CHAPTER 3: STUDY DESIGN AND METHODOLOGY

This chapter critically examines the research methodology adopted in the study. Insights are had into the research paradigm, research design, research instrument, and data collection methods. The sample size, the sample selection process, the data analysis procedures, and the ethical considerations employed by the researcher during the data gathering process are also examined.

A research design provides unity and coherence to a research inquiry. It outlines some logical procedures which enable one to obtain evidence to determine the degree to which a theoretical hypothesis is correct (Khotari, 2004). It comprises three main sections which are: study structure, plan of action, and resource estimation. Research designs give continuity during the inquiry and ensure optimum use of resources. A good research design should have a statement of its purpose that is clear (Dhondyal, 2007). As argued by Creswell (2005), scholarly research is characterized by the type of study conducted. The type of study one conducts depends on the problem to be solved, the research questions, the body of knowledge, and the available data. The types of research designs include descriptive (and the subtypes are case study, naturalistic observation, and survey), correlational, semi-experimental, experimental, and review, and a few will be examined in detail below:

Descriptive research design relies on observation as means of collecting data. Walliman (2011) posits that observation can take many forms including interviews, questionnaire distribution, visual records made, and the recording of sounds and smells. This entails describing everything one comes across in the field.

Correlation entails examining relationships between variables. There are two broad ideas here: an association of concepts where there is influence over the other or a causal effect where there is a cause-and-effect relationship. Walliman (2011) argues how a cause is the “independent variable” while the affected is called the” dependent variable”. In summary, a correlation between two variables can either be none, positive (increase in one increases the other), or negative (increase in one decrease the other).

The comparative design is used to compare past and present events or different parallel situations. Where possible, this design is used to make predictions into the future based on the trends established by past and current events, assuming that if two events are similar in other circumstances over time and space, they could be similar in others too (Walliman, 2011). This means circumstances promoting the occurrence of certain events have to be explored, identified, and recorded so that planners and implementers may know the likely effects of certain decisions and actions.

The study used a descriptive approach since the intention is to find out women's opinions, attitudes, and expectations from development policy. The observation method was employed during the data collection process. This is a strong characteristic of the qualitative inquiry which ensures that no non-verbal cues and responses are missed from the respondents to get the maximum meaningful results from the women. A case study research design was used. The research involved questionnaires, interviews, and focus group discussions with respondents selected from the area under study. The two districts of Gokwe were represented by three areas namely: Gokwe Town, villages from Gokwe North and Gokwe South, and Nembudziya Growth Point.

The major research question involves ascertaining whether women as a group have benefited in any way from development policies implemented in Zimbabwe, particularly those women in smaller remote towns and marginalised rural areas like Gokwe. Studying a small group of women encourages thorough investigations on a micro-level in which the perceptions and indicators of development can be identified comparatively. A descriptive approach was then used to analyse and interpret data collected from the views and attitudes of rural people towards the way development is done in Zimbabwe. The research tools were prepared using the objectives of the study so that each question asked directly addresses the objectives, thus avoiding a derailment of the research target which is common in data collection procedures.

Research is the seeking of knowledge through methodological processes. It is a systematic method of inquiry that aids in adding to one's body of knowledge or to answering outstanding questions in various disciplines. How research is conducted depends on the research philosophy chosen, the strategy or design, and the instruments chosen. Research philosophy is a belief about the way data should be gathered, analysed, and used. The two major philosophies of research are therefore the positivist (also known as scientific) and the interpretivist which is also known as anti-positivist. Williams (2007) avers that the research process is systematic, not just random. This is shown by the way the objective is defined, the way data are managed, and the presentation of findings that occur within established frameworks and guidelines. The frameworks and guidelines help researchers to get an indication of what to include in the research, how to perform the research, and what types of inferences are most likely, with variations though from one research to the other.

Williams (2007) is of the view that positivists believe that reality is stable, observable, and can be described from an objective point of view without much interference with their natural state of occurrence. They contend that phenomena should be isolated and that observations should be repeatable, while relationships can be inferred and interpreted by manipulation of the reality of an independent variable. On the other hand, Interpretivists believe that reality can only be understood through the subjective interpretation of and intervention on situations. The component of studying phenomena in their natural environment, without having to separate them from their environment is a stronghold of interpretivism. They acknowledge the fact that it is inevitable for scientists to affect or influence the phenomenon they study (Glassgow, 200; 5 Burton, 2007; Mkanzi and Cheampok, 2012).

The study includes elements of both positivist and interpretivist approaches. The rationality behind the choice of research philosophy includes avoidance of methodological monism (the insistence of using a single method), emphasising the accurate observation that no method is intrinsically better than the other, and taking advantage of the benefits of triangulation improves the quality of research.

The three common research approaches used when conducting research are quantitative, qualitative, and mixed methods which are all discussed briefly in the chapter. This research used mixed methods. Quantitative research mainly uses statistics (inferential and descriptive), thus this heavy dependence on mathematics has led it to be shunned by some social scientists arguing that it is unrealistic, difficult, and unreliable since the world does not revolve around figures and mathematics only. Other scholars like Leedy and Ormrod (2001) argue that quantitative research is very specific in surveying and experimenting because it builds upon existing theories. While maintaining the assumptions of an empiricist paradigm, quantitative research can be used in response to variables within the research, yielding very objective results since the researcher is not interfering with the objects of the study.

The results from quantitative research can be generalised since the same experiments can be repeated with the same variables and produce the same results. Quantitative research is well known for being objective since the researcher does not manipulate the results of the inquiry. Rather, all results are calculated using formulae where the researcher does not have control. There is also room for hypothesis testing, thus a fact is either rejected or accepted, with no room for doubts or assumptions. In addition, quantitative research is well known for validity, reliability, precision, and verifiability because of the nature of statistics and numbers which can be calculated by scientific formulae. In addition, the findings from quantitative research can be predictive, explanatory, or confirming (Williams, 2007).

Quantitative research has been accused of being hard and fixed, a characteristic which some researchers are uncomfortable with since real life is not fixed or cast in stone through mathematical formulae. As argued by Silverman (2000), statistics may even be treated with suspicion, with some researchers being accused of playing around with figures. Change of one figure changes the outcome of a whole inquiry. An example can be cited of how elections results have been rigged in many countries which claim to be practicing democracy. In addition, qualitative researchers feel that dependence on purely quantitative methods may neglect the social and cultural constructions like attitudes and other interesting phenomena and activities undertaken by people in their day-to-day lives. These can never be picked by a mathematical formula but through direct personal interaction with the respondents.

Qualitative research concentrates on understanding an individual's perception and understanding of the world, seeking personal insights rather than statistical explanations. It is a holistic approach that involves discovery, with purposeful use of description, explanation, and interpretation of collected data. It is about going out there to observe and find out how others perceive the world through their behaviours and attitudes that are expressed facially or through different ethnic languages which are never the same for everyone. This heterogeneity can only be exhumed from the field through direct contact with the interviewees and asking in flexible ways to suit the situation at hand. Qualitative research can be affirmed through several paradigms and frameworks, for example, interpretivism, phenomenological, descriptive, or ethnography. The qualitative paradigm argues how the world is complex, ever-changing, and multiple in its meanings. Since the researcher is the fundamental part of the research, one's views are highly and most likely to affect the results. The researcher chooses the methods, size, and type of sample population using their views and perceptions; thus, subjectivity can never be eliminated in research.

Qualitative research has been chosen in addition to quantitative research due to its ability to value people and real-world events rather than numbers. Flexibility enables the researcher to suit the situation on the ground, thus giving room to manoeuvre through challenges there and then. For example, if one encounters language challenges, finding an interpreter may be easy without changing the research instrument or the objectives of the study. Qualitative research prefers to understand the meanings of/ and document the world from points of view of those studied, giving them a voice and a value without simply treating them as subjects of research but as valuable dignified people with ideas, visions, and perceptions. This helps the researcher to come out with real, current results which contribute to contemporary knowledge rather than having a preconceived idea (hypothesis) to prove wrong or right.

Critics of qualitative research consider it as a warm-up to real research, as generating additional data to add to real data. Due to a lack of hypothesis, the critics say one goes into the field without knowledge of what to seek or what to find. Qualitative research, therefore, has the disadvantage of relying on the subjective interpretations of the researcher which may vary from person to person even if the research instrument and research areas are the same. Sometimes inexperienced researchers may not go out into the field and the data at hand may be difficult to prove right or wrong since there is no fixed mathematical formula to use, thus too much flexibility is one disadvantage that threatens the validity, reliability, and verifiability of results from qualitative studies.

The study used mixed methods to avert the disadvantages and harness the advantages of each of the above research approaches. This is done in a triangulation method where both quantitative and qualitative techniques are employed for higher levels of validity and reliability.

The Survey research method is suitable for both quantitative research and qualitative approaches. Questionnaires are the most commonly used tools in this method, and they can either be close-ended or open-ended. While close-ended questionnaires are short and precise, helping the researcher to stay focused on the objectives and research path required by the researcher, they have the disadvantage of limiting the respondents' views. Open-ended questions solve the problem and allow the respondent to express their original way of thinking which should not be tampered with. However, open-ended questions may be misunderstood and the respondent may derail the objectives of the study by including other issues outside the jurisdiction of the study. Survey research has been chosen because it provides ideal conditions for the exploration of individual differences and group differences, thus allowing for the heterogeneity within homogeneity of the population under study. Surveys are however expensive and time-consuming to carry out.

Wegner (1993) is of the view that a population consists of all the possible observations of the random variable under study. A sample is a subset of observations possible. Walliman (2011) describes a population as a total quantity of things and objects under study (people, organisations, or events) without necessarily referring to people alone as is often mistaken by some researchers. Certain groups of objects may be of interest to one's research out of the whole population, for example in the study, the women in Gokwe's two districts, particularly those in Gokwe town, Nembudziya Growth Point, and nearby villages are of interest. These groups of interest become the sampling frame and a sample is eventually drawn out of it. This relationship between a population, a sample frame, and a sample as shown in Figure 3.1 below.

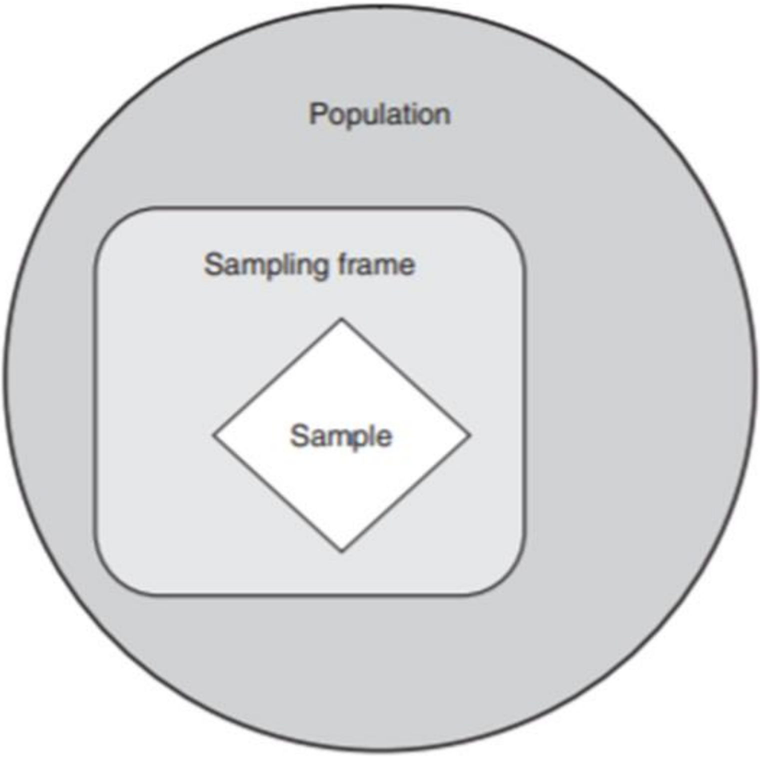

Figure 3.1: Population, Sampling Frame, Sample(Walliman, 2011: 94)

A sample should therefore be chosen with enough objectivity to be able to represent the characteristics in the whole population, especially those that satisfy the objectives of the inquiry. Random sampling was used because it is unbiased and has a strong characteristic of giving each unit an equal chance of being selected.

The study used the following sample size determination formula by Yamane (1967):

$$n = \frac{\mathrm{N}}{1+\mathrm{N}(\mathrm{e})^2}$$

Where: n=sample size; N= Population size; e = level of precision or sampling error (+/-5%)

Singh and Masuku (2014:15) used the same formula to determine sample size in their study, thus similarly the study uses the same formula to determine the sample of a known population of women in Gokwe District. Gokwe South, Gokwe North, and Gokwe Town Center have female populations of 158256, 123885, and 13140 respectively, giving Gokwe District a total of 295281 women (ZIMSTATS 2012). From the formula above, the sample is calculated as follows:

$$n = \frac{2951}{1+\mathrm{N}(0.05)^2}=399$$

The statistical formula by Yamane 1977 was used by the researcher as a guideline to the number of respondents who can be used to give a true representation of the female population of Gokwe District. The researcher, therefore, issued out 399 questionnaires randomly to the women in the identified sectors of the sample frame. There was a 65% response rate that was attributed to the challenges associated with Covid-19 movement restrictions in the years 2020 and 2021. The study, therefore, relied on these returns for statistical analysis in the form of tables and graphs presented in Chapter 4. Singh and Masuku (2014) aver that the minimum number of respondents in any survey should be 100 while the maximum should be 1000. The study used a total of 360 respondents from triangulation of the three methods and observes how the number of respondents is thus within the agreed range for valid and reliable results and representing the population under study.

The study conducted 4 focus group discussions using face-to-face interviews and discussions in 2019 and the other 4 through teleconferencing in 2020. Each focus group comprised 10 participants, to give a total of 80 participants. An additional 20 women were selected for interviews from the three geographical settings under study which are Gokwe Town (1 woman and 1 man), Nembudziya Growth Point (2 women), and 4 villages from Gokwe North and Gokwe South (4 women from each village). Two villages were selected from Gokwe North while the other villages were selected from Gokwe South for the convenience of the researcher. The focus group discussions and the interviews managed to reach a total of 100 women from the two districts of Gokwe. The qualitative research was done to validate the responses which were obtained from the quantitative research and increase the reliability of the research findings.

The major types of sampling are probability and non-probability sampling. Probability sampling uses random methods to select the sample. The selection should be such that every member of the sample frame carries an equal opportunity of being selected to minimize bias. Random sampling, stratified sampling, and cluster sampling are the techniques commonly used in research (Walliman, 2011). Non-probability sampling is a non-random sampling method that can be used for certain studies, like quick surveys, where it is difficult to reach every member of the population due to factors like accessibility, finances, or time. However, it has its challenges and provides a weak basis for generalisation. The techniques involve accidental, quota, convenience, and snowball sampling.

The study used stratified sampling; a technique used in probability sampling. This was done to choose women groups that represent the whole population, to cover heterogeneity within homogeneity. While women from the whole region of Gokwe may be possessing the same characteristics because of geographical location, differences may be found within the group due to different exposures for those women in rural setups as opposed to those in urban setups (Gokwe Town Centre) and semi-urban set-up (Nembudziya Growth Point).

Sources of data during any study can be grouped into internal, external, secondary, and primary sources. Internal data are generated within the organisation during normal business operations (Williams 2007). On the other hand, external data are generated outside the organisation from other private institutions, Government departments, individuals, or communities. The cost of an acquisition depends on the depth required and the distances involved to get to the source.

The study made use of both primary and secondary data sources.

Data collected for the first time from their origin, in its natural state without being grouped or categorised are called primary data. They have the advantage of offering direct solutions to the problem at hand since it is sought to satisfy the current research questions and objectives of the study. It is highly recommended because the researcher is hands-on in the field, giving the researcher a sense of owning the data and a sense of originality rather than relying on what other researchers have collected. This provides the researcher some personal experience in data collection. However, it can be time-consuming and expensive to collect that may be a challenge for most researchers. The study used questionnaires, interviews, and focus group discussions to collect primary data.

Data that are already processed, presented in graphs and tables, or data already published by other researchers is called secondary data. Secondary data are already in existence in the public domain. It is already grouped, analysed, and categorised. It would have been collected for a particular purpose other than for the problem at hand. The advantage is that there is no need for the researcher to start data collection on the same subject since there is information already available. It is, therefore, less time-consuming and less expensive to collect. However, the disadvantages of relying on secondary data are that it may not be problem-specific, and could be outdated and inappropriate for the problem at hand. In addition, its quality may be difficult to assess. Manipulating it further may not be possible since it is the work of other scholars already in the public domain, thus giving the researcher restrictions except to make comments on it.

The study utilised use of questionnaires, interviews, and focus group discussions to gather data from the women in Gokwe North and Gokwe South districts. Beiske (2002) defines a questionnaire as a quantitative research instrument, with a list of written questions that can be completed in one of two basic ways. The respondents can be asked to complete the questionnaire in the absence of the researcher, or the respondents can be asked to give answers while the researcher completes the questionnaire. The study used questionnaires as the main data collection method. The questionnaire was used because more respondents needed to be reached, for the generalisability of the results to women in other districts other than the Gokwe region. This quantitative method has the advantage of reducing subjectivity and bias through statistical calculations, thus increasing the validity and reliability of the results.

For the study, the questionnaire was structured into 6 sections. Section A comprised of questions to do with respondent details. Section B sought the level of awareness of policies implemented on women in Gokwe districts as specified by objective 1 in the study, while section C sought responses on factors influencing development policy (objective 2). Section D sought responses on the effects of development policy on women in the Gokwe region in terms of empowerment, economic engagement, and inclusiveness (objective 3), while section E concentrated on the benefits of development policy to women in Gokwe (objective 4). Lastly, section F sought views and opinions from the respondents regarding effective and sustainable development policy formulation and implementation.

The researcher administered the questionnaires personally to maximize the response rate, reduce the number of trips made to the study area, and mitigate the current unavailability of the postal services in the country. Both open-ended and close-ended questions were used. Close-ended questions were the majority and used the 5-point Likert scale. This was done as a way to keep the question on track and in line with the objectives of the study. Open-ended questions were used as a follow-up to close-ended questions, especially in areas where some details or explanations were required. The questionnaires were pre-tested on a selected number of 10 women in the Gokwe South

District before the actual data collection period to check the levels of understanding and how usable the questionnaire was.

An interview, as argued by Wegener (1993,) is a method used to source primary data responses through direct questioning. It is the most common type of data collection method. The interviews can be face-to-face, telephone, or postal. Face-to-face interviews have many advantages in qualitative inquiry because they give the researcher a chance to observe non-verbal cues which are important in examining attitudes. The study used face-to-face interviews and telephone interviews when respondents were difficult to reach during the data gathering process. Due to COVID-19 restrictions on movement and gatherings in the years 2020 and 2021, telephone interviews were the major data gathering process as a mitigation measure against the challenges. Structured questions have the advantage of providing for compatibility of responses so that the respondents are giving their opinion on the same questions. A sample of 20 women was chosen from each geographical location described in the study for qualitative research. The interviews were mainly chosen to validate the quantitative technique that is the questionnaire in the study.

The same questions used in the questionnaires were asked during the interviews as a way of cross-checking the levels of validity, reliability, and consistency of the answers. Interviewing has been chosen for the study due to its flexibility (can be used with illiterates and literates) and ability to provide the researcher an opportunity to interact with the respondents and therefore be able to extract other non-verbal cues and attitudes which have always been missed by other research methods.

Since the study is focusing on rural livelihoods and a progressive analysis and measurement of change in the standards of living and survival strategies, observation was inevitable during the data gathering process since the researcher was in contact with the respondents for one week during each of the four visits done, enabling an insight into the lifestyles and patterns of livelihoods of the women, another advantage in using qualitative research methods to validate responses from the quantitative techniques. The study found it critical to observe the way the people live, and then use personal evaluation to make a comparison with the responses from the respondents. It was therefore inevitable to combine interviewing and observation during the data gathering process (Kawulich, 2005).

Focus Group Discussion is a carefully designed qualitative research method that helps to find out people's views and attitudes on ideas and events when they are gathered, in a group setting through discussion as compared to when they are individuals (Oliveira and Freitas 1998, Villard undated). Agadoni (2017) suggests many types of Focus Group Discussions which include: two-way dual moderator, client participant, and respondent moderator. Due to the proximity of the respondents in a rural setup, it became easy to mobilize people through the local traditional leadership. The reason for using focus group discussion was to validate the answers which were given by the women in their capacity, and compare the confidence levels in the rural women when they are in groups as compared to when they are alone. The study used 8 focus groups which consisted of 10 women each.

Discussions were conducted in Gokwe town, Nembudziya Growth Point, and the surrounding villages. However, due to COVID-19 movement restriction challenges, teleconferencing was used with half of the respondents, while the other half was done before the strict regulations on movement were imposed in March 2020. The participants were mainly women in the age ranges of 18 years to 70 years, engaged in different economic activities. The focus group discussion method was chosen because of its strengths that include flexibility in questioning, encouragement of dialogue, being fast and inexpensive and generating enthusiasm and probing amongst participants which provides a variety of ideas that can be used to generate hypotheses. However, the focus group discussion has weaknesses like being misused by poorly trained researchers, being tedious and time-intensive data interpretation, and the possibility of overgeneralisation of results (Villard undated). These challenges were overcome by the use of triangulation during the data gathering process since observation, questionnaires, and interviews were also employed by the study to increase the validity and reliability of the findings.

Data collected from any inquiry can be analysed either qualitatively or quantitatively. Qualitative analysis of data involves reducing and making sense out of much information from different sources so that impressions and themes that shed light on a research question can emerge. It involves taking descriptive information (from interviews, audios, and surveys), giving an explanation or interpretation, and reporting it in a systematic, transparent and structured way. Qualitative data analysis has sevenfold aims that are: to detect patterns in the data, to identify deviants and oddities, to compare to theory, and detection of conformance. If the scientific method is used, the other aims are, to identify groups (classification), to compare and contrast groups, to construct and test the model (validation).

Thematic analysis is a qualitative analysis method that is used to effectively analyse opinions and ideas from respondents as the accounts are provided during data collection. It deals with emerging themes, identifying and reporting patterns and identification of recurring messages (Costa *et al.*, 2016). There are types or approaches to thematic analysis which are commonly used by researchers and these include inductive approach, deductive approach, semantic approach, and latent approach. When using inductive thematic analysis, the researcher allows the data to determine the themes, but in a deductive approach, the researcher comes to the data with some preconceived themes. A semantic approach involves analysing the explicit content of the data and detecting meanings of keywords while a latent approach involves reading into the subtext and making assumptions underlying the data. (Keen 2020).

The study employed deductive thematic analysis based on the wide range of literature reviewed on Gokwe. Caufield (2010) and Nowell *et al.*, (2017) concur on 6 steps used by researchers in thematic analysis:

- Familiarising with the data;
- Generation of initial codes;
- Searching for themes;
- Reviewing of themes;
- Definition and naming themes;
- Production of the final report.

These steps were followed by the study to analyse the data from the field using interviews, focus group discussions, and teleconferencing qualitative methods.

Quantitative analysis involves the statistical analysis of the figures collected during the data gathering process. Statistics help to turn quantitative data into useful and meaningful information to help with decision-making and can be descriptive or inferential. Descriptive statistics help to summarise data, but inferential statistics assist in identifying statistically significant differences between groups of data. For the study, descriptive statistics were emphasised so that the women can be categorised as argued by their status and situations prevailing economically and socially. For the sake of effective analysis, categorical and/or numerical variables were used, enabling the information to be presented in frequency tables and or centre and spread of data. Correlation analysis and factor analysis are the main quantitative data analysis procedures performed in the study in addition to qualitative thematic data analysis.

For the quantitative data collected through the questionnaire, the study employed a statistical correlation analysis and the results were displayed on a correlation matrix. A correlation matrix is an array of numbers that is rectangular giving correlation coefficients between a single variable and every other variable in the investigation. The correlation among the factors assessing the level of awareness in rural women in terms of development policies implemented for them is computed in the study using Spearman's method. As argued by Ratner (2011:2), in Masango (2019), correlations that range from 0 to 0.4 are weak, 0.4 to 0.7 are moderate, while those correlation coefficients greater than 0.7 are strong. Results from the responses of each objective were subjected to the correlation analysis, thus a correlation analysis table is presented under results for each objective in Chapter 4 of the Study.

In addition, the Kaiser-Meyer-Olkin (KMO) was used to test the adequacy of the sample. (Ramrakhiani 2017). The prescribed adequate measure is 0.7. The whole point was to find out if the variables were correlated. Variables were said to be independent if they have a significance value less than 0.05%.

As argued by Conway and Huffcut (2003) in Bandon (2011), the Kaiser's Criterion was generally used in conducting factor analysis. In the Kaiser Criterion Method, the old version states that the cutoff point of the eigenvalues of the variables should be greater than 1, while the new version states that the eigenvalues should be greater than 0.8. From the criterion used 4 components were identified using the older version. The eigenvalues of the variables were grouped to bring out themes from the study. These emerging themes were then used to analyse the importance of each variable in influencing the way Government policies affected women in the Gokwe district. Exploratory Factor Analysis was carried out on the factors to identify the strongest components, and the results were shown in respective tables under each objective in Chapter 4.

The study employed thematic analysis to analyse qualitative data. This method makes use of emerging themes from the data. It enables the data to produce various themes from the responses collected during data collection. Inference and meanings were then drawn from the responses using the most commonly appearing phrases as suggested by Costa *et al.* (2020). The study approached the data with some preconceived ideas about women in the Gokwe district based on personal experience in the district and from related literature, thus a deductive approach was used in determining the themes from the data collected from the fieldwork. The themes were then presented in Chapter 4 and used in addition to the quantitative methods of data analysis to formulate conclusions from the study. This was a way of triangulation to establish validity.

Validity and reliability are two critical concepts of research that are used to evaluate the quality of research. They indicate how well a method, a process or a test has been conducted concerning the set goals and research instrument at hand. As argued by Haradhan (2017) and Singh (2014), validity and reliability tend to increase transparency thus decreasing opportunities to insert researcher bias. A researcher, therefore, enhances validity and reliability through the use of mixed methods to collect data. Heale and Twycross (2015) argue that measuring validity and reliability helps to achieve research rigor that is the extent to which the researcher worked to enhance research quality, while Price *et al.* (2015) add that the two are on-going essential processes in research.

Different scholars discuss different types of validity namely; sampling validity, content validity, construct validity, formative validity, and criterion validity (Taherdoost, 2016; Heale and Twycross, 2015; Phela and Wren, 2005; Price *et al.*, 2015). Formative validity is used to assess how well a measure or instrument can be used to provide information that improves the programme under study. This is based on the premise that not everything can be covered, so items need to be sampled from all of the domains. Sometimes there may be a need to seek the advice of experts so that a researcher may not use personal bias to sample the subjects.

Criterion-related validity is used to predict future results by comparing them with other instruments or criteria of interest. As argued by Heale and Twycross (2015), face validity, although not a scientific measure, may be used by assessing the face value or facial expressions of the stakeholders to ascertain that the measure appears to be assessing what it is supposed to measure. Construct validity is used to ensure that the measure is measuring what it is intended to measure and no other variables are being measured no matter how important they may appear to the researcher. Experts familiar with the tool can be asked to assess the measure and students can also be asked to give their feedback (Surbi, 2017; Harahan, 2017 and Kulhkarni, 2013).

Reliability denotes the consistency of a measure. Middleton (2020) observes how reliability tells one about the extent to which results can be reproduced under the same circumstances. Heale and Twycross (2015) posit that reliability is the extent to which a research instrument consistently produces the same results in the case of repeated experiments in the same situation. It is assessed by checking the consistency of results across time, under different observers, and across the test itself. When measurements provide stable, consistent, and repeatable results, it shows the reliability of the instrument. For example, if repeat measurement by a scale under the same conditions give repeatedly the same results, then it can be called reliable. Testing for reliability is important as it refers to the consistency across the parts of a measuring instrument (Taherdoost, 2016).

As argued by Phela and Wren (2005), there are 4 types of reliability which include Test-retest, parallel forms, inter-rater, and internal consistency reliability. Test-retest reliability is about repeating the same test twice to the same group of individuals to evaluate the tests for stability over time and the results from both tests can be correlated to check comparability and duplication.

The study performed Cronbach's Alpha test to ascertain the consistency of the data collection tool. Cronbach (1951)'s Alpha test has been reliably used by many researchers and results ranging from 0.7 to 1.0 are considered practicable for data collection (Drost, 2012 and Mudzingwa, 2019). The results of the alpha test are shown in Chapter 4 of the study. In addition, validity and reliability were enhanced by using triangulation that means using more than one method during data gathering. The various methods used are: questionnaires, focus group discussions, and interviews. The questionnaire, a quantitative technique, was cross-checked with an interview and a focus group discussion that are qualitative techniques to find out if the results are corresponding. This helped in double-checking if the responses being given by the respondents in the questionnaire correspond with the answers given by different respondents in the same study area. The purpose of triangulation, in addition to cross-validating data, is also to capture different dimensions of the same phenomenon (Kulkarni, 2013).

When undertaking research, it is essential to have an outline and adhere to ethical considerations and respect ethical principles so that there is respect for humanity and protection of both the researcher and the participants (Kruger, Ndebele, and Horn (2014). Ethical considerations are closely related to ethics, a concept in which the researcher must consider all forms of good behaviour before, during, and after research. It outlines guidelines about acceptable and unacceptable conduct during research- an 'ethos' or 'way of life' (Shah, 2011; Akaranga and Makau, 2016).

Ethical considerations give the researcher an element of originality, correctness, and blamelessness even years after the research has been conducted. As argued by Frankena (2001), it becomes more beneficial to act ethically than act in evil ways which has long-standing negative impacts. Various ethical considerations in research should be made in respect of the following: planning, plagiarism, fabrication, deception, voluntary and informed consent. In addition, anonymity and confidentiality should be respected and beneficence, and protection of vulnerable groups like children, mentally ill people, prisoners, the critically ill or dying patients (Fouka and Manttzrou, 2011:7).

During the data gathering process, informed consent was secured through the use of introduction letters from the institution. The researcher also sought permission from the local traditional leaders in each district the researcher was conducting research in the region of Gokwe. The researcher made efforts to source the necessary resources required in terms of finance, time, and effort to plan for this research. The intention was to produce an original document that would add value to the academic field through the contribution of new knowledge and interrogating existing facts and figures. Where secondary information was used from other scholars, enough acknowledgments were made through proper academic citations to avoid plagiarism, falsification, or fraud. All respondents to the interviews and participants in the focus group discussions were informed about the nature of the research. Confidentiality was promised and maintained by avoiding the use of the real names of the respondents. Live recordings were only taken with the full consent of the respondents after the purpose of the research and the use of the information was clearly stated to the participants.

This chapter has examined research methods in general and specific methods used in the study. An insight into the research paradigm was made by discussing the research design and different research methods. The qualitative and quantitative research approaches were discussed and the population, sample-frame and sample size determination techniques. The sources of data in general and the data analysis techniques were discussed including specific techniques used in the study. Issues to do with validity and reliability were also examined. The ethical considerations in general and also those specifically employed by the study were also discussed. The next chapter presents the findings of the study.