

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

“... a tension will quickly be revealed between contrasting modes of thought. But this does not mean that one is absolutely right and the other totally wrong. It is possible that they are both partly right and partly wrong. And as the argument evolves, the best of both arguments will often crystallize”

Gaarder (1995, p.304).

3.1. INTRODUCTION

The objective of this chapter is to describe the ontological and epistemological underpinnings of the research as well as to explicate the research design and methodological plan for the practical research exercise in its entirety. The goal of the research methods used has been to ensure the rigour of the research, particularly, in terms of allowance for greater participant contribution to the research undertaking. This was in recognition of the ability of research participants to be the central analysers of their self-generated data as the experts regarding their own views, ideas, and constructions. The philosophical paradigms, which acted as an overarching interpretative basis for the research, will now be represented. Thereafter, the methodological assumptions and research design that guided the research methodology will be illustrated. A discussion of the trustworthiness of the exploration, the context of the study and the roles of those involved in the research will be furnished as well. An exposition of the data collection and data analyses process will then be undertaken.

3.2 RESEARCH PARADIGM

There are contradictory paradigmatic vantages regarding what reality or ontology entails and hence what knowledge or epistemological content constitutes. According to Denzin and Lincoln (2000, p.19), “the net that contains the researcher’s epistemological, ontological, and methodological premises may be termed a paradigm or an interpretive framework”. Research is guided by a set of beliefs and feelings about the world as well as the nature of the research enquiry that leads one to decide how it should be understood and investigated (Denzin & Lincoln, 2000, p.19). The qualitative focus of this research is based on interpretivist and constructivist paradigmatic theories of reality and knowledge.

Constructivism rests on the philosophical assumption that, although there may be a singular reality, people interpret reality. This means that there are, in effect, multiple interpreted points of

view about reality as subjected to personal interpretation by individuals. From a constructivist vantage point, the positivist view of a singular reality is thought to be but one construction of what reality is. Reality is consequently viewed to be consciously and actively created within the minds of individuals (Hayes, 2000, p.8). As such, the ontological position that is described as “constructivist” implies that the constituents of social meaning are outcomes of interaction between individuals and their context. Individuals are therefore perceived to be interpreting reality through “a pair of conceptual glasses” that are tinted according to their goals in situations, their past experiences, values, attitudes as well as the knowledge trends in their context (Holt, 2002, p.264). Instead, a positivist view assumes that phenomena are detached and external to those involved in their construction (Bryman, 2004, p.266). Constructivism emphasizes a phenomenological approach to understanding people and thus, in order to capture the meaning of a social event, such as the helping relationship between the helping professional and the parent, it needs to be investigated in interaction with those who are actively involved so as to see the event as the participants, in these cases parents, in that scenario see it (Hayes, 2000, p.8).

The questions “what kind of research is this?” or “what kind of knowledge does this research produce?” direct a query into the status of knowledge or epistemology for the research as a whole (Taylor, 2001, p.11). Hesse- Biber and Leavy (2005, p.12) suggest that we research what we believe to be knowable and do so in ways that we believe will be effective in gaining access to this knowledge, both of which are reflections of our epistemological position. The epistemological position that is described as interpretivist emphasises knowledge gathering that rests on understanding the social world through an exploration of the interpretation of that world by its participants (Bryman, 2004, p.266). Epistemic content from the interpretivist perspective is composed of representations of people’s mental processes of understanding as influenced both by and during interaction with social contexts (Henning *et al.*, 2004, p.20). Human beings do not find or discover knowledge in the world but rather actively construct it. People invent their own “models or schemes so as to help them make sense of experience” (Schwandt, 2000, p.197). Researchers, who take this epistemological stance for their research undertakings, inquire into the manner in which social meaning comes about in discourses and how these discourses, the knowledge frameworks or meaning systems that drive society, are maintained (Henning *et al.*, 2004, pp.19-20).

In light of the aforementioned discussion, it would appear that the constructivist and interpretivist paradigmatic perspectives amalgamate well with each other. Reflecting on the anti-positivist social science research traditions customarily associated with the constructivist and interpretivist

perspectives, Beck (in Cohen *et al.*, 2001, p.20) maintains that their purpose is to gain an understanding of social reality as different people see it. This is to demonstrate how these views shape the actions that people take within that reality. Research associated with constructivist and interpretivist underpinnings is meant to offer explanatory elucidation of the social forms that people create around themselves. Therefore, the object of the research is to explore “reality in consciousness rather than reality itself” (Northcutt & McCoy, 2004, p.16).

The interpretivist and constructivist paradigms, as foundational philosophical bases with practical ramifications for all aspects of the research process, were hence conducive to the goals of this research, which aimed to explore parents’ constructions of helping professionals, as part of their reality when they seek learning support for their children. Furthermore, the exploration of parents’ meaning making and interpretations by means of certain methodological undertakings allowed the researcher to gain access, through a mutual process of meaning sharing and interpretation, to the “knowledge systems” or personally assimilated discourse that may direct parental interactions and actions with helping professionals. Qualitative research methods thus provided the central mode for the delivery of this type of researchable content as well as access to interpretative analyses of this content. Despite the recognition that these philosophical bases are deemed to lead to a research design that uses qualitative methods, it is acknowledged that other research paradigms may be used to add rigour to the design as a whole (Tashakkori & Teddlie, 2003, pp. 22-23). This point will be expanded in the following section.

3.3 METHODOLOGICAL ASSUMPTIONS

3.3.1 Association with ontology and epistemology

As highlighted in the previous section, the selection of research methods cannot be divorced from a researcher’s theoretical concerns as well as her conception of knowledge building (Hesse- Biber & Leavy, 2005, p.4). However, Bryman (2004, p.438) contends that although epistemological and ontological commitments may be associated with certain research methods, the connections are not necessarily deterministic in nature. Brannen (2004, p.313) agrees that there is not an inevitable link between ontological and epistemological assumptions on the one hand and methodological approaches on the other.

As such, although certain data collection and analyses methods may show an apparent allegiance to an underlying interpretivist or constructivist position, this does not always have to be the case. The links forged between ontology, epistemology and methodological choices are at best tendencies rather than definitive connections. Instead of concentrating on an inextricable

enmeshment between certain epistemological, ontological, and methodological choices, it is claimed that research methods should be considered as autonomous in nature (Bryman, 2004, pp.438; 454).

Thus, my aim as the researcher was to select research methods that were best suited to interrogating the questions that I wished to address rather than selecting methods that purely paid homage to their presumed link to the epistemological and ontological position for the research. The zealous following of a singular research paradigm may lead to a warped sense of its value in the research process with a failure to engage pragmatically with those aspects that it cannot, by its makeup, address. Specifically, the qualitative and quantitative research methodologies are represented by as two essentially different, mutually exclusive paradigms through which to study the social world. Regardless, a case has been made against the separate paradigms outlook (Brannen, 2004, p.312). Indeed, Northcutt and McCoy (2004, p.4) call for reconciliation between quantitative and qualitative paradigmatic views to utilise the strengths of both to the benefit of the research undertaking as a whole.

In the current study, it is therefore argued that, although the research developed from an interpretivist and constructivist ontological and epistemological basis and was ultimately interpreted accordingly, this did not necessarily demand that purely qualitative methods be used during the data collection and analyses process. In the next section as well as in Section 3.3.3 further ideas associated with the use of both qualitative and quantitative methods within a research undertaking will be provided so as to advance the exposition of the thinking that has assisted towards the decision to integrate quantitative methods into this research.

3.3.2 Basis in dialectical thinking

To extend the argument presented thus far, some philosophical perspectives view human existence as being constituted by basic dialectics that, by their very definition, are dependent on each other (Aspinwall & Staudinger, 2003, p.15). For example, one cannot refer to something positive without considering the negative, or think of autonomy without considering its opposite, dependency. It is part of the nature of such pairs that one component cannot exist without the other. Thus, it is seen as important to achieve a sense of equilibrium between one's representations of these pairs. This representation must be to such an extent that balance between the two components of a dialectical pair is optimised within the specific circumstance wherein the dichotomy plays a role (Aspinwall & Staudinger, 2003, pp.15-16).

Dialectical thinking therefore involves the dynamic integration of opposing perspectives. In dialectical thinking, the goal is to construct knowledge by finding a resolution to contradictions (Reznitskaya & Sternberg, 2004, p.188). It entails inviting the juxtaposition of contradictory or opposed ideas. When dialectical thinking is applied to the research realm, some scholars propose a dialectical stance when reasoning for the use of multiple paradigms when doing research. These theorists believe that all paradigms are valuable albeit that each offers only a partial worldview and therefore, from a dialectic stance, the assumption is that all paradigms have something to offer to the research process and the use of multiple paradigms affords a greater understanding of the issue under empirical scrutiny (Tashakkori & Teddlie, 2003, pp. 18; 22; 96).

Against the background of Bryman's (2004), Tashakkori and Teddlie's (2003) as well as Brannen's (2004) arguments for the usage of methods that are best suited to the research undertaking, and, favouring the argumentation for a dialectical outlook on qualitative and quantitative methods, I have used a predominantly qualitative methodology that incorporates quantitative aspects for the strengths that each can bring to a research undertaking. The current research undertakings foundation in dialectical argumentation has both theoretical and practical implications. The research approach aims to initiate a dynamic integration in the ideological dimensions of research paradigms, the qualitative and quantitative research paradigms specifically (Northcutt & McCoy, 2004, p.15). Quantitative methods were used to enhance and complement the qualitative data afforded by the participants in the study.

3.3.3 The complementary usage of quantitative methods within a qualitative study

Brannen (2004, p.314) suggests that it may be best to treat qualitative and quantitative data as being complementary in nature, although not necessarily at ontological, epistemological, and theoretical levels. Hammersley (in Brannen, 2004, p.314) proposes that complementarities occur when two different sets of data are utilised to address complementary but different aspects of the research. Whereas, a purely quantitative study can fail to explain the relationships amongst variables, an exclusively qualitative study is generally unable to provide an indication of the relative weight afforded to the themes that are identified by participants (Bryman, 2004, p.460).

Mixed methods research specifically incorporates the use of both qualitative and quantitative data sets in a single study. The purpose is to expand an understanding from one method to another, to converge or confirm findings from different sources of data. The two data sets can be collected concurrently or sequentially and the research findings integrate both broad numeric

trends and detailed views with regards to the research phenomenon (Creswell, 2003, pp.15, 100,210).

The specific research methods employed for this research undertaking aimed to engage the two afore-mentioned shortcomings of qualitative and quantitative methodologies by employing Interactive Qualitative Analysis (IQA) as described by Northcutt and McCoy (2004). IQA allowed both of these shortcomings to be addressed via a merger of quantitative processes into this qualitative study during data collection and analyses from the perspectives of the research participants themselves. IQA incorporates the qualitative generation of affinities that are used by the participants themselves to make personal inferences regarding the causal relationships amongst these affinities. In this way both induction and deduction are integrated into the data analysis process with theory generation and testing being driven by the participants themselves (Northcutt & McCoy, 2004).

The particular properties that make qualitative research methods apt for this research are their purported emphasis on the qualities of phenomena and their focus on processes and interpretations that are not experimentally examined or measured in terms of quantity, frequency, or intensity. As already highlighted, the focal point is rather on the socially constructed nature of reality (Denzin & Lincoln, 2000, p.8). Qualitative research undertakings seek elucidation of research questions by examining social settings and the people that are part of these settings. The researcher interprets phenomena in interaction with participants according to the representations of meaning that they afford to them. In so doing, the researcher seeks to build a holistic picture with detailed descriptions of the participants' perspectives. The researcher is able to share in the understandings and perceptions of others, the social shaping and processes that people use to create meaning in their lives and maintain their social realities (Berg, 1998, pp.6-7; Macmillan & Schumacher, 2000, pp.16-17; 35; 41; 395).

The exploration of parents' constructions by means of a predominantly qualitative research methodology allowed for access to the knowledge systems' or personally assimilated discourse that may direct parental interactions and actions with helping professionals. This exploration was through a mutual process of meaning sharing and interpretation between the researcher and participants. Qualitative research, as such, allowed admission to a greater depth of understanding of parental constructions of the helping professional in learning support consultation especially in terms of how these constructions shape their actions with helping professionals (Berg, 1998, p.2). I, as the researcher, sought an understanding of how their social experience of helping professionals is created and given meaning (Denzin & Lincoln, 2000, p.8).

The application of quantitative methods to the qualitative research allowed for the establishment of a “meeting ground” between the two research strategies (Bryman, 2004, p.447). Silverman (in Bryman, 2004, p.445) warned that this quantification of qualitative data should be a reflection of participant’s own ways of understanding their social world. The cause-and-effect analysis that formed a part of the participant driven process of IQA addressed this concern. This quantitative analysis provided an indication of the relative weight afforded to the affinities that were identified qualitatively (Bryman, 2004, p.460).

The methodological plan of action for the research that has been shaped out of these methodological underpinnings and which led to the usage of quantitative and qualitative aspects will now be addressed.

3.4. RESEARCH DESIGN

3.4.1 Preamble

A research design is the “plan” or “blueprint” for how the researcher intends to conduct the research (Mouton, 2001, p.55). The particular design type chosen is the “descriptor” of the manner in which the study was developed and gives an indication of the way the research findings will be presented to others (Henning *et al.*, 2004, p.32).

3.4.2 The case study as research design

3.4.2.1 Grounds for usage

In the current research, a case study research design was considered useful as it was envisioned to lead to detailed illustration, insight, discovery and interpretation of parents’ constructions of the role of helping professionals in the context of consultation for learning support purposes (Merriam, 1998, pp.27-28).

Many qualitative researchers are committed to a case-based, insider’s perspective of a phenomenon. This position directs their attention to the specifics of particular cases (Denzin & Lincoln, 2000, p.10). Case studies provide a comprehensive examination of a single example and in so doing they deliver a unique illustration of real people in real situations (Cohen *et al.*, 2000, p.181; Flyvbjerg, 2004, p.420). Case-based research leads to detailed data about the phenomenon being studied; no matter what particular research methods have been used (Henning *et al.*, 2004, pp.32-33). A case study is particularly useful when one is trying to provide a wealth of details and a nuanced view of participants’ experiences in a particular context,

especially, when the research rests on the premise that parents' views cannot be understood by theory alone, as it does for this research (Flyvbjerg, 2004, pp. 421-423).

Yin (2003, pp.13-14) refers to the case study as an empirical inquiry that allows for investigation of a contemporary phenomenon within its real-life context when the boundaries between the phenomenon and the context are not clearly evident and in which multiple sources of evidence are used. Case studies are thus suited to situations in which it is impossible to separate a phenomenon's variables from their context. In the case of my research, parental viewpoints of helping professionals as phenomenon within the context of learning support consultation will be offered. A case study design is well suited to explore parents' constructions of the role of the helping professional in learning support, as a social –contextual phenomenon. It is thought that parenting and learning support are social-contextual undertakings and the meaning that parents attach to the role of the helping professional is bound to their own social context too (Merriam, 1998, pp.27-40; Flyvbjerg, 2004, pp.425-426).

A case can be additionally described as a specific example that is used to illustrate a more general principle (Cohen *et al.*, 2000, p.181). A case study is further delineated as being composed of any social entity that can be restricted by parameters and that uncovers a specific dynamic and relevance, revealing information that can be captured within its realms (Henning *et al.*, 2004, p. 32). A case study as such serves to highlight an instance drawn from a class, a so-called “bounded system” (Merriam, 1998, pp.27-28)

In the current study, the bounded system encompassed, within its parameters, parents who had actually been in contact with helping professionals for assistance with learning support of their child. Information was being sought in relation to their thoughts about and experiences with helping professionals. What I, as researcher, was interested in were the systemic connections amongst the parent-generated elements of meaning within the case or system as a unity or totality with some kind of boundary or parameter (Henning *et al.*, 2004, p.32). A distinguishing feature of case studies is that they allow for accommodation of the recognition that human systems of meaning have a wholeness or integrity to them rather than just being a loose connection of traits. It is this recognition of the complexity of human meaning giving that calls for in-depth investigation of these systems (Cohen *et al.*, 2000, p.181), specifically, the meaning systems created and navigated by parents in their interactions were explored.

The type of case study design used was a critical case study with an interpretive focus. The critical case study involves choosing a representative case study that is most likely to represent

the phenomenon under exploration. The main argument for the use of this type of case study is that what is valid for these participants are more likely to be valid for others too (Merriam, 1998, pp.27-40; Flyvbjerg, 2004, pp.425-426). The descriptive data of interpretative case studies are used to illustrate, support, or challenge the theoretical assumptions held prior to the data gathering process, and, as such, fit well with the purpose of the research which is to allow for practical investigation into the applicability of the strengths-based approach to practice, in terms of parents' perspectives. This is specifically in terms of the theoretical premise that clients must be assisted towards the utilisation of their own strengths and capacities for their own self-empowerment during the process of learning support instead of a focus on expert-driven problem-saturated view of practice. The outcomes of a case study can therefore assist towards the highlighting of parents ideas in association with these theories that may not previously have been hypothesised (Hayes, 2000, p.133).

3.4.2.2 Case description: Issues of sampling

Three cases were included in the study. The inclusion of multiple cases is a common strategy used to increase the credibility of the findings in the analysis of these cases (Merriam, 1998, pp.27-40). In these instances, it also provided for opportunities to lead to a depth of perspectives regarding parental constructions of helping professionals. Participants were chosen that were considered to be "information rich" in that each possessed knowledge of and experience with the issue under investigation (Northcutt & McCoy, 2004, p.87). Each of the case studies therefore included parents who were thought to have special knowledge of the research question in this study, namely "How do parents construct the role of the helping professional in learning support?". All the participants in the study were interacting with or had previously approached a helping professional to initiate learning support for their child. Their views of helping professionals were seen as relevant to the research elements under exploration due to their contact with helping professionals and it was thought that they would be in a position to render an "insider's perspective" in relation to the research question, as suggested by Denzin and Lincoln (2000, p.10).

As is typical in case study research, non-probability sampling, also referred to as purposive sampling, was used. Non-probability sampling is used in case study research because it entails the deliberate selection of a particular section of the population to include in the study for the purpose of fulfilling the criteria for participants as set forth by the research question[s]. Parents of children in a school for Learners with Special Educational Needs [LSEN] were approached for participation in the study due to their proximity with helping professionals as a result of seeking

assistance for their child's difficulties. It was surmised that they were more likely to have been in contact with helping professionals due to the necessity of addressing their child or children's learning difficulties. This meant that they were able to answer the research questions to be explored (Cohen *et al.*, 2000, pp.102-104). The sample of participants was chosen to elicit a close-up and detailed view of particular individuals in a particular setting and was not random but rather theoretical in nature (Silverman, 2005, pp.130-132).

After written permission had been obtained from the school's management as well as the provincial department of education involved, the research questions were shared with the head of department of psychology at the selected school. This psychologist was informed of the need to approach participants who had had contact with helping professionals for their child's learning support. The psychologist provided a list of eight telephone numbers of parents who could possibly participate in the study due to the contact that the psychologist was aware of them having with helping professionals for their children. Initially, five parents were contacted telephonically [the other parents could not be reached telephonically at that time]. The research purpose and subject was explained to these parents and they were asked to consider participating in the study after perusing a written explanation of the research undertaking to be sent to them. After receiving this written explanation, four parents agreed to participate in the research. The first three parents to respond were then chosen to participate. The biographical details of the parents that participated in the study are set out in Table 3.1. Pseudonyms are provided to maintain their confidentiality.

BIOGRAPHIC DETAILS	<i>PARTICIPANT A</i> (MOTHER)	<i>PARTICIPANT B</i> (MOTHER)	<i>PARTICIPANT C</i> (MOTHER)
AGE	38	39	33
OCCUPATION	Secretary	Home executive	Teacher
CHILDREN	2 sons (ages 7 and 12): Youngest son Grade 1, LSEN school	2 sons (ages 9 and 13): Grade 2 and Grade 8, LSEN school 1 daughter (age 18): Grade 12, LSEN school	2 sons (ages 6 and 9): Eldest son Grade 3, LSEN school
CONTACT WITH HELPING PROFESSIONALS FOR LEARNING SUPPORT [For assessment and intervention prior to attendance of LSEN school(s)]	<ul style="list-style-type: none"> • 1 Educational psychologist • 1 Occupational therapist • 1 Speech and language therapist 	Grade 8 child: <ul style="list-style-type: none"> • 1 Educational psychologist Grade 2 child: <ul style="list-style-type: none"> • 1 Educational psychologist • 1 Speech and language therapist • 1 Paediatrician 	<ul style="list-style-type: none"> • 1 Educational psychologist • 1 Occupational therapist • 1 Speech and language therapist

		<p>Grade 12 child: Assessment and intervention centre attendance:</p> <ul style="list-style-type: none"> • 1 Paediatrician • 1 psychologist • Speech and language therapy • Occupational therapy 	
<p>CONTACT WITH HELPING PROFESSIONALS FOR LEARNING SUPPORT</p> <p>[For assessment and intervention at LSEN school(s)]</p>	<ul style="list-style-type: none"> • 1 Educational psychologist • 2 Occupational therapists • 2 Speech and language therapists <p><i>(multidisciplinary teams)</i></p> <p>Parent has also consulted a helping professional for assistance with her eldest son:</p> <ul style="list-style-type: none"> • 1 psychologist 	<p>All three children have attended LSEN schools (the present school and another LSEN school) since the start of formal schooling. Assessment and intervention has been ongoing in these scholastic environments:</p> <p>Grade 2 child:</p> <ul style="list-style-type: none"> • Speech therapy (2 years) • Occupational Therapy (4 years) • 2 Educational psychologists <p>Grade 8 child:</p> <ul style="list-style-type: none"> • Occupational Therapy attendance (7 years) <p>Grade 12 child:</p> <ul style="list-style-type: none"> • Speech therapy (2 years) • Occupational therapy (4 years) <p>Parent has had both informal and therapeutic contact with educational psychologists in her children's present school.</p>	<ul style="list-style-type: none"> • 2 Educational psychologists • 3 Occupational therapists • 3 speech therapists <p><i>(multidisciplinary teams)</i></p>

Table 3.1: Biographical details of research participants involved in the study

3.4.2.3 *The strengths and challenges of case studies*

▪ Strengths

The specific strengths of case studies are that they provide illustrations of effects of phenomena in real-life contexts, especially, as context is recognised as a powerful determinant of both the cause and effect of phenomena and understandings of phenomena. Moreover, the illustrative,

in-depth description that a case study provides helps to report on the complex dynamics of parents' constructions of the role of the helping professional (Cohen *et al.*, 2000, p.181).

Case studies also allow for the presentation of research in a more publicly accessible format that is capable of serving multiple audiences. The research process itself is thought to be more accessible and, as such, is argued to aid in the democratisation of decision-making and knowledge (Cohen *et al.*, 2000, p.184). Associated with this strength is the recognition that the concrete, practical, context bound knowledge, as produced by a case study, is capable of contributing to the learning process of others who can use it to aid in their understanding of the issue that is illustrated. As the research has aimed to be praxis enriching, the case study approach taken provides an avenue for learning about the practical manifestations and implications of parents' views through case studies (Flyvbjerg, 2004, pp. 421-423). These case studies therefore begin in the practical world of parents' experiences and expectations of helping professionals but the knowledge generated in terms of these cases are considered as capable of contributing to practical situations and theory building (Cohen *et al.*, 2000, p.184).

- Challenges

Some challenges are posed by the use of case studies. Case studies can be complex in that they involve large amounts of data. This can become a downfall in that any attempts to summarise them can result in the leaving out of data through a process of subjective bias by the researcher. Additionally, it is argued that the biggest downfall of the case study is that it is impossible to generalise from the results (Hayes, 2000, pp.140-141). The next section provides some methodological as well as literature-based commentary to reveal how these challenges are approached for this research.

- How the challenges were approached by the researcher

In addressing the central criticism of a case design as not being generalisable, Hayes (2000, pp.140-141) counteracts that case studies are deliberately idiographic, that is to say, the purpose is never to identify general laws⁴ pertaining to all but rather to chart and provide an in-depth illustration of unique aspects (Hayes, 2000, pp.140-141). As well as sharing the argument

⁴ The application of "general laws" to all is in any case associated with the contentious positivist premise that human behaviour is mechanistic in nature and governed by general, universal laws (Cohen *et al.*, 2000, p.19) and, as such, is not an objective that is sought for this research undertaking.

of Hayes (2000), I share the ideas of Flyvbjerg (2004), Cohen *et al.* (2000), and Bryman (2004) in terms of the generalisability of this research.

Flyvbjerg (2004, p.424) argues that formal generalisation via quantitative measures is just one way in which knowledge can be accumulated. He maintains that even if knowledge cannot be formally generalised this does not mean that a descriptive case study cannot contribute to “the collective process of knowledge accumulation in a given field or in a society”. Furthermore, those who read case study based research findings have the opportunity to decide for themselves what knowledge is applicable to their own unique circumstances. Readers of case study research can judge the implications of this type of study for themselves (Cohen *et al.*, 2000, p.184). The illustrative, in-depth description that is afforded by the qualitative case study thus offers “others... a database for making judgements about the possible transferability of findings to other milieus” (Bryman, 2004, p.275; Cohen *et al.*, 2000, p.181).

The selected data collection and analyses methods in this study are thought to have aided in circumventing the challenge posed by my own bias in selecting relevant data and interpreting this data. Ensuring more involvement of participants in the data analysis process may have allowed them to monitor my analysis and choice of most pertinent data and, hence, allowed for monitoring of the influence of the researcher’s subjectivity. This was by means of the creation of opportunities to reflect on my initial analysis and to elaborate on their points of view in light of this. This was initiated via a multiple phase data collection and analysis that was not solely researcher directed. My provision of my own reflective account of my assumptions in terms of the topic of research during my reporting about the study is another strategy aimed at ensuring that my subjective assumptions will not influence the research unduly.

In addition to practical attempts aimed at addressing possible subjective bias, there is recent literature that provides an applicable argument to thwart the viewpoint that a qualitative case study can be problematic as it can be subjected to the bias of the researcher. In this literature, Flyvbjerg (2004, pp. 428-429) presents the argument that the case study contains no greater partiality in terms of a researcher’s bias towards verification of her pre-established ideas than other methods of enquiry. The difference is that it is more likely that the researcher’s initial ideas will be directly engaged as her subjective views can be tested in-depth, up close in relation to phenomena as they unfold in practice by means of a case study design. Thus, it is more plausible that a researcher’s preliminary ideas will be falsified in this way due to the allowance for the in-depth viewpoints of those who participate in her research (Flyvbjerg, 2004, pp.428-429).

Ultimately, the achievement of rigour in the study was considered the central means to address the validity and dependability of the research especially in terms of the influence of the researcher's personal influence on the research as a whole. The rigour of the study will now be discussed in detail.

3.4.3 Rigour

Taylor (2001, pp.320-321) maintains that academic analysis must involve a more systematic investigation. She points out that this criterion for the evaluation of research is sometimes referred to as rigour. She further proposes that there are different views for how rigour should be attained. Rigour can be correlated to the depth of detail present in both the data and the analysis that is presented. It can additionally be aligned to the explication of the process of analysis that is provided. She argues for the possibility of retaining a modified form of the criteria for evaluation associated with quantitative research undertakings for studies that are predominantly qualitative in nature. She believes that validity can be redefined in terms of "good practice".

Riessman (in Taylor, 2001, p.321) considers that the validation of research can be deliberated on in terms of the persuasiveness of the argument, correspondence, and pragmatic use. Silverman (2005, p.210) specifically relates validity as another word for the truth of the research interpreted as the extent to which an account accurately represents the phenomena to which it refers. For this research, it is recognised that parents' constructions of helping professionals are grounded in values and, as such, they cannot be proven true or false. Therefore, the research did not seek ultimate facts but rather it sought the "reality negotiations" that parents negotiate in society as a party interested in defining their interactions with helping professionals (Maddux *et al.*, 2004, pp.321; 326). As Maree (2004, p.402) explains:

Inherent in every social system are values and norms that facilitate relationships and existence. The self and the concept of 'truth' are viewed as a manifestation of human interaction, which is constructed by communication [language] and relationship systems or discourse

Therefore, my purpose was not to establish the ultimate truth regarding the actions, experiences, thoughts, and feelings of the participants but rather to search how specific and, at times, contrasting truths are produced, sustained, and negotiated (Rapley, 2004, p.26). These views are mirrored in the writings of Northcutt and McCoy (2004, pp.339-342). These two authors

assert that the rigour of a study reflects its truth-value and as such, the research was based on three theories of truth as discussed by Northcutt and McCoy (2004).

In terms of the **correspondence theory** of truth, this research is an empirical study and aimed to reflect the experiences of parents as grounded in a particular reality, in this case their involvement with helping professionals in learning support within the broader social context in which they function. In a related line of thinking, Bryman (2004, p.273) deems that a qualitative study should have internal validity. By this he means that there should be a level of congruence between researchers' observations and the theoretical ideas that they develop. Involvement of participants in theoretical coding meant that not only the researcher but the research participants had the opportunity relate their personal experiences in terms of a cause and effect characterisation of their experiences which provided the central tenets for the building of their own personal theory about their viewpoints.

However, truth is not only about correspondence between a statement and an external reality. The **coherence theory of truth** requires participants' narratives to have structural, referential and characterological coherence as far as their experiences have structure and fit into a larger structure of experiences. The participation of the parents in the thematic analysis of the results as well as indicating the relationships between the elements is expected to contribute towards the coherence of the findings.

The **constructivist theory of truth** reflects the pragmatic nature of research and requires the research findings to have some usefulness. Therefore, the value of any research is to solve some kind of problem (Northcutt & McCoy, 2004, pp.341-342). Similarly, Bryman (2004, p.277) speaks of the importance of ensuring the relevance of a study in terms of its importance within its field and in terms of the contribution it makes to the literature within that field. The expected contribution of the study is that it may highlight what parents expect of helping professionals to enrich current approaches of learning support with parents. It may also assist towards the deconstruction of parental discourses of helping professionals that may not be conducive to collaborative aims in learning support and may provide emerging themes that may be used for further research.

To achieve rigour in qualitative research, Northcutt and McCoy (2004, p.38) recommend data collection and analysis methods that are public and non-idiosyncratic and that do not depend on the nature of the codes themselves. Requiring the participants to create affinities and to indicate the relationships between affinities was envisioned to attain this. It also served as a member-

checking strategy because it was used as a means of consequent contact with the participants in the study to check whether they were in agreement as to the findings of the study. Member checking, as such, can also be referred to as “respondent validation” (Taylor, 2001, pp.321-322). Respondent validation was also used within the interview process as topics were confirmed, rephrased and probed to gain access to the holistic and subtle meanings of the participants (McMillan & Schumacher, 2000, p.410). The aim of respondent validation was to seek corroboration of the account that I arrived at. I sought correspondence between my findings and the perspectives and experiences of the participants involved in the research (Bryman, 2004, p.274).

3.4.4 The research setting and the roles of those involved

3.4.4.1 The context of the enquiry

A school for Learners’ with Special Educational Needs [LSEN] was approached with the intent of obtaining access to parents who had consulted helping professionals for learning support purposes. The nature of the learning difficulties that the children at the school experience means that they and their parents have been in contact with helping professionals to identify and address the specific difficulties they are dealing with. This contact has in all cases also led to recommendations for placement in a school for learners’ with special educational needs, as per the specific school’s request so as to assist them with appropriate school placement decisions.

At the specific school approached, learners thus enter the school with comprehensive occupational, speech therapy, and psychological reports to aid in ongoing learning support initiations at the school itself. A team of helping professionals consisting of a social worker, psychologists, occupational and speech therapists, and school counsellors further support learners at the school. Contact between parents and the helping professionals involved in these teams is ongoing via informal discussions, parent meetings, and telephonic consultation. Some parents also arrange private consultations with paediatricians, psychiatrists, neurologists, speech therapists, occupational therapists, or psychologists to further assist the family in the course of their child’s school career.

3.4.4.2 The role of the researcher

As required by an interpretivist perspective, I entered the research process with the intention of being receptive to the participants’ own ideas and their personal explanatory frameworks for events and situations that they have been exposed to. Thus, I tried not to see myself as the

“expert” with superior knowledge of the research focus (Hayes, 2000, p.8). Rather, I was interested in the plurality of perspectives that research participants held about their experiences with helping professionals in the context of learning support. As such, understanding of the social phenomenon was sought from the participants themselves. My role was to become immersed in the research process as a curious, interactive observer to the phenomenon rather than a detached data gatherer. I deliberately tried to build a holistic picture with detailed descriptions of the participants’ perspectives (Macmillan & Schumacher, 2000, pp.16-17; 35; 41).

As suggested by Kvale (1996, p.31), I, as the researcher adopted a position of “deliberate naïveté” in that I undertook to exhibit openness to new and unexpected phenomena, rather than having preconceived categories and schemes of interpretation. As the facilitator of the participants’ contribution to the research outcomes, I undertook to be sensitive to what was said and what remained unsaid during the process as well as being critical of my own hypotheses and presuppositions throughout (Kvale, 1996, p.33).

3.4.4.3 The envisioned role of participants

Although one can never prescribe what participants actually experienced, it was certainly an explicit intention that parents who participated in this research felt that they were research partners rather than just “a vessel of information” (Henning *et al.*, 2004, p.68) to be tapped for meaning. My goal was to use a collaborative methodology that allowed parents to experience and understand that their initial understandings or answers were by no means meant to be used as the finalised research product.

I shared my understanding of the research process with them and explained that they would have opportunities to provide further commentary on my analysis as well as to provide alternatives should they feel that this analysis did not adequately reflect their “voices”. Therefore, these parents’ initial understandings were meant to serve as a further agenda for exploration. The findings of the research were thus envisioned as a “team effort” wherein the participants had a central role to play in providing guidance with the analysis of the data (Henning *et al.*, 2004, p.68).

3.4.5 Research methodology

3.4.5.1 Research methodology objectives

It is said that in many ways, the research method used to collect data and the analytical method employed to make sense of this data are inextricably interlinked together in that the one influences the other (Hayes, 2000, p.167). Qualitative researchers seek descriptive data from research participants. These participants' perspectives are of utmost importance in that they are the origin of the data and they also have an extensive influence on where the emphasis will be placed during the data collection (Hesse- Biber & Leavy, 2005, p.7).

Qualitative research is generally a multi-method process as the researcher attempts to add depth to the mutual understanding of the phenomenon under exploration. The multi-method process is not to be viewed as an attempt to add validity but rather as a strategy "that adds rigour, breadth, complexity, richness and depth to the inquiry" (Denzin & Lincoln, 2000, p.5). In addition, many qualitative studies espouse a goal to capture the meaning of a phenomenon from the research participant's point of view. However, Northcutt and McCoy (2004, p.16) suggest that there may be grounds to question this and explain that most qualitative studies actually rely on methods that are truly positivist by design. To illustrate this point, Northcutt and McCoy (2004, p.16) explain that in many qualitative studies, the participant and the researcher are separated by means of the institution of a power-based hierarchy that favours the researcher's expert status as the role-player with the sole ability to generate data and analyse it. The ability of participants to add analytical value to the research is largely ignored and this leads to the questioning of the objectivity and accuracy of the research findings. Both Russell (2003) and Wolfendale's (1999) commentaries in Chapter One mirror the concerns about the previous lack of partnership between parents and researchers in research into parents' perspectives in interaction with professionals as well.

In contrast, the modified implementation of IQA used in this study, allowed participants to add analytic value to the research, and in so doing contributed to the overall rigour of the study. IQA, as described by Northcutt and McCoy (2004), is a dialectical approach to qualitative research that rests on systems theory. The main goal of this method is to represent the meaning of a phenomenon in terms of the elements it is seen by research participants to be composed of as well as providing their hypotheses of the relationships amongst these elements. IQA thus attempts to integrate and reconcile some of the inconsistencies that are apparent in the theorising about the purpose and methods of qualitative research (Northcutt & McCoy, 2004, pp. xxi-xxii).

Usually IQA involves a focus group that generate qualitative content in the form of codes, which the group then arrange into categories of meaning, providing a central affinity theme that binds each of the codes generated together into a category. Each individual will then provide indications of the relationships amongst these categories via a cause-effect analysis. Ultimately, after a quantitative analysis of the relative frequency of each possible relationship given by all the members of the group, a mind map of the group's system of meaning will be drawn up using this quantitative information as a guide. Thereafter, individual interviews will be conducted with group members to elicit each person's personal experience with the system of meaning that has been represented. The modifications I made meant that instead of a focus group, individual interviews were undertaken so I could conduct a content analysis of each to generate affinities for each participant. The participants were then able to review these affinities and could change or add affinities or modify the content of their affinity descriptions. Each participant then went about providing indications of the relationships amongst these affinities, which led to the drawing up of an individual mind map for each. The exact process and its purpose will be elaborated on in the next section.

3.4.5.2 Data collection and data analyses

- Phase one: semi-structured interviews and content analysis

Phase one comprised a semi-structured interview with the parent participants as well as an initial inductive analysis and axial coding of the data obtained from this interview. It was recognised that data collection and analyses are not separate in the research process. Analyses are ongoing processes that begin long before the specific data collection strategies are decided upon. As mentioned in Chapter One, the literature review provided an initial analysis into the phenomenon being researched. This then acted as an impetus to the formulation of research questions that were to be dealt with during interactions with research participants (Rapley, 2004, p.26). Data was collected and analysed in two main phases to interrogate these questions. The details of these phases will now be revealed.

- The semi-structured interview

The main rationale for qualitative interviewing is that it assists the researcher to gather contrasting as well as complementary perspectives on the topic of research which leads to a depth in the understanding of the issue under investigation (Rapley, 2004, p.18). Kvale (1996, p.42) refers to the qualitative research interview as a "construction site of knowledge". Interview interactions are spaces in which both speakers are constantly doing analysis in that both

speakers are engaged and collaborating in producing knowledge and assigning meaning to the interaction (Gubrium & Holstein in Rapley, 2004, p.27). The goal of the qualitative research interview is to access descriptions of the lived world of the participants regarding their interpretations of the meaning of the described phenomena (Kvale, 1996, p. 30). The described phenomenon was in this instance helping professional consultation for learning support purposes.

Semi-structured interviews allowed flexibility in the interview process and provided a more in-depth description of the phenomenon under investigation. Their open-endedness allowed parents to provide discourse that 'project their own ways of defining their world' and, as such, this method was commensurate with the objectives of the study (Smith, 1995, p.3; Cohen *et al.*, 2000, pp.146-147). This type of interview further allowed for elaborate and detailed answers as well permitting for more in-depth investigation into parents' perspectives through the usage of probing (Rapley, 2004, p.15). The interview schedule that guided these interactions is situated in **Appendix E**. In **Appendix F**, an extract from one of the interviews is provided.

- Inductive coding

The data obtained from the interviews were analysed through a process of open, inductive coding or content analysis. Preliminary affinities were identified and described for use in phase two of the collection and analysis⁵ process. A qualitative researcher interprets data by looking for themes grounded in the participants' responses (Hesse -Biber & Leavy, 2005, p.8). Transcriptions were made of the parent interviews as captured on audiotape. Thereafter content analyses of these transcriptions were undertaken. The coding process associated with the analyses can be summarised as follows (Cohen *et al.*, 2000, pp. 284-285; Henning *et al.*, 2004, pp.104-109):

- The entire transcription was read to get an overall impression as to the emerging themes apparent throughout the text.

⁵ Computer-aided qualitative data analysis software [CAQDAS] was utilised to assist the coding and analysis process. This software has been specifically designed for the use of qualitative researchers, who tend to deal with large amounts of linguistic data. The specific software used- Atlas.ti™- does not do coding analysis for the research analyst but allows one to work interactively with the data and may lead to more varied representations of the data and coding. Atlas.ti™, as a CAQDAS tool, specifically allows the researcher to see their data and the coding associated with that data side-by-side on the computer screen and includes reorganisations of the data by codes as well as many other representative possibilities (Yates, 2001, pp.111-114).

- The transcript was read again. As this was done, units of meaning in the text were segmented out.
- Labels were attached to each of the units of meaning that were singled out from the transcript. These labels are referred to as codes. The process undertaken is called coding and the outcome was a condensation of what each participant originally said, using, to as large an extent as possible, the original words of the participant.

A kind of implicit quantification is present in this process, as a theme is more likely to be identified the more times the phenomenon it signifies is represented in the course of coding (Bryman, 2004, p.448). Potter and Wetherell (1987, p.167) note that coding is distinct from doing analysis itself. The goal of the initial selective coding is not to find results but rather to break down an “unwieldy” body of information into more manageable chunks. Open coding “fractures data into concepts and categories” (Henning *et al.*, 2004, p.131). It can be seen as the groundwork to analysis that prepares the way for a much more intensive study. The categories used for coding purposes flow from the research questions of interest. However, as coding has a pragmatic rather than an analytic function it is recommended that this process of collecting together information for analysis should be done as inclusively as possible. Therefore, all borderline information that seemed only vaguely implicated in the undertaking was incorporated (Potter & Wetherell, 1987, p.167).

- Axial coding

Axial coding is the stage of the analytic process where traditionally the researcher puts the parts of the data that have been identified and separated during inductive, open coding back together in new ways so as to make connections between the categories (Henning *et al.*, 2004, p. 132). Once codes were identified, I sorted the codes into categories of meaning called affinities⁶. A name was given to each of these affinities to provide a label to give each affinity a form of identification. The affinity is defined by using the codes extracted during inductive analysis to capture its meaning. A descriptive paragraph that discusses the content of the affinity is written (Northcutt & McCoy, 2004, pp.98-100).

⁶ An affinity is part of the terminology associated with Northcutt and McCoy’s (2004) Interactive Qualitative Analysis method. An affinity or category is composed of a set of references or codes that have an underlying common meaning or theme (Northcutt & McCoy, 2004, p.81). Affinities are the elements that compose a system of meaning.

Contrary to qualitative methodology in general, I did not stipulate a presumed set of causal links amongst the affinities as is conventionally done to provide an explanation of the phenomenon being explored (Creswell, 1998, p.239; Yin, 2003, pp.120-122). Rather, the participants were requested to consider the affinities and to indicate links in the data. The research participants commenced this process during the second phase of the data collection and analysis process, discussed below.

- Phase two: modified interactive qualitative analysis

Phase two encompassed a modified Interactive Qualitative Analysis [IQA] method. In keeping with Interactive Qualitative Analysis's systems theoretical basis, I adopted a systems analysis perspective in the analysis of the parents' constructions as cases that were included in the study. This systems analysis, in its resonance with IQA, involves identifying and exploring the major dimensions of a system of understanding from the participants' perspectives. The major dimensions of a system are elements, order, processes, and functions. Every system is said to consist of elements that are unique in relation to each other and fulfil differing tasks and roles. There is also coherence amongst the elements in terms of the existence of some type of order that takes the form of patterned interactions within the system. In addition, each system involves processes that are generally developmental in nature involving change as a result of time and influences or specific types of interaction and exchange. A system also has functions and goals. Activities will take place because they produce particular outcomes and the character of these activities relate to the overall aims and goals of the system (Hayes, 2000, pp.135- 136).

- The IQA interview process: collaborative theoretical coding

The affinities created in the first phase analysis were the foundation for the interview that took place during the second phase. During a second interview, participant A and B had the chance to examine the initial affinities and descriptions elicited via inductive and initial axial coding by the researcher from the interview data. Participant C was unable to attend a second interview and instead examined a write-up of the affinities and gave written comments about them. All the participants had the opportunity to add to, modify, or rename the affinity names as well as the descriptions and to comment further on their experiences regarding each affinity. In all three cases the parents did not feel it necessary to change the names of the affinities. Comments were however given regarding their experiences in terms of the affinity descriptions.

Thereafter, the identified affinities were used by the parents so as to indicate their perceptions of the relationships amongst them. This was undertaken by completing a Detailed Affinity Relationship Table or DART. In this step, the theoretical coding involved participants commenting on their perception of the connections between each of the affinities in terms of their own generation of a cause and effect hypothesis between each. All possible pairings of the generated affinities were considered. Each parent participant systematically analysed the relationships amongst these affinities using the DART as a guide to this process. The DART was used to create an audit trail or record of the reasoning and actual examples taken from the experiences of the participants (Northcutt & McCoy, 2004, pp.149-167).

The cause-and- affect analysis that is resultant of this theoretical coding is not likened to a positivistic, post positivistic deductive research undertaking. Rather, IQA recognises that people naturally draw their own conclusions about issues, their composition and their interrelationships. The research was thus an inductive and deductive qualitative process in that participants gave their own analyses of the elements and relationships amongst these elements (Denzin & Lincoln, 2000, p.9; Northcutt & McCoy, 2004). The possible connections that could be produced for any two affinities during this process, using affinity A and affinity B as an exemplar, are provided in Table 3.2. Asking participants to provide commentary by stating why they see the relationship in the manner that they have stated, especially, in terms of their personal experiences, provided further insight into their reasoning as well as adding further depth to the study (Northcutt & McCoy 2004, p.151).

DART: POSSIBLE RELATIONSHIPS BETWEEN AFFINITIES	
A→B	A influences B
A←B	B influences A
A<>B	No relationship exists

Table 3.2: Example of possible affinity relationship choices between affinities A and B

This information was then utilised for the drawing up of Systemic Interrelationship Diagrams for each of the parents involved in the study. The details of the steps followed in drawing up these diagrams will be expanded on in an appendix associated with the actual IQA data presented in Chapter Four. For now, a brief outline of the steps in the process and their meaning for the research will be shared.

- The Systemic Interrelationship Diagram

Once the second interview took place, the information contained in the DART was transferred to an Inter Relationship Diagram [IRD]. The relationships that the participant indicated between the affinities in the DART were entered into the IRD. The creation of this IRD was the first step in rationalising the participant's system of meaning. Thus, the DART's hypothesizing activity's output is summarised by means of this diagram, which shows all the participant's perceived relationships for a system of meaning. Thereafter, the relative influence of each of the affinities is calculated by evaluating which affinities have the most influence on the others and which have the least, as evidenced in the number of in and out arrows that have been indicated for the relationships amongst the affinities. Based on the determination of which affinities had the most influence and which affinities have the least, affinities were plotted in a specific pattern that led to the drawing up of the system. This **Systemic Interrelationship Diagram** or SID indicated how affinities were related to one another in a conceptual framework of cause-and-effect relationships of parents' understanding of the role of helping professionals in learning support. These diagrams were drawn up by utilising the theoretical codes that were produced by participants during a second interview (Northcutt & McCoy, 2004, pp.147-149). The conceptual framework indicates primary and secondary drivers [causes], pivots and primary and secondary outcomes [effects] in the system (Northcutt & McCoy, 2004, pp.168-174).

This concept map can be likened to Denzin and Lincoln's (2000, pp.4-6) metaphor for the descriptive outcome of a qualitative research undertaking- the *bricolage*. A *bricolage* is the composite set of representations that are fitted or aligned to the specifics of a situation such as the phenomenon under study. This quilt like set of fluid interconnected representations connects the parts [or affinities] in relation to each other as a whole phenomenon in order to provide a depth of description of this phenomenon.

3.5 CONCLUDING REMARKS

Chapter Three presented a more thorough description of the guiding philosophical underpinnings of the research, methodological assumptions, the research design and the specific research methods employed for the study. In Chapter Four the data that were elicited via this data collection and analyses process are presented in detail, along with a more comprehensive description of the IQA process.