CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1. INTRODUCTION

In the previous chapter, the psycho-educational needs of children and in particular, AIDS orphans, were discussed. The context was created for the practical investigation to follow. The subsequent chapter discusses the research design and methodology which was used for the practical investigation, in greater detail.

4.2. RESEARCH PROBLEM

The importance of formulating relevant and succinct research questions cannot be underestimated. The research questions determine the methodology to be used in an investigation, guide the data-collecting process and finally data analysis and interpretation. Research questions assist in demarcating an investigation by making unmistakably clear which questions a study seeks to answer.

For the purpose of this study, the following research questions were formulated:

4.2.1. Primary research question

- What are the psycho-educational needs of AIDS orphans as perceived by their caregivers in day care centres?

4.2.2. Secondary research questions

- Which factors are impeding the psycho-educational development of AIDS orphans?
- How do day care centres meet the psycho-educational needs of AIDS orphans?
- What further support should be given to AIDS orphans in day care centres to enhance their psycho-educational development?

4.3. AIM OF THE RESEARCH

Given that the research questions determine an investigation’s aim and direction, it follows that from the research questions, the specific purpose and aims of the research can be deduced.

Related to the research questions the primary aim of the research was to:

- Identify and describe the psycho-educational needs of AIDS orphans as perceived by their caregivers in day care centres.

Related to the main aim of the research, secondary research objectives were to:
- identify and describe factors that impede the psycho-educational development of AIDS orphans;
- determine how day care centres meet the psycho-educational needs of AIDS orphans;
- make suggestions for further support that could be rendered to AIDS orphans in day care centres in order to enhance their psycho-educational development.

4.4. RESEARCH DESIGN AND METHODOLOGY

4.4.1. Research design

For the purposes of this study, an interactive qualitative research design was envisioned, more particularly a phenomenological/interpretive design. Phenomenological research strongly emphasizes “the lived world or the lived experience” (Richards & Morse, 2007:49). This implies that the researcher is literally immersed into a “lived experience” of the phenomenon under investigation, and, as is typical of qualitative research, the phenomenon is investigated in the setting in which it naturally occurs. In terms of the present research, this means that the researcher visited the sites (day care centres) where AIDS orphans lived and were being taken care of.

Minichiello and Kottler (2010:19) tabulate certain key characteristics of qualitative research. The main point of departure in qualitative research is to attempt to understand the phenomenon at hand from the viewpoint of the people participating in the study. Reasoning processes are complex in that they involve circular movement between data, literature and analysis (Minichiello & Kottler, 2010:19). In qualitative research, participants in a study act as agents, not as subjects. In terms of interviewing, this means that participants are given the opportunity to explore a broad range of aspects related to the topic and may even take on the leading role in an interview. Conversations may bring up points that have not been envisioned at the start, since the interviews are open-ended and do not prescribe certain answers.

The present study explored a wide range of aspects related to the psycho-educational needs of AIDS orphans. Participants were probed by questioning *mainly during individual interviews to elicit as much information as possible (*only one interview was conducted with two participants simultaneously for reasons of practicality) (Berg, 2007:101). Participants were also given the freedom to recount their own stories. Interviews were brought to a halt when it was clear that no further information could be obtained and data saturation was reached (Phillips & Davidson, 2010:255).
4.4.2. Research methodology

The epistemological framework underlying this study was interpretivism. It follows that basic principles underlying qualitative research, applied. One of the assumptions that determine research design and methodology in qualitative research is that a naturalistic approach where human behaviour is studied in its everyday context, does more justice to the study of human nature than a positivist natural-sciences approach which fails to take into account contextual factors that are so inextricably inter-twined with human behaviour. The method chosen for data-gathering was interviewing. Various semi-structured/open-ended, individual interviews were conducted with the caregivers of AIDS orphans that provided the opportunity for participants to elaborate on whatever aspects they believed to be of particular significance with regards to the psycho-educational needs of AIDS orphans. There was sufficient opportunity for the participants and the researcher to explore a broad range of factors associated with the psycho-educational development of AIDS orphans.

4.4.2.1. Site selection

In order to do justice to the study, the sites under investigation were day care centres that care for AIDS orphans who have lost one or both parents due to HIV/AIDS.

Two sites in the rural areas of KwaZulu-Natal where AIDS orphans were cared for, were selected for the purposes of the study. These sites were selected, because AIDS orphans could be best observed by caregivers during their daily activities in these contexts. Interviews were conducted with the caregivers at these sites, because they were more likely to share objective information about the orphans than surviving parents or other relatives. A description of these sites follows:

Site 1: The first selected site was a day care centre where AIDS orphans were being taken care of by three caregivers on a day-to-day basis. A fourth caregiver, a preacher from a community church nearby, assisted in counselling the children. The site was under the management of a non-profit organisation driven by donations. One of the organisation’s employees (the person who translated the interviews), visited the site on a regular basis, and saw to it that the care centre had an adequate supply of food. This person was also the project manager of the organisation. She worked at the organisation’s office, had regular contact sessions with the manager, and worked together with other staff members who assisted her in communications with donors. The project coordinator also attended to other needs, such as when a medical outreach needed to be organised. Of the three caregivers working permanently at the site, the eldest was in charge of
the day care centre, and oversaw the running of the centre. The two younger caregivers, who were not at school anymore, were orphans themselves.

The care centre was situated in a very remote area, and it took quite a while to reach the centre which was off the main road. The gravel ‘road’ leading to the care centre was partly in a very bad condition making it difficult for vehicles to reach the place. This care centre had its own water pump, which was a donation and was quite an advancement, since other members in the community had to walk long distances to fetch water. However, the care centre did not have electricity (besides a generator for emergencies), which meant the children had to do all day-to-day activities at night by candlelight. This was an unfortunate condition, seeing that some of the children complained of eye problems related to the heat of the area (see chapter 5). The centre did have a stove and a refrigerator, and both ran on gas. The care centre consisted of a solid brick building with several rooms, including one kitchen, a common dining room, and three bedrooms: two for the AIDS orphans and one for the caregivers. The centre provided the possibility for children to sleep over should there be a need for that. The rooms were very poorly equipped, however, and some of them were almost empty. Especially the dining room and kitchen were in urgent need of furniture in order to make the place more homely for the children. The building was covered with a tin roof, but lacked a proper ceiling on the inside.

The day care centre hosted 25 AIDS orphans who had lost a mother or both parents to HIV/AIDS. Some of the children slept over in the day care centre and were looked after by the caregivers on a full-time basis as they had no other place to go to and no relatives who were able to take care of them. This allowed the caregivers to gain a deep understanding of the everyday lives of these children and all the challenges they experienced. Some of these orphans were being referred to the day care centre by social workers or even by the police.

This day care centre was situated in a rural area that is considered to be one of the most remote and impoverished areas in KwaZulu-Natal. The main factor driving the HIV/AIDS epidemic in this area is urbanisation. Fathers travel to the cities to earn money, leaving their wives and children behind. They often return having contracted HIV/AIDS and subsequently infect their wives. Orphans in this day care centre had often been severely neglected and had been exposed to abuse. They constituted a very typical example of the tragic picture of orphanhood in rural South Africa. The orphans covered a broad age range including all ages from 0 to 18 years of age.
Site 2: The second research site chosen was another day care centre in rural KwaZulu-Natal that took care of about 44 AIDS orphans in the age range 0 to 18 years (this did not mean all these ages were included, but they could potentially). This care centre was under the same management organisation that oversaw the first site. At the centre itself, there were three elderly Zulu women in charge, who were also the caregivers. One of the three caregivers had a stronger leadership role and she communicated with the other centre or even the preacher of the community when experiencing problems. Fortunately, the caregivers did have cell phones, and could be reached if the need arose.

The second care centre was even more difficult to reach than the first, since the ‘road’ lead directly through the field and a vehicle could only drive, very, very slowly in these areas. Heavy rain, which is frequent in KwaZulu-Natal, could make the road impassable at times. This centre was very poorly equipped. A mud building, covered with cement, had been erected with the community’s help. On the inside the building was so hot and unfriendly that it could not really serve any functions other than stocking food supplies and doing cooking. Toys and educational resources were desperately needed. The centre did not have running water or electricity.

Once again, the day care centre was situated in a very impoverished area and it catered for the needs of AIDS orphans in the particular community. The caregivers themselves also came from the same community. The caregivers were particularly sensitive to the children’s needs since they personally identified the orphans in the community who were most in need of the services that the day care centre offered. They were able to observe the AIDS orphans over a period of time. The older children that came to the care centre were being taught basic skills such as doing their washing. Especially younger children could also be given an opportunity to do homework. Since the building was not appropriately equipped, the children could do their homework outside under the trees if they preferred to do so. Older children could assist younger ones with their school work. Pre-school children that were at the care centre for the whole day were exposed to some structured activities but also had time for free play.

4.4.2.2. Participant selection
For the purposes of this qualitative study, use was made of “purposive sampling” (Maxwell, 2005:88). Another term for purposive sampling is “judgment sampling” (Berg, 2007:44). This means the participants selected for the study were able to provide the researcher with information that could not be obtained in the same way from a different source (Maxwell, 2005:88). According to Bloor and Wood (2006:154) purposive sampling requires the researcher
to use her own judgment when selecting cases she deems most appropriate for data collection. The aim is to obtain information-rich data where participants are observed and interviewed in their natural contexts (Maxwell, 2005:90) thus the emphasis is not on selecting a large number of participants.

At the first site, four caregivers were involved with the AIDS orphans. Three of these caregivers lived at the care centre. Among them was a lady, who was a mother herself. She was 55 years of age, and two of her own children lived with her at the centre. She was in charge of the centre and the daily activities. Then there were two younger female caretakers, who were orphans themselves. They were 19 and 24 years of age respectively. The older caregiver, who may be referred to as *Mama*, did not have more than primary school education, but handled the bringing up of children in a very mature way. The youngest caregiver did have matric, and the third caregiver had some form of high school education. A fourth caretaker, who was involved with counselling the children from time to time, was a pastor from a local church. He did not live at the care centre himself, but had his own family. He was 33 years of age, did not have matric, but had some form of high school education. All of the caregivers mentioned here, could read well. The two younger caretakers recounted some of their personal experiences in the course of the interviews. Their personal life experiences proved very relevant in the setting where they found themselves.

At the second site, there were only three caregivers involved. All of them were females; their ages were 57, 47 and 45 years of age respectively. None of these caregivers really had high school education, and they struggled to read. One of them was even an orphan herself. All three ladies came from the surrounding area and were well acquainted with community values and practices. They were mothers themselves who had their own children.

Heterogeneity was ensured in that the caregivers emphasised that the orphans at the centre came from a variety of different backgrounds. Consequently, the caregivers were able to relate their experiences with children coming from a range of different contexts, and each could give his/her own viewpoint on the subject. The fact that some of these caregivers were orphans themselves, added all the more meaning to what they said. Some caregivers who were not orphans themselves, knew the communities in which they lived very well. In spite of individual differences, the AIDS orphans at the day care centres displayed a range of similar problems, which means that heterogeneity of the participants did not result in a loss of typicality.
Heterogeneity and typicality should balance each other as the sample size is limited compared to quantitative studies (Maxwell, 2005:89-90).

**4.4.2.3. Researcher’s role**

According to Phillips and Davidson (2010:273), “undertaking any type of qualitative research can be an emotional and personal experience as you share and empathize with participants”. In qualitative research, the researcher’s stance and interpretation of the data becomes an important tool and the researcher herself and her perspectives are inextricably inter-twined with the subject under investigation (see Mosselson, 2010:479).

The researcher’s task in this study involved the gathering of data, by means of conducting mostly individual interviews with caregivers of AIDS orphans. The researcher’s role as the analyser and interpreter of the data was greatly emphasized during this study, flowing from the researcher’s practical interaction with the data against the background of the literature study. The researcher reflected upon and categorized raw data, and subsequently came to certain conclusions with regard to the psycho-educational needs of AIDS orphans and how to address them.

**4.4.2.4. Data collection**

In phenomenology, data collection strategies generally revolve around in-depth interviews and narratives (Bloor & Wood, 2006:129). As phenomenology focuses on the description of lived experiences, 13 in-depth, open-ended, mostly individual interviews were conducted with caregivers at the day care centres for AIDS orphans in order to gain a more in-depth understanding of the needs of these orphans as observed by their caregivers on a day-to-day basis. At the day care centres caregivers were identified with whom the in-depth, individual and unstructured interviews were conducted. The interviews were conducted in the participants’ mother tongue IsiZulu and then translated by the project manager of the organisation who speaks both IsiZulu and English. The researcher started with a general question, attempting to elicit information from the participants on the needs of the AIDS orphans. If the question was not clear to the interviewee, the researcher attempted to explain the term ‘needs’ through examples in order to probe deeper into the issue. The researcher posed the questions in English which were then translated and posed to the Zulu participants in IsiZulu. The Zulu participants answered in IsiZulu and their responses were then translated back to English for the researcher to understand. With the participants’ permission, the interviews were audio recorded and thereafter transcribed. The researcher saved the transcriptions onto a computer where they were kept for further
analysis, reference and safekeeping (see Appendix F for a complete copy of the transcribed interviews).

4.4.2.5. Data analysis: inductive content analysis

As is typical in qualitative research, data analysis should take place throughout and may even direct the data gathering process. A main point in qualitative data analysis is categorizing. After the interviews were transcribed, the researcher searched the data for emerging categories. In qualitative research, these may be new or similar to already existing categories in the research field. The researcher grouped similar ideas from different interviews together under one heading, giving the category a descriptive label which organises and makes sense of the data. The following is an at-length description of the process of data analysis:

The electronically transcribed interviews were transported to OneNote (Microsoft Office, 2007). OneNote offers a margin of unlimited breadth on either side of the transcribed document, and therefore provides more than enough space for notes and codes to be jotted down on both sides (see Appendix I for an example of the coding process). Furthermore, OneNote makes colour-coding possible which assisted the researcher in gaining a clear overview of separate text segments. OneNote also affords unlimited space within the transcribed document for the creation of mind maps, tables and the like. In this way, data can be displayed in different ways, links between data segments established, and the data can be organised and categorized in different ways while simultaneously displaying the transcribed document. A summary of the entire process of data-analysis that was followed is provided on the following page in the form of a diagram:
Figure 4.1: The process of data analysis that was followed in the research

Codes and themes are grouped under questions in an attempt to answer these

Researcher codes the data: highlights text segments (using colour) and assigns them with code labels

Researcher reads through data: obtains general sense of the interviews And what has been said

Preparation of data for analysis: transcribing of interviews

Collection of data: recording of interviews with caregivers at day care centres

(Adapted from Creswell, 2008:244)

Working through newly acquired data may cause a great deal of uncertainty (Smith-Ruig & Sheridan, 2010:171). As the diagram makes clear, the first step towards data analysis was the recording of the interviews. The researcher herself transcribed the entire set of interviews (see Appendix F). This provided her with the advantage of being able to develop a better feel for the data from the start. The fact that the researcher transcribed the interviews herself, was also a positive point in the sense that it did justice to an important facet of qualitative research: the investigation became an intensely personal experience for the researcher and she learnt to empathise with the participants (Phillips & Davidson, 2010:273). While transcribing, she also had the opportunity to re-live the experience of the interviews and the setting where they took place. These factors combined made identification and in-depth involvement with the data at hand a much more natural and intensive process. The researcher was even able to jot down some of her personal impressions and lessons learnt from the participants in the study.

After the transcription of the interviews, a general idea versus the complex involvement of the transcription stage must be obtained (Creswell, 2008:251). In the present study, the researcher read through the data to discover what the participants were telling her and as soon as she felt
ready, the process of dividing the text into segments began (Creswell, 2008:251). She used different colours to group text segments which represented a particular idea and could be regarded as a distinct piece of information. This step is represented by the fourth “data analysis stage” in the diagram. Subsequently, these text segments were given particular codes or code names, to summarise the information contained in them. Some of the codes were also numbered to make them more distinguishable. Hereafter, the researcher began to look for themes under which these codes could be grouped (Creswell, 2008:251). Seven broad themes were identified in total. As the diagram shows, the codes were used again and grouped under the separate questions in a table in order to discover which information segments could possibly contribute to answering one of the three research questions. An example of this process is given in Appendix G.

Maxwell (2005:46-47) refers to concept mapping as a way to make the process of data analysis somewhat less ‘daunting’. For the present study, the researcher made use of concept mapping for the purpose of giving feedback of the findings to the participants (member-checking). The mind map created by the researcher therefore formed part of the process of data-analysis, but was likewise a means of ensuring the trustworthiness of the study. At the centre of the concept map, the researcher placed the main point around which the study centred, the psycho-educational needs of AIDS orphans. The main research aim was then further subdivided into the three subordinate research aims mentioned previously. Under these secondary research aims, matching themes or codes were placed – pieces of information that related to the research aim and objectives in question (see Appendix H for concept map).

The researcher presented the concept map with the findings to the participants during a feedback session. The services of the interpreter were again used during the feedback session. During the feedback session, the participants were given ample opportunity to respond to the findings and to make further comments.

According to Kouritzin, Piquemal and Norman (2009:5), qualitative researchers often have to defend the academic nature of their work by the standards imposed by quantitative research. The question remains, however, whether it is justifiable to judge qualitative research according to the standards of a research procedure which rests on completely different philosophical tenets.

For the study at hand, the following measures referred to by Maxwell (2005:110ff), were used to increase the trustworthiness of the findings: The researcher was intimately involved with the
participants at two research sites. The limited number of sites intensified the researcher’s involvement at a particular site. Also the possibility was created for a repetition of the interviews in order to rule out misunderstandings or biases. The second set of interviews contributed to the collection of information rich data which assisted the researcher in developing a better understanding of the topic under investigation. Furthermore, the researcher verified her findings by giving feedback to the caregivers with whom the interviews were conducted as described beforehand (member-checking). Data analysis was also conducted by an independent co-analyst. The findings of the researcher and the independent co-analyst were compared for similarities and differences. In this way consensus was reached with regard to the trustworthiness of the findings. The findings were also compared with information to be found in the literature on AIDS orphans (the so-called literature control).

It should be kept in mind that these methods only served to contribute towards the trustworthiness of the present study, and that the findings cannot necessarily be generalized to other settings where AIDS orphans are cared for.

4.5. ETHICAL ASPECTS OF THE RESEARCH
The researcher applied for permission from the Ethics Committee of the North-West University, Potchefstroom Campus, to conduct the research and ethical clearance was granted. In all aspects, the researcher undertook to conduct the proposed research in compliance with the ethics research policy of the North-West University. This entailed conforming to ethical principles such as informed participant consent, confidentiality, anonymity, as well as adherence to the principle that the study should not harm participants in any way (Richards & Morse, 2007:235).

The researcher also conducted the research at the day care centre with the written permission of the management of these institutions and all the participants (caregivers) participated on an informed and voluntary basis (see appendices A and C for documentary proof in this regard).

4.6. CONCLUSION
These then are the main points with regards to research design and methodology which were taken into consideration for the carrying out of the present study. The next and last chapter will bring to the fore some important conclusions reached on the basis of the data collected by means of the data collection strategies described in this chapter.