CHAPTER TWO

RESEARCH METHODOLOGY

"The process of putting together a piece of good research is not something that can be done by slavishly following a set of edicts about what is right or wrong. In practice, the social researcher is faced with a variety of options and alternatives and has to make strategic decisions about which to choose. Each choice brings with it a set of assumptions about the social world it investigates. Each choice brings with it a set of advantages and disadvantages. Gains in one direction will bring with them losses in another, and the researcher has to live with this" (Denscombe, 1998:3).

2.1 Introduction

Public administration is both an art and a science. As an applied social science, it employs a variety of research methods to validate and augment its body of knowledge and advance its research. Bearing in mind the above perspective by Descombe and this view, this chapter describes the location of the study and its methodological framework. It explains the rationale behind the methodology employed, methods of data collection, how the research was conducted and the possible limitations of the study. The purpose of study as described in Chapter One and the theoretical framework in Chapter Three are the guiding force in this investigation.

2.2 The location of the study and unit of analysis

The study was carried out in Mafikeng; the capital city of the North West Province of South Africa. The province is made up of ten departments which are as follows: the Department of Economic

Development and Tourism, the Department of Developmental Local Government and Housing, the Department of Education, the Department of Agriculture, Conservation and Environment, the Department of Health, the Department of Sports, Arts and Culture, the Department of Finance, the Department of Transport, Roads and Community Safety, the Department of Public Works and the Department of Social Development. The senior public servants in the North West Province were the subjects of this study. The specific units of analysis of the study were the Department of Health, Department of Education and the Department of Social Development. These departments of the North West Province have a close relationship with the North West University which has four campuses: Mafikeng, Mankwe, Vaal and Potchefstroom. The researcher is attached to the Mafikeng Campus of the North West University and is domiciled in the North West Province. Therefore, this research work is an effort to promote the partnership relationship between the North West Province and the University by strengthening the North West public service to achieve its goals and objectives.

2.3 Case study as a methodological framework

This research is a case study about the support for capacity building of senior public servants in the North West Province of South Africa. A case can be a site, such as an institution or a department within an institution (Bryman, 1989: 171; Bryman, 2001:48). Events and activities can also be viewed as units of analysis in case studies. Creswell (1994: 12) defines case studies as a type of qualitative research in which the researcher explores a single entity or phenomenon (the case), bounded by time and activity (a programme, event, process, institution or social group), and collects detailed information by using a variety of data collection procedures during a sustained period of time. As for Yin (1994: 13-14), a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not evident; and in which multiple sources of evidence are used. An evaluation of the support for capacity building of the senior public servants in the Department of Health, the Department of Social Development and the Department of Education provides an opportunity to identify the rationale behind the success or failure of the public service in policy implementation. This view is supported by Stake (1995), who argues that the sole criterion for selecting cases for a case study should be "the opportunity to learn". Case studies are conducted to shed light on a phenomenon, be it a process, event, person or object of interest to the researcher (Leedy, 1997: 157). Similarly, researchers generally do case studies for one of three purposes: to produce detailed descriptions of a phenomenon, to develop possible explanations of it, or to evaluate the phenomenon (Johnson and Joslyn, 1991: 121; Gall et al, 1996: 549).

Therefore, the exploration and description of the case takes place through detailed, in-depth data collection methods, involving multiple sources of information that are rich in context. These may include interviews, documents, observations or archival records (De Vos et al, 2005: 272). As such, access to, and confidences of participants are fundamental requirements for effective case. Thus, a case study methodology provides an approach which lends itself to the examination of the effects of policy, as well as the potential to generate theory (Bryman, 1989: 170). In the evaluation of the support for capacity building of senior public servants, a case study approach increasingly plays an important role, since it is able to illuminate the effects of leadership on the governance and management on everyday activities of the public service. Although it is acknowledged that it may not be possible to make generalisations about the three departments sampled, it is expected that the methodologies employed will enable the researcher to reason inductively from the findings about the impact of leadership on the support of senior public servants in building their capacities to fulfil public services in the North West Province.

However, this method of research has several weaknesses: First concentration on only one case makes it virtually impossible to make use of contrasting situations. In other words, when many organisations are compared, the parallels and differences between them often provide useful insights. The second weakness is the problem of typicality or generalisation. In a case study, there is no assurance that the organisation chosen for study is representative of other similar organisations (Baldridge, 1971: 32). Additional weaknesses of the case study approach (Denscombe, 1998:40) are that case studies are often perceived as producing soft data. The approach is often accused of lacking the degree of rigour expected of social science research. Often, case studies are regarded as appropriate in terms of providing descriptive accounts of the situation, but rather ill-suited to analyses or evaluations. None of this is necessarily justified, but it is a preconception which the case study researcher needs to be aware of, and one which needs to be challenged by careful attention to detail and rigour in the use of the approach. Negotiating access to case study site can be a demanding part of the research process. Research can flounder if permission is withheld or withdrawn. In case studies, access to documents, people and settings can generate ethical problems in terms of things like confidentiality. It is hard for case study researchers to achieve their aim of investigating situations as they naturally occur without any effect arising from their presence. Those being researched might behave differently (the observer effect) from the way they do normally owing to the knowledge that they are under the microscope and being observed in some way (Denscombe, 1998:40).

In contrast, several strengths help outweigh the disadvantages. These have been identified by Baldridge (1971:32) and Denscombe (1998: 39-

40). Firstly, it allows the researcher to deal with the subtleties and intricacies of complex social situations. In particular, it enables the researcher to grapple with relationships and social processes in a way that is denied to the survey approach. Secondly, it allows the use of a variety of research methods. More than this, it more or less encourages the use of multiple methods in order to capture the complex reality under scrutiny. Thirdly, it fosters the use of multiple sources of data. This, in turn, facilitates the validation of data through triangulation. Fourthly, the case study approach is particularly suitable where the researcher has little control over events. Because the approach is concerned with investigating phenomena as they naturally occur, there is no pressure on the researcher to impose controls or to change circumstances. Fifthly, it can fit in well with the needs of small-scale research through concentrated effort on one research site. Lastly, theory-building and theory-testing research can both use the case study approach to good effect.

2.4 Data collection instruments

The methods of data collection are to some extent guided by the purpose of the study (Dixon, 1989:13). As stated in Chapter One, the purpose of the study is to evaluate the support for capacity building of senior public servants in the North West Provincial government. Therefore, the instruments employed in the collection of data are document analysis, the questionnaire and individual interviews.

2.4.1 Document analysis

To a greater extent, the study involved the use and analysis of documents. According to Bell (1993: 68), a document is a general term for an impression left by a human being on a physical object. Documents can be divided into primary sources which are those which came into existence in the period under research, and secondary sources which are interpretations of events of that period based on the primary sources. Essentially, the purpose of most of such documentation is to enhance accountability (Denscombe, 1998:161). This means that the records must have two qualities, both of which happen to be of particular value for research. They need to contain a systematic picture of things that have happened and they should be publicly available. The records only serve the function of accountability to the extent that they are made available to relevant people to scrutinise. In this regard, a good documentary research can use four criteria to evaluate documents (Scott, 1990:120). These are: authenticity, credibility, representativeness and meaning. At this point, before beginning the search for documentary evidence, one must clarify exactly what kind of documents were to be used (Bell, 1993:68). The documents and the reasons for using them are delineated below.

(1) Official annual reports published from 2000 to 2005 were studied. These reports were able to disclose the staff complements, the patterns of challenges that the departments experienced, how the

departments addressed these changes and other any other external observations, such as the Auditor-General's observations. The purpose of this analysis was to gather some evidence of managerial capacity or managerial capacity building requisition and assess their implementation success.

(2) Strategic plans developed from 2002 to 2005 were also studied. Through the strategic plans, it was possible to assess the strategic role, capability and leadership exercised in the department and in relation to the senior public servants. The purpose of this analysis was to track down the challenges identified by the departments each year, whether they are being addressed and if there are capacity building opportunities identified, recommended and implemented in order to achieve superior public performance. It was also vital to obtain an impression of the commitment of the departments to capacity building and also the extent to which strategic plans appeal to the SMS competency framework.

(3) Human resource development information obtained through the Human Resource Departments relating to the policies, programmes, processes, procedures and resources for supporting capacity building of senior public servants were requested and, where available, analysed. It was vital to assess what informed capacity building and whether the processes were internally owned, with evidence of

coherence, and support within and between the departments. It was also critical to assess the tools for measuring the achievement of the SMS competency framework. This perspective indicated the extent to which the SMS competency framework is being valued or embraced in the North West public service.

This research approach undoubtedly enabled instant access to relevant information and ensured that the credibility of the documents was realised given the authority of the source as per approval by the Office of the Premier. It was very cost effective and time saving which were important to the researcher.

2.4.2 Structured interviews

In order to triangulate the information obtained from the official documents, structured interviews were conducted with three senior Human Resource Development (HRD) staff respectively from the Department of Health, the Department of Social Development and the Department of Education, as per **Annexure D**. According to Denscombe (1998:112), structured interviews involve tight control over the format of questions and answers. In essence, the structured interview is like a questionnaire which is administered to a respondent in person. The respondents were required to provide information relating to the institutional support for managerial capacity building of the senior public servants in their own departments and between the departments of the North West Province. The major weaknesses of interviews relate to analysis of data which is time consuming and difficult and the costs of travelling and transcription of information (Bryman, 2001:130). However, these weaknesses did not affect the reliability or the validity of information obtained from the departments because respondents answered identical questions, thereby seeking a balance between the views expressed by the officials responsible for managerial capacity building and the senior public servants of the North West Provincial Government. Indeed, the technique had the advantage of saving money and time which were concerns for the researcher. Through the structured interview, it was possible to complete the data collection process within four weeks and without compromising any other subject or source.

2.4.3 The questionnaire as a research tool

The study utilised the self-administered questionnaires to obtain views of the senior public servants regarding the public service support for their capacity building. The most important aspect of this type of data collection is that the questionnaire is the only means of communicating between the respondents and the researcher.

The questionnaire was employed because of the advantages of the self-administered questionnaire which are noted below (Dixon, 1989: 19; Denscombe, 1998: 105; Bryman, 2001:129-130). Firstly, it is cheaper to administer: travelling and subsistence costs are minimal. Secondly, it is quicker to administer. It can be sent out through the mail or otherwise distributed in very large quantities at the same time. Thirdly, since questionnaires are identical, the stimuli provided are identical. Fourthly, the anonymity of respondents means that respondents' names are not given. In this study even the names of the departments were not divulged, because doubts about anonymity could have influenced the validity of the responses. Lastly, questionnaires can be processed easily, if they are carefully structured and precoded.

The limitations of the self-administered questionnaire cannot be overlooked. Like all other strategies for data collection the self-administered questionnaire has some disadvantages. Firstly, pre-coded questions can be frustrating for respondents and, thus, deter them from answering. Secondly, there is no opportunity to probe respondents to elaborate an answer. Lastly, some respondents could have negative attitude towards them (Dixon, 1989: 19; Denscombe, 1998: 106; Bryman, 2001:130). Despite these limitations, the self-administered questionnaire is still commonly used in collection of data. With great care taken in the construction of the questionnaire and its administration, positive responses could be attained (Dixon, 1989:22).

2.4.3.1 Questionnaire construction

The measuring instrument has the greatest influence on the reliability of the collected data; hence great care was taken in the construction of the questionnaire. A well-designed questionnaire boosts the reliability and validity of the data to acceptable levels (Bryman, 2001:136). The questionnaire is commonly used as a tool for data collection (Denscombe (1998: 87; Dooley, 2001: 135; De Vos, 2005: 166). However, there are some criticisms against the use of the questionnaire, such as: excessive non-response rates; poorly- constructed items; questionnaires deal with trivial information; and data from different questions are difficult to synthesise. Bryman (2001:129) argues that the major criticism against the use of questionnaires is the poor design rather than the questionnaire per se. Equally, the wording of the questions is not only one of the most difficult features of questionnaire design, but also one of the most important to get right (Denscombe, 1998: 97).

Therefore, to overcome the difficulty of poorly-constructed questionnaires, items should deal with meaningful research problems, questionnaires need to be structured carefully and administered effectively to qualified respondents (Denscombe, 1998: 97; Bryman, 2001: 132). To this end, the aim of the questionnaire was to gather information about the support for capacity building of the senior public servants as well as effective implementation and assessment of the SMS competency framework in the public service. A theoretical framework presented in Chapter Three largely contributed to the development of the questionnaire.

2.4.3.2 Format and content of the questionnaire

The questionnaire was divided into six sections (see **Annexure F**) according to their focus. These are listed below.

Section A (questions 1.1 to 1.6.1). The purpose of these questions was to gather biographical information about the gender, age range, positions, experiences and educational achievements of the respondents.

Section B (questions 1 to 26). The purpose of these questions was to collect information about the expectations and knowledge of the respondents. The items for these questions were developed from the literature, and for each item the respondents were asked to indicate on a three point dimension (no, yes or not sure), their own knowledge.

Section C (questions 1 to 5.1). These questions focused on the approaches to management development. The reason behind these questions was to obtain information relating to on-the-job and off-the-job approaches to managerial development and training.

Section D (questions 1 to 17). These questions were asked to determine the attitudes of the senior public servants about management development in the public service. The items for these questions were developed from the literature, and for each item the respondents were asked to indicate on a three point dimension (no, yes or not sure), their own knowledge.

Section E (questions 1 to 19). The purpose of these questions was to collect information about the application and assessment of the Senior Management Service (SMS) competency framework. The items for these questions were developed from the literature, and for each item the respondents were asked to indicate on a three point dimension (no, yes or not sure), their own knowledge.

Section F (questions 1 to 7). These questions were constructed to determine the support for, and the barriers to, managerial development and training in the public service. The respondents were also able to rate on the scale (1=a little, 2 = a moderate amount and 3 = a great deal) the level of skills and expertise they required in order to remain effective.

2.4.3.3 Pre-testing the questionnaire

A pilot study is a small-scale preliminary investigation designed to acquaint the researcher with flaws and problems that need attention before the major study is conducted (Treece and Treece, 1986: 382). It offers the researcher an opportunity to pre-test the instrument. The major purpose of the pilot trial is to detect the problems that must be solved before the major study. Most of the flaws of the measuring instrument are detected during the pilot study (Schnetler, 1989:92). With regard to this study, the questionnaire was pre-tested using a sample of (n-4) senior public servants in order to determine any ambiguity, flaws and problems. The four senior public servants were asked to complete the questionnaire and to indicate whether some questions seemed ambiguous to them, and to comment on the other points that might need to be considered to improve the instrument.

The pre-test results were checked and the suggestions made by the respondents were taken into consideration to improve the questionnaire. The four senior public servants in the pre-test were concerned about the open-endedness of some of the questions and suggested that if they were left in that form this might negatively affect the quality of information from the respondents and the general response rate. The population of the pre-test was not used in the final study.

2.4.3.4 Final questionnaire

Thereafter, the final questionnaire was successfully administered to 50 senior public servants.

2.4.3.4.1 Covering letter

The covering letter is a tool employed to introduce the questionnaire to the respondents with the aim of persuading them to respond to the questionnaire. It gives the respondents direction in the completion of the questionnaire, as well as directions about returning the completed questions and it guarantees anonymity (Borg and Gall, 1989:436). A simple covering letter (**Annexure E**) that explained the purpose of the study and the approval by the Director General accompanied the questionnaire to the respondents. The letter also reassured the respondents that all the information provided would remain confidential and that the analysis will be based on aggregated data.

2.4.3.4.2 Administration procedures

Several steps were followed before the questionnaires were distributed. First, the researcher visited the websites of the Department of Health, the Department of Education and the Department of Social Development with a view to obtaining information relating to their Senior Management Levels.

Next, the researcher visited the HR directorates of these departments. The purpose of these visits was to request information relating to appointed and vacant personnel in the SMS categories. The permission granted by the Director General assisted, as many suspicious questions were asked about the purpose and level of the study. With the exception of the Department of Education, other departments took more than five days to provide information.

On the basis of the information provided and the observations made, the researcher appointed an assistant to help him with the distribution of the questionnaires to selected senior public servants. With the assistance of the contact persons in each department, questionnaires were returned either directly or indirectly to the researcher. A few copies of the questionnaires were returned within a week, while others took more time than anticipated, up to five weeks.

2.4.3.4.3 Follow-ups

A major disadvantage of the questionnaire is non-response. The respondents may simply decide not to respond to the questionnaire. Because of the low number of responses within a week, the researcher made personal and telephonic follow-ups to the contact persons in the departments. This resulted in an increase in the number of completed questionnaires returned.

2.5 Population sampling and response rate

According to Wimmer and Dominick (1987: 70), two kinds of sampling methods exist, namely probability and non-probability methods. A probability sampling is selected according mathematical guidelines whereby the chance for selection of each unit is known. A non-probability method of sampling is not focused on the guidelines of mathematical probability. However, the most significant characteristic distinguishing the two types of sampling is that probability sampling allows researchers to calculate the amount of sampling error present in a research study, while non-probability sampling does not.

A sample of 50 respondents was targeted for this study. To select the actual respondents from each department convenience/ availability sampling was utilised. This is a non-probability sampling technique in which the researcher chooses the closest persons who are willing to participate in the study as respondents (Leedy, 1997:204). As applied in this study, the use of availability sampling involved the researcher administering the questionnaires only to those senior public servants willing to participate in the study. The major disadvantage of utilising availability sampling is that it has negative effects on sample representativeness (Descombe, 1998: 17-8) which undermines the capacity of the study findings to be generalisable across the population studied. However, the purpose of the study is to evaluate the institutional support for managerial capacity building of the senior public servants and not necessarily the senior public servants (respondents). Furthermore, the technique had the advantage of saving money and time which were concerns for the researcher. Through it, it was possible to complete the data collection within a short time.

In all, the three case study departments were covered by the study: the Department of Health, the Department of Education and the Department of Social Development and involved three categories of staff: Deputy Director General (DDG), Chief Director (CD) and Director (D). Table 2.1 presents the distribution of the sample population.

Table 2.1: Distribution of the sample population and response rate

Departments	Position	Population	Sample population	Response rate
Health	DDG	2	2	2
	CD	2	2	0
	D	20	14	10
Social Development	DDG	1	1	1
	CD	2	2	0
	D	11	8	8
Education	DDG	1	1	0
	CD	8	5	2
	D	25	17	8
Total		**72**	**50**	**31**

(Response rate by the Senior Public Servants, July 2006: North West Provincial Government)

Table 2.1 shows the distribution of the population, sample population and the response rate per department. It reveals that 50 (69%) senior public servants out of 72 were identified to participate in the study. Out of the 50 senior public servants who were identified to participate in the study, only 31 (62%) successfully completed and returned their questionnaires. In this regard, more than 82% of the respondents were drawn from the director's level. Notwithstanding, it is worth reporting that a total of 20 (representing 28%) of the senior public servants in these Departments were in their acting capacities and decided not to participate in the study. Despite this submission, some of the senior public servants who did not complete the questionnaires offered explanations which form part and parcel of the limitations of this study, as per Section 2.8.

2.6 Methods of data analysis

Taking into account the purpose of the study in Chapter One and the case study research design followed, the methods of data collection employed necessitated appropriate methods of data analysis. Three approaches to analysing case data can be followed. These are: interpretational analysis, structural analysis and reflexive analysis (Gall et al, 1996). Interpretational analysis refers to examining data for constructs, themes and patterns that can be used to describe and explain the phenomenon being studied. Structural analysis refers to searching the data for patterns inherent in the discourse, text, events or other phenomena, with little or no inference made as to the meaning of patterns. Reflective analysis refers to using primarily intuition and judgement to portray or evaluate the phenomenon. Given the structured nature of the interview protocol performed and the need to relate the responses from the Human Resource Development (HRD) with those of the senior public servants, these approaches have been followed to a greater extent.

Furthermore, the data provided by the senior public servants were analysed utilising the SPSS-PC quantitative data analysis software. The analysis was mainly descriptive and involved the computation and utilisation of descriptive statistics especially frequency distributions and percentages. These were used to establish a linkage with the data provided through the structured interview and to construct a descriptive profile of the departments studied within the public service.

2.7 Ethical considerations

In carrying out this study, the academic freedom of scientific research as entrenched in the Constitution of the Republic of South Africa; 1996 (Act 108 of 1996) section 16 (1) (d) has been applied within the context of ethical considerations. This was very important because Macburney (1994: 373-374) argues that the decision to conduct research often presents a conflict between three sets of values. The conflict is between the commitment of the researcher to expand knowledge and the potential benefit the research may have for society or a section of society and the cost of the research to the participants. This conflict could best be addressed by ethical considerations. Thus, institutional approval should be regarded as an important ethical consideration, in that the researcher should obtain approval from the host institution prior to conducting research. With regard to this study, the Director General of the North West Province gave permission on 9th December 2005 as per **Annexure B** and an ensuing directive as per **Annexure C**.

Another major ethical consideration of any research is that respondents should not come to any harm. By its nature, this study did not focus on a subject that was likely to expose the respondents to any hazard. Indeed, several steps were taken to guarantee respondents confidentiality (or anonymity). Firstly, respondents were instructed not to indicate their names on the surveys. Secondly, no information that could be used to identify particular respondents was employed in reporting research findings and all surveys will be destroyed at the end of the study. Thirdly, answers to all questions were kept completely confidential. More specifically, no responses from a particular respondent were analysed (or reported) separately. Rather, responses were combined and used with the responses from other participants. Finally, the respondents were informed about the objectives of the study and what the information was to be used for.

2.8 Limitations

Research work is never without limitations, and this study is no exception. As such, a number of factors could be considered to undermine the quality of the findings in this study, as well as the conclusions drawn from its findings. The first of such factors is that the research is limited to the senior public servants employed at the public service of the North West Province. Yet, it is evident form Chapter One that the public service in South Africa has a very long history of existence and ongoing transformation process which affects all levels of government. Notwithstanding, the period of the study that has been taken into account is from the year 2000 to 2006. This period is important to enhance the current policy and practical imperatives that affect the support for managerial capacity building in the public service.

In addition, a case study approach hinders the selection of all senior public servants within a department or all departments of the North West Province. However, capacity building is not only an individual issue; the public service must institutionalise it, and be supported from the policy to practice point of view, regardless of the nature or size of department. By following a case study approach, the study suggests that the findings, conclusions and recommendations may be replicated in the public service of the North West Province. Again, the researcher had limited time and budget with which to execute the study; this might have affected the depth of the analysis conducted.

A constructive culture of research is a fundamental prerequisite for effective scholarship and sustains the interest and commitment of the researcher beyond the scope of research work. However, the dominant research culture in the public service somehow worked against the research purpose and the timeframes. For instance, all the official requests for research information were entertained six weeks later and after frequent follow ups, despite the permission to conduct the study from the Director General (DG). Some senior public servants voluntarily chose not to participate in the study. These are some of their comments: "I am not being paid to complete this questionnaire" "This is not part of my job" "I am very busy, I will complete it if I have time''. In many instances, the researcher had to visit a single participant more than fifteen (15) times with empty promises being made consistently. On account of this kind of reluctance to co-operate, the period of data collection took two months and two weeks with only thirty-one questionnaires successfully returned, though it had been planned for only two weeks maximum.

A final limitation of the study relates to the fact that some senior public servants were often very wary about the intentions of the researcher and this made it difficult for the researcher to administer the questionnaires, notwithstanding. The suspicion that characterised some respondents undoubtedly impacted on the quality of information realised by the study. It is possible, accordingly, that some respondents might not have been objective while completing the questionnaire. For example, one responded in the process of completing the questionnaire by saying "I cannot consistently rate my department low". Notwithstanding these limitations, the results of the study were very useful in revealing the state of capacity building support for the senior public servants, and may have several implications for future research, as well as for the design and implementation of effective management and leadership development programmes and strategic human resource planning and management in general in the North West Province.

2.9 Summary

This chapter laid down a methodological framework within which this study could be successfully conducted. In particular, a case study as a methodological framework was justified for this research. However, an evaluative research of this nature requires that data be obtained from more than one source. For this reason, it was indispensable to triangulate data from official documents, structured interviews and questionnaires with a view to ensuring that the results and the conclusions would be scientifically valid and reliable. With the aid of the restructured interviews, a case study on the support for managerial capacity of the senior public servants is presented in Chapter Four. The next chapter provides a review of the literature.