

CHAPTER 2: RESEARCH METHODOLOGY

INTRODUCTION

This chapter outlines the research design and methodology for the study. The purpose of this study is to provide qualitative information on the level of the standard of service delivery by selected South African public service departments. The departments selected are the Departments of Health, Housing, Justice and Constitutional Development and Safety and Security. Against this background, a qualitative case study approach is used. This has the potential of supplementing and re-orienting our current understanding of service delivery by the South African public service.

The results of the case study are incorporated into the thesis. This chapter describes the research method used, the selection of the sample, data collection and data analysis, validation and reporting methods, ethical considerations for this study, and the scope, limitations and significance of the study. The qualitative case study approach requires the researcher to conduct an in-depth analysis of information obtained from different authors and different sources of data, using a method known triangulation. Four South African public service departments were selected for the study, namely: The Departments of Health, Housing, Justice and Constitutional Development and Safety and Security. These public service departments were selected to facilitate discussion that, were important for the study. The sources used to compare, contrast and crosscheck information were documents, audio-visuals and discussions. The audio-visuals were obtained from libraries. Such triangulation increased the scope, depth and consistency in the methodological proceedings of this study. Data analysis was conducted concurrently with data collection from various sources mentioned above. To ascertain the relationships between the different variables, matrices were used. The final conclusions to the study emerged when all the data had been collected.

RESEARCH METHODOLOGY

The researcher has selected the qualitative research approach to conduct this study. According to Denzin and Lincoln (1994: 2), the qualitative approach is multifaceted method involving an interpretive, naturalistic approach to its subject matter. In other words, qualitative researchers study phenomena in their natural settings by attempting to make sense of, or interpret phenomena in terms of the meanings that participants give them.

Further Creswell (1998: 15) indicates that qualitative research is a process of understanding that is based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting. This involves going out to the setting of study, gaining access, and gathering material. This takes the reader into the multiple dimensions of a problem or issue and displays it in all its complexity. These distinct methodological traditions of inquiry are the historian's biography, the psychologist's phenomenology, the sociologist's grounded theory, the anthropologist's ethnography, and the social, urban studies, and political scientist's case study.

According to Stake (2000: 5), qualitative research is a form of systematic empirical inquiry into meaning. Empirical inquiry is any form of inquiry that depends on the world of experience in some fundamental way. Qualitative research involves the collection of a variety of empirical materials; namely: case study, personal experience, introspective, life story, interview, observational, historical, interactional, and visual texts, that describe routine and problematic moments and meaning in individuals' lives. Qualitative research is not haphazard, nor idiosyncratic, nor even subjective. It is planned, ordered, and public (Denzin and Lincoln, 1994: 2). The researcher spends many hours in the field, collects extensive data, and labours over field issues of trying to gain access, rapport, and an insider perspective.

Cadwick, *et al.* (1984: 206) indicates that qualitative research involves several different methods of data collection, including triangulation and in-depth interviews. There are substantial differences among these research strategies, but they all emphasize the idea

of getting close to the data and are based on the concept that experience is the best way to understand social behaviour.

Qualitative research takes the reader into the multiple dimensions of specific problems or issues and displays them in all their complexity. Authors often define qualitative inquiry in comparison to quantitative inquiry. In general terms, quantitative researchers work with a few variables and in many cases, whereas qualitative researchers rely on a few cases and many variables (Creswell, 1998: 15). Creswell (1998: 17) reiterates that qualitative research can be defined in terms of its relation to quantitative research. Quantitative research measures and answers questions such as: ‘how many, how often, what proportion or what size.’ Qualitative research in contrast, leads to understanding and often answers questions like, “why”, “how”, “in what way”, “will” and “to what extent.”

There are three reasons why a qualitative approach as opposed to another approach was chosen. Firstly, the research question starts with “to what extent”, i.e. to what extent can a leadership and governance framework improve service delivery by the South African public service? The study examines service delivery performance by the South African public service. It looks at whether services are in fact being improved by the South African public service. It thus examines whether there are positive and negative factors impacting on service delivery outcomes. It analyses the role of the leadership and governance framework adopted by the South African public service. Secondly, a qualitative study was chosen because the topic needs to be explored. By this, it is implied that there are no theories available to explain service delivery performance in South Africa and the need for an effective framework to promote service delivery outcomes. Thirdly, a qualitative study was used because of the need to present a detailed view of the topic. The wide-angle lens or distant panoramic shot would not have sufficed to present answers to the problem investigated in this study.

An important aspect of this research was to decide how the data should be collected. According to Dooley (1999: 44), a research design is a detailed plan or method for obtaining data scientifically and it provides the necessary structure. Mouton (2001: 4), in this regard states that “a research design is a plan or blueprint of how you intend conducting the research.” The research design thus focuses on the end product of the

study, for example, what kind of study is being planned and what kind of result is expected.

Puth (1996: 87) is of the opinion that “selecting an appropriate research design is often complicated by the availability of a large variety of methods, techniques, procedures and ever-more-sophisticated computer programming and technology.” Smith (1998: 29), similarly, emphasizes the reality that the design of the research study is one of the most challenging steps in the research process. Smith (1998: 29) explains, “decisions have to be made about what degree of precision is needed and how much depth of understanding is required. This trade-off also needs to be balanced against the time and budget available.” The researcher herein thus took into account the practicality of different approaches whilst ensuring that the study is ethical and complies with the codes of conduct in the research industry.

Dooley (1990: 47) states that the components of a research design involve the maximum control over factors that could interfere with the validity of the findings. In this respect, a research design guides in planning and implementing a study. It focuses on the overall strategy and rationale for the study. It also focuses on the specific setting, the sample and the phenomenon to be studied. However, this must be linked to the other steps of the research process. Research design also focuses on the logic of the research study, by asking for example, what kind of evidence is required to address the research question adequately. As indicated, the current study explores the issue of service delivery performance by the South African public service. Consequently, the relationships with other constructs related to service delivery by the South African public service are also investigated, such as the factors that affect the sustainability of the public service in ensuring effective service delivery, for example, the leadership and governance framework adopted. The format for the design of this study follows the traditional research approach of presenting a problem, asking a question, collecting data to answer the question, analysing the data, and answering the question.

There are several examples of qualitative research, such as action research, biography, phenomenology, grounded theory, ethnography, and case study (Ely, *et al.* 1991: 4). The focus of a biography, for example, is on the life of an individual, while that of phenomenology is on understanding a concept or phenomenon. In grounded theory,

based on one develops a theory, whereas in ethnography a portrait is drawn of a cultural group or people. Lastly, in a case study, a specific case or a number of cases are examined.

As indicated previously, a case study approach is used herein, using Neuman's (1997: 11) case study structure as a model. In this regard, the study will be structured as follows:

- (i) The problem is identified, viz. slow service delivery, especially to previously disadvantaged communities in South Africa.
- (ii) The context is discussed, viz. the South African public service in the post-apartheid era.
- (iii) The issues are highlighted, viz. there are factors impeding service delivery outcomes.
- (iv) The lessons learnt are investigated, viz. the need to promote a sustainable South African public service
- (v) Finally, specific solutions are proposed, viz. the importance of improving and strengthening, or even redesigning the existing leadership and governance frameworks.

It will be shown that there is a need for an effective leadership and governance framework to improve and redress service delivery imbalances and inequities, especially in previously disadvantaged communities in South Africa. Consequently, this study has used case studies of four departments in the South African public service. These are the Departments of Health, Housing, Justice and Constitutional Development and Safety and Security. A number of studies have already been undertaken both by the South African public service itself and by academics, which have provided valuable lessons for the study. The use of collective case studies is adding to the existing knowledge of experiences in the South African public service and is contributing to our understanding of service delivery.

Case study approach

Zucker (2001: 1) proposes that the case study method is a valuable tool in expanding knowledge. Within the context of this study, the case study approach thus uses in-depth information obtained from multiple sources and provides a unique and valuable method of eliciting phenomena of interest to the particular topic. According to Creswell (1998: 39), four steps define any particular case:

- (i) the case is identified;
- (ii) the case is bounded by time or place;
- (iii) the data comes from multiple sources; and
- (iv) the report includes a detailed description of the content and setting.

Orum (1991: 20) suggests that the scope of a case study can be defined as an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. A case study is an intensive study of a specific individual or specific context. Specifically, what differentiates the case study from the other qualitative methods is the focus of the study. A case has clear boundaries and includes context that is vital to constructing a picture of the incident. Creswell (1998: 39) calls the case study an “exploration of a bounded system or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in context.” The context of these cases includes understanding both the physical setting and the social and historical setting. Information can be obtained mainly from four basic sources (Zucker 2001: 4), i.e. interviews, observations, documents and audio-visual materials. The backbone of qualitative research is therefore extensive collection of data, typically from multiple sources of information. Each set of data or strategy, on its own, might not be strong enough to support the finding, but when different strands are taken together, there is stronger evidence for the finding.

According to Creswell (1998: 39), qualitative case studies focus on a particular situation, programme or phenomenon. The case itself is important for what it reveals about the phenomenon and for what it will represent. This specificity of focus makes it an especially good design for practical problems, for questions, situations, or puzzling

occurrences arising from everyday practice. The end product of a case study is a rich, ‘thick’ description of the phenomenon under study, which moreover illuminates the reader’s understanding. It can thus bring about the discovery of new meaning, extend the reader’s experience, or confirm what he or she already knows.

Yin (1994: 11) describes three types of case studies: (a) exploratory, (b) explanatory and (c) descriptive. Exploratory (exploring what is happening) and explanatory (explaining what is happening) case studies are used to discover causal relationships, whereas descriptive (describing what is happening) case studies provide complete descriptions of phenomena within their contexts. If little were known about the research topic, one would use exploratory research. Exploratory research can increase the researcher’s familiarity with the phenomenon in question, and it can help to clarify concepts. It can also be used to establish priorities for future research, identify new problems and gather information with practical applications.

According to Neuman (1997: 19), exploratory researchers are “creative, open minded, and flexible; adopt an investigative stance; and explore all sources of information. Researchers ask creative questions and take advantage of serendipity, those unexpected or chance factors that have large implications.” Both Powell (1997: 58) and Neuman (1997: 19) remark that exploratory researchers frequently conduct qualitative research. Powell (1997: 59) further emphasizes that, “it is important to remember that exploratory studies merely suggest insight or hypotheses; they cannot test them.” Smith (1998: 38), similarly, remarks that a typical outcome from exploratory research would be to generate of a number of hypotheses that could be taken forward for quantitative testing at a later stage of the project.

Descriptive research “presents a picture of the specific details of a situation, social setting or relationship” (Neuman, 1997: 20). Neuman (1997: 20) is of the opinion that descriptive and exploratory research is similar in some respects. Neuman (1997: 20) reiterates that descriptive and exploratory research “blur together in practice” and explains, “in descriptive research, the researcher begins with a well-defined subject and conducts research to describe it accurately.” Descriptive research focuses on “how”, “who”, “what”, “when”, and “where” questions and provides a solid platform for helping to understand current, and possibly predict future behaviour (Smith, 1998: 38).

When the research question demands that the researcher explain the relationship between variables and demonstrates that change in one variable causes change in another variable, the research is called explanatory research. Neuman (1997: 20) suggests that the desire to know why things are the way they are, i.e. to explain them, is the purpose of explanatory research. Neuman (1997: 21) explains that explanatory research “builds on exploratory and descriptive research and to identify the reason why something occurs. Explanatory research is often not feasible. This is the case when it is not possible to manipulate the suspected independent variable or to assess the time-order of variables.” However, research can never solely be explanatory, exploratory or descriptive (Dooley, 1990: 291). A research project may include elements of two or three of these basic goals.

Stake (2000: 437), defines case studies in terms of the study’s purpose, suggesting that, “different researchers have different purposes for studying cases.” Identifying the three types of case study as intrinsic, instrumental, and collective, the author, however, notes that these seldom fit neatly into such categories. Stake (2000: 437) amplifies the fact that intrinsic case studies serve the purpose of understanding a single case without concern for whether or how it may be representative of other cases, or whether it can be used for theory building, or for understanding constructs or phenomena. Instrumental case studies serve the purpose of clarifying an issue, or theory, with the case being important than it is in an intrinsic case study. In an instrumental study, then, the decision to study a case is made, based on its ability to increase understanding of an issue. Collective case studies use more than one case to understand an issue or phenomenon. The collective case study, Stake (2000: 437) proposes, are used “because it is believed that understanding them will lead to better understanding, perhaps better theorizing, about the problem.”

This present study is descriptive, since no hypotheses or cause and effect relationships were sought, and it used Stake’s (2000: 438) concept of the collective case study with multiple cases to explore an issue of interest, namely service delivery by the South African public service. Stake emphasises on understanding the particular, rather than the general, and the unique and diverse, rather than the general. Neuman (1997: 22) states that “damage occurs when the commitment to generalize, or create theory runs so strong that the researcher’s attention is drawn away from features important for understanding

the case itself.” To counteract this, the cases in this study take centre stage and any generalizing or theorizing that occurs is secondary.

Orum (1991: 8) advocates the use of the case study if analysis of the data may “permit the observer to render social action in a manner that comes closest to the action understood by the actors themselves.” This present study’s use of the case study method allows a deeper investigation into service delivery by the South African public service. Gillham (2000: 102) argues that case study research can lead to social change and that the power of the case study lies in its ability to challenge the existing “order of things.” In this study, the case study challenges the adoption of the existing leadership and governance framework adopted by the South African public service.

Sjoberg (1991: 102) notes that changing approaches, or policies, towards problems can result from “insight into phenomenon”. The current literature on service delivery by the South African public service suggests the need for innovative approaches to improve service delivery. This study thus uses the case study method to gain insight into service delivery by the South African public service, with the objective of improving service delivery, especially in previously disadvantaged communities.

Another perspective that underscores the importance of the case study method for the current study comes from Creswell (1998: 36), who indicates that the case study is more than just a detailed investigation, but also a way to represent, even exaggerate, theories about experiences in the wider society. Yin (1994: 11) considers context essential in gaining a deeper understanding of concepts. By exploring the experiences of South African public service departments with respect to service delivery, information is obtained to add to the literature, particularly with respect to the impact of certain factors on service delivery performance.

Stake (2000: 435) further describes the case study as being typically qualitative. There are many methods, according to Stake (2000: 435), available for studying a case, including repetition studies, hermeneutics, or cultural and social perspectives. However, the factor that unifies a case study is the focus on the case, rather than the methods used. The qualitative element of the case study lies in its subjective focus, that is, on learning how people or institutions “make sense of” or understand their experiences within a

particular setting. The researcher is a participant who acknowledges and looks for the roles of participants in what participants discover.

The evidence from case studies illuminates issues and turns up possible explanations. It is essentially a search for meaning. Sjoberg (1991: 2) describes the case study method as possibly including both qualitative and quantitative methods, but with neither being predominant. The definition states that a case study is “an in-depth, multifaceted investigation, using qualitative research methods of a single social phenomenon. Using holistic qualitative approach, the case study method can provide a deeper understanding of the experiences of people, phenomena or institutions in their natural settings.”

Yin’s (1994: 11) approach to case studies emphasizes a reliance on rigor and repetition to obtain high quality research. The author states that the appropriateness of the method is based on: (a) defining a topic in a broad, rather than narrow sense; (b) including context, rather than just the phenomenon; and (c) relying on more than one data source. The triangulation method can be used with different methods, different researchers, different sources of data, and even different theories (Stake, 2000: 135). It increases the scope, depth and consistency in the methodological proceedings of the present study, being used to verify our understanding of the situation (Flick 1998:230). The search for the convergence of information relates directly to situations in developing a case study. This method also reduces the risk of systematic distortions inherent in the use of only one source of data. The process is used to verify the understanding of the situation. According to Creswell (1998: 213), the searching for the convergence of information relates directly to developing a case study.

According to Flick (1998: 230) for incontestable description, the researcher is required to expend little effort toward triangulation, whereas dubious and contested description requires confirmation through triangulation. When assertions are made and key interpretations are offered, the researcher needs to exert extra effort to confirm their validity. The importance of describing findings in detail further aids understanding and is part of what is called thick description, which is a process that made the researcher pay attention to in-depth information about what is observed and reflected on. This present study accordingly adopted a triangulation approach, whereby documents and audio-visuals were reviewed and discussions were held with academics and public

servants, to search for convergence of information relating to service delivery by the South African public service.

Miles and Huberman (1994: 275) suggest a number of strategies for verification. For instance, the strategy for verification recommends that the researcher should check the meaning of outliers. Outliers are persons, information or phenomena that seem to be acting differently or reflecting something different than the rest of the population. The researcher thus has to ask why they are different, and what does that difference mean. Another strategy was implemented after the researcher had written the first draft of the present study. The advantage of using these methods herein was in the ability to seek convergence, or agreement, between different data sources.

Gillham (2000: 22) describes two shortcomings in case study research, namely, prejudice and preference. To avoid prejudice and preference, the researcher herein was aware of her or his own prejudices and preferences, and continuously checked the conclusions of this study. An awareness of personal bias was essential in monitoring the overall integrity of this study. It was important during data collection to reflect on and record the researcher's thinking, for which purpose the researcher used a data log as suggested by Gillham (2000: 23). For instance, the researcher constantly asked why a particular conclusion had been reached or why the study was written in a particular way. This kind of questioning led to further investigation.

TARGET POPULATION (SAMPLE)/SELECTION OF STUDY PARTICIPANTS

According to Collins (1998: 69), the way to learn about a large group or an entire population is by looking at only a small part of it, i.e. a sample. The 'population' referred to by Collins (1998: 69) is not necessarily the total population of a country or area, but the totality of the target group from which the sample needs to be drawn. As a first step in the sampling process, the target population in this study had to be identified. Thereafter, the researcher determined the sample characteristics and the sample size.

A case study relies on a system of sampling that is bounded in time and place (Creswell, 1998: 120). The boundaries of this study include the geographical location of South Africa and the time from 1994 to 2003. The particular setting of this study is South

African public service departments. Creswell (1998: 120) suggests that case studies should “represent diverse cases to fully display multiple perspectives about the cases and to show different perspectives on the problem, process, or event.”

The particular parameter of the sample in this study evolved once the fieldwork began; the sample was not prespecified from the outset. Originally, then the South African public service was examined from a broader perspective, and only gradually did the researcher work into the core of the setting. From there the focus tightened: Specific public service departments with specific characteristics and experiences were purposefully selected. The sample thus comprised four departments from the South African public service to avoid too much superfluous information and to enhance our understanding of the topic.

DATA AND INFORMATION COLLECTION

According to Bulmer (2000: 205), “the most critical phase in social research is that during which data are actually collected.” Puth (1996: 86) argues that, as every research project is a search for information on some topic, researchers can be more confident of the quality and the appropriateness of their information if they tap all the relevant resources: “Often there is a wealth of information and data on the research problem already collected by others, in which case it may not be cost-effective or necessary to conduct a whole new research project in order to answer the research question. In many cases, existing secondary data may be sufficiently relevant and comprehensive to answer at least a certain part of the overarching research question.” (Puth, 1996: 86).

An exploration of secondary data resources can they begin with a search of published data and the identification of unpublished data that is relevant to the topic or problem area. It is essential to explore all the possibilities of secondary data sources before proceeding with the remaining steps of the research process. Miles and Huberman (1994: 40) remark that some inexperienced researchers believe they can ignore past work and use entirely new ideas and methods. They refer to the misguided approach, Einstein syndrome, since researchers who suffer from it fail to connect their ideas with lessons from others. By discarding previous lessons as irrelevant, they fail to learn from the studies from others (Miles and Huberman, 1994: 40).

Creswell (1998: 130) suggests that multiple sources of information be used in case studies to provide a detailed picture for holistic analysis. For the purpose of this study, data were obtained from documents, audio-visuals and discussions about the South African public service. These were triangulated to ensure the validity of the information. Data for the document, audio-visual and record review were obtained from books, journals, newspapers, official government documents, papers, public service departments, CD Roms, and the worldwide web. An advantage of this method lies in the possibility of enhancing the reliability and validity of data as well as in crosschecking the data obtained (Mouton, 2001: 197).

Information obtained from the sources mentioned above was collected and integrated, in an attempt to add any other nuances that might reside in these sources. The documentary sources were compared with data already gathered from the discussions, and then added as new information to the present study. The data from all the available sources that were utilized during the research process were thus collated and integrated, to conclude the data collection stage (Mouton, 2001: 197). Documents and audio-visuals from different South African public service departments were copied, with permission, and other documents were downloaded from the departmental websites and analysed. This process was intended to keep the data available for further verification as needed.

Creswell (1998: 85) points out that case study research require a balance between subjectivity and objectivity. Objectivity assists in avoiding biases and expectations that could compromise the integrity of the data. Ely, *et al.* (1991: 16) also cautions against entering a field that is too familiar because the researcher may think that he or she already knows the answers. A balance between empathy and a distanced, non-judgmental position is advisable (Ely, *et al.* 1991: 113). Ely, *et al.* (1991: 127) further states that making the unfamiliar familiar “includes the ability to recognize stereotypes because even when entering an unfamiliar situation we are not devoid of myriad of images, expectations, and beliefs.” As an outsider, the researcher had the advantage of observing norms and values of which an insider may not be aware. The researcher was an outsider in the sense that she was not a public servant in the South African public service.

Completing the data collection process is described by Ely, *et al.* (1991: 91), as “knowing when to leave the field”: this is a “judgment based on the researcher’s sense that substantial amounts of data have been gathered on the initial questions that have emerged during the study”. Ely, *et al.* (1991: 92) indicates that there are certain criteria to guide the decision to end data collection or to leave the field:

- (i) when a feeling of immersion is reached;
- (ii) when few unanswered questions remain;
- (iii) when the most important questions are answered;
- (iv) when staying in the field is only for the sake of fun, or feeling needed; and
- (v) when a sense of redundancy and feeling completed is reached, not when a great deal of time is spent, or a large amount of data is collected.

DATA ANALYSIS, VALIDATION AND REPORTING

The following section will describe the methods used in this study for analyzing the data, checking the validity of the data and the analysis, and writing the report. The report is an important part of this study, as it integrates the context, the literature review, and interpretation of the data sources and the description of the study’s findings.

The term analysis comes from the Greek verb *analysein*, which means “to break apart or to resolve into its elements.” (Miles and Huberman, 1991: 50). Data analysis in this study involves reducing the accumulated data to a manageable size to allow summarizing, comparing and synthesizing in order to interpret the results in relation to the research problem.

The analysis of a large amount of qualitative material for this study was a daunting task, since the data were largely unstructured. The data were analyzed using the combined approaches of Rubin and Rubin (1995: 226) and Stake (2000: 71). According to Stake (2000: 71), data analyses may occur simultaneously with data collection, or begin at anytime. Analysis is a matter of giving meaning to first impressions as well as to final compilations (Stake, 2000: 77). Stake (1995: 77) suggests two strategies, both of which were utilized by this study to find meaning in the data: (a) direct interpretation of a single illustration or instance, and (b) aggregation of instances for the purpose of

drawing conclusions from them as a class. Mouton (2001: 109) explains that interpretation involves the synthesis of data into larger coherent wholes. Interpretation means relating one's results and findings to existing theoretical frameworks or models, and showing whether these are supported or falsified by the new interpretation. Interpretation also means taking into account rival explanations or interpretations of one's data and showing what levels of support the data provide for the preferred interpretation.

In attempting to understand phenomena and relationships, the use of so-called "categorical data" is more important than direct interpretation (Stake, 2000: 71). Here researchers describe in detail, develop themes through some classification system, and provide an interpretation in light of their own views or views of perspectives in the literature. Although Stake (2000: 71) advocates two strategies for data analysis, the author also states that case study, unlike other qualitative methods, requires unique adaptations by each researcher, which means that his or her experiences and reflections are used to guide data analysis.

Categorisation of data is used to aid understanding and to find meaning by identifying and comparing consistent patterns. Categories were formed immediately on reviewing the data, by coding and aggregating of data into patterns (Stake, 2000: 78). Coding involves breaking down data into its relevant parts or elements. The researcher followed the advice of Ely, *et al.* (1991: 87), who suggests that while categories are being formed, the researcher should continue to "keep hold of the large picture" to make sure that the categories fit within it. Some patterns were drawn from the research problem, while others were linked to the available data, its meanings, ideas or explanations.

Stake (2000: 82) suggests "going through documentation to search for primary issues and to develop a table representing the repetition of categorical data." Stake (2000: 84) emphasizes the importance of identifying data that is, "...the best and to set the rest aside, noting that, "equal attention to all data is not a civil right." To identify the best data, as Stake (1991: 84), suggests, the aim of this study was continuously referred to throughout data collection and analysis.

Correspondence between issues is reviewed in matrices to show the relationships that exist between categories (Creswell, 1998: 154). Patton (2002: 471) has provided a rich source of ideas and illustrations of how to use matrices in qualitative analysis. Patton (2002: 470), for instance, uses matrices to draw important distinctions among the kinds of evaluations used by asking if, "...techniques of effective evaluation utilization differ with regard to the entity studied." Patton's matrices, identifies a programme's or policy's dimension (what can be studied?) with a programme manager's or policymaker's distinction (who is to be aided?) to show different kinds of utilization in each case. The linkage between a particular approach adopted and outcomes constitutes such a fundamental issue in many programme evaluations, that it provides a particularly good focus for illustrating qualitative matrix analysis.

Consequently, to study service delivery by the South African public service matrices was developed. The impact of different variables on effective service delivery was examined in each case study. The aspects that have an impact on service delivery performance in the selected case studies were included in the table, such as fiscal constraints for instance. Furthermore, major programmes or implementations of policy, in other words, service delivery projects by South African public service departments, were also identified and discussed. The impact of different factors on the sustainability of the public service department impeding service delivery outcomes, are listed as well. The cross-classification of any programme or policy implementation with these factors produces a cell in the matrix. The information that goes in to any cell in the matrix describes linkages, patterns, themes, experiences, content, or actual initiatives that help to understand the relationship between service delivery and selected public service departments in South Africa.

In either case, the matrix became a way of organizing, thinking about, and presenting the qualitative connections between programme or policy implementation dimensions (service delivery) and the factors that impact on service delivery. Once the process/outcome's descriptive analysis of linkages had been completed, the researcher offered appropriate interpretations of service delivery performance. The aspects of the case (the "facts") were thus reviewed, aggregated into categories and collapsed into patterns. Information was contrasted by using literature on the topic. The data analysis began early with the interpretation of first impressions and with an assessment of the

case and setting, as Stake (1995: 71) advises. These first impressions are important in developing a rich description of a case that will include the context. Data analysis began before all the data had been collected and was used to contribute toward the process of finalizing the research question (Gillham, 2000: 17).

The researcher used the types of analysis identified by Stake (2000: 17) and Creswell (1998: 154), which are relevant for case study research, and the qualitative methods described by Miles and Huberman (1994: 11). Categorical interpretation was used to find related meanings from data. For example, the research question of this study was the following: ‘to what extent can a leadership and governance framework improve service delivery by the South African public service?’

Stake (2000: 78) emphasizes the importance of separating the data after an initial interpretation, to find what is worthy. The data was thus coded on initial screening and later reviewed again. Data collected from multiple sources pertaining to a particular influence were compared to data in different categories. As indicated previously, data analysis began while the document, record review, audio-visuals and discussions were still underway. This preliminary analysis informed the researcher’s decisions how to redesign the study to focus on central themes emerging from the documents, audio-visuals and discussions. After the data had been collected and reviewed, the researcher began a more detailed and an in-depth analysis of what had indicated by this review. Much of the analysis was concerned with coding the data into categories. In this way, the researcher discovered additional themes and concepts, noted patterns and built these towards an overall explanation.

To begin the final data analysis, all the material from documents, audio-visuals, record reviews and discussions that related to one theme or concept was put into one category. The material within each category was then compared to identify variations and nuances in meanings (Stake 2000: 78). Comparisons were made across the categories to discover connections between themes. The goal was to integrate the themes and concepts into a systematic explanation that would offer an accurate, detailed, yet subtle interpretation of the research arena. The analysis was complete when the researcher felt confident that the research findings could be shared with others.

In view of the vast amount of data collected, data reduction was used in this study. According to Miles and Huberman (1994: 11), data reduction “sharpens, sorts, focuses, discards, and organizes data in such a way that ‘final’ conclusions can be drawn and verified.” Data displays were done using methods similar to the process of correspondence where matrices are used to view data and draw conclusions. Data display is a method “designed to assemble organized information into an immediately possible accessible, compact form so that the analyst can see what is happening.” Conclusion drawing and verification were approached with caution and a willingness to remain open and sceptical. As Miles and Huberman (1994: 11) note, final conclusions would not emerge until all the data had been collected, even though tentative conclusions could be drawn much sooner. The other side of conclusion drawing, according to Miles and Huberman (1994: 11), is verification. Verification for this study follows the guidelines of Miles and Huberman (1994: 11), Stake (2000: 78) and Creswell (1998: 154), as compared in Table 2/1.

TABLE 2/1

A comparison of data analysis and verification methods

Stake (2000)	Miles and Huberman (1994)
Coding data	Noting patterns, themes
Triangulation	Seeing plausibility
Category aggregation	Clustering
Naturalistic generalizations	Making metaphors
Correspondence	Counting
Correspondence Description (Creswell, 1998)	Making contrasts/comparisons

(Adapted from Miles and Huberman [1994: 11], Stake [2000: 78], and Creswell [1998: 154])

Miles and Huberman (1994: 245) suggest a number of data analysis tactics for finding meaning and for drawing and verifying the quality of conclusions. These tactics are the following:

- (i) Noting patterns and themes. Miles and Huberman (1994: 246) suggest that the human mind is able to find patterns quickly and that no ‘how-to advice’ is needed. However, the researcher was sceptical in reviewing patterns in order to be open to disconfirming evidence when it appeared and to recognize additional evidence for the same patterns.
- (ii) Seeing plausibility. The idea that certain conclusions are plausible, make good sense (Miles and Huberman, 1994: 246). The researcher remained open to a lack of plausibility, which was a trustworthy tactic for judging conclusions.
- (iii) Clustering. Clustering is the process of grouping similar categories and as with the preceding tactics, Miles and Huberman (1994: 250), suggest being cautious so as to avoid premature closure of categories. Verification of clusters may include questioning where extreme cases belong, and whether data used in a cluster are fully representative of the events, actors or setting being studied. Clusters can overlap and complex data clustering involves a process of moving from the more mundane toward increasingly higher levels of abstractions.
- (iv) Making metaphors. Miles and Huberman (1994: 250) propose that metaphors add richness and complexity to qualitative data analysis in such a way as to clarify and elucidate meanings. The definition of metaphor as data-reducing devices, by taking several particulars and making a single generality of them, is useful in handling the volume of data generated in qualitative research. Metaphors are also pattern-making devices that can centre data within a larger context; this is a potentially useful device in a case study where context is integral to the research.
- (v) Counting. Using numbers in qualitative research should not be ignored according to Miles and Huberman (1994: 253). Numbers were thus used to see what the researcher had, to verify ideas, and to stay honest by avoiding overweighing some items, or ignoring others. In this respect, statistical data

was collected on service delivery by the South African public service, to determine the outcomes.

- (vi) Making contrasts and comparisons. Comparing, according to Miles and Huberman (1994: 254), is “a natural and quick method to evaluate experiences, as well as a time-honoured, classic way to test a conclusion.” Comparing different cases involves asking questions such as “How big must the difference be before it makes a difference?” and “How do I think I know that?” Both questions require assessing practical significance since statistical significance is not relevant.

Stake (2000: 109) emphasizes using high standards in the validation of case study research. Stake proposes that, despite the complexity of the phenomenon of study, the researcher is fully responsible for the consequences of the research and ethically obligated to “minimize misrepresentation and misunderstanding.” Accordingly, this study used triangulation, or searching for the convergence of information, as a primary method of verification, as suggested by Creswell (1998: 213). For descriptions that appeared self-evident, there was less need for triangulation, but when data conflict appeared less than obvious, triangulation, as suggested by Creswell (1998: 213), was indeed used. In this regard, Stake (2000: 109) gives examples of triangulation. One of these is methodological triangulation, which was used for this study. Methodological triangulation occurs when methods such as document review and audio-visuals are compared for confirmation of interpretations. In this way both the reliability and the validity of the research were strengthened. Furthermore, it was necessary to use triangulation to acquire an extended knowledge and understanding of service delivery by the South African public service.

Preparing the research report and communicating the research findings and recommendations to the client are the final steps in the research process. Van Wyk (1996: 398) argues, “The report is the culmination of the whole research project.” Van Wyk (1996: 398) further expresses this sentiment: “regardless of the sophistication displayed in the other portions of the research process, the project is a failure if the research report fails.”

The ultimate objective of the report is “to enable the client to make an informed and scientifically verified decision to solve the original problem that prompted the undertaking of the research in the first place” (Puth, 1996: 90). Various authors emphasize that research reports will be quite different in terms of their style and organization, depending on the aim and objectives of the research project and the target audience for the report.

According to Ely, *et al.* (1999: 168), the writing of a qualitative research report demands the creation of a narrative. Narrative is used to report this study’s findings. According to Orum (1991: 20), narratives are the basis of reporting and communicating the case studies and aid in developing understanding and finding truth. Orum (1991: 21) further suggests that the use of “vivid description” in the narrative may include some “generalizations about many events.” For instance in this study, generalizations were used to illustrate a point more vividly than would have been possible through specific reporting of each event, condition or episode.

Orum (1991: 21) notes that the ability of a case study to understand social action is enhanced by a narrative that grasps the lived experiences of people. The case study should not be overly simplified; rather it should create a realistic and, at times, complex picture of service delivery by South African public service departments. The narrative describes this picture so that the reader can see the South African public service within an institutional context of its leadership and governance framework.

Gillham (2000: 97) proposed several steps to drive the research question; these were used to write this study’s report as a narrative. These steps are:

- (i) Develop a chronology of the data.
- (ii) Develop a logical system to enhance the chronology of the data.
- (iii) Review the aim of the research and check the organization to make certain that the aim is kept in sight.
- (iv) Finalize the research question according to a clearer understanding of the case.
- (v) Explain issues so that a theory emerges that gives meaning to what the case is about.

Stake (2000: 240) calls the narrative a story that the researcher, “even though committed to empathy and multiple realities, must decide how to relate.” The aim is to find a story that best represents the case, and thus subjective choices of how to do so, as well as what to include in the report, and what to exclude must be made by the researcher. To achieve the steps needed to develop the narrative, this study used Gillham’s (2000) and Stake’s (2000: 240) recommendations, as well as a log or diary to organize notes. These were later used as evidence to build the context and the story for the reader. Context, as noted above, is what differentiates case study from other methods of qualitative research, and in this study it provided the background, or foundation, for ultimately understanding the meaning of the data.

The elements included in the report of this study were based on Stake’s (1995: 242) suggestion that validation of the study may be more accurately judged if the following are added:

- (i) information that readers can use to judge the accuracy, completeness, and bias of the report;
- (ii) some raw data so that readers can verify or create new interpretations;
- (iii) a description of the case study method in such a way that the reader can understand triangulation and confirmation;
- (iv) information about the data sources; and
- (v) an emphasis that validity is based on the veracity of the reported findings, not on agreement between observers.

SCOPE AND LIMITATIONS OF THE STUDY

The premise of this study is that the application of values, ethical and socio-political principles and conduct are meant to prevent harm and to promote respect and fairness towards the participants in this study. This research makes every attempt to be sensitive, keeping the interests of the South African public service in mind.

Given the constraints of time, money and infrastructure, the researcher was not able to cover the topic in a very comprehensive fashion. The author has therefore delimited the time frame of the study and the sample of the study. The researcher has also confined

the study to selected South African public service departments. The decision was arrived at in the interests of sustaining the manageability and quality of the research.

Furthermore, there came a point where unstructured information, beyond which further documents, audio visuals and discussions added very little in the way of insight or understanding, and the researcher, thus took a broad-based approach to the design of the project to avoid the danger of being swamped by too much data that could not be synthesized.

SIGNIFICANCE OF THE STUDY

The objectives of this study are:

- (i) to provide a broad overview of service delivery during the apartheid era as a context within which to understand issues of leadership and governance between 1994 and 2003;
- (ii) to discuss both Western and traditional African leadership and governance approaches that have been successfully adopted within an institutional or community context both locally and internationally;
- (iii) to critically analyse the current status of service delivery in the South African public service by focusing on the experiences of the national Departments of Health, Housing, Safety and Security, and Justice and Constitutional Development; and
- (iv) to recommend a leadership and governance framework for the South African public service that would improve service delivery in public service organisations in a more sustainable manner. This leadership and governance framework would have its own unique characteristics and strategies that would accommodate the diverse perspectives and socio-economic and political differences in South Africa.

The South African public service may favour a leadership and governance framework, such as the one designed by this study, as a mechanism to improve service delivery performance and current imbalances and inequities. The research should undoubtedly have far-reaching implications on the South African public service, and it was thus

important to undertake such a study. Moreover, the recommendations for an improved leadership and governance framework, tailored for the South African public service, will hopefully contribute to an improvement of service delivery outcomes. By improving and/or redesigning the current South African leadership and governance approach and/or framework, it is expected that the South African government will improve service delivery to society.

SUMMARY

This chapter has outlined a variety of issues within the framework of qualitative research as it pertains to the present study, namely the research methodology, the research design, the conceptualization of data collection, the use of coding, and the reporting. The conceptual framework and research question have led to the formulation of plans for sampling and for instrumentation. The unit of analysis selected comprised South African public service departments. Once the sampling plan had been clarified, access to cases was obtained and data collection began. The data sources that were used were documentary sources, audio-visual materials and discussions with academics and public servants, making use of triangulation to crosscheck and verify the data. The study focused on the different methods that were used herein to investigate service delivery by the South African public service. Case studies were identified as being the most appropriate for the purposes of this study.

Before proceeding with the literature review on leadership and governance approaches, it is imperative to discuss the trends in public administration and relationship between various important concepts in this study, namely, public administration, new public management (NPM), leadership, governance and service delivery. This is the content of Chapter Three.