

CHAPTER 5

METHODOLOGY

5.1 INTRODUCTION

Research is a procedure whereby the researcher systematically strives to find (with verifiable facts) the answer to a question or the resolution of a problem (Kerlinger, 1986; Leedy, 1993; Merriam & Simpson, 1984). In order to ensure valid and reliable research results in this particular case, the researcher did her best to consistently abide by the following principles:

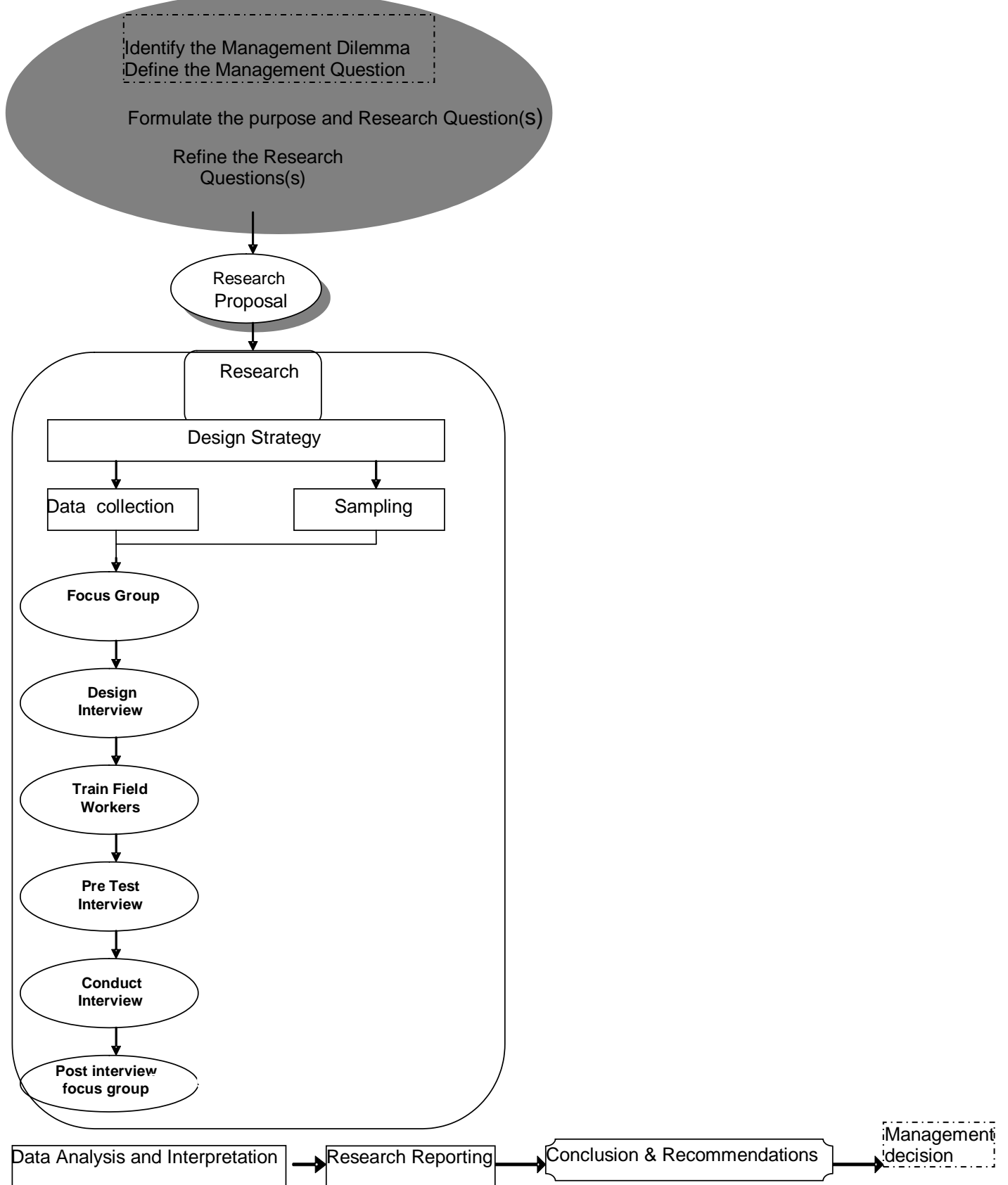
- the research can be replicated;
- the data can be generated in a standardised form;
- the data can be statistically interpreted
- the validity of results can be corroborated
- improved understanding can be obtained as a result of research findings; and
- Further research possibilities can be indicated.

Research methodology may be regarded as the application of scientific methods in the study of reality.

This chapter focuses on the research design, sampling processes, data collection steps for the qualitative (focus groups) and quantitative (structured interviews) research. The chapter ends with a discussion on the validity and reliability of the information gathered.

Figure 5.1 provides an overview of the research model used in this study. The various steps are subsequently discussed in detail in this chapter.

Figure 5.1: Overview of research process



5.2 RESEARCH DESIGN

The research design creates the framework for the analysis of the variables by constructing the study in such a way that it will attain the research purpose and produce answers to specific questions. This is referred to as the basic strategy of the research, which will allow the researchers to draw valid conclusions. The research design therefore has two purposes: to provide answers to research questions, and to control the experimental, extraneous and error variance (Mouton, 1996; Oppenheim, 1992).

The purpose of the study is to investigate rural consumer's perception on how corporate image in the Pharmaceutical sector in Bushbuckridge should be built up to improve health-care delivery. The most effective way to gather the required information is through survey research.

According to Shiffman & Kanuk, (2004: 29), the design of a research study is based on the purpose of the study; if descriptive information is needed, then a quantitative study is likely to be undertaken; if the purpose is to generate new ideas, then a qualitative study may be in order. For the purpose of this research it was decided to utilise both qualitative (Focus groups) and quantitative (structured interview) approaches. The focus group interviews' main purpose was to collect information to develop the structured interview. The structured interview was used mainly due to the large illiterate sample.

The differences between qualitative and quantitative research are presented in table 5.1

Table 5.1: The differences between qualitative and quantitative research.

Qualitative research	Quantitative research
Uses an inductive form of reasoning: develops concepts, insight and understanding from patterns of data.	Uses deductive form of reasoning: collects data to assess preconceived models, hypotheses and theories.
Uses a perspective of enquiry: derives meaning from the subject perspective.	Uses an ethic perspective: the meaning is determined by the researcher.
Is idiographic: aims to understand the	Is homothetic: aims to objectively

meaning that people attach to everyday life.	measure the social world, to test hypotheses and to predict and control human behavior.
Regards reality as subjective.	Sees reality as objective.
Captures and discovers meaning once researcher becomes immersed in data.	Test hypotheses that the research started off with.
Concepts are in the form of themes, motifs and categories.	Concepts are in the form of distinct variables.
Seeks to understand phenomena.	Seeks to control phenomena.
The research design is flexible and unique and evolves throughout the research process. There are no fixed steps that should be followed and therefore cannot be exactly replicated.	The research design is standardised according to a fixed procedure and can be replicated.
Data are analysed by extracting themes.	Data analysis is undertaken by means of standardised statistical procedures.
The unit of analysis is holistic, concentrating on the relationship between elements and contexts. The whole is always more than the sum of its parts.	The units of analysis are variables which are atomistic (elements that form part of a whole).
Subjective.	Objective.
Soft science.	Hard science.
Literature review may be done as study progresses or afterwards.	Literature review must be done early in the study.
Develops theory.	Test theory.
Multiple realities: focus is complex and broad.	One reality: focus is singular and narrow.
Discovery, description, understanding, shared interpretation.	Reduction, control, precision.
Interpretive.	Measurable.
Report contains rich narrative, individual	Report contains statistical analysis.

interpretation. Basic elements of analysis are words/ideas.	Basic elements of analysis are numbers.
Research is part of the process.	Research is separate.
Participants.	Subjects.
Context-dependant.	Context –free.
Research questions.	Hypotheses.
Reasoning is dialectic and inductive.	Reasoning is logistic and deductive.
Describes meanings, discovery.	Establishes relationships, causation.
Uses communication and observation.	Uses instruments.
Strives for uniqueness.	Strives for generalisation
Designs: phenomenological grounded in theory, ethnographic, historical, philosophical, case study.	Designs: descriptive, correlative, quasi-experimental, experimental.
Sample size is not a concern, seeks “information-rich” sample.	Sample size: 30-500 people

(Based on the interpretations of Babbie & Mounon (1998), Dezin & Lincoln (1994), Foley (2003), Bateman & Ferris (1984) and Neuman (1997)).

5.2.1 Survey research

The study employs the survey research method. This research method examines both large and small populations by selecting and studying samples chosen from the populations to determine the relative incidence, distribution and interrelations of sociological and psychological variables (Kerlinger, 1986). The survey method was applied in this research to determine the perceptions of the sample regarding the corporate image of the pharmaceutical organisations. Survey research is used here to obtain factual information and also allows the study of attitudes (Nachmias & Nachmias, 1981; Schnetler, Stoker, Dixon, Herbst & Geldenhuys, 1989).

Several methods exist by which survey research may be conducted. For the purposes of this study, the structured interview is applied.

5.3 SAMPLING

A population is the total collection of consumers in the Bushbuckridge area about which we wish to draw some inferences. The sample group is the subject from whom the data is gathered. It is also the unit of the study.

Several compelling reasons exist for representative sampling of a smaller research group than the population, including:

- lower cost
- greater accuracy of results;
- faster data collection; and
- availability of population elements

Cooper & Schindler (2001:164-165) argue that the ultimate test of a sample design is how well the chosen sample represents the characteristics of the population it stands for. In measurement terms, the sample must be representative. Validity of a sample depends on the following two considerations: accuracy and precision. An accurate sample is one with little or no bias or systematic variance. A sample with adequate precision has a sampling error within the acceptable limits for the study's purpose.

The eventual sample size of 850 out of a population of approx 500 000 rural consumers for this research study has been determined in cooperation with a statistician from the University of Pretoria.

5.3.1 Relevant sampling approaches and methods

Although probability sampling is generally the preferred method of sampling, both non-probability and probability sampling procedures are used in the study due to practical considerations. Therefore, a combination of cluster and convenience sampling is employed in this research. These two methods will be discussed in paragraph 5.4.1.1 and 5.4.1.2 (Cooper & Schindler, 2001).

The general aim of all sampling methods is to obtain a sample that is representative of the target population. Sampling methods can be categorised according to the approach they take to ensure that probability of a particular unit is being included. Most sampling methods attempt to select sample units in such a way that each has a definable probability of being chosen. Moreover, most of these methods in the probability sampling category also attempt to ensure that each unit has the same probability of being included as every other unit in the sample frame.

However limiting research conditions in this study, such as voluntary and limited participation of subjects, also necessitate the application of non probability sampling methods (www.deakin.edu.au).

Table 5.2: The difference between the probability and non probability sampling designs.

Element selection	Probability	Non-probability
Unrestricted	Simple random	Convenience
Restricted	Complex random	Purposive
	Systematic	Judgement
	Cluster	Quota
	Stratified	“Snowball”
	Double	

(Cooper & Schindler, 2001:166)

5.3.1.1 Cluster sampling

Cluster sampling is a probability sampling method used when "natural" groupings are evident in the population. The total population is divided into groups or clusters. Elements within a cluster should be as homogeneous as possible. But there is also heterogeneity between clusters. Each cluster is a small scale version of the total population of rural consumers (Wikipedia, 2006).

According to Cooper & Schindler (2001:187), the most important form of cluster sampling is area sampling. Area sampling methods has been applied to the Bushbuckridge population (Refer to paragraph 5.5.2.4).

Area sampling holds the following advantages for this study:

- It provides an unbiased estimate of population parameters;
- The cost per sample is relatively low and it is also easy to execute without an available population list.

Area sampling may also have disadvantages of which the most important is a lower statistical efficiency due to the requirement for subgroups to be homogeneous rather than heterogeneous.

In this study the following main clusters were formed;

- Thulamahashe
- Dwarsloop
- Acornhoek
- Bushbuckridge
- Shatale
- Mkhuhlu
- Agincourt
- Hluvukani
- Green Valley
- Kasteel

5.3.1.2 Convenience sampling

Convenience samples are non-probability samples with no restrictions on who is included in the sample. These are the least reliable but normally the most cost effective and easiest to conduct. Researchers or fieldworkers have the freedom to include in the sample whomever they find, thus the name 'convenience'. While a convenience sample has no

controls to ensure its precision, it is a useful procedure in probability-restrictive research such as in this study. (Cooper & Schindler 2001:164-165).

5.3.2 Specific criteria for the selection of individual participants

The participants in this study were included on the basis of the following inclusion criteria:

- Firstly, each participant must have had experience related to the phenomenon researched, i.e. experience as a buyer in the Pharmaceutical sector in Bushbuckrige.
- Secondly, the participants needed to be verbally fluent in their mother tongue and able to communicate their feelings, thoughts and perceptions in relation to the pharmaceutical products and services.
- Finally, the participants needed to express a willingness to be honest with the researcher.

5.3.3 The sample

Permission for the study was obtained from pharmacists in the area. All participants were interviewed in either their first or second language. 1021 structured interviews were received and catergorised according to quality. The final sample consisted of 850 African consumers of pharmaceutical products. Characteristics of the sample are discussed in Chapter 6.

5.4 DATA COLLECTION

Data collection in this study comprised the following steps:

- focus group interview,
- designing of the interview,
- selection and training of fieldworkers,
- pre-testing of structured interview,

- conducting the interview, and post focus group interviews.

These steps are discussed in detail in the following paragraphs.

5.4.1 Focus group interview

5.4.1.1 Content of the focus group interview

A focus group is a group of approximately 6 to 10 people who meet with a moderator to answer questions related to a particular research topic (http://www.steppingstones.ca/artman/publish/article_59.shtml).

The focus group interview is a frequently used data collection method. It provides a unique opportunity to experience the market at first hand.

The basic purpose of the focus group interview in this study was to listen to groups and individuals belonging to the rural survivalist consumer group and to gather specific information about their culture and their perceptions of the corporate image of the pharmaceutical sector (Cooper & Schindler, 2001:142)

The following main themes of corporate image were covered by the focus group interviews.

(i) Categories of the Bushbuckridge consumer culture in Bushbuckridge

The emphasis was on the following determinants of culture and how it influenced the corporate image

- social structure,
- time orientation
- religion,
- education,

- values,
- attitudes and beliefs,
- material culture,
- social system, and
- relationship patterns.

(ii) **Information on corporate image gathered with the focus group**

The purpose was to obtain the following information on the following aspects of corporate image:

- the preferred corporate conduct in Bushbuck Ridge in the pharmaceutical sector;
- what product features such as performance, conformity, durability, quality and style are most preferred; what perception is held on Western and African medicine.
- the best communication methods with specific focus on advertisements, publicity, promotions, direct mails and telemarketing;
- consumer perceptions regarding the price of medicine;
- the support that consumers require from a corporate company with specific focus on education, manuals, consumer training and consultation;
- consumer's perception of good service;
- the best distribution channel to reach the consumer;
- consumer's perception of a good sales force; and

5.4.1.2 Structure of the focus groups

The following common structure is applied for all the interviews:

- The focus group sessions lasted for 90 minutes.
- The focus groups were conducted in English and were translated by a translator into the participants first language.
- A single moderator presided.

- The interviews were semi-structured: certain questions were pre-planned; a general flow of logic was established for the issue to be discussed; time was allowed for follow-up or exploration of unexpected issues.

- The focus groups clusters were divided as follows:
 - 8 African women between 16-34 years
 - 8 African women between 35-64 years
 - 6 African women over 65 years
 - 8 African men between 16 – 34 years
 - 8 African men between 35 – 64 years
 - 6 African men over 65 years
 - 6 African men and women over the age of 16 years who are illiterate
 - 8 African men and women over the age of 16 years who have a secondary education level
 - 6 African men and women over the age of 16 years who have a tertiary education level

- A total number of 64 people were included in the focus interviews.

- The respondents may or may not know the general subject that was discussed and knew little else about the purpose of the session in advance.

- The respondents received compensation in the form of medicine for their participation.

- Each focus group met in the tea room of the Bushbuckridge pharmacy with the intent to maximise the comfort, ease of recording and observation of the group during the interview.

- The participants were seated in a school room seating. Refreshments were also served (Pheiffer Library, 2003)

5.4.1.3 Misuses of focus groups

The use of the focus group has become very popular. Even though the focus group is an excellent research method, it is frequently used inappropriately in situations in which another method would be more suitable. Some of these misuses include:

- using focus groups as inexpensive alternatives to quantitative research;
- using focus groups to produce data that they cannot accurately generate, such as estimated sales volumes;
- implementing more focus groups than necessary to achieve research objectives;
- taking the focus group technique to an extreme;
- taking the focus group too seriously;
- assuming that the focus group will make the decision for the researcher (Pfeiffer Library, 2003).

This study avoided such misuses by relying on the focus group as a method to determine themes for the structured interview.

5.4.1.4 Group dynamics and focus groups

The group dynamics may help to uncover certain issues for a variety of reasons such as:

- Members of these groups respond to and interact with one another, stimulating more ideas and achieving a wider range of insights.
- Members often find the experience enjoyable so they “warm up” and contribute, even after shaky starts.
- Random comments can set off a chain of reactions of other people’s comments.
- A feeling of safety in the enclosed peer environment can lead to more candid responses and a sense of strength drawn from the group (Pheiffer Library, 2003).

In this study the researcher noticed that it was the first time for most of the respondents to be included in a focus group. It was also observed that the focus group discussion stimulated more ideas and a chain of reactions were created.

5.4.1.5 Flow of a focus group

Although many variations are seen, certain elements are common to most focus groups. Often referred to as the “flow” of the session, the elements include an introduction, rapport building, in-depth investigation and closure. These steps were included in the study and are described in the paragraphs below.

(i) Introduction

The researcher opened with a general introduction of the research topic and the benefits that the study will have for the community. Focus group participants did not know for which organisation the data was gathered, but was aware that it was related to the pharmaceutical industry in Bushbuckridge. The researcher facilitated an introduction of all the participants and provided a set of ground rules ensuring that there was understanding and agreement of the ground rules among all participants.

(ii) Rapport building

The researcher began with easy-to-answer questions like how can you describe the culture and pharmaceutical industry in Bushbuckridge. These questions were not threatening and continued to shift to more specifics. During that time the researcher was forming a picture of the group by assessing the following: who speaks readily and who needs a bit of encouragement; who answers questions in detail and who may need to be prodded for more detail. In addition, the participants were also learning the group norms and expectations which increased their comfort level with the passage of time, the researcher used a flip chart and PowerPoint slides to help the participants maintain focus.

(iii) Closure

An initial or “false” closer was used to allow the researcher time to gather final questions from the participants. Then the researcher reconvened the group, asked for any final questions and provided a summary statement. The statement summarised the group’s opinions on corporate image in the pharmaceutical sector and on African consumer culture. This also allowed an opportunity for clarification. The researcher thanked the participants for their time and input (Pheiffer Library, 2003).

(iv) Developing questions

The success of the focus group is dependant on the questions asked: the difference between an answer and a solution is found in the question itself. The questions act as the stimulus for the respondents. This particular research followed the three primary rules that were applied when asking questions in the focus group:

- Short questions were asked for long answers in order to gain as much information as possible from the participants.
- Double-barrelled questions were avoided because people would not have known which one to answer.
- “Why” questions were avoided and ‘What’ questions were used to prompt more multi-dimensional responses, taking the participants’ thoughts in many directions.

The following questions were included:

What do you think are the most important leadership qualities?

When do you think a company is a good company?

How can pharmaceutical companies make a contribution to South Africa?

Do you believe in the extended family?

How can pharmacies assist the extended family?

What is a women’s role in society?

Which values do you believe in?

Do you prefer a male or female pharmacist?

Do you think that a man can have more than one wife?

How do you feel about time?

How do you describe a good employee?

What are the three most important things when you buy medicine?

What type of medicine do you believe in?

Where do you buy your medicine?

Which magazines, newspaper, radio stations and television stations do you listen to/read?

Who makes healthcare decisions in the family?

Which colour do you associate with a pharmacy or healthcare?

How do you prefer to pay for your medicine?

What kind of support should pharmaceutical companies offer customers?

What is the most important thing when you visit a pharmacy?

What are the most important qualities that a pharmacist should have?

What do you think are most important for employee satisfaction?

(v) Group rules

The focus group participants were given the ground rules in a clear and concise way at the start. This was the responsibility of the researcher. The following ground rules were included in this study:

- Participants were asked to speak clearly and one at a time.
- The researcher would want to hear from all participants.
- The discussion was to be open; commenting on or building upon one another's remarks was permissible.
- There was no wrong answer.

(vi) Following up on the focus group session

After the focus group session had ended, the researcher evaluated the data gathering process to identify procedural and other mistakes to be eliminated. The following questions were asked:

- What did I do well?
- What could I have done better?
- Did I obtain answers to the critical questions?
- Did I facilitate discussion?
- Did I demonstrate active listening?
- What did I learn from the group?
- Did I achieve the purpose of the study?

By rectifying the mistakes before the next focus group, the quality and representivity of the data was improved.

(vii) Main statements during the focus group interviews

- **Leadership qualities**
 - “Should be friendly”
 - “Should be a good example”
 - “Should have a sense of understanding”
 - “Should have good manners”
 - “Care for the needs of people”
 - “Patience”
 - “Democratic”
 - “Create jobs for people”
 - “Cares for the community”
 - “Trustworthy”
 - “Organised”

- “He must be married because you have more dignity”
- “Should be able to communicate effectively”
- “Must be friendly”
- “People should not be scared of him/her”
- “Should understand employees and treat them fairly”
- “Should motivate employees”
- “Intelligent”
- “Compassionate”

- **Company conduct**
 - “Excellent customer service”
 - “Enough products in stock”
 - “Care for patients”
 - “Evaluate the needs of the customers”
 - “Research first and identify needs of customers”
 - “Productive company”
 - “All products should be checked by SABS”
 - “Quality products and services”
 - “Company should be legal

- **Social responsibility**
 - “Crime”
 - “AIDS”
 - “Poverty”
 - “Unemployment”
 - “Lack of housing”
 - “Quality of education”
 - “Poor environment”
 - “Entrepreneurship”

- “Child abuse”
- “The government should not provide houses to young people, but rather supply them with jobs”
- “Crime comes from the police”
- “If AIDS can be cured the rest will follow”
- “Support for pensioners”

- **Extended family**
 - “I normally have a small family so that we can have a better quality of life and hopefully avoid financial problems”
 - “I have an extended family to help me through tough times”
 - “The extended family is working but is not good”
 - “The extended family does not work due to the high unemployment rate”
 - “Doesn’t work anymore”
 - “The more I earn, the more I tend to care for my immediate brothers and sisters as long as necessary”
 - “There is too much conflict in an extended family”
 - “I will only support my brother for a short period of time then he must find a job”
 - “According to our tradition, we rely on the extended family”

- **Women’s role in the society**
 - “A woman should belong to her husband’s family”
 - “A woman should not obtain her husband’s permission to go out”
 - “Tradition tends to oppress women”
 - “Girls and boys should be educated equally”
 - “More women should be handed leadership roles in society”
 - “Male pharmacists are not better than women pharmacists”
 - “Men pharmacists are better”
 - “Women are difficult”

- “A male assist a woman with education, but the women’s family doesn’t appreciate it”
 - “A women should be a leader at work, but a mother at home”
 - “A determined women can become a good passionate leader”
 - “ I prefer a male pharmacist because you can discuss your problems with a man”
 - “I feel more free to go to a woman pharmacist because they understand women’s needs.
 - “I prefer a male pharmacist because the are not judgemental”
 - “Women can be leaders if they have the right skills”
 - “Women do not know how to control themselves and can therefore not be leaders in a society”
 - “There are only certain jobs that women can do”
 - “I prefer to work with a male pharmacist because they are more patient and can keep secrets” Women gossip to much.
 - “Women and men are equal”
-
- **Employee values**
 - “I am driven by individual reward”
 - “ I am group co-operative. We are all in this together to assist one another”
-
- **Religion**
 - “Religion should not be incorporated in the workplace”
 - “Workplace should make time for people to pray”
 - “Company should open the day with a prey”
 - “ A company should not pray for people, because people belongs to different religions”
 - “Religion is a private matter”

- **Time orientation**

- “Time is money”
- “Time can not wait for people”
- “People should make an appointment when visiting your house”
- “People should not make an appointment when visiting your house”
- “A pharmacy should open on time and close on time everyday”

- **Polygamy**

- “Polygamy is not good”
- “ A man should not have more than one wife, because of diseases”
- “ A man should have more that one wife to balance the ratio (more women than men)”
- “A man can have more than one wife if he can afford it”
- “A woman should be trustworthy and therefore a man should not use a condom”
- “It is natural for a man to have more that one wife”
- “It is too expensive to have more that one wife”
- “Good to have only one wife, because you can give your full attention to her and it will also prevent illnesses

- **Employee conduct**

- “Employees should stay loyal to companies at all times”
- “Believe in an open door policy”
- “An employee can take a second job without telling the company”
- “Your brother or sister can not be your boss”
- “ I do not believe in an open door policy”

- **Type of medicine**

- “I believe in western medicine which should not be mixed with any other kind of medicine”
- “Normally consult with a traditional healer, because there is some diseases that can not be cured by a pharmacists”
- “I am a Christian and therefore traditional medicine will not work”
- “Some churches don’t let people use medicine”
- “Traditional medicine”
- “Pharmaceutical medicine because you can also go back for assistance”
- “Western medicine because it has been checked and examined”
- “Medicine should not be mixed”
- “Western and traditional healers should come together to share best practices”
- “Western medicine, because you heal quicker”
- “Western medicine should be used when you have wounds”
- “Western medicine because it has an expiry date”
- “Should not use western and traditional medicine together”
- “Combination between western and traditional medicine”
- “I prefer traditional medicine”
- “Traditional medicine in a pharmacy”

- **Distribution of medicine**

- “The hospital quinces are too long”
- “ From the pharmacy”
- “ We are not using street vendors because that have no knowledge or education”

- **Communication**
 - Radio stations: Swazi, Thobela, Pedi, SAFM, Bushbucridge, Jacaranda
 - Magazines: You, Bona, Drum, True Love,
 - Newspapers: Daily Sun, Sowetan, I do not read newspapers, Mpumhalanga News, Citizen
 - Television stations: SABC 2, No television, SABC 1, e-TV

- **Decision making**
 - “Quality of the product”
 - “My knowledge of the product”
 - “Expired date on the product”
 - “The taste of medicine is not important”
 - “Duration of treatment”
 - “Efficiency of medicine”
 - “Cost of the product is not important”
 - “Good experience with the medicine”
 - “Trust in pharmacists”
 - “Pharmacy should sell medicine in lesser quantities to make it more affordable”
 - “Consultation by pharmacist”
 - “Explanation in own language”
 - “Privacy during consultation”
 - “Pharmacists should explain the product”
 - “Friendliness
 - “Good services”
 - “Good knowledge of the medicine”

- **Decision maker**
 - “My mother because she is always at home with the children”
 - “ Husband and wife make equal decisions”

- “Myself”
- “My wife”

• **Corporate colours**

- “Blue”
- “Brown and black”
- “White”
- “Never black”
- “Red and black”

• **Payment method**

- “Cash”
- “Medical aid”
- “On account”
- “Credit card”

• **Pharmaceutical services**

- “Distribute medicine in rural areas”
- “Treatment to make customers healthy”
- “Medicine should be affordable”
- “Should have a clinic in the pharmacy”
- “Education in your local language”
- “Physical consultation”
- “Training on how to use medicine”
- “Privacy during consultation”
- “Availability of stock”
- Cleanliness”
- “Reasonable prices”
- “Conduct workshops for people to learn more about healthcare”

- “Safety”
- “Air conditioning”
- “Cold water in waiting areas”
- “Training should be given in the customers local language”

- **Qualities of a pharmacist**
 - “Should have knowledge”
 - “Should be friendly”
 - “Age doesn’t matter”
 - “Gender doesn’t matter”
 - “Older pharmacist are more experience”
 - “Experience does help, but old pharmacist do not always keep up with new technology”

- **Employee satisfaction**
 - “December bonus”
 - “Pension or provident fund”
 - “Communication should be open”
 - “There should be a rest room and television”
 - “Radio or music while working”
 - “Good salary for employees”
 - “Staff loans”
 - “Rewards for good effort”
 - “Death policy”
 - “Medical Aid”
 - “Overtime payments”
 - “Should belong to a union”
 - “Should not discriminate against employees”
 - “Teamwork”
 - “Employees should be involved in company decision making”

- “Company should supply uniforms for employees”

5.4.2 The interview

Interviews were conducted to gather information mainly because the sample was illiterate and the interview was then the most suitable method.

Tutty, Rothery & Grinell (1996:52) define interviewing as a conversation with direction. Its purpose is to gain an understanding of the perspective of the person being interviewed. Individual interviews are frequently used to gather information on how organisations function (Kelley, 1992:244), and, according to Sрати (2000:143), the interview is a research method widely used in the empirical analysis of organisations.

The transcription of the interview was analysed by means of descriptive statistics that are discussed in paragraph 5.6.

5.4.2.1 The structured interviews

(i) Introduction

It was decided that the structured interview would be most suited for this study due to the following reasons:

- There are many illiterate consumers in Bushbuckridge who are not able to complete a questionnaire.
- Different interviewers would conduct interviews, so a structured interview would ensure data comparison.
- Although the interviewers have had limited previous experience, they could be trained to conduct interviews effectively.
- Structured interviews allow the researcher to collect much data in one contact session.
- The population is too large to observe directly

The structured interview - sometimes called a standardised interview - used a common interview schedule that contains specific questions, also called items. Its rationale was to present all interviewees with approximately the same set of questions so that the participant's responses (results) can be compared with one another. A comprehensive number of questions regarding the purpose of the study were included in the interview. Care was taken with the manner of wording to allow the interviewees to understand clearly what they are being asked (Tutty, Rothery & Grinnell, 1996:53).

To improve uniformity, Lincoln and Dezin (1994) indicate that very little flexibility should be allowed in the way questions are asked or answered in a structured interview setting. The following guidelines were adhered to by all the interviewers:

- They were instructed not to get involved in long explanations of the study and to use standard explanations provided by the researcher.
- They could not deviate from the introduction to the study, sequence of questions or question wording.
- No other person could interrupt the interview, or answer for the respondent, or offer her or his opinions to the question.
- Interviewers were not allowed to suggest an answer or agree or disagree with an answer, or to give the respondent any idea of personal views on the question asked.
- Interviewers were not to interpret the meanings of a question; they could repeat the question and give instructions or clarifications that were provided in training.

(ii) Advantages and disadvantages of the structured interview

All research methods have certain advantages and disadvantages. The advantages of the structured interview implemented in the study are the following:

- The process allows time for the researcher and the interviewee to develop a more relaxed relationship so that the interviewee can trust the interviewer with the answers.

- It makes it possible to compare the different interviews.
- Interviewers with relevant little experience can participate.
- Only limited prompting is required.

The disadvantages of the structured interview are as follows:

- The research method is costly in terms of both money and time
- Interviewees may be unwilling or may be uncomfortable sharing all that the interviewer hopes to explore or they may be unaware of recurring patterns in their lives.
- Although language compatibility between the interviewer and interviewee was attained, misinterpretation can still occur.
- Interviewees may sometimes have a good reason not to be truthful
- When only interviews are used to gather information, distortion of data is more likely as interviewers are inclined to interject their personal biases (Adapted from Cooper & Schindler (2001), Tutty & Rothery & Grinnell (1996:55), Marshall & Rossman, (1999:110) and Botha (2001)).

The discussion in paragraph 5.7 of the reliability and validity of the study explains the steps that have been taken by the researcher to reduce the disadvantages.

(iii) Design of the structured interview

The design process of the structured interview started with compiling of a comprehensive list of investigative questions drawn from several completed consumer behavior and organisation behavior studies. The results from the focus group interviews were also used to design the structured interview. The design process comprised the following three steps:

- developing the interview design strategy;
- constructing and refining the measurement questions; and
- drafting and refining the interview

The structured interview employed in this study, made use of both ordinal and nominal scales.

Measurements with ordinal scales are ordered in the sense that higher numbers represent higher values. However, the intervals between the numbers are not necessarily equal (<http://davidmlane.com/hyperstat/A30633.html>).

A nominal scale is characterised by classification, that is, the sorting of observations into different classes or categories. A nominal scale represents the most primitive form of measurement because it reflects only differences in kind, not differences in degree or amount

(<http://ceds.vu.edu.au/studentlearning/CourseSpecific/PsychStatsTopics/PsychStatsDef/NominalScale.htm>).

It was decided against inclusion of open-ended questions because of the large number of interviewees. Inclusion of open ended questions would have extended the interviews to unacceptable long durations.

The structured interview consisted out of the following dimensions which were investigated in the research:

- Corporate social conduct & company contribution conduct: To determine the importance of the involvement of pharmaceutical industry in social responsibility programmes.
- Company business conduct: The importance of specific leadership qualities in ensuring good company business conduct.
- Employee conduct: To determine the importance of certain values related to employees as a determinant of corporate business conduct and to determine the importance of certain aspects for employee satisfaction.
- Product: To determine what type of medicine is preferred by the African consumers in Bushbuckridge.

- Decision making: To determine the African consumers' views on the factors that will influence their buying decisions when buying medicine.
- Communication: To determine African consumers' preference in magazines, radio stations, newspapers and televisions stations. Consumers views on the main decision makers when buying medicine and their views on which colours should be associated with medical care
- Price: To determine consumers' views on payment preferences when buying medicine
- Support: To determine consumers' views on the importance of certain supporting methods
- Distribution: To determine consumers' views on where do they prefer to buy medicine
- Sales force: To determine consumers' views on which qualities a sales force should have to sell medicine effectively
- Background information which included the following: profession, gender, home language, location, qualification level and age group.

(iv) Pre-testing the structured interview

The structured interview was pre-test before it was applied.

According to Cooper & Schindler (2001:359), pre-testing the structured interview is recommended to identify problems before the actual collection of data. Effective pre testing implies the following: determining of respondent's interest, establishing if the questions have meaning for the respondent; checking for respondent's modification of the questions intent; examining the questions continuity and flow; experimenting with question sequencing patterns; collecting early warning data on item variability and fixing the length and timing of the structured interview.

In this study pre-testing of the structured interview was accomplished by interviewing a group of 20 consumers in several areas of the Busbuckridge districts. The pre-testing also ensured cultural standardisation.

The results of the pre-test were incorporated in the final interview format.

The main adjustments which were made to the final interview format were the following:

- The testing group indicated that some of the ratings scales were difficult to understand. The most effective rating scale was a 10 point scale
- The testing group was not familiar with some of the terminology that was used in the structured interview.

5.4.2.2 Identifying and training the field workers

A total of six interviewers were identified to conduct the fieldwork. Fieldworkers needed to adhere to the following requirements:

- Accomplishment of grade 12 qualification
- Fluent in English and local languages
- Working experience in the pharmaceutical sector

Their training was conducted in Bushbuckridge by the researcher. The interviewer training programme aimed to accomplish the following:

- to train the fieldworkers in the principles of measurement; provide them with a good grasp of the data collection function and the knowledge to evaluate interviewing behavior;
- teach the skills of interviewing;
- teach interviewers in phrasing and explaining instructions to ensure a smooth and consistent flow of questions.
- teach how to probe;
- provide the opportunity to practice and evaluate by conducting a training interview under controlled supervision; and

- to provide interview guidelines for teaching fieldworkers how to be flexible, objective, emphatic, persuasive and good listeners.

Ethical issues were also addressed and the interviewers were coached on the following ethical conduct:

- The participant's true identity was to be kept confidential. This principle of confidentiality was to underlie all research transactions. Accordingly, no one had access to any data and files, correspondence or other documentation without clear authorisation from the pharmacists.
- The principle of transparency was to apply to all research transactions. (Schostak, 2003).
- Prior risk assessment was to be done in order to consider all potential risk for the interviewees and pharmaceutical organisations.
- Interviewers were given names of experts who they could consult on handling practical or emotional issues (Sewell, 2003).

5.4.2.3 Post interview focus group

Post interview focus groups were conducted after the data collection process with the following purposes:

- to cross-check the information obtained from the structured interviews; and to obtain more information and perspective on issues that may have surfaced during the interviews and which could influence the final interpretation of the results.

5.4.2.4 Geographical areas where the interviews were conducted

Structured interviews were conducted in the following ten geographical areas:

- Acornhoek
- Agincourt
- Bushbuckridge
- Dwarsloop
- Green Valley
- Hluvukani
- Kasteel
- Mkhuhlu
- Shatale
- Thulamahashe

5.5 DATA ANALYSIS

According to Bogdan (1972), data analysis is the process of systematically searching and arranging the interview transcripts, field notes and other materials that were accumulated to increase the understanding of the findings and to enable the presentation of what has been discovered to others. Analysis involves working with data, organising it, breaking it into manageable units, synthesising it, searching for patterns, discovering what is important and what is to be learned, and deciding what peers would be told.

As mentioned data from the focus groups (qualitative) and also from structured interviews (quantitative) were used. The two sets of data require different methods of analysis.

5.5.1 Focus group analysis

The focus group data in this research was analysed by using content analysis.

According to Hancock (1998), content analysis is a procedure for the categorisation of verbal or behavioral data for purposes of classification, summarisation and tabulation. The content can be analysed on two levels. The basic level of analysis is a descriptive account

of the data: that is, what was actually said with nothing read into it and nothing assumed about it. Some text refers to this as the manifest level or type of analysis. The higher level of analysis is interpretative: it is concerned with what was meant by the response but also what was inferred or implied. It is sometimes called the latent level of analysis.

Content analysis involves coding and classifying data. Some authors refer to this as categorising or indexing. The basic idea is to identify from the transcripts the extracts of data that are informative in some way and sort out the important messages hidden in the mass of each interview.

In this research the followings was done to analyse the data:

- organising the information gathered with the focus groups;
- generating categories, themes and patterns;
- testing the emerging hypotheses against the data;
- searching for alternative explanations of the data; and
- recording the findings (De Vos, 1998; 342-343).

Themes and concepts that develop through this process were utilised to compile the structured interview.

5.5.2 Structured interview analysis

Once the completed structured interviews were received, coding was assigned to the respective questions and categories. The completed structured interviews were assessed to ensure they were correctly completed before entering the data onto a data file.

The statistical package for the social sciences (SPSS) was used for the analysis of all the numeric data in the study.

Descriptive statistics were used and involved the following: means, standard deviations and frequency distribution.

The following two criteria were applied to determine the relevance of the results and to reduce the data for discussion purposes:

- Rank order criterion: The three items (questions) with the highest mean were ranked from one to three and considered the most relevant for discussion purposes.
- A second criterion incorporating the width of the distribution was also introduced to determine the relevance and to reduce the volume of data for discussion purposes (Miles and Huberman, 1984:21). This criterion was determined by subtracting the standard deviation score from the mean score. The adjusted mean score arrived at through this procedure brings in to account the possible incidental variations of measurement. The scores were considered as relevant in the following scenarios:
 - If a 10 point scale was used, the adjusted mean should be 7 or greater
 - If a 5 point scale was used, the adjusted mean should be 3 or greater
 - If a 4 point scale was used, the adjusted mean should be 3 or lesser.

Only the results that comply with both the rank order and adjusted mean criteria are discussed in chapter 6

5.6 VALIDITY AND RELIABILITY OF THE INFORMATION GATHERED

The validity and reliability of the observations from the focus groups and structured interviews are discussed in the following paragraphs.

5.6.1 Reliability of the qualitative research (focus groups) and quantitative research (structured interviews)

There is considerable debate over what constitutes good interpretation in qualitative research (Hammersey in Denzin & Lincoln, 1994, p 476).

According to Krefting (1991), little attention has been paid to establish rigour in qualitative research. He discusses a model of trustworthiness of the qualitative research, which is based on four aspects of trustworthiness relevant to qualitative and quantitative research:

- The first action that the researcher took was to establish confidence in the truth of the findings. In qualitative research this is usually obtained from the discovery of human experiences as they are lived and perceived by participants. Researchers then need to focus on testing their findings against various groups from whom the data was drawn, or persons who are familiar with the phenomenon being studied.

- The second step was for the researcher to establish whether the findings can be generalised to other large populations. There are two perspectives related to applicability in qualitative research. The first suggests that in qualitative research each case is unique and not amendable to qualitative research. Applicability is then not seen as relevant to qualitative research as its purpose is to describe a particular phenomenon or experience, not to generalise to others. The second perspective is referred to as fittingness or transferability. Krefting (1991) is of the opinion that research meets this criterion when the findings fit into contexts outside the study situation that are determined by the degree of similarity or goodness of fit between the two contexts. Lincoln & Guba (in Krefting, 1991) argue that as long as the original researcher presents sufficient descriptive data to allow comparison, she or he has addressed the problem of applicability.

- It must also be determined whether the findings would be the same if the research was repeated with the same participants or in a similar context. As qualitative research deals with the uniqueness of the human situation, variability is expected in qualitative reach, and consistency is defined in terms of dependability. Guba's (in Krefting, 1991) concept of dependability implies variability that can be ascribed to identify sources, for example informant fatigue, or changes in the informant's life situation. Another source of variability stems from the fact that qualitative research looks at the range of experience, so irregular situations are important to include in

the findings. Although a person might not be completely representative of a particular group, her or his experience is still considered relevant.

- The researcher improved the trustworthiness of the findings by prolonged contact with the subjects and lengthy periods of observation. Lincoln and Guba (in Krefitng, 1991) shift the emphasis of neutrality in qualitative research from the researcher to the data. Instead of looking at the neutrality of the researcher, the neutrality of the data is considered, and these authors suggest that conformability be the criterion of neutrality. This is achieved when the truth-value in applicability is established.

According to Kerlinger (1986), reliability of quantified measures refers to the accuracy or precision of a measuring instrument. An unreliable measurement is loaded with errors, making the interpretation of variables and the determination of relations between variables a difficult task. High reliability is however not necessarily a guarantee for good scientific results, but there can not be any respectably scientific result without reliability. This author affirms that reliability is a necessary, but not always sufficient, condition of the value of research results and the interpretation thereof.

Cooper & Schindler (2001:215) argue that a measure is reliable to the degree that it supplies consistent results. Reliability is a necessary contributor to validity but is not a sufficient condition for validity.

5.6.2 Validity of quantitative and qualitative data

Validity determines whether the measuring instrument or interview in fact measures that which it is supposed to measure. It also refers to whether or not the experimental design answers the research question, and is threatened when uncontrolled factors confound the experiment (Weimer, 1995).

In terms of the validity of this research, as well as the measuring instrument designed for this study, several steps were taken to prevent factors that threatened validity.

The following steps ensured content validity:

- A panel of experts checked the formulation of the items to ensure that the questions were asked correctly.
- The items were checked individually for face validity by experts in the field of consumer behavior, organisational behavior and health care

The following procedures were followed to support the already mentioned steps:

- A literature study regarding organisational behavior, consumer behavior, and corporate image and consumer culture was conducted to ensure that relevant themes were included in the interview.
 - A framework of corporate image was compiled from the available research.
 - Each item was discussed by a panel of experts to ensure correct placement of the relevant categories.
 - As mentioned, focus group interviews were conducted with the purpose to listen to groups and individuals belonging to the appropriate target market and “yo” talk about their culture and their perceptions of corporate images in the pharmaceutical sector. The results were included in the structured interview to increase the validity.
 - Pre-testing of the structured interview was accomplished by interviewing group of consumers in several regions to determine whether the questions are clearly worded and easily understood. The pre-testing also ensured cultural standardisation.
- Quality control measures were instituted at two levels:
- First, fieldworkers were trained to identify the enumerator areas included in the sample.

- Secondly, a team consisting of staff from the surrounding pharmacies carried out independent quality control visits to check questionnaires for errors and quality.

According to Cooper & Schindler (2001:211), validity is the extent to which differences found with a measuring tool reflect true differences among respondents being tested.

Three forms of validity are used to evaluate the measurement scales. They are the following:

- Content validity exists to the degree that a measure provides an adequate reflection of the topic under study. Its determination is primarily judgmental and intuitive.
- Criterion-related validity relate to our ability to predict some outcome or estimate the existence of some current condition.
- Construct validity is the most complex and abstract. A measure has construct validity to the degree that it conforms to predicted correlations of other theoretical propositions.

In summary satisfactory methods were used to ensure reliability and validity of the results.

5.7 SUMMARY

The primary aim of this chapter is to provide an overview of the method of research used in this study.

Both quantitative (focus groups) and qualitative (structured interviews) approaches were used to examine the research question.

The following methodology was applied:

- Sampling: Non-probability and probability sampling were used in the study due to practical considerations. A combination between cluster and convenience sampling was used.
- Data collection in this study comprised the following steps: focus group interviews, designing the interview, selecting and training fieldworkers, pre-testing structured interviews, conducting the interview and post-focus group interviews.
- Data analysis: As mentioned, focus groups (qualitative) and structured interviews (quantitative) were used. The two sets of data required different methods of analysis:
 - Focus group data was analysed by using content analysis, and
 - Structured interviews were analysed by using descriptive statistics.
- Validity and reliability: In terms of reliability and validity of this research, as well as of the structured interview designed for the study, several steps were taken to prevent factors that threatened validity and reliability.