</td>
<td>Dept of Public Administration</td>
</tr>
<tr>
<td>171213</td>
<td>Phaahla HM</td>
<td>Land reform in the Limpopo Province: the case study of Elias Motsoaledi Local Municipality</td>
<td>English</td>
<td>MPA</td>
<td>2011</td>
<td>UWN</td>
<td>Public Management and Governance</td>
</tr>
<tr>
<td>167258</td>
<td>Kaseke LL</td>
<td>Challenges facing the Limpopo Department of Public Works with regard to service delivery: a case study of the core functions of the department</td>
<td>English</td>
<td>MPA</td>
<td>2011</td>
<td>UL</td>
<td>Faculty of Management Sciences and Law</td>
</tr>
<tr>
<td>158208</td>
<td>Simelane TG</td>
<td>Local government financing and development: a case study of KwaDukuza</td>
<td>English</td>
<td>MPA</td>
<td>2010</td>
<td>UKZN</td>
<td>School of Public Administration and Development</td>
</tr>
<tr>
<td>Municipality</td>
<td>Code</td>
<td>Name</td>
<td>Title</td>
<td>Degree</td>
<td>Year</td>
<td>Institution</td>
<td>Department</td>
</tr>
<tr>
<td>--------------</td>
<td>------</td>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>----------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Omoro MFA</td>
<td>154666</td>
<td>Municipality Organisational effectiveness of regional integration institutions: a case study of the east African community</td>
<td>English</td>
<td>MPA</td>
<td>2009</td>
<td>UNISA</td>
<td>Dept of Public Administration</td>
</tr>
<tr>
<td>Munanura A</td>
<td>152317</td>
<td>Municipality Impact assessment of the local government reforms in Rwanda: the case study of Kigali city</td>
<td>English</td>
<td>MPA</td>
<td>2009</td>
<td>NMMU</td>
<td>Faculty of Arts</td>
</tr>
<tr>
<td>Madzidzela L</td>
<td>152314</td>
<td>Municipality An analysis of factors affecting housing delivery in Nyandeni Local Municipality with specific reference to the Extension 4 Housing Project: a case study of ward 21 Ngeleni</td>
<td>English</td>
<td>MPA</td>
<td>2009</td>
<td>NMMU</td>
<td>General</td>
</tr>
<tr>
<td>Mlotshwa SG</td>
<td>141505</td>
<td>Municipality The impact of organisational structures on service delivery: a case study of the uMgungundlovu District Municipality</td>
<td>English</td>
<td>MPA</td>
<td>2007</td>
<td>SU</td>
<td>General</td>
</tr>
<tr>
<td>Bidandi F</td>
<td>141334</td>
<td>Municipality The effects of poor implementation of housing policy in the Western Cape: a case study of Khayelitsha site C</td>
<td>English</td>
<td>MAdmin</td>
<td>2007</td>
<td>UWC</td>
<td>School of Government</td>
</tr>
<tr>
<td>Gitari FK</td>
<td>140049</td>
<td>Municipality Investigating the potential role of corporate social responsibility (CSR), in management of HIV/AIDS at the workplace. A case study of garment industries in Thetsane Maseru</td>
<td>English</td>
<td>MPA</td>
<td>2007</td>
<td>SU</td>
<td>School of Public Management and Planning</td>
</tr>
<tr>
<td>Tsamareb C</td>
<td>131393</td>
<td>Municipality Decentralization in Namibia: a case study of the Hardop Regional</td>
<td>English</td>
<td>MAdmin</td>
<td>2006</td>
<td>UWC</td>
<td>School of Government</td>
</tr>
</tbody>
</table>

101
<table>
<thead>
<tr>
<th>Council</th>
<th>Title</th>
<th>Language</th>
<th>Degree</th>
<th>Year</th>
<th>Institution</th>
<th>Faculty/Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>124330</td>
<td>Public service reform in South Africa: an overview of selected case studies from 1994-2004</td>
<td>English</td>
<td>MAdmin</td>
<td>2006</td>
<td>UP</td>
<td>School of Public Management and Administration</td>
</tr>
<tr>
<td>140265</td>
<td>The mayor's listening campaign in the integrated development planning process: a case study of the City of Cape Town</td>
<td>English</td>
<td>MPA</td>
<td>2005</td>
<td>SU</td>
<td>General</td>
</tr>
<tr>
<td>Tshamaano VL</td>
<td>Impact of the supply chain management on service delivery: the case study of provincial Department of Economic, Environment and Tourism in the Limpopo Province</td>
<td>English</td>
<td>MPA</td>
<td>2012</td>
<td>UL</td>
<td>School of Leadership</td>
</tr>
<tr>
<td>Sebashe SS</td>
<td>An evaluation of the implementation of performance management system: a case study of Ba-Phalaborwa municipality in Limpopo</td>
<td>English</td>
<td>MPA</td>
<td>2010</td>
<td>UL</td>
<td>Faculty of Management Law</td>
</tr>
<tr>
<td>Pule B</td>
<td>An evaluation of the ward committee system as a mechanism for enhancing service delivery in Nkonkobe Local Municipality: A case study of Middledrift</td>
<td>English</td>
<td>MPA</td>
<td>2009</td>
<td>NMMU</td>
<td>Faculty of Arts</td>
</tr>
<tr>
<td>Nandulall R</td>
<td>Mentorship as a strategy to improve research output at tertiary institutions: a case study of University of Johannesburg</td>
<td>English</td>
<td>MTech</td>
<td>2010</td>
<td>DUT</td>
<td>Dept of Public Management</td>
</tr>
<tr>
<td>Dube T</td>
<td>Systemic corruption in</td>
<td>English</td>
<td>MPA</td>
<td>2011</td>
<td>UNISA</td>
<td>Dept of Public Management</td>
</tr>
<tr>
<td>Author</td>
<td>Title</td>
<td>Language</td>
<td>Degree</td>
<td>Year</td>
<td>Institution</td>
<td>Department</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>----------</td>
<td>--------</td>
<td>------</td>
<td>-------------</td>
<td>------------</td>
</tr>
<tr>
<td>Paile NJ</td>
<td>Staff perceptions of the implementation of a performance management and development system: Father Smangaliso Mikhatshwa case study</td>
<td>English</td>
<td>MPA</td>
<td>2012</td>
<td>UNISA</td>
<td>Dept of Public Administration</td>
</tr>
<tr>
<td>Botes C</td>
<td>Adopting the public accounts committee model for financial oversight in South African municipalities: a case study of the public accounts committee in the City of Cape Town</td>
<td>English</td>
<td>MPA</td>
<td>2011</td>
<td>SU</td>
<td>School of Public Management and Planning</td>
</tr>
<tr>
<td>Baloyi MM</td>
<td>The impact of the taxi recapitalisation programme on the South African taxi industry: a case study of Greater Mankweng Taxi Association in Capricorn District, Limpopo province</td>
<td>English</td>
<td>MAdmin</td>
<td>2012</td>
<td>UL</td>
<td>Faculty of Management and Law</td>
</tr>
<tr>
<td>Tshiyoyo MM</td>
<td>Public Service delivery in the Democratic Republic of the Congo: a case study approach</td>
<td>English</td>
<td>MPA</td>
<td>2006</td>
<td>UP</td>
<td>School of Public Management and Administration</td>
</tr>
</tbody>
</table>