

### CHAPTER 3: STUDY DESIGN AND METHODOLOGY

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The focus of the study is to identify the management challenges faced by pastors and to explore the extent to which pastoral preparation programmes made management learning explicit through course offerings. The intent of this research project is to obtain knowledge on management skills development in pastoral preparation programmes. To gain that understanding three seminaries, three in-house training churches and fifty-three pastors from Pentecostal and Evangelical churches were selected for this study. Some of the questions asked relate to the extent to which management skills are being developed in the future pastors during their pastoral preparation and which other management aspects from the secular system can be incorporated in the training manuals of the pastoral preparation programmes to produce a pastor who can effectively manage church resources to attain ministry effectiveness. The research also focuses on what the pastors perceive concerning the adequacy of their management skills. To address the research questions fully, an outline of the research methodology as influenced and structured by the research onion (Saunders *et al.* 2009) is given in this chapter. A detailed explanation of the research process follows. To begin with, it is important for a research process to clearly establish its research philosophy as it has a significant impact on the methodological framework applied.

The term research philosophy relates to the development of knowledge and the nature of that knowledge, and it represents a researcher's perception of the way knowledge is constructed (Bryman 1989). Knowledge is a complex phenomenon influenced and developed by various contextual variables, which cannot be

generalized in a value-free and detached manner (Saunders *et al.*, 2009).

The philosophy which was incorporated in the context of the present study was that of pragmatism, which is oriented towards solving practical problems in the real world rather than on assumptions about the nature of knowledge (Feilzer 2010). Pragmatism argues that the most important determinant of epistemology, ontology and axiology to be adopted is the research question as one maybe more appropriate than the other for answering questions (Saunders *et al.*, 2009).

This philosophy is appropriate because it focuses attention on the research problem and uses pluralistic approaches to derive knowledge about the problem (Morgan 2007, Patton 2002, Tashakkori and Teddlie 2003) and this enabled the researcher to emphasize the research problem and use all approaches available to understand the problem (Creswell 2014). Pragmatism offers an instantaneous and helpful middle position philosophically and methodologically; therefore, the researcher was able to look to many approaches for collecting and analysing data rather than subscribing to only one way (Greene 2007). In other words pragmatism opens the door to multiple methods, different worldviews and assumptions, and different forms of data collection and analysis that best meet the researcher's needs and purposes to best understand the research questions (Feilzer 2010).

The literature outlines three distinctive research approaches, which could be applied in this study, namely deductive, inductive and abductive (Bryman 2016, Collis and Hussey 2009, Creswell 2014, Flach and Kakas 2000, Mantere and Ketokivi 2013). A deductive approach is suggested to be suitable for scientific research, which sees a researcher developing a hypothesis, testing it and examining it to establish a

theory (Hussey and Hussey 1997). While in inductive approach, the results of the analysis would formulate theory after beginning with observations that were specific and limited in scope, which then proceed to a generalized conclusion that is likely but not certain, in light of accumulated evidence (Flach and Kakas 2000).

In the present context, the research approach was the abductive approach, which is a method of reasoning in which one chooses the hypothesis that, if true, best explain the relevant evidence (Flach and Kakas 2000). It is in fact the operation of adopting an explanatory hypothesis that would account for all the facts or some of them (Mantere and Ketokivi 2013). Abduction involves the interplay of observation and theory during the research process and is an approach to research involving inference to the best explanation response to an observed anomaly (Rose *et al.*, 2015). This approach was chosen after having taken into consideration the research questions and the purpose of the research, as the researcher-based knowledge claims on pragmatic grounds which are problem centred, consequence oriented and pluralistic (Creswell 2014, Feilzer 2010).

According to Eisenhardt and Graebner (2007) inductive and deductive logics are mirrors of one another, with the inductive theory building from cases producing new theory from data and deductive theory testing completing the cycle by using data to test theory. This combination of the inductive and deductive approaches in the abductive approach provided a more complete understanding of the research problem than either approach alone (Greene 2007). The researcher thus built theory abductively by collecting both quantitative and qualitative data, integrating the two forms of data and using distinct designs involved philosophical assumptions and theoretical frameworks (Creswell 2014, Mantere and Ketokivi 2013).

A variety of methods was used to collect these diverse types of data to establish different views of management skills development in pastors and develop theory by expanding the applicability of the Management Process School theory from the business setting into the church setting, through philosophical reasoning (Easterby-Smith *et al.* 2008; Saunders *et al.* 2009). The abductive approach was therefore appropriate because the researcher desired to both generalize the findings to a population “the Christians” and develop a detailed view of the meaning of a phenomenon “management skills development” or concept “management” for individuals “pastors” (Creswell 2014).

The abduction approach assisted the researcher to take advantage of the features of both qualitative and quantitative methods which included triangulation, for more confidence in the results; complementarity, to clarify the findings of different method types; and expansion, to increase the scope and range of the study by adopting different methods as appropriate for different research questions within the study (Bowen 1996, Feilzer 2010, Green 2007, Tashakkori and Teddlie 2003). However, this approach also has some weaknesses, one of them being that qualitative and quantitative researches represent incompatible paradigms based on fundamentally different philosophical assumptions, an example being methodological monism, as such there can be no meaningful mixing of methods (Rose *et al.* 2015). The other weakness is that there is a paradigmatic difference between the inductive and the deductive approaches (Feilzer 2010).

A research strategy can be explained as the tool or tools the researcher employs for addressing the research question (Saunders *et al.* 2009). There are many research strategies which can be identified in literature such as experiment, survey, case study, action research, grounded theory, ethnography and archival research (Adams and Schvaneveldt

1991, Crotty 1998, Ghauri and Grønhaug 2005). This study employed the research strategy of case study because it allowed the researcher to focus on understanding the dynamics present within the Church setting and the pastor's perceptions on management skills development (Yin 2013). The study looked at understanding management skills development of pastors in pastoral preparation programmes so that they can effectively manage the church resources for ministry effectiveness.

The research was therefore case oriented as it was concerned with depth, diversity and context done in a natural church setting with the investigation of a small number of participants (Rose *et al.*, 2015). The case study strategy was selected based on the basis that the researcher was attempting to extend the domain to which the Management Process School theory has been applied in one set of circumstances (*business*) by proposing that theory can be generalized to another (*the church*).

Robson (2002:178) defines case study as 'a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real-life context using multiple sources of evidence'. It involves gathering detailed information about the unit of analysis, with a view to obtaining in-depth knowledge, which is what the researcher aimed to do concerning the interaction of the Church and management concepts (Creswell 2014). As such a case study is often described as exploratory research used in areas where there are few theories or a deficient body of knowledge, as was the case under these circumstances (Saunders *et al.*, 2009).

The research strategy of case study was appropriate because it provided an in-depth account of events, relationships, experiences or

processes occurring in the Church settings regarding the application of management aspects in ministry and the development of management skills in pastors (Remenyi *et al.* 1998). It was also appropriate in that it could be applied on a single institution or a small group as in the present case where the study analysed the pastoral preparation programmes and the Pastors as representatives of the Church institution (Creswell 2014). This strategy was also perfect for this study because it enabled the researcher to study many different aspects of “the Church”, examine them in relation to each other with regards management concepts, view the process within its total environment and use the researcher’s capacity for *verstehen*. This was due to the detailed observations entailed in the case study method.

Case studies can involve single or multiple cases (Eisenhardt 1989, Murthy and Bhojanna 2008, Stake 1995). The multiple case studies are preferable to the single case study according to Yin (2013) because where one chooses to use a single case study, they will need to have a strong justification for their choice, and it has limitations in generalisability and several information processing biases. Given these limitations of the single case study, it is desirable to include more than one case study in the research and to respond to the information processing biases (Eisenhardt 1989). Multiple cases augment external validity and help guard against observer biases (Stake 1995). Multiple case sampling also adds confidence to findings (Miles and Huberman 1994). Constructs and relationships are more precisely delineated because it is easier to determine accurate definitions and appropriate levels of construct abstraction from multiple cases (Eisenhardt and Graebner 2007). Multiple cases also enable broader exploration of research questions and theoretical elaboration (Stake 1995). Additionally, including multiple cases increases the scope of the investigation and the degrees of freedom (Eisenhardt 1989, Patton

2002). Multiple case studies provide a more rigorous and complete approach than single case study research due to the triangulation of evidence (Eisenhardt 1989, Neuman 2005, Stake 1995, Yin 2013).

As a result, this study was a multiple case study with the researcher studying the course offerings of six pastoral preparation programmes and how they incorporated management concepts in their training content. The researcher also gathered information from pastors from different Evangelical and Pentecostal churches concerning management skills development to determine the impact this has on ministry effectiveness. The researcher was then able to identify comparisons which clarified whether the emergent finding was simply idiosyncratic to a single case or consistently replicated by several cases (Eisenhardt 1991). This helped the researcher to determine that the findings could lead to generalization in terms of the pastoral preparation programmes in Zimbabwe because the multiple case studies provided a purposive sample and the potential for generalisability of findings (Miles and Huberman 1994, Patton 2002). Thus, multiple cases allowed for comparative analysis which meant the findings could be considered more compelling and robust because the propositions were more deeply grounded in varied empirical evidence (Rose *et al.*, 2015). Finally, multiple case studies were appropriate because they provided for a rigorous methodology for replication logic (Yin 2013) and provided for theory confirmation through literal and theoretical replication (Christie *et al.*, 2000).

The case study was also descriptive, illustrative and explanatory all at once (Creswell 2014). The researcher began with describing the current practices in pastoral preparation programmes concerning their course offerings. Then existing management theory was used to understand and explain the universal application of management and the implied

management roles that pastors play in the church. Finally, the researcher illustrated new and possibly innovative practices adopted by other organisations that could be applied in the church organisation for ministry effectiveness.

One strength of using the case study is that it allows the researcher to deal with the subtleties and intricacies of complex social situations (Yin 2013). The use of multiple sources of evidence allows triangulation of findings which, according to Eisenhardt and Graebner (2007) is a major strength of the case study design as it provides stronger substantiation of constructs and hypotheses.

However, one of the weaknesses is that access to a suitable organisation is often difficult to negotiate and also access to documents and people can generate ethical problems in terms of things like confidentiality (Kervin 1999). Another weakness is that the research can flounder if permission is withheld or withdrawn (Saunders *et al.*, 2009). One other technical issue is selection bias whereby the choice of cases biases the findings of the research, particularly with respect to excluding cases that contradict favoured theory (Rose *et al.*, 2015). Another challenge in multiple-case research is to stay within spatial constraints while also conveying both the emergent theory that is the research objective and the rich empirical evidence that supports the theory (*ibid.*).

Pragmatism philosophy, the abduction approach and case study strategy characteristically emphasize multiple research methods rather than one research method (Creswell 2014). According to Curran and Blackburn (2001), multiple methods refer to a situation where a single research study may use quantitative and qualitative techniques and procedures in combination and use primary and secondary data. In the



current study, the research was conducted by means of a literature study and empirical research. The nature and complexity of the research problem, research questions and related research objectives called for a purposeful research design to meet the requirements of these research intentions. For this reason, a multiple methods research design was chosen to conduct this research. This enabled the researcher to use the secondary data to provide a solid theoretical foundation, whereas the primary data contributed to the researcher's ability to address the most important issues in the Zimbabwean context (Robson 2002).

The researcher adopted this design to increase the scope and range of the research, to address the research problem and the related research questions, since the research did not commence with a set of questions and notions about the limits within which the study would take place (Teddle and Tashakkori 2009). The researcher thus had to incorporate a multiple methods design for collecting data and analysing it using non-numerical procedures to answer the research questions (Saunders *et al.*, 2009). These multiple methods provided better prospects for the researcher to respond to the research questions and to better assess the degree to which the research findings could be relied on, and inferences made from them (Tashakkori and Teddle 2003).

Under the multiple methods design, a mixed methods approach was selected (Tashakkori and Teddle 2003). The mixed methods approach is subdivided into two types of the mixed method research and the mixed model research (Saunders *et al.*, 2009). The current research study employed the mixed-model research which combines quantitative and qualitative data collection techniques and analysis procedures and combining quantitative and qualitative approaches at other phases of the research such as research question generation

(Greene 2007). This allowed the researcher to take quantitative data and convert it into narrative that could be analysed qualitatively. Alternatively, the researcher was also able to quantify the qualitative data, by counting the frequency of reasons and/or responses that had been given (Saunders *et al.*, 2009). This resulted in the conversion of the qualitative data into numerical codes so that it could be analysed statistically (*ibid.*).

The rationale for choosing a mixed methods research design for this research was to gain data about a wider range of management interests of the pastors; understand more fully and thus get a fuller research picture concerning the Church and management issues; generate deeper and broader insights on the development of management skills in pastors for ministry effectiveness; enhance the significance of interpretation of the universal application of management principles and practices; enhance the convergence and collaboration of findings; allow for unexpected developments; clarify underlying logic; facilitate both outsider and insider perspectives, thereby improving research; facilitate a better understanding of the relationship between variables; allow appropriate emphases at different stages of the research process; and to explain idiosyncratic circumstances, approaches, opinions and practices of different respondents (Scott and Morrison 2007).

Mixed methods employ strategies of inquiry that involve collecting data either simultaneously or sequentially to better understand the research problems (Teddle and Tashakkori 2009). This research used the primary model of convergent parallel mixed methods, to provide a comprehensive analysis of the research problem by converging or merging qualitative and quantitative data (Greene 2007). The researcher collected both forms of data at roughly the same time, and then integrated the information in the interpretation of the overall

results. One form of data were nested within another larger data collection procedure to analyse different questions of the research (Creswell 2014). This enabled contradictions and incongruent findings to be explained or further probed.

An apparent weakness of quantitative research is that it is often perceived and seen to be weak in understanding the context or setting in which people talk and the voices of respondents are accordingly not verbally heard (Bryman 2016). On the other hand, qualitative research tends to be rich with quotation, description and narration, as researchers attempt to capture conversations, experiences, perspectives, voices and meanings, but it is seen as deficient because of the personal interpretations and the involvement of the researcher that may lead to bias (Teddlie and Tashakkori 2009). So, all methods have bias and weaknesses, but the collection of both qualitative and quantitative data in this research neutralizes the weaknesses of each form of data which allowed the researcher to get the whole picture (Creswell 2014). Mixed methods thus provided more comprehensive evidence for studying the research problem than either qualitative or quantitative research alone. The researcher was free to use relevant methods, skills and thinking to address the research problem, making this design very practical and one that enabled the use of an all-encompassing paradigm, such as pragmatism (Green 2007).

According to Johnson and Onwuegbuzie (2004), the goal of mixed methods research is not to replace either the quantitative or qualitative approaches to research, but rather to draw from the strengths of these approaches and to minimise possible weaknesses. Greene and Caracelli (1997) suggest that the blending of qualitative and quantitative research methods produces a final product which underscores the noteworthy contributions of both.

By combining the two methods, advantages of each methodology complemented the other resulting in a stronger research design that ensured valid and reliable findings, in that the inadequacies of individual methods were minimized and threats to internal validity were addressed (Bowen 1996, Hussey and Hussey 1997). According to Greene and Caracelli (1997) combining the two methods is like adding qualitative flesh to quantitative bones to provide richness and detail to a study, with the questionnaire exploring a different set of questions than the interviews. The quantitative design controlled for bias, such that facts could be understood in an objective way, while the qualitative approach endeavoured to understand the perspective of the participants, looking to firsthand experience to provide meaningful data (Habib *et al.*, 2014). The two methods were thus used to cross-validate and build each other's results. The objective questionnaire was complimented by the subjective interview. With this the researcher increased the quality of the result and thus provided a more comprehensive understanding of the analysed phenomena (Creswell 2014).

Sampling refers to the selection of a subset of persons or things from a larger population (Scott and Morrison 2007), with the intention of representing the population (Neuman 2005).

According to Bryman (2016), no decision in research design is more important than defining the unit of analysis as this determines the boundaries within which the research is done and guides the process of picking or sampling the study cases. The unit of analysis is "*the Church organisation*" as it is the entity that forms the basis of the sample, and it is the kind of case to which the variables or phenomena under study and the research problem refer and about which data are collected and analysed (Collis & Hussey 2009). The subsidiary units of

analysis which can be referred to as embedded cases (Easterby-Smith *et al.* 2002) are the pastor of a Pentecostal or Evangelical church in Harare whose church is either registered with the Zimbabwe Council of Evangelical Pentecostal Churches (ZCEPC) and/or the Evangelical Fellowship of Zimbabwe (EFZ); the Seminary Dean and Senior Pastor of a pastoral preparation program which any of these pastors attended. These subsidiary units thus made up the target population, which can be defined as the aggregation of elements from which the sample is selected (Bryman 2016). As such, the target population for this research consisted of three parts: the Pastors for Evangelical and Pentecostal churches, the Seminary Deans and the Senior Pastors from the churches which do in-house training of pastors.

Since it may be impractical and/or impossible either to collect or to analyse all the data available from an entire population owing to restrictions of time, money and often access, researchers must consider sampling (Sekaran 2000). Sampling is the technique applied in primary research for facilitating the researcher in choosing the most appropriate and relevant amount of data for the exploration (Bryman and Bell 2014), thereby enabling the researcher to reduce the amount of data they need to collect by considering only data from a sub-group rather than all possible cases or elements (Marshall 1996).

Sample selection is critical to the validity of the information that represents the populations or subjects that are being studied (Easterby-Smith *et al.*, 2002). Sampling saves time, and the organisation of data collection is more manageable as fewer people are involved (Denscombe 2007). The outcome is the collection of information that is more detailed and fewer data to enter which leads to the results being available more quickly (Saunders *et al.*, 2009).

In this study, there was a need to sample because it was impractical to survey the entire Christian population in terms of pastors, churches which do in-house training of their pastors and seminaries. This would require a lot of time which was not feasible due to the research being of an academic nature and thus there were time constraints.

Sampling can be divided into probability and non-probability sampling (Murthy and Bhojanna 2008). In probability sampling, the probability of each case being selected from the population is known and is usually equal for all cases meaning it is possible to answer research questions and to achieve objectives that require estimating statistically the characteristics of the population from the sample (Saunders *et al.*, 2009). On the other hand, in non-probability sampling, the probability of each case being selected from the total population is not known and it is impossible to answer research questions or address objectives that require making statistical inferences about characteristics of the population from the sample (Marshall 1996).

Non-probability sampling or judgmental sampling was used for the selection of knowledgeable and experienced participants because it provided a range of alternative techniques to select samples based on the researcher's subjective judgment (Habib *et al.*, 2014).

From the range of non-probability sampling techniques available, the most appropriate sampling technique that would enable the researcher to answer the research question was purposive sampling (Zikmund 2000). Purposive sampling is a technique that fails in being statistically representative but is useful in providing significantly rich information on the explored context (Saunders *et al.*, 2009).

To answer the research question and to meet the objectives the researcher needed to undertake an in-depth study that focused on a small sample case selected for a particular purpose (Adams and Schvaneveldt 1991). This sample would provide the researcher with an information-rich case study in which to explore the research question and gain theoretical insights (Neuman 2005). Bryman (2016) supports this sampling technique by stating that in case study research, sampling is purposeful to obtain rich information. For this reason, a purposive sample was used to select the Seminary Deans and Senior Pastors from Evangelical and Pentecostal churches which train pastors in-house. The researcher actively selected this as the most productive sample to answer the research questions, based on the researcher's practical knowledge of the research area and the available literature (Marshall 1996).

The purposive sampling strategy that was employed is that of homogeneous sampling which focuses on one sub-group in which all the sample members are similar (Saunders *et al.*, 2009). This enabled the researcher to study the group in great depth. The sub-group was represented by the sample of pastors from Evangelical and Pentecostal churches. However, the sampling strategy of heterogeneous or maximum variation was used for the pastoral preparation programmes to enable the researcher to collect data to describe and explain the key themes that could be observed (*ibid.*). The data collected then enabled the researcher to document uniqueness. This technique contributed to the researcher's aim of identifying and exploring in-depth the different perceptions from pastors concerning their preparation for effective church management prior to becoming pastors, and the different views of the Seminary Deans on the amalgamation of management courses with biblical studies (Rose *et al.*, 2015).

However, the disadvantage of purposive sampling is that the researcher cannot measure the level of certainty or margins of error as the sample is not probability based (Creswell 2014). Since the sample will be small, biases are thus inevitable (Ghauri and Grønhaug 2005). Overall, non-probability sampling allows convenience for the researcher while possibly losing data validity due to the lack of representation (Marshall 1996). The researcher thus minimized errors by using some recorders during the interview process, carefully recorded the results to remove bias, piloted the questionnaire for validity and reliability, and allowed the respondents enough time to consider the questionnaires and respond with little pressure.

The researcher selected the churches and pastors based on the following criteria: the church should believe in the Pentecostal or Evangelical doctrine of salvation; the pastors should be overseeing at least one church in Harare; and the church should also be registered and affiliated with the ZCEPC and/or the EFZ. The list of the pastors is extracted from the data bases of ZCEPC and EFZ. The researcher also selected seminaries based on the following criteria: the seminary had to be non-denominational, must have been attended by some pastors from the sample and having been operational for not less than five years. For the churches which do in-house training the researcher selected churches which had been training the leaders for five years or more and were among the churches attended by some pastors from the sample.

Following the above criteria and the fact that for non-probability sampling, the issue of sample size is ambiguous, generalizations are made to theory rather than about a population; and the sample size is dependent on the research questions and objectives (Patton 2002); the research sample included three seminaries out of the 30 seminaries



which had been attended by 46 pastors; three churches which do in-house training out of the seven (7) from the sample; and 53 Pastors across a spectrum of 43 denominations in Evangelical and Pentecostal churches. It was the researcher's belief that the sample size was not so small as to make it difficult to achieve data saturation, theoretical saturation or information redundancy; at the same time, it was not so large that it would be difficult to understand the deep case-oriented analysis (Bryman 2016).

In non-probability sampling the issue of sample size is ambiguous and there are no rules (Patton 2002), since generalizations are being made to theory rather than a population (Saunders *et al.* 2009, Teddlie and Tashakkori 2009), as such the number of respondents in this research was viewed as being sufficient. According to Marshall (1996) and Saunders *et al.*, (2009), an appropriate sample size for a non-probability sampling is usually one that answers the research questions meaning it is dependent on the research questions and objectives. The researcher believes that the above sample should be able to provide enough data for analysis because the cases selected were particularly suitable for illuminating and extending relationships and logic among constructs (Eisenhardt and Graebner 2007).

Ritche *et al.* (2014) argue that a very general rule of thumb is that qualitative samples for a single study involving individual interviews usually lie under 50 because if much larger than 50 they can start to become difficult to manage in terms of the quality of data collection and analysis that can be achieved. Teddlie and Tashakkori (2009) state that, purposive samples are typically small usually 30 or fewer cases, and case studies involving individuals often range from six to twenty-four participants. Crouch and McKenzie (2006) are of the opinion that samples of fewer than 20 increase the researcher's chances of

generating fine-grained data, while Adler and Adler (2012) cited in Bryman (2016) advice a range between 12 to 60 and a mean of 30 interviews. Guest, Bunce and Johnson (2006) state that for research where the main aim is to understand commonalities within a homogenous group twelve in-depth interviews should suffice. Given the above and the fact that the semi structured questionnaire falls under interview methods (Saunders *et al.*, 2009), then a sample size of 53 participants should be enough to collect the needed data.

With regards the number of cases to be studied, Eisenhardt (1989) points out that between four to ten cases usually works well, because with fewer than four, it is often difficult to generate theory with much complexity and its empirical grounding is likely to be unconvincing. With more than ten cases, it quickly becomes difficult to cope with the complexity and volume of the data. This view is also supported by Teddlie and Tashakkori (2009) who advocate for case studies to vary from a minimum of approximately four to twelve organisations. As such since the researcher was only interested in interviewing the key person in each of the six selected pastoral preparation program cases then six interviews sufficed for this research. This is also supported by Creswell (2014) who states that the desire for depth and pluralistic perspective implies that the number of cases must be fairly few, as this allows for comparison and contrast between the cases and a deeper and richer look at each case.

The researcher relied on theoretical sampling where the cases were chosen for theoretical, not statistical reasons (Glaser and Strauss 1967). Cases were chosen to extend emergent theory on management skills development in pastors. There was a selection of specific cases to extend the theory to a broad range of pastoral preparation programmes which were split into two categories of seminaries and in-

house training churches. Multiple cases within each category allowed findings to be replicated within categories.

Self-administered questionnaires were sent to pastors of Evangelical and Pentecostal churches drawn from the list of all the churches registered with EFZ and/or ZCEPC. By using these lists the researcher understood and assumed the risk of the databases being incomplete, the information held being inaccurate and the information of some of the churches being out of date (Saunders *et al.*, 2009). The researcher did face-to face interviews with each of the Seminary Deans and each of the Senior Pastors of the churches that do in-house training. Pseudonyms S1, S2 and S3 for identification purposes of the seminaries and C1, C2 and C3 for identification of churches which do in-house training were used.

The pastoral participants of this research were purposefully selected based on their leadership positions and their close involvement in church management. Seminary Deans and Senior Pastors were purposely selected based on their specialised expertise in pastoral training and close involvement in the pastoral preparation programmes. The 53 pastors were asked to fill in self-administered questionnaires, while the three Seminary Deans and the three Senior Pastors were requested to participate in a face-to-face interview, to contribute to the achievement of the stated research aims.

The research purpose can be described to be “*descripto-exploratory*” which is a hybrid of descriptive and exploratory. Descriptive in that the pastors were asked to describe to the researcher their experiences in pastoral preparation programmes with regards the management courses they learnt and the impact these have had in terms of assisting them to attain ministry effectiveness (Sekaran 2000). Exploratory in

that there is a deficit body of management knowledge in the Church organisation and this study aims to reveal new insight and evaluate the research phenomena in a new light (Saunders *et al.*, 2009). Furthermore, the research has a flexible approach to establishing its theoretical propositions, which does not mean that the research lacks clear direction and framework (Adams and Schvaneveldt 1991). As exploratory research processes share the common research strategy of exploring the phenomenological literature and extracting expertise from specialists in the field, similarly the study incorporated the research strategy of case study which allowed the researcher to use a variety of sources, data collection techniques and research methods as part of the investigation (Creswell 2014).

The data collection involved gathering both numeric information on the questionnaire, and text information from interviews. So the data were collected through questionnaires sent out to Pastors which were used to provide information on their perceptions on management skills development which was a particular point of interest in this research; face-to-face interviews with the Seminary Deans and Senior Pastors of churches which do in-house training and documentary analysis of the course outline collected from Seminaries and the training manuals collected from the churches which do in-house training. In this respect, it can be concluded that the study was built on a combination of secondary and primary data as such it was a personal multiple-source data set as it linked a variety of the secondary data sources to the primary data that was collected (Saunders *et al.*, 2009). These data collection methods were very appropriate for this research because the case study strategy allows the researcher to use a variety of sources, a variety of data collection techniques and a variety of research methods as part of the investigation (Creswell 2014). So the collection of course outlines and training manuals from the pastoral

preparation programmes was combined with interviews of Seminary Deans and Senior Pastors, plus questionnaires to Pastors from Evangelical and Pentecostal churches.

Secondary data are data collected and processed by others for a purpose other than the problem at hand (Stewart and Kamins 1993). The researcher used secondary data because it could provide a useful source from which to partially answer the research questions (Curran and Blackburn 2001). By collecting the course outline from the different seminaries and training manuals from the churches which do in-house training, the researcher was able to extract rich information on the courses being offered in the pastoral preparation programmes. The researcher was also able to ascertain the extent to which management courses were being made explicit in the course offerings at the pastoral preparation programmes.

Secondary data includes both quantitative and qualitative data (Saunders *et al.*, 2009) and the data collected included both raw data and compiled data (Kervin 1999). There was an analysis of documentary data which are important raw data sources, storage mediums for compiled data, and provide qualitative data (Krippendorff 2004). Access to the training manuals and the course outline was dependent on gatekeepers within the seminary or church. Survey-based secondary data collected through ad hoc surveys in the form of academic surveys was also used to extract information (Saunders *et al.*, 2009). The secondary data were used to ascertain whether the theories and practices can be applied by pastors and if so, how this can be done considering the sacred nature of churches.

The advantages of using secondary data include the fact that the data already exists so it has fewer resource requirements in terms of time

and money particularly because the access time is short and the data are generally less expensive to acquire (Ghauri and Grønhaug 2005), it provides an unobtrusive measure (Cowton 1998), longitudinal studies may be feasible, it can provide comparative and contextual data, it can result in unforeseen discoveries (Saunders *et al.*, 2009), and there is permanence of data which will also be available in a form that may be checked relatively easily by others (Denscombe 2007).

The disadvantages of secondary data are that the data may be irrelevant, combining various sources could lead to errors of collation and introduce bias (Denscombe 2007), gaining access may be difficult or costly, aggregations and definitions may be unsuitable to the research, there is no real control over data quality because it is difficult to assess data accuracy (Saunders *et al.*, 2009), and the initial purpose may affect how data are presented resulting in data not being subject to further manipulation at times (Stewart and Kamins 1993).

Primary data are data which is captured at the point where it is generated, with a specific purpose in mind (Bryman and Bell 2014). For this research primary data were extracted through the interview methods of semi structured questionnaires given to Pastors and face-to-face interviews with Seminary Deans and Senior Pastors for those churches which do in-house training of their pastors. Face-to-face interviews were conducted according to a semi-structured interview schedule plan (Appendix B) to allow more clarifying, probing and cross-checking questions (Gray 2016). The semi-structured questionnaire (Appendix A) was used to collect mostly numeric data to enable statistical analysis and to provide quantitative information (Zikmund 2000). However, the quantitative part of the research required the researcher to objectively evaluate the data which

consisted of numbers, and then try to exclude bias from their point of view.

The use of the interview methods helped the researcher to gather valid and reliable data that were relevant to the research questions and objectives (Sekaran 2000). This is because interview methods are social relationships designed to exchange information between the participant and the researcher. This was supported by Saunders *et al.* (2009) who stated that an interview is said to be a purposeful discussion between two or more people. The goal of any research interview is therefore to see the research topic from the perspective of the interviewees, and to understand why they have a particular perspective (King 2004). However, the interviewers are deeply and unavoidably implicated in creating meanings that ostensibly reside within the participants (Greeff 2011 cited in de Vos *et al.*, 2011).

The advantages of primary data collection are that the data are directly relevant to the problem at hand, and they generally offer greater control over data accuracy (Habib *et al.*, 2014). The disadvantages are that it's time consuming to collect and more expensive than secondary data (Collis and Hussey 2009).

According to de Vaus (2002) and Monette *et al.* (2011) the term questionnaire includes all techniques of data collection in which each person is asked to respond to the same set of questions in a predetermined order directly on the questionnaire form itself, without the aid of an interviewer. This research reserved the term questionnaire exclusively for the technique where the persons responding to the same set of questions in a predetermined order, recorded their own answers. Self-reported data were collected through questionnaires by asking pastors to talk about their past experiences in

the pastoral preparation programmes. The questionnaire addressed questions focusing on management skills development, perceptions of pastors and suggested management courses to be assimilated with the theological studies. As such the type of data variable collected through the questionnaire was an opinion variable (Saunders *et al.*, 2009).

The questionnaire was constructed in alignment with the literature overview, the theoretical framework and the research aims. A related questionnaire relevant to pastoral training developed by Andrews and Roller (2011) was adapted for question 15, in alignment with the theoretical findings according to the research aims. The format of the questionnaire was developed to have a professional appearance with a clear, neat and easy to follow layout. Clear and precise instructions were provided for the completion of the questionnaire. The theoretical foundation and the framework served as a parameter for the development of the questionnaire, in accordance with the research aims and purpose of this study (Hofstee 2009). And thorough attention was given to question formulation.

The questionnaire included a combination of open and closed questions. Open questions, sometimes referred to as open-ended questions (Dillman 2007), allowed the respondents to give answers in their own way (Fink 2003a). Closed questions, sometimes referred to as closed-ended questions (Dillman 2007) or forced choice questions (de Vaus 2002), provided many alternative answers from which the respondent was instructed to choose (Saunders *et al.*, 2009).

The questionnaire had more of the closed questions as these are usually quicker and easier to answer, they require minimal writing, and the responses are also easier to compare as they have been predetermined (Sapsford and Jupp 1996). The closed questions were



pre-coded on the questionnaire to facilitate data input and subsequent analyses (Fink 2003b). The closed questions comprised of list questions and rating questions. The rating questions were used to collect opinion data using the Likert-style rating scale, which is a category partition method (Neuman 2005). The researcher used this to record responses on the questionnaire to capture the incidence, potency and intensity as to what extent management courses were explicitly being taught in pastoral preparation programmes (Saunders *et al.*, 2009). The Likert rating scale requires an indication of the extent of the respondent's agreement in relation to a particular question item on a given continuum (de Vaus 2002). In this study, a five-point Likert scale was used to enable scores of either low or high values to represent the extent of the knowledge, opinion, judgment and experience of the respondents with regard to management skills development in pastors (de Vaus 2002, Neuman 2005).

The researcher being aware of the fact that the design of the questionnaire can affect the response rate, the reliability and validity of the data collected, carefully designed the individual questions to maximize the response rates, validity and reliability (Hofstee 2009). The researcher made sure that the questionnaire was as short as possible, to minimize respondent boredom and to get more carefully considered answers and in all probability a higher response rate (Collis and Hussey 2009). This was because there is a widespread view that longer questionnaires will reduce response rates relative to shorter questionnaires (Edwards *et al.*, 2002).

However, a very short questionnaire may suggest that the research is insignificant and hence not worth bothering with, as such the researcher stuck to a length of four A4 pages as this has been seen to be acceptable for self-administered questionnaires (Saunders *et al.*, 2009).

The researcher also looked into the issue of the questionnaire being valid by making sure that it enabled accurate data to be collected through careful planning and execution, also through correct wording and precisely defining the questions to be answered prior to data collection (Wilkinson and Birmingham 2003).

The first advantage of self-administered questionnaires is that the respondents are relatively unlikely to answer to please the researcher or because they believe certain responses are more socially desirable (Dillman 2007). The second advantage is that questionnaires facilitate the collection of vast amounts of data with minimal effort, because more volumes raise confidence levels in the sample (Edwards *et al.*, 2002). The third advantage being that they are generally easier to analyse and turn into quantitative results (Hofstee 2009). The fourth advantage is that a questionnaire allows respondents to complete the questionnaire at their own convenience, while allowing some time to think about their answers (Gray 2016). The fifth advantage is that as research instruments, questionnaires can be used time and time again to measure differences between groups of people, making them reliable data gathering tools (Strauss and Corbin 2008). Another advantage is that the person administering the instrument has the opportunity to establish rapport, explain the purpose of the study and elaborate on the meaning of items that may not be clear (Patton 2002). Lastly well- designed questionnaires can allow relationships between data to be identified, as they are particularly useful to showing relationships with data that are easily quantifiable (Edwards *et al.*, 2002).

On the other hand, there are some disadvantages of using questionnaires. The first is that the respondents may discuss their answers with others, thereby contaminating their response (Strauss

and Corbin 2008). The second disadvantage of questionnaires is that they do not allow for digression from the set format, which means they are limited in the depth to which the researcher can interact or even observe the respondents, as such the researcher is unable to ask probing questions (Patton 2002). The third disadvantage is that questionnaires often provide low response rates and are time-consuming in terms of follow-up and data entry (Hofstee 2009). The fourth disadvantage is that the ease of production and distribution can result in the collection of far more data than can be effectively used (Edwards *et al.*, 2002). Another disadvantage is that lack of adequate time to complete the instrument may result in the return of superficial data (Dillman 2007).

Several procedures exist for establishing the reliability of an instrument, such as the test-retest and alternate-form methods and the split-half technique (Gratton and Jones 2010, Delport and Roestenburg 2011 cited in de Vos *et al.*, 2011). For the purposes of the current study, a pilot study was conducted; and the Cronbach alpha coefficient (Cronbach alpha) was used to measure the reliability of the questionnaire as the measurement instrument.

Bless *et al.* (2006) define the pilot test as a small study conducted prior to a larger piece of research to determine whether the methodology, sampling, instruments and analysis are adequate and appropriate. According to Wilkinson and Birmingham (2003), the researcher can begin to identify and correct imperfections by piloting or testing a questionnaire with a select few people to establish their clarity. Piloting further assists in eliminating ambiguous questions, and in generating useful feedback on the structure and flow of the intended interview. Welman *et al.* (2009) and de Vos *et al.* (2011) summarise the purpose of the pilot study as to detect possible flaws in the

measurement process and to identify unclear or ambiguously formulated items. In such a pilot test the actual questions are put to the participants and they are then asked to indicate how they have interpreted the formulated questions, which presents an opportunity for the researcher to notice non-verbal behaviour that may possibly signify discomfort or wording of the questions (Welman *et al.*, 2009).

According to Saunders *et al.* (2009) prior to using a questionnaire to collect data it should be pilot tested. The purpose of the pilot test being to find out how long the questionnaire takes to complete; and to refine the questionnaire so that respondents will have no problems in answering the questions and in recording the data. This enables the researcher to obtain some assessment of the questions' validity and the likely reliability of the data that will be collected (Strauss and Corbin 2008).

As such a pilot study was conducted to determine the respondents' understanding and interpretation of the questionnaire, testing the length of the questionnaire and any feedback on difficulties that the respondents faced (Bryman and Bell 2014). The pre-test was done on ten pastors from the researcher's church as they would not be participating in the final survey. Ten is the minimum number for student research recommended for a pilot test by Fink (2003b).

The findings from the pilot test indicated that it took between 20-30 minutes to complete the questionnaire, the respondents understood most of the questions and they felt the structure and layout were attractive, the questions were clear and made sense, there was no question that they felt uneasy to answer and they appreciated the fact that it was pre-coded and short which made it easier and quicker to answer. However, they indicated some aspects that they felt were

irrelevant, and proposed other topics they would have loved to see being addressed in the questionnaire. The researcher took these comments seriously and amended the questionnaire accordingly while confining it to the research objectives.

The researcher also noticed that overall, the feedback was good, but there were some individuals who had not followed the instructions. Some questions which required the respondents to “*support their answer*” had been left with no further explanation. The researcher thus restructured those questions in such a way as to remove the mixture of the response options and the open questions but restricted the questions to being open-ended only in nature. Some people were putting crosses (×) instead of ticks (✓) as per the instruction, so the researcher added the visual effects of the tick as part of the instruction.

The researcher then undertook a preliminary analysis using the pilot test data to ensure that the data collected would enable the investigative questions to be answered (Murthy and Bhojanna 2008). The analysis indicated that all was in order.

The Cronbach alpha coefficient is widely used as a reliable procedure to indicate how well various items are positively correlated to one another (Drucker-Godard *et al.*, 2001 cited in Thietart 2001). The Cronbach alpha is based on the inter-item correlations. If the items are strongly correlated with each other, their internal consistency is high, and the alpha coefficient will be close to one (Sekaran and Bougie 2010). On the other hand, if the items are poorly formulated and do not correlate strongly, the alpha coefficient will be close to zero (*ibid.*). Guidelines for the interpretation of Cronbach’s alpha coefficient have been suggested and the following seem widely and generally accepted by researchers: 0.90 is high reliability, 0.80 is moderate reliability and

0.70 is low reliability (Drucker-Godard *et al.*, 2001 cited in Thietart 2001, Sekaran and Bougie 2010).

A statistical method was used to calculate the Cronbach alpha coefficient ( $\alpha$ ) to assess the internal consistency of the various question items of the questionnaire (*ibid.*). The Cronbach alpha was calculated for each group of items to illustrate the internal consistency of each subsection (*ibid.*). It also served another purpose in indicating the level of measuring the same construct validity (Sekaran and Bougie 2010). In the different subsections the general coefficient was higher than the acceptable, which is 0.7 and above (Drucker-Godard *et al.* 2001 cited in Thietart 2001). The Cronbach alpha coefficient for the different questions on the questionnaire follows and is presented in *Table 1*.

**Table 1:** *Cronbach alpha coefficient* (Own calculations from survey, 2017)

Construct	Total responses per question	Questions	Cronbach Alpha
Pastors' views on the church as an organisation and its interface with management principles	53	7a-7e	0.730
Management skills important for ministry effectiveness	53	8a-8h	0.774
Management skills, practices and principles	53	7a-7e, 8a-8h	0.802
Management skills development in pastors	53	15a-15d	0.723
Pastoral preparation for church management	53	15e-15g	0.721

In total it could thus be said that the different constructs of the questionnaire yielded scores with the general Cronbach alpha

coefficient ranging between 0.72 and 0.80 which indicates a low to moderate level of reliability for each construct.

The researcher approached the EFZ and the ZCEPC as one of the members on both Boards, and asked for permission to use their registration information databases as a sampling frame for the research. The permission was granted and the researcher went on to use the EFZ and ZCEPC email database to e-mail a pre-survey contact letter to the respondents (pastors), to try and convince them to participate in the research prior to administering the questionnaire so they can decide whether to grant access or not. The researcher also sent text phone messages to alert the pastors to check their e-mails for the letter. Most respondents responded via text messages giving their permission and physical addresses where the questionnaires could be dropped. The researcher however did face problems with the databases as some of the listed pastors were from out of Harare, which meant they could not participate.

Once access was granted, questionnaires with self-introductory cover letters which explained the purpose of the research and when the questionnaires were to be collected were sent to those who had responded positively and were in Harare as per the research's delimitation (Adams and Schvaneveldt 1991). A self-administered questionnaire for completion by the respondent was delivered by hand to 85 Pastors of Evangelical and Pentecostal churches. The duration of the completion of the questionnaire took 30 minutes on average. In total 85 questionnaires were distributed of which 53 were completed and collected while 32 were never completed on time. This translated to mean that there was a 62.4% response rate with 37.6% non-responses. For purposes of this study these respondents added to those

interviewed respondents through face-to face interviews were regarded as the study population.

Once fully completed some pastors sent text messages or WhatsApp messages and others phoned to advise the researcher to collect the questionnaires. For those who had not given any feedback, the researcher occasionally sent follow-up text messages to check on the progress of the pastors regards completing the questionnaire and to encourage them to complete the questionnaire as soon as possible as their input was of great value to the research study. Even though there was no way of ensuring the pastor as the respondent was the one who responded to the questionnaire (Habib *et al.* 2014), the researcher nevertheless made sure to ask at collection, who had answered the questions to make sure that there was no contamination of respondents' answers, as this would reduce the data's reliability (Sekaran 2000).

The researcher used face-to-face interviewing as a data-gathering method to permit exploration of the management topic and to yield a deeply experiential account of the extent of management skills development in a diversity of pastoral preparation programmes in Harare. The interviews afforded the researcher the opportunity to obtain perceptions of key role players in pastoral preparation programmes regarding alternative management course offerings and management skills development in pastors for effective management of church resources. This is because the interview is adaptable and flexible (Verma and Mallick 1999). It can thus yield rich material unobtainable in any other way, which can support or be supported by other data from questionnaires and standardised test responses (Grummitt 1980).



The researcher carried out semi-structured interviews which are non-standardised and are often referred to as qualitative research interviews (King 2004). This allowed the researcher to digress from the set format by asking probing questions to explore the topic and produce a fuller account of details for the research (Hofstee 2009). As such, even though the researcher had a list of questions to be covered, some of the questions were omitted interviews, given a specific organisational context that was encountered in relation to the research topic (Saunders *et al.*, 2009). This meant that the researcher was free to use additional questions to explore the research questions and objectives given the nature of events within particular organisations. This assisted the researcher with more in-depth answers

Data were collected through face-to-face interviews with three Seminary Deans from a selection of 30 Seminaries and three Senior Pastors from a selection of seven churches which did in-house training. The interview was a qualitative interview because the researcher sought to understand the stance that pastoral preparation programmes have taken with regards management skills development in pastors and also to hear their opinion towards attaining ministry effectiveness through the application of management principles and practices (Saunders *et al.*, 2009).

The researcher used open ended questions to encourage the interviewee to provide an extensive and developmental answer, and to obtain facts on management skills development in pastoral preparation programmes (Grummitt 1980). The open-ended questions put the respondents at ease and gave them a sense of control based on the fact that they were able to express themselves in their own words (Hofstee 2009). Probing questions were asked to explore responses that were of significance to the research topic and to seek an explanation where the

researcher did not understand the interviewee's meaning or where the response did not reveal the reasoning involved (Collis and Hussey 2009).

All the interviews took place in the offices of the Seminary Deans and Senior Pastors respectively. The interviews were held on different dates, and some necessary information concerning the management courses being explicitly offered in the preparation programmes was obtained together with their course outlines for content analysis. The interviewees were asked a series of seven questions during the interview process and one follow-up question which asked the interviewees if they had any other relevant comments before the interview ended. The nature of the questions and the ensuing discussion meant that there needed to be an audio-recording of the conversation for data collection, to allow the interviewer to concentrate on questioning and listening (Hofstee 2009). To ensure that responses were recorded, a digital voice recorder and backup recorder were used to record the responses of the participants. Recording also allowed the researcher to re-listen to the interview for accurate and unbiased recording of the responses (Healey and Rawlinson 1994). The researcher at the same time took notes during the interview because there are a lot of things that happen in an interview that a recording device cannot pick up but can be observed by the interviewer (Hofstee 2009). However, permission was sought to audio-record the interview. A copy of the interview schedule and the contact detail of the researcher were provided to each interviewee for possible future enquiries.

The researcher assured the interviewee that confidential information was not being sought as such there was anonymity and nothing they said would be attributed to them without their express consent which

the researcher would seek and obtain first. This increased the level of confidence in the researcher's trustworthiness, and thus reduced the possibility of response bias (Denscombe 2007). The interviewee was also advised on their right not to answer any question they were not comfortable with, and that they were free to stop the interview at any moment they felt they were no longer interested in participating (Kervin 1999).

The advantages of face-to-face interviews are that the interviewer has more control over who answers the questions; there is a higher response rate; questioning allows probing for reasons so that a rich and detailed set of data can be collected immediately; non-verbal responses can be observed and noted; and the use of aided-recall questions is possible (Grummit 1980, Healey 1991, King 2004).

The disadvantages however are that fewer interviews are conducted because of cost and time constraints; it is also time consuming in terms of the time required to transcribe the audio recording; there is a possibility of gathering interviewer biased data and/or response biased data due to lack of standardization which leads to concerns about reliability; and the interviewer may be unable to develop interviewee trust which will negatively impact their credibility (Easterby-Smith *et al.*, 2008, Ghauri and Grønhaug 2005, Healey and Rawlinson 1994).

The type of data to be analysed was numeric information gathered on scales of instruments and text information which recorded and reported the voice of the participants, as such there was across database interpretation of statistical results and themes or patterns that emerged from the data (Saunders *et al.* 2009). There was inductive analysis and content analysis. There was also within-case and cross case analysis. Data analysis was determined by the research objectives

and research questions. Presentation of data were done using tables and figures including bar charts and pie charts. Tables were used because they are simpler to comprehend and comparisons between classes can be prepared easily using tables.

Case study research attempts to understand the nature of the research problem, reflecting, forming and revising meanings and structures of the phenomena being studied. Thus, the case method is well suited for inductively building a rich, deep understanding of new phenomena (Creswell 2014). The researcher commenced the research project using an inductive approach and seeking to build up a theory that was adequately grounded in the collected data, by exploring the data to see which themes or issues to follow up and concentrate on (Strauss and Corbin 2008, Yin 2013). The researcher analysed the data as it was being collected and developed a conceptual framework to guide the subsequent work. This is referred to as a grounded approach because of the nature of the theory or explanation that emerges as a result of the research process (Saunders *et al.*, 2009).

Prior theory contributed in this investigation by the provision of a foundation and a means to refine the conceptual framework collection (Yin 2013). Additionally, prior theory in this investigation focused the literature review and assisted in developing the research issues and interview schedule, along with a suitable research design and system of data collection (Lincoln and Guba 1985, Miles and Huberman 1984).

The research also included elements of the deductive approach as the researcher sought to develop a theoretical position and then test its applicability through subsequent data collection and analysis. This approach is supported by Saunders *et al.* (2009), who state that while one may commence with either an inductive or a deductive approach,

in practice their research is likely to combine elements of both approaches. As such the questionnaires were used to gather data, which was then the subject of quantitative analysis while the non-standardised semi-structured interviews were used to gather data, which was analysed qualitatively.

Descriptive statistical techniques were applied to organise, analyse and interpret the quantitative data. Measurements were recorded as scores indicated by a five-point Likert scale. Measurements of central tendency were applied to describe the average of selected sets of scores to obtain indications of typical tendencies and outliers. Data from the questionnaire were interpreted, and statistically converted by means of the SPSS 16.0 (Statistical Packages for Social Sciences) computer software program to obtain related scores for the purpose of quantitative interpretation.

A two-stage statistical procedure was followed. In the initial stage an exploratory factor analysis was done on all the items of questions 7, 8 and 15 of the questionnaires as a means of data reduction and to ensure construct validity. Thereafter the Cronbach alpha coefficient was calculated to ensure and determine the reliability of each new defined construct of the various subsections of the questionnaire. To determine whether a factor analysis may be appropriate, Kaiser-Meyer-Olkin's Measure of Sample Adequacy (MSA), which gives an indication of the inter-correlations among variables, were computed (Tabachnick and Fidell 2012) for each confirmatory factor. Guidelines according to Hair *et al.* (2010) were used to confirm that the MSAs were appropriate. Secondly, the statistical procedure involved the use of descriptive statistics in graphical and numerical ways to present and analyse the gathered data of this research. Two-way frequency tables or cross tabulations were used to explore response patterns of different

subgroups (Pietersen and Maree 2007). Central tendency measures were applied to describe the distribution of responses and to identify characteristic values. The spread of distribution was described by numerical variances to the extent to which data measures tend to cluster close together or are widely spread over the range of values (*ibid.*).

Krippendorff (2004) argues that content analysis is an empirically grounded method, exploratory in process, and predictive or intentional in intent. Qualitative approaches to content analysis sometimes are given the label interpretative and they rely on several specialised procedures for handling text like unitizing schemes, sampling plans, recording or coding instructions, reducing data to manageable representation, inferring contextual phenomena and narrating the answer to the research question (Strauss and Corbin 2008). The researcher identified, coded and categorised patterns in the data (Patton 2002). The course outline and training manuals in the pastoral preparation programmes were examined using qualitative content analysis to determine how much management training was provided by searching for management courses offered to the students. The study semantically focused on the vocabulary in the course outline and training manuals.

According to Eisenhardt (1989) when a research's ontology is relativism, the epistemology is interpretivism and the research strategy is a case study like this research, then the analysis will include both within-case analysis and cross-case analysis. Within-case analysis involves detailed case study write-ups for each case to allow the unique patterns of each case to emerge before investigators push to generalize patterns across cases (Eisenhardt 1989). Cross-case

searching tactics enhance the probability that the investigators will capture the novel findings which may exist in the data (Creswell 2014).

Data sampling was used when transcribing the face-to-face interviews per case to extract the qualitative data for analysis (Saunders *et al.* 2009). The researcher thus only transcribed those sections of each audio recording that were pertinent to the study. Each case was individually analysed seeking common themes, content clusters and ideologies. This was done through repeated readings of the interview notes to learn the ideological essence of the individual Dean's and Senior Pastor's view of the assimilation of management skills development in pastoral preparation programmes. Once each case was individually scrutinized the researcher compared the separate cases to determine any commonalities. The commonalities were then analysed based on each individual case study to offer recommendations for implication by the pastoral preparation programmes.

Within-case analysis assisted the researcher to build up separate descriptions of opinions and phenomena concerning management skills development between each category of cases from the different seminaries and the different in-house training churches. These were then used to identify patterns for theory generation (Yin 2013). Cross-case analysis was applied as the researcher identified similarities and differences in the management course offerings of the seminaries and the churches which do in-house training of their pastors.

The credibility of every study depends on the validity and reliability of its findings and conclusions. This means that research can only be characterized as reliable only if the measures yield the same results on other occasions, if similar observations can be reached by other observers and there is transparency in how sense was made from the

raw data (Easterby-Smith *et al.*, 2008). This suggests that the reliable research is transparent and replicable. On the other hand, the validity of a study is achieved only if the research findings achieve their initial objectives and addresses the research question appropriately (Sapsford and Jupp 1996). Validity is the most important quality of a measured dependent variable because it refers to the extent to which an empirical measure accurately reflects the concept it is intended to measure, yielding scores that reflect the true variables being measured (Saunders *et al.*, 2009).

This study achieved research reliability and results validity through the application of several approaches. Firstly, the researcher clearly outlined the examined research variables by employing the funnelling strategy, which contributes to a high extent of research transparency and internal validity (Hofstee 2009). Secondly the researcher outlined a contextual framework, which can be suggested to contribute to the external validity of the research findings (Saunders *et al.*, 2009). In other words, the researcher provided a transparent framework to guide other research attempts in achieving the same results on different occasions. Finally, the researcher achieved reliability and credibility by gathering information from the pastors, Senior Pastors and Seminary Deans who are more knowledgeable concerning the programmes offered for pastoral preparation. This provided the researcher with useful guidance and avoided the researcher's failure in addressing key research themes making sure there was a sufficient number of perspectives that had been included (Sekaran 2000). The research is also generalizable because the sample was sufficiently diverse to allow inferences to other contexts (Easterby-Smith *et al.*, 2008).



According to Miles and Huberman (1994) and Yin (2013) case study research can achieve rigor of validity through five approaches namely; construct validity, confirmability, credibility, transferability and reliability. This case study research achieved construct validity by developing its constructs through a literature review and use of triangulation (Denzin & Lincoln 1994, Marshall & Rossman 1989, Patton 2002). Triangulation allowed for a stronger substantiation of constructs and propositions that assisted in generalisability of the research findings. An interview guide was developed to provide for a systematic process in the interviews (Yin 2013). The subjectivity inherent in the case study method was reduced through a prudent selection of the case study interviewees, a structured interview process, and a structured process for recording, transcribing and interpreting the data (Lincoln and Guba 1985). Thus, a chain of evidence was established from the beginning of the research questions through data collection to the final conclusions (Yin 2013).

Since construct validity is the extent to which a questionnaire or test measures a theoretical concept or trait, a confirmatory factor analysis was used to determine the construct validity for each subsection of the questionnaire and to validate the questionnaire as a way of performing reliability testing (Field 2005). Research has demonstrated that the general rule of thumb of the minimum sample size when it comes to performing factor analysis are not valid and useful as the minimum level of sample size is dependent on communality of the variables (Henson and Roberts 2006, Preacher and MacCallum 2002). If communalities are high, recovery of population factors in sample data are normally very good, almost regardless of sample size (MacCallum *et al.* 2001). Communalities should all be greater than 0.6 or the average level of communality to be at least 0.7, and if components possess four or more variables with loading above 0.60, the pattern may be

interpreted whatever the sample size used (ibid.). Since the average of the commonalities for this study was 0.71 and two of the six components extracted possess more than four variables with loading above 0.60, then factor analysis was appropriate.

To further determine whether a factor analysis was appropriate for the questionnaire, Kaiser-Meyer-Olkin Measure of Sample Adequacy (MSA), was computed for each confirmatory factor, to get an indication of the inter correlations among the variables. An MSA of 0.60 indicated that the data were sufficient and appropriate for analysis because only values which lie below 0.5 indicate unacceptability of data (Field 2005). The Bartlette's test of sphericity (520.321) and  $p < 0.001$  showed that there were patterned relationships between the items and using an eigen value cut-off of 1.0 there were six factors that explained a cumulative variance of 70.67%. The scree plot confirmed the findings of retaining six factors. The final communalities indicate the range of low and high contributions that each variable is making to the specific factor. The results of the factor analysis are presented in Table 2.

**Table 2:** *Exploratory factor analysis* (Own calculations from survey, 2017)

Items	MSA	Number of factors retained	Percentage of variance explained
7a-7e	0.661	2	73.16
8a-8h	0.777	2	57.15
15a-15g	0.662	2	60.14
7a-7e, 8a-8h, 15a-15g	0.604	6	70.67

From Table 2 it is evident from the initial exploratory factor analysis, that the factors retained from the different subsections of the questionnaire were two factors each making it a total of six factors extracted in total. The factors retained explain the percentage of

variation in this situation and yielded different MSA scores. The MSA for the different sub sections of section of the questionnaire varied between 0.66 and 0.78, while for the sum of questions 7, 8 and 15 of the questionnaires, the MSA score was 0.60, which is an indication that the data were appropriate for data analysis. All the factor analyses were therefore trustworthy and construct validity on all constructs was confirmed. The significance of the above confirmatory factor analysis is the fact that it demonstrated the high level of construct validity of question items in being homogenous in relation to each other.

To ensure confirmability the researcher developed a record of data collected to allow other researchers to observe a chain of evidence from the evidence presented to the conclusions drawn (Miles and Huberman 1994). Credibility was established using within-case analysis, cross-case analysis, assurance of internal coherence of findings and expert peer review to demonstrate the internal consistency of the information collected. Further activities to demonstrate credibility included precisely distinguishing the unit of analysis, linking of the analysis to prior theory identified in a literature review (Yin 2013) and making clear the researcher's assumptions about their world view and theoretical orientation (Merriam 1988).

Transferability was achieved using a multiple case studies methodology and by comparison of evidence (Lincoln and Guba 1985, Miles and Huberman 1984). Multiple case studies were used to develop analytic generalization through replication logic and/or corroboration of findings to achieve transferability (Eisenhardt 1989, Yin 2013). The researcher used cross-case analysis and made use of the procedures for coding and analysis (Lincoln and Guba 1985, Miles and Huberman 1994). To achieve reliability in case study research demands the enactment of case study procedures to identify a documentation

trail. The researcher thus established a case study protocol during data collection and established a case study data base to allow for other researchers to access the files (Eisenhardt 1989, Merriam 1988). This provided for greater cohesion of explanation which resulted in a more reliable understanding of the nature of the phenomenon under investigation (Hirschman 1986).

Access and ethics are critical aspects for the success of any research project. Cooper and Schindler (2008:34) define ethics as the 'norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others'. Saunders *et al.* (2009:183) define ethics as 'the appropriateness of one's behaviour in relation to the rights of those who become the subject of one's work or are affected by it'. This means the researcher needs to be aware of issues to do with how to formulate and clarify the research topic, design the research and gain access, collect data, process and store the data, analyse data and write up the research findings in a moral and responsible way because ethical concerns can occur at all stages of the research project. The fact that this research was qualitative in nature it meant that it would lead to a greater range of ethical concerns in comparison with quantitative research, although all research methods have specific ethical issues associated with them. The following ethical considerations were adhered to in this research:

- EFZ and ZCEPC granted their consent and approved for the researcher to use their databases to identify the different churches registered under them. Of the churches on the lists 43 participated in the research while the rest did not respond to the request to participate. A few churches had as many as two or three pastors from different assemblies within the same ministry responding to the questionnaires, while most had only one pastor from the ministry participating.

- An introductory letter was e-mailed to the respondents to encourage their participation in the research. Information was provided to the participant concerning the nature of the study, participation requirements, confidentiality and contact information of the researcher (Appendix C). The right to professional privacy and confidentiality of information obtained was also guaranteed by a written statement in the cover letter (Appendix A).
- The researcher made sure that the research design did not subject the research population to any risk of unusual stress, embarrassment or loss of self-esteem, harm or any other material disadvantage (Bryman and Bell 2014). Data were collected only from a research population that knew they were the subject of research and had consented (Rose *et al.* 2015).
- Consent, permission and approval for the research were obtained from the head of each Seminary and Church. Furthermore, each participant and respondent gave their informed consent to participate in the research and signed a consent form (Appendix D).
- The researcher sought informed consent by being open and honest and did not use deception, making sure not to exaggerate the likely benefits of the research for the participating seminaries, churches and Pastors, at the same time respecting the participants' rights to privacy at all stages of the research (Creswell 2014, Easterby-Smith *et al.* 2008, Saunders *et al.* 2009, Zikmund 2000).
- The research was conducted in accordance with the ethical requirements to report the findings in a comprehensive and honest way. The researcher made sure not to fabricate or misrepresent the statistical accuracy of any data as this is totally an unacceptable and unethical course of action

(Neuman 2005). Thus, the researcher maintained objectivity during the data collection, analysing and reporting stages (Habib *et al.* 2014).

- The researcher ensured that participants and respondents would remain anonymous in relation to anything referred to in the study report unless the researcher is given the participants' explicit permission to do otherwise (Saunders *et al.* 2009). The researcher thus used secondary data to protect the identities of those who contributed to the data collection or who were named within it (Cowton 1998). As such the research was based on genuinely anonymised data.
- Caution was taken to avoid any harm to participants in the light of sensitivity of the research theme concerning responses about the management competencies required by pastors to manage the church and which should inform management programmes for pastor training in accordance with the diverse needs of the pastoral preparation programmes.

To address the research questions fully, an outline of the research methodology as influenced and structured by the research 'onion' was given in this chapter. There was a detailed explanation of the research process, which highlighted how the data were to be collected, the choice of methods to be used and their justification. The research philosophy was pragmatism with the ontology being relativism and the epistemology being interpretivism. The research approach was abductive, and the strategy employed was that of a case study which allows for multiple data collection methods hence a mixed methods model was applied within a cross sectional time horizon. The data were thus collected through self-administered questionnaires filled in by pastors from Pentecostal and Evangelical churches, face-to-face interviews with Seminary Deans and Senior Pastors from churches

which do in-house training of pastors, and lastly the collection of seminary syllabuses and pastoral training manuals. The data were collected through the non-probability sampling method of purposive sampling and analysed through inductive analysis combined with some deductive analysis, content analysis, within-case and cross-case analysis. The limitations of the chosen methods and how their effects are minimized were also specified. The next chapter will focus on the data presentation, discussion and interpretation of the research findings.