CHAPTER FOUR

METHODOLOGY

The previous chapter highlighted that few studies have been conducted on how parents 'manage' the role of home tutor. This study aims to contribute to the academic discipline of distance education by developing substantive theory which explains how parents manage their role as home tutors. Positioning the research undertaken in terms of how parents 'manage' the role of home tutor is consistent with the social theory of symbolic interactionism.

Symbolic interactionism has become a label for an approach that is generally used to refer to the study of "group life and human conduct" (Blumer, 1969, p.1). As such, symbolic interactionism does not "merely give a ceremonious nod to social interaction but rather it recognizes social interaction to be of vital importance in its own right" (Blumer, 1969, p. 8). Symbolic interactionism has been described by Blumer (1969), as resting on three premises. The first being that:

human beings act toward things on the basis of the meanings that the things have for them ...secondly, that the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows (sic) ... and thirdly, that these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he (sic) encounters. (Blumer, p.2)

Positioning the research from this point of view is to acknowledge symbolic interactionism as an approach grounded in action and process. The central research question is consistent with this perspective and through the collection of data "sought to yield verifiable knowledge of human group life and human conduct" (Blumer, p.21). The question was:

How do parents as home tutors in remote and rural locations that have had no specific training as teachers of children 'manage' the primary schooling of the children in their care?

Guiding questions were developed from the central research question and grounded theory methods of data collection and analysis, which are consistent which symbolic interactionism were used to develop the substantive theory which is the central finding of the study reported in this thesis. The decision to proceed in this way is consistent with a symbolic interactionist approach in that investigating preconceived hypotheses may well have directed the research into areas that had no importance or meaning to the lived experience of parents in the role of home tutor.

What follows in this chapter is a full explanation of the methodology of the study that was undertaken. The chapter is divided into several sections. The first locates the central research question within symbolic interactionist theory after which follows a description and explanation of the participants and process of theoretical sampling. The focus of the third section is on the grounded theory techniques of data collection and analysis, which leads into the detailing of the methods, utilised for recording and storing the data. Consideration is then given to the trustworthiness of the theory 'individual perseverance' which emerged from the data and the chapter ends which the identification of the ethical issues related with the study.

SYMBOLIC INTERACTION THEORY AND THE CENTRAL RESEARCH QUESTION

The origins of 'symbolic interactionism' can be traced to the Chicago school of the 1920s and 1930s Although it was Blumer (1969) who coined the phrase 'symbolic interactionism'. George Herbert Mead (1934) set the foundations some years earlier by contending that individuals develop a sense of who they are (self) through interaction with others. Blumer as a student of Mead, became his mentor's 'spokesman' and 'interpreter'. He argued, "interpretation takes place in such a way that the individual is continually interpreting the symbolic meaning of his or her environment (which includes the actions of others) and acts on the basis of this imputed meaning" (Bryman, 2001, p.15).

There has been a tendency to "view symbolic interactionism as occupying similar intellectual space to the hermeneutic-phenomenological tradition and so is interpretive in approach" (Bryman, 2001, p.15). The hermeneutic-phenomenological tradition is concerned with the notion that human behaviour is related to the context in which it occurs. Essentially that the behaviour can only be understood from the meanings that the individuals ascribe to phenomenon within the given context. Similarly, symbolic interactionists are searching for an increased understanding of the meaning that particular phenomenon has for individuals in everyday life. In essence individuals create meaning from their interactions with the world in which they live -they construct, adjust, influence and are influenced (Woods, 1992).

Central to symbolic interactionism are the concepts of self, construction, interaction, voluntarism and symbols. Mead (1934) believed that *self* was developed through interaction with the social world. He was concerned with

the inner experience of the individual, which he believed involved construction and interpretation within the self and between the self and others. For Mead, social interaction was a process of construction. Individuals are constantly defining and interpreting the context in which they find themselves in order to find individual and common meaning (Blumer, 1969). According to Mead, social organization provides a framework within which individuals construct their actions.

Social organization is fundamentally the everyday understood interactions that individuals make in society. These are the agreed meanings of society that results in expected and similar behaviours. Mead (1934) draws attention to the fact that with new contexts and experiences the individual is required to construct and interact in order to find new pathways of knowing and cannot rely on an expected behaviour/s. So, in research terms the implications of Mead's ideas and a symbolic interactionist approach require the investigator to follow how meanings are formed. The principles of symbolic interactionism outlined by Blumer (1969) are instructive when considering how the central research question and consequent guiding questions were selected and formulated. The three principles and how they relate to the guiding questions will now be outlined.

The first principle it may be recalled is that "human beings act toward things on the basis of the meanings that things have for them" (Blumer, 1969, p.2). In the context of this study these things included everything that the parents as home tutors assign meaning to when they are involved in the process of home tutoring. Therefore, it was necessary to examine the actions of home tutors in the environments that the process schooling would be observed, which

included for example, the annual *Seminar*. It was important then in this study to ask parents what 'meanings they held for the role of home tutor' and further what strategies they had for managing the role as a consequence of these meanings. These became the main guiding questions and were pursued from the very start of the research

The second principle refers to the starting place or foundation of the meaning in that "meaning of such things is derived from, or arises out of, the social interaction that ones has with one's fellows (sic)" (Blumer, 1969, p.2). As a result it was imperative to understand how meaning arose in the "process of interaction between people" (Blumer, p.4). In this study the interactions of home tutors and others helped to define the meanings that parents attributed to the phenomenon of home tutor. The pursuit of the afore-mentioned guiding questions throughout the study enabled the researcher to develop an understanding of the changed meanings that parents had for the phenomenon and the actions in which they engaged as a consequence of these changes.

The third premise "that these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he (sic) encounters" (Blumer, 1969, p.2) implies that meaning developed within a social context will be modified through an interpretive process. Further that the interpretation of meaning by parents in the role of home tutor "should not be regarded as a mere automatic application of established meanings but as a formative process in which meanings are used and revised as instruments in the guidance and formation of action" (Blumer, p.3-4). It is important then that meanings attributed to the role of home tutor by parents are understood to "play their part in action through a process of self-interaction"

(Blumer, p.5). In this study the researcher attempted to understand the meanings and resultant actions attributed to the phenomenon of home tutor by parents. This was done through the gathering and analysis of data that encompassed the contexts in which the phenomenon would be observed.

In the previous section the three major principles of symbolic interactionism have been outlined and their relationship to the central research question and guiding questions shown. The guiding questions were not specific questions to be answered, but were used at the initiation of the research as a guide to generate data about the phenomenon of home tutor. The first guiding question contributed to the development of what Patton (1990) refers to as an *interview guide* which was used for initial interviews with parents who were home tutors. Patton (1990) describes the *interview guide* as being distinctive from an interview schedule, which contains a detailed list of questions. It was expected that the *interview guide* would allow the researcher to explore and probe with the interviewees the research area. A series of broad guiding questions form the interview guide are shown in Fig 4.1.

Parents who were home tutors were asked questions about their aims, intentions, reasons and significance (Blackledge & Hunt, 1985). Parents were asked many 'why' questions to probe their reasoning. As the study progressed further questions from the initial *interview guide* were rejected, refined or modified. The second guiding question was pursued through observations at the annual *Seminar*, through interview data and documents supplied from each of the SOTAs and in some cases from parents.

Figure 4.1: Development of the Interview Guide Questions from the First Guiding Questions

First guiding question	Examples of questions in the interview guide
What are the meanings that parents have with regard to their role as home tutor?	Aims and intentions: What actions do they take when planning, guiding, motivating and correcting children's work? How do they prepare for the correspondence lessons? How much time do they set aside for preparation? What do they do when guiding the children in correspondence lessons? How do they motivate the children when confronted with correspondence materials? What other aspects of their life impact upon their role? Reasons: For each of the above questions also probe the parent with regard to reasons they give for their aims and intentions (ask 'why' questions). Significance: For each of the above questions also probe the parent for the significance they attach to their aims and intentions (ask questions commencing with: "How important is that relative to?).
tutor?	How much time do they set aside for preparation? What do they do when guiding the child in correspondence lessons? How do they motivate the children when confronted with correspondence materia What other aspects of their life impact up their role? Reasons: For each of the above questions also prothe parent with regard to reasons they gir for their aims and intentions (ask 'why' questions). Significance: For each of the above questions also prothe parent for the significance they attack their aims and intentions (ask questions commencing with: "How important is the

THE STUDY POPULATION AND THEORETICAL SAMPLING

Data gathering and analysis undertaken in this study used a grounded theory research approach which is complementary to symbolic interactionism (Charmaz, 2000). Grounded theory techniques and procedures were employed to develop theory inductively from the data (Charmaz, 2000, p.509; Punch, 1998, p.163). Further details of these strategies are detailed later in this chapter.

Following is a brief explanation of how the grounded theory approach relates to the extent of data gathering and the participant sample.

Grounded theory methods are not rigid prescriptions for collecting data, but rather refer to specific analytic strategies which the researcher can "use in turn to inform and refine their developing theoretical analyses" (Charmaz, 2000, p.509). These strategies require however that extensive data be collected. Collecting extensive data, as Geertz (1973) states, provides rich and thick data in order to develop theory relevant to the central research question and study.

Data were collected for this study from multiple sources and initially guided by the central research question. Analysis began immediately and "guided by emerging directions in that analysis" (Punch, 1998, p.167) the next stage of data collection was undertaken. This cycle is ongoing until theoretical saturation is achieved. Grounded theorists refer to this process as theoretical sampling. Charmaz (2000) describes this process as a choice the researcher makes "to develop their emerging categories and to make them more definitive and useful" (p.519). Thus the aim of the sampling undertaken in this study was to refine ideas, rather than increase the size of the participants.

Theoretical decisions about sampling evolved as the research was being undertaken (Strauss, 1991; Strauss & Corbin, 1990). However, it was initially reasonable to expect that the phenomena being investigated could be located prior to the commencement of the study [Strauss, 1991; Janesick, 2000]. Indeed, in this study, it was clear that the 'phenomena' of home tutors would be found at the five SOTAs and SIDE located in rural and remote Western Australia. The researcher had established a rapport with the SOTAs throughout ongoing the pilot study which ensured authentic access and

communication with the participants (Janesick, 2000). The pilot study is described fully later in this chapter.

Limited time and resources narrowed the extent of data collected and consequently a strategy of modified inductive analysis was utilized. The use of the strategy of modified inductive analysis was necessary, as gathering data from all sites was neither practical nor possible. Therefore, the substantive theory to emerge from this study relates entirely to the locations described in this study, namely the SOTAs and SIDE in Western Australia (Schwartz & Jacobs, 1979).

In this study the researcher limited data gathering to the four of the five possible sites in which the phenomena under investigation were evidenced. It was intended that all sites would be investigated but climatic conditions and financial resources curtailed data collection. However, it should be noted that in grounded theory studies, theory is representative of the contexts and actions of the phenomena being investigated. It was not proposed that that the theory to emerge from this study would be generalized to all five possible sites but rather represents the four sites reported here. In this study the aim was to develop theory which took into account the context in which the phenomenon of parents as home tutors existed, the actions and interactions associated with parents as home tutors and any associated outcomes or consequences of parents as home tutors.

Overview of the data gathering phases

The data-gathering phase of the study commenced in February 1999 and continued through until July 2002. Details of the data-gathering timetable are contained in Table 4.1.

Table 4.1 Timetable of Data Gathering

Months	Data gathering tasks
February-December	Pilot study
1999	Visit to parent station
	Interviews
February-April 2000	Semi-structured group and individual
	parents interviews at SOTAs Seminar
	Observations of parents at Seminar
	Document study
April-July 2000	Telephone 'follow-up' interviews
	with Principals of School of the Air
	Document study
July-December 2000	Semi-structured interviews with managers
	and curriculum directors at the School of
	Isolated and Distance Education
	Document study
July 2001- July 2002	Follow-up unstructured telephone
	interviews with parents, teachers and SIDE
	Document study

The School of Isolated and Distance Education (SIDE)

Western Australia is the largest of the Australian States and the School of Isolated and Distance Education (SIDE) coordinates a variety of programs to ensure that all children in Western Australia can gain access to a formal education. The parents that formed the group for the study are the home tutors of the five Schools of the Air and consequently fall under the brief of SIDE. The formation of SIDE resulted from the amalgamation of the Distance Education Centre and the five Schools of the Air. SIDE is located on six campuses. In addition to the Preparatory [P-5], Middle [6-10] and Post Compulsory [11-12] Schools on the Leederville site, there are five Schools of the Air located at Kalgoorlie, Port Hedland, Meekatharra, Carnarvon and the Kimberley [Derby]. The School is lead by a director who manages the six

campuses with a team of Principals and Managers. The school has a large and diverse student population ranging from Pre-primary to Year 12.

The Schools of the Air (SOTA)

Western Australia occupies approximately one third of the Australian continent. The parents who formed the population for the study were located within designated SOTA zones in rural and remote areas of Western Australia. There are five zones. These schools are located hundreds of kilometres from each other and from the State capital city of Perth. Gathering of data for the study was restricted to four SOTA. Adverse weather conditions prevented the collection of data from the fifth SOTA. These schools are located at Carnarvon, Kimberley (Derby), Kalgoorlie, Meekatharra and Pt Hedland (see Map 4.1).



Map 4.1: Location of Schools of the Air

SOTAs provide education for students from years P-7 located in remote areas. Traditionally, lessons have been delivered using the RFDS HF radio network. However, Email and other technologies have also been

introduced to improve interaction amongst students, supervisors, home tutors and teachers. For some students, electronic mail is also used to reduce the time required for the distribution, assessment and return of lessons. Teachers from SOTAs usually visit remote home locations two or three times a year to advise and assist home tutors (parents and governesses) and students. Mini camps and school camps provide students with the opportunity for social interaction with their peers. They also become opportunities to gain access to a range of complementary learning experiences and activities. These might include organised physical education, visits to events or sites of interest such as museums and galleries and participation in workshops provided by visiting experts in areas such as art, drama, and music.

Each SOTA setting while in many ways similar also had unique characteristics. However, in regards to support for the role of home tutor all parents at all sites had an identified teacher as a first point of contact. This was usually, but not always the class teacher. Home tutors were also able to contact other members of the teaching staff at their SOTA and at all sites, if necessary, directly to SIDE. Home tutors could also request home visits which were set at two per term, although this varied from SOTA to SOTA. The annual *Seminar* program was usually coordinated by respective SOTAs and included specialist advice to the parents about a wide range of issues associated with the role of home tutor. SIDE provided professional development activities within the *Seminar* for parents and staff (teachers) in an attempt to increase the knowledge of teachers and parents about education issues.

The Parents

In 2000-2001 there were approximately 500 parents who were undertaking the role of home tutor to their children at SOTAs across Western Australia. Some parents were responsible for more than one child, and in some cases, more than three children. Most of the parents did not have a teaching qualification. Other parents had ushered through older children and this informed their experience of being a home tutor. Parents were usually the home tutor during the primary years, after which many children moved to boarding school in the major cities of Western Australia. Of all parents, 100 were involved in the study reported here. The parents had a range of background and experience which allowed the researcher to sample broadly and thereby, develop a dense theory. In grounded theory it is important that multiple perspectives are included and that theory is grounded "directly and indirectly on perspectives of the diverse actors toward the phenomenon being observed" (Strauss & Corbin, 1998, p.173). In effect ensuring that the parents had a range of backgrounds and experience as home tutors allowed the researcher to sample broadly and thereby, achieve thick and rich description (Geertz, 1973) and develop dense theory (Glaser, 1978).

The researcher had excellent trust and rapport with the participants which allowed for the capturing of "nuance and meaning of each participants life from the participants' point of view. This also ensured that participants were more than willing to share everything, warts and all, with the researcher" (Janesick, 2000, p.40). She had developed positive relationships with the participants at all SOTAs and SIDE. Further, the researcher was familiar with the expectations of home tutors by EDWA and therefore had an understanding

of 'the culture' and 'language' (Fontana & Frey, 1994, p.366) of rural and remote schooling.

Teachers, principals and parents who were home tutors of the SOTAs and SIDE were more than agreeable to the research being undertaken. They willingly engaged with the interview process and provided additional materials such as the printed guidelines given to new home tutors, SET booklets and other documentation. These documents provided additional sources of information relevant to how parents managed the role of home tutor.

The Teachers

The teachers of the SOTAs are mostly trained Primary School Teachers. There are some instances of specialisations in curriculum areas. Regardless, each teacher is expected to promote a curriculum that embraces the Key Learning Areas as prescribed by the Western Australian Education Department. There is an expectation that the teachers will provide support and guidance to parents who act as the home tutor in all curriculum areas. The range of expertise and familiarity with the curriculum varies from school to school and is a source of diversity for the study. Including the teachers in the sample provided an opportunity to collect a contrasting perspective in order to understand the parents role as home tutor.

DATA GATHERING METHODS

Consistent with the general methodology of grounded theory is the systematic gathering and analysis of data. The interrelationships between data gathering and analysis are often referred to as the constant comparative method (Strauss

& Corbin, 1998, p.158). In this study, the processes of gathering and analysing data were undertaken concurrently throughout the 2000 and 2001 school year and the first six months of 2002. For the purpose of reporting, the gathering and analysis techniques are considered separately in the following section. Firstly, gathering techniques will be described after which analysis techniques are discussed.

Three major sources of data were used in this study. Data were collected from semi-structured interviews, *Seminar* observations and document study. Other techniques such as informal discussions and telephone conversations were also used to gather data. This combination of methods ensured that the researcher was constantly immersed in the meanings and perspectives of the participants in the study. Furthermore, there was opportunity to "look for relationships regarding the structure, occurrence, and distribution of events over time" (Janesick, 2000, p.43).

During the 1999 school year a pilot study was undertaken to trial and refine the various data gathering methods and to inform ongoing design decisions. Janesick (2000) states that "this initial time frame allows the researcher to begin to develop and solidify rapport with the participants as well as to establish effective communication patterns" (pp.42-43). There was opportunity for the researcher to undertake individual and group interviews of selected key participants during a workshop for home tutors' children. Time was also allocated for the appraisal of documents which were supplied by the home tutors in order to gain further insight into how parents supervised the schooling of their children as home tutors (Janesick, 2000).

LeCompte and Goetz (1982) confirm that participation in the social life of the phenomenon over a period of time can strengthen the relationships developed between concepts and observations made by the researcher which can contribute to the internal validity of the research undertaken. Further, the credibility of this study is accounted for as there were multiple perspectives of the social reality of the phenomenon of home tutors that were sought through formal and informal data gathering techniques (Bryman, 2001, p.272).

The time invested in the pilot study also heightened the 'theoretical sensitivity' of the research towards the phenomenon of home tutor. The researcher gained both research and personal experiences to complement disciplinary and professional knowledge into the phenomenon. Strauss and Corbin (1998) state that this can enrich the analysis as the researcher-theorist is becoming increasingly sensitized through the continuing conversation with 'the data' (pp.173-174). The pilot study also went beyond building rapport and theoretical sensitivity as it has enabled the researcher to make decisions about how best to use the time allocated to collect data and the strategies best suited to collect rich description.

Interviews

Data gathering took place at four of the possible five annual *Seminars* and SIDE during the period from January 2000 to December 2001. Semi-structured interviews (Bryman, 2001) were conducted with individual parents and with groups of parents. The interviews were undertaken as the annual *Seminars* occurred which was usually during Term 1 and Term 2 of the school year.

The interviews typically lasted for one hour and consisted of a series of questions in the form of an interview guide that had been derived from the

study's guiding questions. The interview guide also allowed the researcher to "ask further questions in response to what were seen as significant replies" (Bryman, 2001, p.110) about parents' perceptions and understandings of their role as home tutors.

After the first round of interviews spanning Terms 1 and 2 the researcher was in telephone contact with some of the parents and teachers in the study. Given the significant travelling distances and "geographically dispersed sample" (Bryman, 2001, p.111) it was decided between the researcher and the participants that telephone 'conversations' (interviews) were appropriate and suitable. As the researcher had developed considerable rapport and trust of the participants telephone conversations were both a cost effective way in which to gather more data related to the phenomenon of the home tutor and became an immediate response tool for both the researcher and the participants. Disappointingly few participants made telephone contact which may been due to the cost associated with using the telephone although this was never raised. The initiative for the conversations were left mainly to the researcher.

The next round of personal interviews were with the teachers, managers and heads of schools at SIDE over an extended period between July 2000 and December 2001. Many of these participants held positions at SIDE which meant that they were not as freely available as the parents in the first interview round and suitable dates and times were negotiated with each participant. All participants in this interview round were cooperative and positive about the interview process. Again, each interview lasted about an hour although many were longer. SIDE is located in a well-known café strip so many interviews were conducted over lunch and out of school hours in nearby cafés. These

interviews were particularly important as they enabled further data to be collected about the concepts that emerged from the analysis already undertaken of earlier interviews with parents and teachers based at the SOTAs.

Informal telephone contact between the researcher and the principal of School of Isolated and Distance Education was also maintained throughout 2000-2002. Additionally, the researcher invited the parents to initiate telephone conversations at any time to discuss any matters related to their role as home tutor.

The significant amount of data as to how parents 'manage' their schoolroom work as home tutors was acquired during the fifty hours of parent and teacher individual and group interviews. While informal telephone discussions could not be recorded they were written carefully and immediately after the discussion. All of the tape-recorded interviews were transcribed for subsequent coding and analysis.

Schoolroom Observations

Data were also gathered from schoolroom observations during the pilot study. Undertaking these observations at this early stage of the study enabled the researcher to begin the process of describing and detailing the meanings that parents held about their role as home tutors. This is consistent with Blumer's (1969) second major principle, that people act towards things on the basis of the meanings they have for them and a reason why schoolroom observations were undertaken. Data about parent actions-interactions were collected through unobtrusive observations which Judd, Smith and Kidder (1991) state allow the researcher to see the participants behaving in the same way that they would in *real life* in the "circumstances in which they are ordinarily found" (p.271).

However, it was not possible for the researcher to attend all home sites of parents given the difficulty of the large distances and considerable cost associated with this. The parents lived within a 250,000 square kilometre zone from each SOTA location thus making it impossible given the resources of the researcher to visit all parents' homes.

The researcher was invited to the home of one family where observing the behaviour of the parent (home tutor) and the situation in which the behaviour occurred was possible. The visit to the station was for an extended period of time and enabled the researcher to observe the strategies that one parent used to respond to the phenomenon of home tutor.

Over a period of a week the researcher would spend a half-day in the schoolroom, with half the time devoted to school room observations and the rest of the time spent taking part in the schoolroom and conducting a parent interview. Each observation session lasted for approximately three hours and involved the researcher taking a passive role within the schoolroom. Throughout the periods of schoolroom observation the researcher attracted little attention from the children despite initial curiosity. The school day for this family was typical of others and began at 7.30 am and concluded at midday. The researcher spent the rest of the day taking part in station life and thus observing the parent beyond the schoolroom.

There was opportunity to ask questions about what 'meanings' parents had attached to the role of home tutor. This was important as there were times when strategies observed in and beyond the schoolroom required clarification. As an example, when the parent had already sought advice from another home tutor on a particular piece of work and had made the decision to omit the task

the researcher was interested in knowing why the parent had not thought to seek advice from the class teacher in the first instance. Later the researcher observed the parent seeking advice from the class teacher but the parent had already acted on their previously made decision. The observed action became significant and further discussion was required to clarify the strategy that the parent as home tutor was employing. This action was a consistent strategy employed by parents in the role of home tutor and its significance is discussed further in later chapters of this thesis.

In order to have reliable records of the observations, field notes were written. They were detailed summaries of the "events and behaviours and the researcher's initial reflections to them" (Bryman, 2001, p.304). Bryman classified such summaries into three categories. They were:

- Mental notes: those that you take down when it is thought to inappropriate to be taking notes
- Jotted notes: brief notes that you might take as a reminder to jog your memory later and;
- Full field notes: usually undertaken as soon as possible as the main detailed data source. (Bryman, 2001, p.305-306)

During the observations at the *Seminar* and on schoolroom visits data included jotted and full field notes made by the researcher. The full field notes recorded over eighty hours of *Seminar* observations throughout the study. They contained important and relevant information in relation to how parents manage their schoolroom work as home tutors.

A final set of follow-up interviews was conducted with the director of the SIDE in July 2002. This was undertaken for several reasons. Initially the main requirement of this final stage of the research was to seek substantiation and confirmation of the emerging theory. However, these discussions also became an opportunity for the researcher to ask further questions about the data that had already been collected in relation to the emerging theory.

Data were collected during the period from March 1999 to July 2002. Analysis of the data did not occur after the collection of data but rather concurrently. In this study data collection and analysis were integrated. As is consistent with a 'grounded theory' approach maintaining a close connection between the data and the emerging concepts is essential for developing trustworthy and authentic theory (Glaser and Strauss, 1967; Strauss and Corbin, 1990). The data analysis that was undertaken in this study is described in considerable detail in the next section.

ANALYSIS OF DATA

Data that were collected from interviews, observations and documents were carefully coded using code notes, observational and theoretical memos which lead to the development of categories and related propositions that resulted in the theory of *individual perseverance*. A full description of these processes now follows.

Open Coding

The analysis of data in this study involved open coding which has been described by Strauss and Corbin (1990) as "the process of breaking down, examining, comparing, conceptualising and categorising data" (p.61). Data were scrutinized in most cases line-by-line for similarities and differences to produce concepts. Coding becomes the process by which the inquiry is *opened up* to reveal the meaning and motives of the interviewee and the researcher needs to be imaginative and vigorous as the analysis at this juncture will affect the next steps in the enquiry (Strauss, 1991, Strauss & Corbin, 1990).

In this study, transcripts were coded using an open coding process on a line-by-line basis from the commencement of the pilot study (March-December, 1999). Coding continued thereafter throughout the 2000-2002 school years. Schatzman and Strauss (1973) recommend that the researcher write code words in the right hand margins of the interview transcript sheets. This is illustrated in Figure 4.2 and 4.3 below. These excerpts have been taken from one of the transcribed individual interviews and an observation from one of the seminar meetings.

The open coding process enabled the researcher to think about and search for similarities and differences in the data. Charmaz (2000) argues that "coding keeps us thinking about what meanings we make of our data, asking questions of it and pointing gaps and leads in it to focus on during subsequent data collection" (p.515). This process of asking questions and making comparisons with data is often referred to in grounded theory studies as the constant comparative method. Put simply, this means that data may be compared for example between different people, individuals at different points of time and

between categories and sub-categories (Charmaz, 2000; Glaser, 1978;1992). In using a constant comparative analysis Charmaz (2000) suggests that the researcher is more attuned to the participants realities and further, that the researchers' emerging theories will be grounded in that reality (Charmaz, p.515).

Figure 4.2: Open Coding of Interview Transcript SCHL-A-P01.INT-March 2000

Interview transcript

We all have a lot of roles to fill as mothers and wives and a lot of us have our business or station roles to fill. We either go out mustering or fencing or cook or do the bookwork so we have a lot of other roles apart from the prime home tutor role we have taken on. When we start I am sure there are a lot of mixed feelings. We can be a bit tentative. We feel pretty exciting just thinking I have got to teach these kids. It can be pretty scary. I do not think when we start with our first child who has reached the time they have got to start learning, I do not think we ever realised just what it entails - this new role is going to have on our lives as mothers and women. I do not think until you get into this teaching role and when more of your kids start coming into school just how much of your time and what an impact it is going to have on the life of not just you, but your whole family and perhaps whoever might be involved in your household.

Coding

assessing number of roles; identifying specific roles as things mothers do; take an active role in station life;

home tutor most important role identifying feelings; anticipation of responsibility; possibilities and assuredness: an act of teaching by me; teaching as an activity; reflection of previous experience; familiarity with what is required; learned on first child; realization of the enormity of the job; know what it is going to be; assessing and reflecting impact of her life as a mother; the role falls to the women: takes a lot of time: understanding the teaching role; teaching is an act; multiple children being schooled; identification of life style changes; relationships in the family and with others

Figure 4.3: Open coding of Excerpt from Seminar Observation Notes SCHL-B-OBS-May 2000 General Home tutor meeting 8.45-10.00 am

Observation notes

8.45 a.m. Parents gather together with acting principal (AP) to discuss a variety of issues. The chatter is friendly, the atmosphere relaxed. The AP welcomes the group to Seminar and outlines the program for the next three days. Use the time at Seminar to see each other and catch up. The AP asks for any issues to start the session. A mother raises the issue of working with their class teacher and the problems with what to include and leave out in the Sets from SIDE. Another parentfed up with lack of sensitivity from teachers, lack of understanding from the teachers and sick of having to 'make it up'. Another parent- 'too little, too late'. Another parent, 'the teachers know the materials' and the 'materials' do not allow us any options, when a page is left blank it is demoralizing for the children'. Another parent-'How do I know what to leave out?' AP- it is important that you contact your class teacher and discuss the issues. A parent interjects- I only ring when I need help and it ends up with an emotional interaction. I find it difficult to communicate with my teacher'. The group is increasingly becoming upset. One parent who has been with SOTA for a considerable time begins to cry and is comforted by another parent. The AP begins to make a list of concerns and issues on the whiteboard. The atmosphere in the room is hostile, mixed with frustration and hurt.

9.30 am

Coding

parents glad to see each other and exchanging greetings- it is the first meeting of Seminar; communicating with parents-support; professional development;

socialising;

identifying areas of concern of home tutors communicating with class teacher; questioning how much of the correspondence materials are important; frustration of home tutors how do I know wha

frustration of home tutor- how do I know what to leave out? Selecting and choosing; hurt; teachers do not understand how I feel? unsuredness; tiredness; why can't teachers help; irritation; frustration;

home tutor is not a teacher; expectation of teachers; high expectation of teachers; out of depth and frustration at not being able to help child; home tutor blaming self; frustration; inadequacy; my fault; children suffer:

acknowledging difficulty and feelings; allowing emotional outburst;

seeking help; frustration at inadequacy; irritation; poor communication; misunderstanding;

frustration; sadness; helplessness; collective comfort and consoling as a group; identifying as a group; understanding each other;

acknowledging; listening and confirming issues; the issues are important; disappointment, anger; frustration, irritated; helplessness; hurt

The concepts developed at this stage are, according to Strauss (1991), only provisional, and the researcher must ask many questions around what has arisen. Strauss (1991) instructs that questions such as:

What category does this incident indicate? What is actually happening in the data? What is the basic problem(s) faced by the participants? What accounts for their basic problem or problems? will force the generation of a core category or categories which will be at the centre of the theory and its eventual write-up. (p.30-31)

Strauss (1991) also states that a more encompassing question to ask may well be "What is the main story here, and why? "(p.31).

During the analysis and theory development stages code notes and theoretical memos were written (see Fig. 4.4). The writing of code notes and theoretical memos allowed the researcher to explore more fully processes, assumptions and actions as well as to provide a structure for the data (Charmaz, 2000). Code notes are described by Strauss and Corbin (1990) as containing detailed descriptions and explanations of the conceptual labels which emerge from the data whereas theoretical memos are developed to both track coding results and stimulate further coding.

Figure 4.4:Code Note

SCHL-A-CODE NOTE 001/REFER-PO1.INT-March 2000 (p.1)

Code name: identification of multiple roles

Related codes: responsibility

act of teaching impact on life

relationships within the family and with others

Code note: Parent identifying the complexity of the role of home tutor. The parent is articulating that as mothers and wives (identification of multiple roles) and contributors to station life whether mustering, cooking, fencing or bookwork that their first responsibility is to their children's education. Although she may feel concerned about the responsibility of this it wasn't until the second child that she realized what that meant. The act of teaching is something that is looked forward to and she is excited by. She is reflective on the burden it is to the mother and how it impacts on family relationships.

Questions: What has caused the home tutor to identify multiple roles?

Why is that important?

Does the home tutor separate the role?

Is there potential conflict to be had in family

relationships?

What is the burden of being the home tutor for the

What does the home tutor do in their teaching?

mother? What does the home tutor mean by responsibility?

Why is she excited by it?

<u>Dimensions of multiple roles</u>: positive/rewarding position<> negative only

What study are these data pertinent to? Family relationships

Identity within the

family

Conflict analysis
Managing multiple

roles Gender Curriculum Teaching

RECORDING AND STORAGE OF DATA

There was a significant amount of data which required an orderly and efficient system for data coding, storage, and retrieval for theory development (Corbin, 1986, p. 102). All interview recordings were transcribed, coded and carefully sorted. Most data were stored and filed as both hard copy and on floppy disc. Other data such as documents, *Seminar* and schoolroom observations, and telephone interviews were also coded and filed. The researcher has ensured that all data were easily accessed, as this was necessary for analysing the data efficiently. Coding was systematic and all categories and sub-categories can be tracked through the data. This enhances and demonstrates the credibility and dependability of the study undertaken as the researcher can if required take others step-by-step through the research process (Bryman, 2001). As example of the coding system that was used to identify data from particular school, parents, teachers and documents can be viewed in Table 4.2

Table 4.2: Explanation of Types of Coding for Schools of the Air

CODE	Explanation
SCH -A	Carnarvon School of the Air
SCH-A-	Carnarvon SOTA Parent
PO1	Interview
SCH-A-GI	Carnarvon SOTA Group
	Interview
SCH-A-	Carnarvon SOTA Documents
DO	
SCH-B	Meekatharra School of the Air
SCH-B-	Meekatharra SOTA Parent
PO1	Interview
SCH-B-GI	Meekatharra SOTA Group
	Interview
SCH-B-	Meekatharra SOTA Documents
DO	

Chapters Five, Six and Seven of this thesis contain the findings of this study. Passages of data are distributed throughout these chapters and provide supporting examples of the categories and propositions which have emerged during data gathering and analysis. In most cases the passages are direct quotations obtained during interviews with the participants. Other evidence quoted was obtained from observations at *Seminar* or taken from the documents which each SOTA provided.

TRUSTWORTHINESS OF THE GROUNDED THEORY OF "INDIVIDUAL PERSEVERANCE"

The measures that have been used to evaluate this study in terms of trustworthiness are consistent with an interpretivist study in the symbolic interaction framework. Lincoln and Guba (1985) argue that it is inappropriate to use the criteria of reliability and validity favoured by quantitative researchers. They are critical of the view that there are absolute truths to be uncovered and alternatively there may more than one account to make known. Janesick (2000) argues similarly "qualitative researchers do not claim that there is only one way of interpreting and event" (p.393). With this in mind it was considered appropriate to use the criteria for *trustworthiness* as outlined by Lincoln and Guba (1985) for assessing this study. Trustworthiness is made up of a further four criteria: credibility, transferability, dependability and confirmability. These are described more fully in the following paragraphs.

Credibility

The credibility of the data refers to whether it can be believed. Janesick (2000) states that it is important consideration for the researcher that the explanation fits the description of the data to be considered credible (p.393). If research is carried out according to the "cannons of good practice" then it is likely that the data will have credibility (Bryman, 2001, p.272). Bryman refers to *respondant validation* (or sometimes called *member validation*) as an example of good practice for researchers. Essentially data is provided to the participants to seek corroboration or otherwise of the account arrived at by the researcher. Similarly Lincoln and Guba (1985) offer that if appropriate strategies such as described here are used then it is likely that findings and interpretations will be viewed as credible as they have been tested with the participants of the research.

It was important to the researcher that the "findings and impressions were congruent with the views of those whom the research was conducted and to seek out areas in which there is a lack of correspondence and the reasons for it" (Bryman, 2001, p.273). Consequently the credibility of this study can be measured in several ways. The researcher used a variety of data collection techniques over an extended period of time which provided 'multiple accounts' of the phenomenon being investigated. This also ensured that the theory would find acceptability amongst others (Bryman, 2001). Parents, principals, teachers and the director of SIDE were asked to review and appraise drafts of the emerging theory. Participants were also provided with transcripts. They had opportunity to discuss and provide impressions of the interrelationships within the theory and theoretical propositions as they emerged during the process of

data analysis. As the researcher purposefully instigated these strategies they ensure that the participants confirm the findings and credibility of the study are enhanced.

Transferability

As the data of this study were peculiar to the context of the participants the findings relate specifically to this unique group. This can make the transferability of findings a difficult if not impossible task for the qualitative researcher (Lincoln & Guba, 1985, p.316). However, by developing an indepth and detailed exposition of the phenomenon being studied this can be overcome (Geertz, 1973).

For this study an aim was to produce a 'thick description', which would detail the phenomenon being investigated (Geertz, 1973). The 'thick description' which included considerable examples provided by the analysis and consequent logical and ordered presentation of the theoretical propositions was further opportunity for others to make judgements about the possibility of transferability of the findings presented in this study to other contexts (Lincoln & Guba, 1985). As a result the strategies that have been used in this study such as detailed analysis of the interview transcripts, observation notes and documents may assist others to assess the transferability of the findings to different contexts.

Dependability

Dependability refers to establishing the trustworthiness of the research.

Therefore to establish the merit of this research complete records of the research process have been diligently maintained throughout the study to

ensure that the findings are consistent and reliable. Essentially, the researcher has made sure that "records have been kept at all phases of the research" (Bryman, 2001, p.273) so that the theory that has been developed can be tracked logically from the beginning of the study- from decisions about the research questions, and so on- to the final recommendations articulated in the final chapter.

Confirmability

Confirmability is concerned with ensuring that the researcher has not "overtly allowed personal values or theoretical inclinations manifestly to sway the conduct of the research and findings deriving from it" (Bryman, 2001, p.274). The study reported in this thesis has ensured the confirmability of the findings. Complete records have been maintained of the study, therefore it is possible to 'track' the research process and to attest that the findings are 'grounded' within the participants (parents) experience and their understandings of the phenomenon (home tutor).

ETHICAL CONSIDERATIONS

Approval to conduct the research outlined in this chapter was initially sought from SIDE as the governing body of the five SOTAs in Western Australia. This was consistent with the Western Australian Education Department's policy on research in schools. Before data was collected the director of SIDE (and consequently all participants) was furnished with specific details of the study including its purpose, how and when data would be collected, for what

the data would be used and potential benefits of the research. An assurance was given that any participant could withdraw from the study at any time without prejudice. This information was detailed on the consent form (see APPENDIX A). Further permission was then sought from the principals of each school of the air for the researcher to interview parents, teachers and conduct observations at *Seminar*. The director of the School of Isolated and Distance Education, principals of the schools of the air, parents and teachers each signed the consent form.

Consistent with maintaining confidentiality and anonymity of the participants all data was treated respectfully. Coding was used for all data that was collected and additionally during the analysis phases. All participants were assured that verbal or written accounts based on the study would not allow for individuals to be identified. In reporting the results no identifying code has been used as it was thought individuals would be easily known and confirmed by SIDE that this was the case.

AVOIDANCE OF RESEARCH DUPLICATION

Prior to the commencement of the study an exploratory review of the literature was undertaken to ensure that duplication of existing work did not occur. Frequent literature searches were subsequently undertaken during the study. However, as was identified in Chapter 2 and 3 few studies emerged regarding the role of the parent as home tutor and therefore it seems unlikely that this study duplicates research already undertaken.

CONCLUSION

This chapter has provided a review of the methodology undertaken for the study reported in this thesis. As outlined the intention of the study was to develop substantive theory about how parents who undertake the role of home tutor, 'manage' their schoolroom work. The study had as its focus the parents who identified as home tutors and whom have children enrolled in SOTAs in rural and remote areas of Western Australia.

Methods of data gathering and analysis consistent with those proposed by grounded theorists were employed to develop the substantive theory of 'individual perseverance'. Initially open coding techniques were used to reduce raw transcript data into concepts. These concepts were organised into categories and expanded into further associated or sub- categories that formed the basis of the resultant theory. In the next three chapters, a detailed account of the theory of 'individual perseverance', the central finding of the study, is offered.