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A grounded theory: Realising family potential through choice of schooling

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CHAPTER 2

METHODOLOGY

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The primary concern of this thesis is the challenge presented to families in Western Australia in regard to their choice of secondary schooling. Secondary schooling refers to students who are generally between the ages of 12 and 17 and attending school in the school years from Year 8 to Year 12. The choice at issue involves a decision whether to enrol the child in the local government school (which is the right of every child), or to choose to apply for access to a different government school outside the appropriate zone, or to seek access to an available non-government school on a scholarship or fee-paying basis. The principal focus of the present study is on the choice between government and Catholic schools. Moreover, this thesis focuses specifically on the decision-making by parents who were predisposed, for faith and enculturation reasons, to actively (and in some cases exclusively) look first to Catholic schools in preference to the available 'mainstream' government schools.

This phenomenon of choice was examined through use of the grounded theory method, a qualitative methodology, and an explanatory theory was developed that illuminated the bases for the complex choices that families make and the way in which they maintain, or change, those choices.

The grounded theory method produces a theory by collecting and analysing data obtained from participants who share in a similar problem or concern that is situated in a particular context (Charmaz, 2000). From the rich information derived (in this study, mainly from transcribed interviews) a theory of choice-

making is generated by systematically uncovering the meanings behind what the participants have said about the choices they have made, the factors that influenced those decisions, and their guided reflections on the outcomes experienced. Through painstaking application of the grounded theory method, the present study has sought to discover, within its transcribed interview data, the common essence of the processes each family engaged in as they took decisions or made choices to resolve their concerns about their children's secondary schooling or to realise their family ambitions and aspirations.

This chapter describes, using the context of the present study, the methods used in grounded theory for data collection, data analysis and the emergence of the theory. Issues of confidentiality and anonymity are also described and respected since the participants in studies of this type typically reveal private and often deeply personal issues related to the phenomenon under study. The chapter concludes with a discussion about how theories of this type can most appropriately be evaluated.

Grounded Theory Method

The grounded theory method, initially described by Glaser and Strauss (1967) in their seminal work, *The Discovery of Grounded Theory*, consists of "systematic inductive guidelines for collecting and analysing data to build middle-range theoretical frameworks that explain the collected data" (Charmaz 2000, p. 509). The resultant grounded theory is valuable to the extent that it adds a micro view of a particular human social process. Originally, Glaser and Strauss maintained that only professional sociologists were able to develop grounded theories (Glaser & Strauss, 1967). However, they later worked with researchers in other disciplines (Glaser, 1978) and the method has since been used in education, nursing, business, social work, architecture, communications, religious studies, occupational therapy, art, and sports psychology (Irurita, 1996; Strauss & Corbin, 1997), extending far beyond the purely sociological field (Piantanida, Tananis & Grubs, 2002).

The present study into parents' choice of schooling does not presume to be a contribution to educational sociology, but seeks rather to develop a substantive grounded theory generated by a practitioner-researcher that is useful for the consideration of issues related to school choice (Piantanida et al., 2002).

While grounded theories are richly descriptive, they do not remain merely a description. If they do, the use of grounded theory method is considered to be prematurely closed (Wilson & Hutchinson, 1996). The narrative data will have been under analysed and will "inadequately cover the behavioral variations" (Hutchinson, 1986, p. 128). Grounded theory method, properly and fully implemented, requires that the researcher "collect and analyse data from the natural world" (Chenitz, 1986b, p. 79), its purpose being to "understand the concerns, actions, and behaviours of a group and explain those patterns of behaviour at a higher level of abstraction, a theory" (Chenitz, 1986b, p. 79). Once data has been collected from the natural setting, it is analysed through the use of coding procedures. As Locke, (1996, p. 123) asserts, "at each level the theory becomes more refined, yielding a parsimonious integration of abstract concepts that cover behavioural variation".

Miller and Fredericks (1999) in describing how a grounded theory explains a phenomenon argue that grounded theory can be both predictivist and accommodationist but that it does not need to be either. Once the theory is complete, with all core categories saturated, generalised to the point of highly abstract concepts and able to fit all areas of inquiry, it is predictivist in that it can predict the outcome of any problem in that particular context (Miller & Fredericks, 1999, p. 550). It is also accommodationist in that, if it is true, it will also accommodate any literature in the same context. Miller and Fredericks further state that grounded theory is "the making of credible inductive arguments for phenomena situated within a context of discovery whose logic is some version and application of the methods of induction" (Miller & Fredericks, 1999, p. 549). Since the method involves constant comparative analysis with ongoing reflective memo writing, there is no linear format, everything remaining concurrent and circular until the theory is complete (Hutchinson, 1986).

Epistemology of Grounded Theory

The philosophical underpinnings of this method were discovered by Glaser and Strauss (1967) and are consistent with those researchers' academic backgrounds. Charmaz (2000) describes how Glaser applied "his rigorous positivistic methodological training in quantitative research from Columbia University to the development of qualitative analysis," and goes on to say that "grounded theory methods were founded upon Glaser's epistemological assumptions, methodological terms, inductive logic, and systematic approach" (Charmaz, 2000, p. 512).

Strauss, on the other hand, came from a background of Chicago School field research and symbolic interactionism, which had developed from the work of Herbert Blumer and Robert Park (Charmaz, 2000; Annells, 1996; Kendall, 1999). Annells (1996) describes the basic premises of symbolic interactionism and how grounded theory emerged from this tradition using its philosophical approach to human behaviour and the manner in which such behaviour is investigated. The work of Blumer and Park in the early twentieth century (Metz, 2000; Kendall, 1999) had been developed following the founding of American sociology by George Herbert Mead and others of the Chicago School of Sociology, who emphasised the importance of meaning when looking at the individual and society. Mead and his colleagues "believed that all human understanding is highly interpretive and socially shaped" (Metz, 2000, n.p.), and their symbolic interactionist theory "represented the first major challenge to the privileged status of functionalist theory" (Kendall, 1999, p. 744). Kendall records three theoretical objections that had been brought forward by the Chicago School in its case against functionalism:

> First, functionalist theory was inherently normative, evaluative, and conservative and was unable to account for periods of rapid social change. Second, functionalist theory was perceived to be a much more logical and orderly account of social life than supported by empirical observation. Finally, a functionalist theoretical perspective viewed the role individuals occupied to maintain the greater system (family or society) as the basic unit of analysis (Kendall, 1999, p. 744).

Because symbolic interactionism offered an alternative way of looking at society, where life was seen as a "fluid and dynamic process" (Kendall, 1999, p. 744) special methodology was needed for the new study of human behaviour, and it was from this basis that Glaser and Strauss (1967) discovered grounded theory. Grounded theory was "perceived to be able to generate a theory that would be functional for the intended purposes in the world of social science" (Annells, 1996, p. 383). Unlike verificational research that starts with an existing theory and seeks deductive verification in the data, grounded theory

> … utilizes an inductive, from-the-ground-up approach using everyday behaviours or organizational patterns to generate theory. Such a theory is inherently relevant to the world from which it emerges, whereas the relevance of verificational research varies widely (Hutchinson, 1986, p. 113).

Strauss and Glaser moved apart in their research directions in later years, particularly after Strauss had collaborated with Juliet Corbin. Strauss and Corbin (1990) developed a more prescriptive view of the grounded theory method, a prescriptiveness that was severely criticised by Glaser (1992) as amounting to an unjustified forcing of the theory rather than allowing the theory to emerge from the data as they had originally designed. Strauss, writing in the Preface to *Basics of Qualitative Research* (Strauss & Corbin, 1990), proposed that reading and studying the three major books by himself and Glaser (*The Discovery of Grounded Theory,* Glaser & Strauss, 1967; *Theoretical Sensitivity,* Glaser, 1978; and *Qualitative Analysis for Social Scientists,* Strauss, 1987), is strongly advocated and that while "some of their terminology and specific recommended procedures are not always identical", all three "express an identical stance toward qualitative analysis and suggest the same basic procedures" (Strauss & Corbin, 1990, p. 8). Glaser (1992) vehemently disagreed with Strauss on this issue. "*Basics of Qualitative Research* cannot produce a grounded theory. It produces a forced, preconceived, full conceptual description, which is fine, but it is not grounded theory" (Glaser, 1992, p. 3). Strauss and Corbin (1990) are more formulaic than Glaser but they also rely heavily on Glaser's original work with Strauss (Melia, 1996).

Epistemologically, grounded theory method sets out to discover the "relationship between the knower (the inquirer) and the would-be knower and what can be known" (Annells, 1996, p. 384). This is dependent on the ontological stance of the symbolic interactionist view that is inherent in the methods of classic grounded theory and reflects critical realism concerning the nature of a "real" reality (Annells, 1996, p. 385). Charmaz claims that both Glaser and Strauss "endorse a realist ontology and positivist epistemology, albeit with some sharp differences" (Charmaz, 2000, p. 513) and that grounded theory need not necessarily always be symbolic interactionist but can lean towards a "simplified, constructivist version … that can be adopted by researchers from diverse perspectives" (Charmaz, 2000, p. 514). Annells, however, argues that the classic mode of grounded theory is better placed in the postpositivist paradigm of inquiry as it "leans ontologically toward critical realism and a modified objectivist epistemology with an associated methodology aiming for theory discovery that may be subsequently verified by sequential research" (Annells, 1996, p.389).

Miller and Fredericks (1999, p. 538) asserts that the term epistemology, as it is being used here, is appropriate because it "characterizes both the type and parameters" of the approach of grounded theory that presents it as a "form of inquiry that produces knowledge of the social world".

The present grounded theory study has drawn from both founding authors. The initial work was guided by Strauss and Corbin (1990, 1997) and the subsequent conceptualisations directed by Glaser's work (1978, 1992, 1998a, 2001) with a clear awareness of the importance of the emerging theory. My regular participation in a membership of a multi-disciplinary analysis seminar group led by Dr Vera Irurita, an acknowledged grounded theory methodologist, at Curtin University of Technology (Perth, Western Australia) was very instrumental in developing an understanding of the method. Comprised mainly of nurses, the seminar group involved grounded theory research students from education, the police service, social work, and the allied health areas. It provided "an ideal forum for sharing learning experiences and for enhancing the development of

theoretical sensitivity and analytic skills" (Irurita, 1996, p. 3). Although Melia (1996) challenges the popular view that it is necessary to have a mentor in order to do grounded theory, the mentoring experience gained from participation in the Curtin group was critical to the development of the present study.

Use of literature in the Grounded Theory Method

In deductive research the available literature is typically reviewed fully early in the research process in order that an understanding of the topic is acquired early, the extent of previous work is acknowledged and analysed, and any unresolved issues are revealed (Hart, 1998; Strauss & Corbin, 1992). When used in qualitative research, the intentionally inductive nature of the grounded theory method requires that the literature be reviewed only after the emerging theory has been sufficiently grounded in the data, and then principally to relate the theory to the existing literature through the integration of ideas (Glaser, 1978). As Punch (1998, p. 167) states,

> Grounded theory has a different perspective on this matter from other research approaches. The difference lies in how the literature is dealt with, and when it is introduced, and follows from the stress that grounded theory places on theory generation.

Strauss and Corbin (1992), as well as Glaser (1978), give a further caution about the use of literature. It is important, they argue, not to "contaminate one's efforts to generate concepts from the data with preconceived concepts that may not really fit, work or be relevant" (Glaser, 1978, p. 31) and to avoid being "constrained by having to adhere to a previously developed theory that may or may not apply to the area under investigation" (Strauss & Corbin, 1992, p. 49).

On the other hand, where there are several grounded theories available in the same substantive area, the naming of categories can legitimately and usefully be influenced by previous studies once the data has been coded sufficiently to take on its own meaning (Wuest, 2000). And moreover, during the constant comparative process within the grounded theory method, other relevant studies can be deductively incorporated. As Wuest argues,

> ...the investigator's knowledge of relevant literature and theoretical schemes comes into play during constant comparative analysis and as long as primacy is given to what can be inductively derived from the data, only the components of pre-existing theory that fit the data will survive (Wuest, 2000, p. 55).

Strauss and Corbin (1992) define two different types of technical literature that are commonly used in grounded theory. The first relates to the technical aspects of carrying out a grounded theory study and includes "theoretical or philosophical papers characteristic of professional and disciplinary writing" appropriate to the method (Strauss & Corbin, 1992, p. 48). Literature of this type used in the present study included papers, articles, reports and theses using the grounded theory method, as well as text books dedicated to the subject, which together gave a solid background to the processes needed for the construction of a theory. Also included were reports of studies in other substantive areas such as sociology (Mizuno, 1997) and cancer research (Fujimura, 1997) that explicated the use of theory building in other disciplines. Technical literature of this kind was reviewed at the outset of the study.

A second form of technical literature relevant to grounded theory development is literature that focuses on the substantive area of investigation, although it is essential that consideration of it is not permitted to influence the study's essentially inductive processes. Available substantive literature was fully canvassed but, mindful of the danger of contamination noted by Glaser (1978) and Strauss and Corbin (1992), this was done only after the essential features of the grounded theory had emerged. Research papers and reports specifically related to the substantive inquiry of the present study were collected during the term of the research as they became available but they were deliberately set aside and not read until the theory, generated from the data of the study, had been completed. Discussion of this literature and its place in the overall process of the study's grounded theory is presented in Chapter 6.

Non-technical literature is defined by Strauss and Corbin (1992) as:

> Biographies, diaries, documents, manuscripts, records reports, catalogues, and other materials that can be used as primary data or to supplement interviews and field observations in grounded theory studies (Strauss & Corbin, 1992, p. 48).

Literature fitting this non-technical definition was collected as data throughout the term of the present study and was used in conjunction with the material obtained from formal interviews, as is described later in this chapter.

Research Design

The design for the study was intended to accommodate not only how the investigated parents have reached their decisions about schooling and how the deliberative process "works", but also what these decisions mean within their own social contexts (Page, 2000). In the 1970s there was substantial change in the study of educational issues as argument raged in academic circles about the usefulness and scientific value of qualitative research (Page, 2000). The intention of this research is not to describe the specifics of parental choices in education but rather to probe "what the described behaviours represent" (Bussis, Chittenden & Amarel, 1976, p. 15) in the sense of capturing the process that all parents go through when making choices about schooling for their children. An understanding of what is foundational to 'good discipline', for example, may vary widely among the parent body, and the meanings specific to individual parents must be explored collectively and comparatively in order that the common decision process can be discerned.

Page (2000, n.p.) has outlined the importance of recovering the "hermeneutic, or interpretive, orientation in social research", as a timely counterbalance to traditional quantitative research in education. Early criticism of qualitative research, according to Page, had centred on two serious problems: namely, that the description of method in many qualitative studies had not been sufficiently exacting in its approach to data and the foundation for the claims made, and that the wider social and historical contexts were often ignored. Both problems, he argued, "raise questions about the authoritativeness of qualitative accounts by

making it difficult for readers to assess their validity" (Page, 2000, n.p.) with the consequence that the presentation of early qualitative research had been challengeable both aesthetically and politically in terms of how, and for whom, the research was presented. Nevertheless, from a review of the more recent example, he asserts "the developments in qualitative research have improved rather than destroyed the methodology by clarifying its distinctive contribution to human understanding" (Page, 2000, n.p.).

Grounded theory addresses both of these criticisms. It is resolutely and consistently rigorous in its method, and by working properly within the parameters and standards of the method it is not possible to generate a full theory that is not fully substantiated. The method of analysis (described in detail later in this chapter) precludes the possibility of producing theoretical schemas that are not based on substantive data, as it is a method that "provides a total package, which takes one from data collection through several stages to a theory" (Glaser, 1999, p. 837).

Glaser (1999) maintains that the grounded theory researcher needs three characteristics, "an ability to conceptualize data, an ability to tolerate some confusion, and an ability to tolerate confusion's attendant regression" (Glaser, 1999, p. 838). For the present study, it is fair to say that the ability to tolerate confusion's attendant regression was most certainly necessary in that the theory formed, regressed and reformed a number of times before it reached a level of completion, a reality that made it very difficult at times to predict when the theory would be finished.

A further potential problem for qualitative research, according to Page (2000), arises when the research being undertaken is part of a particular political or ideological agenda. As described in the previous chapter, the issue of choice of schooling has recently become very important in the federal and state political scene in Australia, particularly in relation to the distribution of funding (Preston, 2004; Watson, 2003). This, it is recognised, raises important methodological issues for the researcher, such as: Should the researcher be completely impartial? Could the researcher's personal stance or interest in the topic

compromise the task of producing unbiased knowledge? With a Catholic background as parent and teacher, my personal immersion in the phenomenon to be studied could have produced unwitting distortions in the interpretation of the data. Grounded theory, however, has a rigour that reduces the potential for such distortion and, in fact, consciously values the theoretical understanding and attendant sensitivity of an informed researcher.

> Theoretical sensitivity refers to the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't. All this is done in conceptual rather than concrete terms. It is theoretical sensitivity that allows one to develop a theory that is grounded, conceptually dense, and well integrated – and to do this more quickly than if this sensitivity were lacking (Strauss & Corbin, 1990, p. 42).

Strauss and Corbin (1990) offer four sources of the theoretical sensitivity that can beneficially be brought to the study by an informed researcher: literature, professional experience, personal experience and the analytic process itself (Strauss & Corbin, pp. 42-43). It can be argued, therefore, that my ongoing personal and professional immersion in the phenomenon of research interest was of particular value to the study as it brought into play my firsthand knowledge of the phenomenon being researched and, in that sense, the way in which both the interviewed participants and the researcher were able to cooperate in the creation of knowledge. The interactions within the interviews themselves contributed to the way in which the knowledge was formed.

Similarly, within the analytic process itself, my conceptualising of the data to assist development of the emergent theory was an ongoing heuristic process that culminated an integrated explanation of the phenomenon, rather than simply a comprehensive description. As a result, the eventual theory, suitably saturated, is able to explain the various levels and subjective nuances of the phenomenon of school choice as the participants have experienced it.

As a sensitive insider to the phenomenon under study, I was consciously aware of the hermeneutics of the specific context. Hermeneutics is the science of interpretation that includes activities that can explain the meaning of something.

It is about "the theory and practice of interpretation, about the bringing of understanding into language" (Moss, 2005). Through in-depth interviews the participants in the present study have interpreted their own decision motivation in the light of their current context and an understanding of what their choice of secondary schooling has to offer to their child or children. Since these hermeneutics are dialectical in nature, the participants reflect on their choices, desires and expectations and in that reflection can also make a judgement on their choice, affirming it or rejecting aspects of it. At the same time, the researcher is also involved in dialectic of her own. The parents' meanings cannot be fully interpreted in the sense required for theory development without the engagement of the researcher's personal insight and contextual sensitivity.

To grasp the meaning inherent in an experienced event, Halliday explains that the, "interpreter must participate in a shared way of life within which the event has significance. Language can be used in at least two important ways to say something about the event and to try to understand what it means" (Halliday, 2002, p. 51). The author concludes that "meaning cannot be reported in a way that is independent of the observer because she or he has to understand what is being said and this [necessarily] implicates them in the subject of their research" (Halliday, p. 51).

Referring to the rigour of the method, Glaser (1978) asserts that

> … how the analyst enters the field to collect the data, his method of collection and codification of the data, his integrating of the categories, generating memos, and constructing theory – the full continuum of both the processes of generating theory and of social research – are *all* guided and integrated by the *emerging* theory (Glaser, p. 2).

The control extended by the emerging theory over all aspects of the process maintains a rigour that ensures its validity. Throughout the present study it became obvious that it is not possible to imaginatively make additions to the theory if they are not grounded in the actual data as they cannot be substantiated and therefore cannot become part of the theoretical construct.

During the development of the theory about choice of schooling, my own theoretical sensitivity to the issue described one category as *fear of losing own identity*. While there was a sense from the early participants that this was a reality, the subsequent comparative analysis did not support such a category. Although the original intention of the research had been to concentrate on secondary Catholic schools in Western Australia, it became necessary to ignore such delineation so that the actual concern of parents emerged from the data itself and not from a pre-imposed conception. I found, for instance, that it was not possible to conceptualise the real concern of parents participating in the study until I began to look for a basic social concern articulated by all the participants (Hutchinson, 1986, p. 114). The rigour of grounded theory requires analytic fit (Morse & Singleton, 2001), which is the "process of examining two entities and identifying their similarities or compatibilities along some identifiable dimensions" (Morse & Singleton, p. 841). If fit is not achieved it cannot be forced as that would destroy the inductive thrust to the research being undertaken (Morse & Singleton, p. 843).

Criticisms of Grounded Theory

Charmaz (2000) declares that grounded theory is actually imbued to some extent with positivism, from the perspective both of Glaser and Strauss and Corbin and their "assumptions of an objective, external reality, a neutral observer who discovers data, reductionist inquiry of manageable research problems, and objectivist rendering of data (Charmaz, p. 510). But, in Strauss and Corbin's (1990) move away from Glaser's (1992) stance, Charmaz (2000) maintains, as did Annells (1996), that they have moved towards postpositivism, in that

> they also propose giving voice to their respondents, representing them as accurately as possible, discovering and acknowledging how respondents' views of reality conflict with their own, and recognizing art as well as science in the analytic product and process (Charmaz, 2000, p. 510).

Punch (1998) comments on how the distinctions between theory generation (as in grounded theory) and theory verification are not as sharp as one would expect them to be. As the theory begins to develop from the data in grounded theory,

he argues it is necessary repeatedly to test it against further data collection, which amounts essentially to a form of progressive verification. To that extent, he concludes, "grounded theory is essentially an inductive technique, but it uses deduction as well" (Punch, p. 166).

Strengths of Grounded Theory

Hakim (1997) lists two significant strengths of qualitative research that are relevant to this study. First, because the research is grounded in the actual experience of people and in sufficient depth for the results to be taken as true, the data obtained will be valid. Second, its emphasis on motivations and connections between motivations and other factors, means that qualitative research can be "extremely valuable for identifying patterns of associations between factors on the ground, as compared with abstract correlations obtained from the analysis of large scale surveys and aggregate data" (Hakim, p. 29). Positivist research, by contrast, assumes that everyone shares the same meaning system (Neuman, 1994, p. 63). A parent who cites discipline as the prime reason for having chosen Catholic secondary education in preference to the government system, would thus be assumed to be interpreting this in the same way as every other parent who might also nominate discipline as most important. Interpretive, or postpositivist, qualitative research on the other hand is founded on the assumption that people may or may not experience social or physical reality in the same way. Thus, parents who list discipline as a prime reason may have learned their reality from a totally different context and therefore experience and understand that reality subjectively in quite different ways, imbuing it with their own personal meanings.

As will be shown, the grounded theory study reported in this thesis provides a theory that is grounded in the meanings and motivations presented by parents as they explored their reasons for choosing secondary schooling in a particular context.

Methods of the Grounded Theory Procedure

The principle focus of grounded theory is on the specific analytic strategies required for analysing data (Charmaz, 2000), not the collection of the data. However, since the analysis of the data commences as soon as it is available, the initial collection must be purposeful and disciplined, the objective being to provide depth and richness. Even though some grounded theorists collect data from interviews only, rich data can be drawn from many sources (Charmaz, 2000; Irurita, 1990), particularly ethnographic-type interviews, biographical data sheets, questionnaires, participant observation, informal interviews, examination of documents and literature searches (Irurita, 1990). The present study used all of the above sources except for participant observation.

Purposive Sampling

Purposive sampling, where participants are purposefully chosen with some particular focus in mind (Irurita, 1996; Punch, 1998), was used in situations where the selection of participants was based on the researcher's personal experience of the phenomenon under study (Irurita, 1996). Identifying and engaging a sample of participants initially was directed by their perceived relevance to the original research question, namely, why parents choose to send their children to Catholic secondary schools in Western Australia. A local Catholic secondary school was chosen as the site for the purposive sampling of participants for the initial interviews because of the ease of accessibility (Strauss & Corbin, 1990, p. 179) and what was already known about the school and its demographic.

Confidentiality and Ethical Clearance

Each prospective participant in the initial and subsequently expanded sample was provided with an information sheet that guaranteed confidentiality and anonymity and outlined the interview procedure (see Appendix 2.1). Explicit consent was required for a face-to-face interview, tape recording of the interview, and to be re-interviewed for clarification if necessary. Each participant who agreed to take part in the study signed a consent form that indicated that the information sheet had been read and that consent was given

(see Appendix 2.2). In the cases where an interview was conducted by telephone, consent was obtained verbally and the interview was recorded with a telephone-recording device and subsequently transcribed to a written transcript. All consent forms received were held in secure storage throughout the period of research. As soon as an interview had been transcribed, all names of people and places were replaced in the transcript with codes to preserve anonymity. Only the principal researcher had access to the identifying details of the coded participants, and these details were maintained in a locked cabinet at all times. Within the text of Chapters 3, 4 and 5, where the theory is presented, the original codes for the participants have been replaced by first-name pseudonyms in order that the text is more easily readable. Moreover, in relating events relevant to the theory, care was taken to exclude the possibility of situations being described in such a way as to make any participant recognisable to others through the context of the situation, thereby further securing anonymity. The Human Research Ethics Committee of the University of Notre Dame Australia gave formal ethical clearance to the study.

Participants

The first participants to be interviewed were obtained through a local Catholic secondary college where the principal was known to be enthusiastic about the intended direction of the research. With the principal's support, a letter inviting participation was sent to all parents of students who had enrolled for the first time at the college for the next school year. These parents were targeted specifically because they were actively involved at the time in the actual decision to enrol their child in the college. Six participants were interviewed from this group.

As coding of the transcripts of the interviews of these parents proceeded, it became obvious that the questioning needed to be much more open and that this initial cohort shared very similar perspectives. Consequently, it was decided that the sampling basis needed to be considerably wider to encompass greater diversity in locality and socio-economic background and to expand the number of participants. It was decided at this point to include a number of rural parents,

as it was clear that remoteness often presented a special set of challenges when the time came for children to progress from primary to secondary education.

Of the 39 participants of this now expanded sample, 30 were mothers and eight were fathers. The remaining participant, who was not a parent himself, had had a long history of association with Catholic schools and was included because of his evident knowledge of surrounding cultural issues. In two instances, the interviews involved the mother and father together. In all other cases the participants (37 mother and six fathers) were interviewed alone, without the involvement of their spouses.

City Participants

City participants comprised 80% of the interviews and were invited to take part in the research through a variety of approaches. While the researcher was working as a research assistant for another project, opportunities arose to interview Catholic parents whose children were not enrolled in Catholic schools and this advantageously broadened the parent cohort. Analysis of data from these participants prompted further sampling aimed at including parents with children at different forms of non-government education in the city area. Parents with children at large private schools were approached through a colleague and this resulted in four further interviews. One other participant initiated contact himself, following publication of early findings of the study in an article in The West Australian newspaper. A copy of the article is included in Appendix 2.3.

Country Participants

When interviewing country participants as part of the other project mentioned above, it became obvious that rural parents had different challenges from those in the city and that this affected their available choices for the education of their children. Among the country participants were three remote families who had fewer choices than those living close to school facilities in major towns. These three were in locations classified by the government as remote on the basis that it takes more than three hours on a bus for their children to access appropriate schooling. Families in such circumstances receive a living-away-from-home

allowance from the government. One of the families did not qualify as they were marginally inside the defined boundary, and this caused them some difficulty.

> *It wasn't quite 3 hours a day on the bus because if it was 3 hours a day he would've got a living away from home allowance and he would have been subsidised to go to boarding school and all the rest of it, but because we're in town here it's not quite 3 hours on the bus, it's about 2 and a bit (Mary, p. 7).*

Access to further country participants was sought while visiting a country school to present a professional development seminar as part of my normal work responsibilities. With the assistance of the deputy principal and two families who were already acquaintances, a series of interviews was arranged. One of the participants interviewed at this time subsequently moved to Perth and was interviewed again to follow the family's continuing story in school choice.

The distribution of school choices made by participants is presented in Table 2.1.

Table 2.1. **School choices made by participants**

Child	1		2		3		4		5		6		7	
	Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec	Prim	Sec
Government	18	10	18	3	7	3	3	0	0	0	0	0	0	0
Catholic	11	12	8	10	9	7	8	6	4	1	3	1	2	1
Other = independent and home schooling	1	3	3	4	0	0	0	0	0	0	0	0	0	0
Combination of schools	7	4	3	5	1	2	0	1	0	2	0	2	0	1
Total	37	29	32	22	17	12	11	7	4	3	3	3	2	2

A profile of the study's 39 participants is presented in Table 2.2. Construction of the participant profile yielded useful information about what kind of schools the parents had chosen, thereby revealing the distribution of choices across the sample as a whole. A further benefit of preparing the profile was the fact that is

summarised important contextual details in an accessible format that enabled easy reference throughout the data analysis and the writing of the thesis.

Table 2.2. **Profile of parent participants**

Characteristic		Number	Percentage of total cohort
Age	<40	11	28
	40-49	19	49
	50+	9	23
Gender	Male	9	30
	Female	30	70
Country of birth	Australia	23	59
	Other	16	41
Residence	Metropolitan	31	80
	Country	8	20
Religious affiliation	Catholic	31	80
	Other Christian	6	15
	None	2	5
Post secondary education	Yes	27	69
	No	12	31
Catholic schooling (parent)	Primary	19	49
	Secondary	20	51
Families with children younger than school age		4	10
Number of children currently in Catholic schools in participants' families		32	

Data Collection

Data collection in grounded theory is not solely reliant on interviews as it can be drawn from "multiple sources – observations, conversations, formal interviews, autobiographies, public records, organizational reports, respondents' diaries and journals, and [the researchers'] own tape-recorded reflections" (Charmaz, 2000, p. 514). Analysis and collection of the data occurs simultaneously as a grounded

theory study evolves and progresses (Irurita, 1996; Corbin, 1986b; Glaser, 1992) but, for clarity in the present thesis, details of the data collection will be presented first, followed by a separate discussion of the analysis of the data.

Self Reflection

The original area of interest for this study was the choice of Catholic secondary schooling in Western Australia. However, personal reflection and early journal entries helped expose the biases that were present in my own thinking and preconceptions that had flowed from my experience as a Catholic parent and my long involvement as a teacher within the Catholic school system. Constant journaling throughout the early period of data collection and analysis helped me to stimulate and refine my position within the research and, where necessary, to bracket my personal preconceptions.

Period of Data Collection

In order to identify early the possible areas of significance in the initial research question a short structured survey was completed during 1998 with colleagues in a Catholic secondary college where I was teaching at the time (See Appendix 2.4). Each of the surveyed teachers had children in the college or in another Catholic school and their contributions assisted in the early development of a line of questioning for the formal interviews that were to take place for this present study.

Formal interviewing of the participants began in 2000, with the majority of the interviews being completed within a two-year period. In conjunction with the interviews, personal memos were recorded on a dictaphone immediately following the conclusion of the interview and subsequently transcribed. Information was also sought through email contact, informal conversations, and policy reports collected from schools and other bodies where interest was shown in the phenomenon. Substantial newspaper coverage in the area of school choice occurred coincidently during the preparation of this thesis, and selected articles have been included in Appendix 2.3 (with a full list presented in Appendix 1.2) as it is pertinent to an understanding of the context of this study. Relevant information revealed by parents in these accounts has been used as

corroborating material, by comparing the material to the theory as part of the process of confirming fit.

The final round of interviews was undertaken during the writing of the thesis in 2005 in order to achieve saturation where there was need, or to review the theory with some of the participants (Irurita, 1996). Only one of the earlier participants was formally re-interviewed in this round but others who had been interviewed earlier engaged in informal discussions about the emerging theory and the way in which their contribution confirmed the theory.

Because positivistic research is generally conducted in a linear fashion it is therefore usually possible to budget accurately the time needed for each phase of a research study (Hutchinson, 1986). In generating a grounded theory, however, the process is "inherently circular in nature, requiring an indeterminate amount of time for conceptualisation to occur" (Hutchinson, p. 126). For the present study, it was necessary to recalculate repeatedly the time needed for completion, as the development of the theory proved impossible to confine within a predetermined time frame.

The Formal Interview

As has been noted, grounded theory requires in-depth information from participants in the research that gives details of their situation to form a rich description within the context of the substantive area of inquiry. The principal means by which much of this information is gleaned is through the formal interview. Formal interviews can be structured or unstructured (Chenitz & Swanson, 1986b; Minichiello, Aroni, Timewell & Alexander, 1995), but in grounded theory it is the unstructured interview that produces the richest description, as it allows participants to elucidate in their own words an aspect of their lives in which they are fully involved and for which reason they have been chosen as participants. In an unstructured interview, the interviewer may use a guide that contains "brief, general questions, a topical outline, or a major theme" (Chenitz & Swanson, 1986a, p. 67).

From the initial contacts, a semi-structured interview was formulated based closely on the principles of ethnographic interviewing (Spradley, 1979; Minichiello, et al., 1997; Fontana & Frey, 2000). The ethnographic interview "attempts to understand the complex behavior of members of society without imposing any a priori categorization that may limit the field of inquiry" (Fontana & Frey, 2000, p. 653). It became obvious after the pilot interview, however, that this particular semi-structured format was too specific and overly structured. By adhering to a predetermined schedule of questioning, the participants were unable to develop their own understandings and reactions to the main topic. Adjustments were therefore made to loosen the structure, leaving the format more open and natural, with trigger questions being used to assist in eliciting further particular aspects of the participant's story. The use of such triggers is described below.

The opening question of the original interview question list had been "How did you come to the decision to send your child/children to a Catholic secondary school?" By the third and fourth interview, however, it became evident that this question did not always offer a meaningful beginning, as each of the children in question was the fourth child of the family to be enrolled in the school. The second participant illustrated the inadequacy of the opening question by providing the following answer:

> *Let me have a relook at the question – what motivates parents to choose to send their children to Catholic secondary school? I would say that's not what I chose. It didn't work like that (David, p. 1).*

By the fifth interview, it was evident that the use of direct questioning was continuing to create problems, in this case because of the nature and special circumstances of the participant. This parent had been recently bereaved and was limited in her facility with spoken English. This meant that short clear questions were necessary, often being repeated in different ways, and it was not until the second half of the interview that she was able to speak at any length about issues that were raised.

For the seventh interview the approach was changed yet again, this time by initially asking the participant to speak about what he thought was a good education (see Appendix 2.5).

From each participant's initial response, opportunities to open the discussion further were created by prompts introduced by the researcher. For example, when Participant 7 spoke about "general skills" he was encouraged to elaborate by a prompt that asked him what he especially valued in education. It was an easy step for him then to tell his educational story.

When Participant 9 was asked about her understanding of a good education her reaction was negative and she responded with a very critical view and a seeming reluctance to go into detail. To get around this, short and very specific questions were used for some time to allow her to develop confidence in her point of view. By the second half of the interview she was able to respond at length.

In the tenth interview, the initial participant was a woman who was later joined by her husband. She was very hesitant at first, and when her husband entered she said very little and he assumed a confident position. Later in the interview she began to talk confidently and she and her husband complemented each other's story with further detail to provide a very rich description of country issues in educational choice.

By this stage a pattern had developed where the participants were asked initially about their understanding of what constitute a good education and then prompts proceeded from their response. Further trigger questions were used to maintain the flow of the participant's story, and to elicit detail. For example:

> And how did you feel about that….
> What was your child's response to that….
> Can you tell me more about that aspect….
> Let's go back to something that you said earlier…..
> Tell me the story behind that…..
> So when you say…. Can you tell me what you mean…..

What other aspects of school life can you tell me about…..

While the unstructured nature of the interview allowed for the direction to be established largely by the participant, some particular aspects were introduced into the conversation directly by the researcher. For example, metropolitan participants who had students in upper school were asked about the school's Year 12 ball. Questions of this type encouraged participants to detail issues on other aspects of the school culture.   For the country participants who had children in boarding school, trigger questions were used to prompt a description of that experience and its specific impact on their educational and family needs.

The Language of the Interviewer

In each interview, I considered it important to adapt my language where possible to include vocabulary used by the participant. This not only ensured that it was more comfortable for the participant to respond at a conversational level, but it also reduced the possibility of the researcher's technical language and preconceptions interfering with, or directing, the participants' natural response. As Swanson (1986) states, "The interviewer should listen for and be sensitive to language used by the respondent, and should use these terms when appropriate during the interview" (Swanson, p. 68).

Establishing the Connection

As was noted earlier in this chapter, a school principal had been contacted asking for his assistance in order to gain access to participants. The school contacted the parents and asked for their permission to give contact details. The permission included a signed consent form that was then followed by a phone call. In the phone call a broad outline of the study was given, assurance of confidentiality was provided, the importance of the study was explained, and a request was made for an hour of the participant's time. For those who accepted, an appointment was made.

In all interviews I was very conscientious about punctuality and arrived on time, dressed comfortably and casually and in a peaceful state of mind. In order to

achieve this I gave myself time away from any intense activity and time to read my prompt questions and my own outline. Flexibility was required in terms of time allowed, as the social need to chat on general issues could help establish the connection but this did take extra time. In some cases, even setting up the tape recorder turned out to be a useful establishing action when the participant's assistance was required in order to access a power point.

The filling out of the biographical data form (Appendix 2.6) also functioned well as an establishing experience for the researcher and the participants. Initially I asked the participants to fill in the sheet, but in later interviews I filled them in myself and asked the questions in a conversational manner. This enabled me to get a picture of the family which was later useful in stimulating appropriate trigger questions, for example, "At the beginning you said that there were three boys at high school, which one haven't we heard about?"

The place of interview was chosen by the participant and in most instances was in the kitchen/living area of their home. Often a cup of coffee further helped to establish the connection and cover any anxieties that the participant might have had. Extreme flexibility was required in one instance where because the participant who was known well to me spent quite some time crying. My stance as interviewer had to change several times as the tape was stopped and comfort was offered. There was no emotional risk to this participant as a trusting relationship had already been developed through our joint membership of the same parish community.

Being aware of the impact of body language and other forms of communication was also important in establishing and maintaining connections. Understanding the nature and significance of these other forms of communication has come from the field of neuro-linguistic programming (Gray, 1991). Neuro-linguistic programming (NLP) develops skills that assist those in a variety of contexts who deal with people in an interview situation in a great variety of places, for example, probation officers, social workers, researchers, school teachers, doctors, and other health professionals. Effective use of the NLP techniques requires that the interviewer is able to recognise certain communication traits in

the participant and is able to replicate and read the behaviour so that communication channels are made clearer and a common understanding is achieved. If the interviewer is able to read quickly the way in which the participant reads the world, trust and understanding can usually be established efficiently. The originators of NLP had discovered that a person's thoughts or inner processes are expressed verbally through four sensory modalities, visual, kinaesthetic, auditory, and body-movement (Gray, 1991, p. 3). In the present study for instance, people may respond in a visual modality by saying "The way that I see education is this…" If they were kinaesthetic they would say "Well the way I feel about education is…" If they are auditory in their modality they might say "The way I'm hearing the question is …" Eye movement provides another clue to the modality of the person, "upward eye movements reflect visual processing, lateral eye movements reflect auditory processing, and downward movements represent either kinaesthetic processing or indicate that the client is talking within" (Gray, p. 4).

An understanding of body position has been developed in NLP (Gray, 1991, p. 4) that helps the interviewer provide a comfortable communicative environment. Non-verbal mirroring on the part of the interviewer is a powerful tool in actually altering the subconscious indications of understanding. For example, if the interviewer subtly changes body position to mirror that of the participant, then the mutual feeling of trust and understanding can sometimes be established quickly. Reading the body language of a participant in other types of investigations has sometimes resulted in an interviewer simply using the information to interpret the participant, whereas NLP suggests that using the information by mirroring their posture can completely change the dynamics of the interview making it more comfortable for the participant and possibly yielding better results (Gray, p. 4). This form of mirroring of posture was used in interviews where appropriate in this present study.

It is important that the closing of the interview remains tentative (Chenitz & Swanson, 1986a) in order that the connections already established could remain open and useful. In each case the participants in the present study were encouraged to contact me at a later time should they have further information,

or if they wished to further develop anything they had shared with me. An opportunity for me to return for clarification if that should prove necessary was also requested.

Development of the Interviews

Unlike most structured interviews, the grounded theory interview evolves and develops responsively throughout the data collection. In the early interviews minimal control was exerted so that the widest possible interpretation could be placed on the subject by the interviewee, thereby ensuring that all possible dimensions and nuances in the participants' experiences of, and attitudes toward, the topic could surface. Once analysis of the early interviews was complete the formal interviews became narrower in focus as theoretical sampling commenced (Chenitz & Swanson, 1986b). As Chenitz and Swanson note, towards the end of the study it might only be necessary to have a short conversation to check out a few points that then allow the saturation and theoretical completeness to occur. In the case of Participant 35, for example, the necessary information was able to be collected simply through a brief email exchange, since only specific information about the change of schools was required, and this method of data collection was satisfactory to both parties.

A full conceptualisation of the interview process used in this study is contained in Figures 2.1 and 2.2. Conceptualising the process in this way was undertaken because it was apparent early in the study that the skill level needed by the researcher in order to complete this demanding form of research was initially inadequate. The conceptualisation together with a detailed exploration of the skills required for interviewing made a substantial difference to the remainder of the study. The importance of such preparation is well supported in the literature (Berg, 2001; Fontana & Frey, 2000; Minichiello et al., 1997; Rubin, 1995; Weiss, 1994).

Figure 2.1. **Conceptualisation of interview format**

ESTABLISHING CONNECTION	→	• Request for schools and other sources to provide names of participants and secure consent • Initial contact with participant – guarantee of confidentiality established, understanding of study given to level of desired interest, appointment made at participant's convenience • Personal contact made – interview at place chosen by participant, researcher's personal position assured as casual and calm in every aspect • Icebreakers – filling out biographical data to establish confidence and family background, hospitality accepted to promote warmth in contact • Comfortable placement of recording device once permission has been given, and explanation of interview process

GLEANING DATA	→	• Initial question open ended and clear to promote conversation • Awareness of body language (NLP) and other non-verbal communication necessary • Prompt questions easily accessible and non-intrusive • Use of language that reflects the mode of the participant to encourage confidence and mutuality • Flexibility and adaptability necessary in response to participant's needs (eg. stopping the tape for family interruptions, emotional difficulties) • Careful focus on view of participant which excludes researcher's opinions or experience • Desire to understand the participant's perspective

Expansion on following page →

CLOSING ACTIONS	→	• Gratitude expressed for participation • Open ended question about any further response or areas uncovered so far • Contact details presented so that further information can be relayed • Request for further interview should it be required for clarification • Disconnecting conversation – friendly interest • Unhurried exit

Figure 2.2. **From substantive frame to interview guide** (Weiss, 1994, p. 15f)

GLEANING DATA	**From substantive frame to interview guide:**

Concern about the motivation behind the choice made to enrol and maintain enrolment in Catholic secondary schools

This concern decides who should be interviewed and what should be asked? (Weiss, 1994, p. 17)

Theoretical Sampling

Once the initial interviews have been conducted, transcribed and analysed, further participants are chosen according to the emerging categories. The original interviews reveal the possible range of the substantive frame. Theoretical sampling identifies further relevant participants who can add data to the significant categories that have already been established. Theoretical sampling concludes when the existent categories have reached saturation.

➢ Initial idea – good education – what is it?
➢ Diachronic approach – family history of education
➢ Relate your experience of education
➢ Your spouse's experience
➢ Wider family's response
➢ Your children's education – tell the story
➢ Current experience – story of enrolment, starting out, academic emphasis, experience of RE, peer group experience, extracurricular activities, boarding experience, year 12 ball, exam time,
➢ **Has this experience given a pleasing result? Any negatives in the experience?**
➢ **On a scale of 1 to 10, (10 being best) how would you rate your overall experience of involvement with Catholic secondary education?** (*Can you tell me why?*) Single quantitative question (Weiss, 1994, p. 50) – can help anchor a qualitative discussion.
➢ Move to the future – personal/family investment – original dreams, new visions, real affect of education on family; relationship with Church
➢ After the story is complete, present the categories found so far in the form of "some parents think this, but others think that – where do you stand in this particular aspect?"

If the interview takes an unexpected direction the guide should be dropped entirely (Weiss, 1994, p. 51)

Transcription of the Interviews

Glaser (1998) forcefully advises solo researchers: "DO NOT TAPE INTERVIEWS" (1998, p. 107, author's emphasis). His advice is based on several factors; firstly, he says the power of grounded theory can be undermined

if the amount of data is not delimited quickly and efficiently, and that taping and analysing every small part of the data can overwhelm the research. Secondly, he adds, that taping delays theoretical sampling by prolonging the analysis of the data. Thirdly, taping collects words, not observations, and both interview and observation need to ground the meaning. And, fourthly, Glaser (1998) suggests, taping reduces the skill level of the researcher who should rely instead only on "note taking, immediately coding and analyzing and then theoretical sampling" (Glaser, p. 111). Notwithstanding Glaser's arguments, it is fair to say that for a neophyte researcher, these high-level research skills of the experienced sociology researcher are seldom present. This study has therefore relied on taped interviews, along with observations recorded in note form. As the coding procedures developed, however, the need for intense scrutiny of every line and word was no longer necessary. (The grounded theory seminar group at Curtin University supported these strategies.)

Of the 39 interviews, ten were able to be transcribed professionally with the funding available. The professional transcriber signed a confidentiality agreement and provided digital and hard copy of each interview. The transcriptions were carefully checked for accuracy and amended where necessary, with all personal and geographical details being given pseudonyms to preserve confidentiality. This process increased familiarity with the content of the interview.

Completing the transcription of the remaining 29 interviews myself provided an advantage during later open coding as enhanced awareness of the interview detail was achieved through the painstaking nature of transcription. After each interview had been transcribed, each tape was played again several times, carefully listened to for meaning, and checked against the hard copy for accuracy. The tapes and hard copy were then stored securely.

Easton, McComish and Greenberg (2000) address three problems associated with transcription in qualitative research: "equipment failure, environmental hazards, and transcription errors" (Easton et al., p. 703). The initial interviews for this study were recorded on a Sony microcassette recorder in order that the

recording machinery would be as inconspicuous as possible. Extra batteries and tapes were available at all times.

Transcribing from the microcassette directly without the aid of an appropriate transcribing machine, proved difficult. A larger Eiki™ recorder was therefore used where possible, but this had the disadvantage that it required a power point, usually an extension cord, and was cumbersome and intrusive, even though it was more convenient for transcription. More resources became available through the University when the 11th interview was to take place. A Sony™ portable dictating machine was made available along with a Lanier VoiceWriter™, which made the transcription process more efficient. For the interviews conducted by telephone, an Olympus™ telephone recording pickup was plugged into the dictating machine to provide clear tapes for transcription and analysis. Careful handling and storage of this equipment resulted in no equipment failure.

Environmental hazards were carefully avoided although barking dogs, hungry children, crying participants and soft voices made recording difficult at times. Since the participant always chose the location for the interview, it was a place of comfort and security for them and not a work area, so hazards were minimized.

Transcription errors were avoided by very carefully auditing each tape, whether it was transcribed professionally or personally. Careful attention was given to achieving exact replication of the participants' language and nuance. For example, the transcript of the interview with Beth and Tom records:

> *Beth: To learn, I didn't really have a great learning myself when I was a child. I couldn't sort of get a grasp of things, um, the children these days they seem to get a good education, they come home and know they can spell, read, um yeah.*
> *Tom: The trouble is that if ya try to hold them, they'll just rebel.*
> *Beth: Rebel altogether. Like won't come home.*
> *Tom: Like sorta we did a bit, you learn after a while, you know, as you get older, mature a bit, you see the light (Beth & Tom, p.1).*

Open coding began by listening to the tape with the corrected hard copy in hand, and specific emphases and linguistic peculiarities were noted at the time. In transcribing the immigrant participants' interviews, great care was taken to ensure that the cultural understanding was correct. Punctuation was carefully documented so that the meaning of the content was clear. In the instances where crying, children's needs or other domestic problems interrupted the flow of the interview, the recording device was turned off until the participant was composed and happy to recommence the recording.

Throughout the thesis, quotes from the participants have been used to illustrate the way in which the emerging concepts have drawn directly from the data. Where identifying details within the quotes have been changed (for example, the name of a college or suburb), brackets enclose the changes. Engaging the readers in the actual language of the participants in this way provides them an opportunity to assess the researcher's level of inference. For example, Samantha was concerned about her children's access to Catholic schools when they moved to Western Australia and reflected in her interview about the reasons for this concern:

> *I suppose my dream is that because [my husband] and I went to Catholic schools all our lives, we just presumed we'd do the same with our children (Samantha, p. 3).*

This particular part of the transcript was coded as a response to her own personal history.

In Appendix 2.7 a brief description of each family provides a background for the richness of the descriptive narrative. It gives a further opportunity to deepen the understanding of the participants' stories and experiences.

Data Analysis

Although data collection and analysis proceed concurrently and in circular fashion in grounded theory development, they are discussed separately in this

chapter for the purposes of clarity of exposition. The grounded theory method of data analysis is described in following section.

The Constant Comparative Method

The strategic method used to generate a grounded theory is constant comparative analysis (Glaser & Strauss, 1967; Glaser, 1978; Strauss & Corbin, 1992; Hutchinson, 1986, Corbin, 1986a). Constant comparative analysis proceeds through four stages: comparing incident to incident to form categories, integrating the categories and their properties, delimiting the theory, and writing the theory (Glaser & Strauss, 1967). The strategic aim of the analysis is to "generate theoretical constructs that, along with substantive codes and categories and their properties, form a theory that encompasses as much behavioural variation as possible" (Hutchinson, 1986, p. 122).

Some actual data from the present study will be used here illustrate constant comparative analysis. For example, one of the participants in this study, an immigrant, described his appreciation of the kind of home country education he had had that later became unavailable to other coloured people during the apartheid period. He recounted a strong appreciation of what his parents had done for him, particularly by taking him each day to the city to attend the same school where his father had been educated. His education, he declared, was as good as any available at that time. He was very appreciative also of the choices that his parents had made and the sacrifice that those choices had entailed. Another participant, who had also been born and educated overseas, spoke of her education and the choices that her parents made for her. She was among the first generation of girls that were given equal access to education, even to the extent that she was the only girl in her class in her initial secondary school experience. After completing her schooling her parents allowed and encouraged her to travel overseas to gain further education and to seek professional employment.

The accounts related by these two participants are different in that the second one recounted an experience that was in the forefront of the change that ensured

proper advantage for girls in education in her country, while the first was at the end of equal educational opportunity immediately before the apartheid regime was established. Yet they both embody and convey a similar sense of appreciation as they explored the meaning of their personal experience in relation to educational possibilities for past or future generations. The second had reached a time of independence unknown to previous generations of women in her country and the first had achieved an education that was denied to the following generations of his race, which in turn deprived the children of opportunity. Comparative analysis of both accounts helped the researcher to develop and name a category of "Personal History", a category which later became important in the "refining of family imperatives" that emerged as a key procedural element in the first iteration of the theory as described in Chapter 4. The general process through which the analyst moves from raw data to the eventual integrated theory can be schematised as shown in Figure 2.3. Even though the figure seems to imply a hierarchical development, there is much activity that is concurrent and circular. It has been presented in a hierarchical manner only to convey the progressive growth character of grounded theory development.

Memos

Memoing is a vital part of the process of elevating descriptions of events in the substantive area to a theoretical level that encompasses meaning and relationships (Hutchinson, 1986, Corbin, 1986b). Strauss and Corbin (1990) describe the function of memos as "written records of analysis related to the formulation of theory" (Strauss & Corbin, p. 197). They are the means by which the researcher's ideas are given shape and recorded in order that they can later be used in development and articulation of the theory (Irurita, 1996, Corbin, 1986b). During the span of years taken to write this thesis, memos proved to be invaluable in recording what I thought about a particular area of the data at the time, what it appeared to mean to the participant, and what it seemed to signify in a more general sense. Relational schemas were drawn and associated memos described my emerging understanding and appreciation of the significance of what the participant had said. Such information captured in the memos and schema was important for ongoing discussions with my supervisor

Figure 2.3. **Construction of a grounded theory**
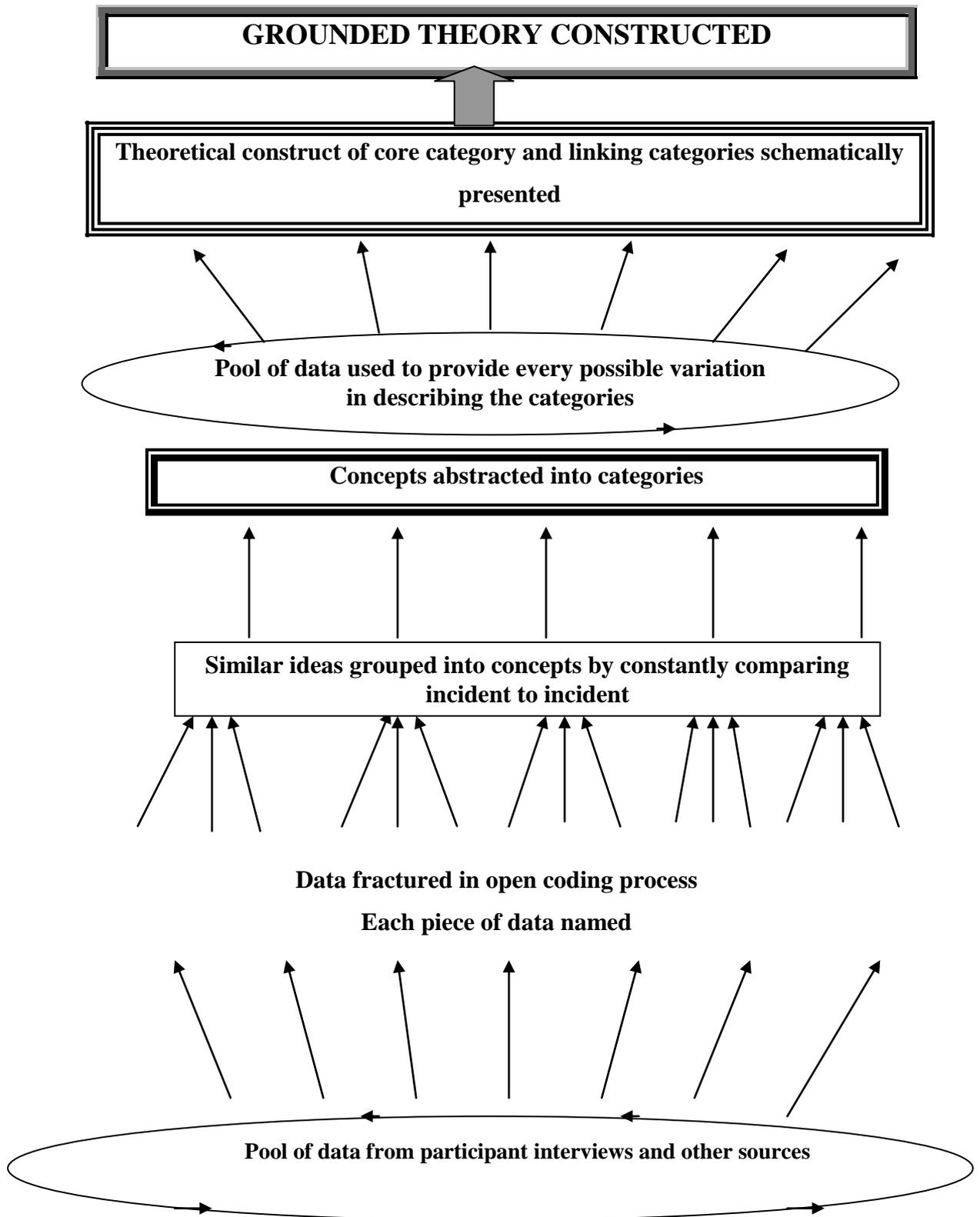
and provided much of the conceptual raw material for the eventual theoretical development.

Strauss and Corbin (1990) refer to three different types of memos: code notes, theoretical notes and operational notes (Strauss & Corbin, p. 197). In this study I did not seek consciously to create different types of memos, although an examination of those I did write would reveal some differences in content and purpose. I simply memoed everything that occurred to me as I struggled to find the underlying meanings in the transcript data in order to ensure that nothing was missed or forgotten and so that the developing theory could be as comprehensive as possible. Categorising of memos occurred through the action of filing them as coded entries within the word processing documents used for recording and retrieval. A well-structured system of category folders enabled the rapidly accumulating memos to be accessed according to their relevance. Where it became evident that a particular memo was needed in a newly developed category it was simply moved to, or added to, the new folder. Memos were also used to record both the means by which I was able to progress the research and the particular strategies that made the analysis cohesive. Two examples illustrative of the general form of memo used in the present study are reproduced in part below:

> *MEMO – Categories 26 March 02*
> *Assessing Children's needs*
> *Much earlier on this category emerged as the first category found. However, I did not even delimit it by describing its properties.*
> *From participant one, I have now been reviewing this category and asking what really is she doing? Therefore, I am listing all of the things that have emerged from her interview and am going to use the constant comparative method to try and show which categories are present and what properties they have. She has done things like:...*
>
> *RESPONDING TO PERSONAL HISTORY*
> *Describing family structure – complicated personal history, bereavement, background. Noting different expectations initially*
> *Showing prejudice against single sex private schools*
> *Describing reasons for prejudice – perceived artificial environment, crisis when dealing with the real world, arrogance*
> *Explaining – bereavement difficult*
> *Relating of personal experience of education, parents, family*
> *Describing self in upper IQ level – possible scholarship*

Participant's parents choosing to keep her within her home and people – proximity of close family, closely bonded, stay within social class
Finding strength in own background
Communication capacity good, extensive, because of background, capable of using different language
Describing poverty of peers who were bright students

Other information concerning aspects relevant to the progress of the study and development of the thesis was recorded in a separate research journal. The following memo recorded a supervisory discussion and illustrated my impression of the status of the developing theory at that time.

Memo 1 October 2002
This morning had a meeting with Tony and presented my document that shows the theory in full. Filled in categories as Wombing Their Future 1Oct02.

The theory itself is robust enough as a model to include all parents and guardians who intelligently consider their children's future and make choices. The differences that will cause parents to go outside the government education system will be involved in what they need to do to preserve their family identity. That might mean that the individual needs of the child take them outside the government system when they have already educated one or more children within this system.

Those who choose outside the "norm" system, choose within a spectrum that is not included in the norm. In applying their own imperative to preserve the family identity, it might mean that they provide completely different education for the individual.

In the final phase of the process, there needs to be some rearrangement. The justifying choice category can swing off in two directions. With supporting dynamics being the intervening condition, the parents/peers/school add to the child's chances of success. If there are challenges and negative dynamics, then they leave the justifying and either change the choice or exit the system.

In the final stages of theory development it was very important that it be possible to revisit and retrace all steps of the theory development to ensure that nothing was excluded or overlooked and to provide an effective audit trail for the study. The evolving story line was preserved through memos of the kinds discussed above. The memo below demonstrates the emerging theoretical construct at a particular time within the analysis period.

Memo 27 Feb. 03 Theoretical construct
(a complex idea resulting from a synthesis of simpler ideas)

BASIC SOCIAL CONCERN: Wombing the Future

Causal condition: ***Rumbling***
                                 education compulsory
                                 responsibility of rearing children
                                 have to make a decision – variety of choices available
                                 no perfect answer, no control over some facets

Contextual condition: ***Limits and needs***
                                 awareness of family imperatives
                                 desire to preserve family identity
                                 awareness of limited resources: economic, social, personal.
                                 awareness of each child's needs
                                 awareness of own educational history
                                 geographical location

Consequences: ***Making a Match***
                                 Harmony   ***OR***   ***Disquiet***

                                 families required to make a match so that the family remains in harmony.
                                 Family has successfully made a match where there are no   challenges that
                                 make them enter into the basic social process.   Anxiety over the choices
                                 available and the fear of error and world influences on the children give rise
                                 to a great deal of disquiet in some families, and little in others. If there is
                                 disquiet, the family enter into the basic social process to resolve the
                                 consequences of their concern.

BASIC SOCIAL PROCESS:
Preserving Family Identity

Phase one: ***Refining family imperatives*** *(responding to personal history*
                                 a contextual factor of this category)
                                 Assessing specific needs of each child

Phase two: ***Framing their options*** *(intervening condition – availability -*
                                 closure of local schools, chosen school full,) committing
                                 family resources, sourcing information, ensuring
                                 opportunities available

Phase three: ***Balancing***
                                 minimising and maximising options
                                 re-engaging family imperatives, singularising result

Phase four: ***Managing the result***
                                 three subcategories: *Maintaining the choice*
                                                               Changing the choice - redo
                                                               Exiting the system to restore
                                                               balance

By continually preserving, revisiting and reflecting on the ideas and insights
contained in the recorded memos, it was possible to move progressively forward
with the construction of the theory. Neuman (1994) describes the analytical
memo of the qualitative researcher as forging a link between the concrete data or

raw evidence and more abstract, theoretical thinking, and characterises most qualitative researchers as "compulsive note-takers" (Neuman, 1994, p. 411). Note taking is not only compulsive for most, but is also compulsory. Important ideas often occur in strange places at strange times when the mind is free to wander and move among different levels of abstract thought. The initial field notes might be simply the researcher's fresh impressions of the participant and the interview as well as the atmosphere and the environment. Once recorded, however, they can provide content for further reflection and contribute to the emergence of more abstracted ideas over time. For a considerable period I frequently carried a micro-cassette recorder to capture ideas, particularly when driving any distance, where there was time available for thinking clearly about the detail of the interviews and for developing abstractions. As this compulsive note taking progressed, blocks of the original transcript data that were relevant to the memos were filed in the same folder so that when the actual writing of the findings took place there was already a wealth of direct participant-language excerpts to enrich and ground the text.

Saturation

Saturation refers to "the completeness of all levels of codes when no new conceptual information is available to indicate [the necessity for] new codes or the expansion of existing ones" (Hutchinson, 1986, p. 125). New data will not be independently useful as a contribution to theory development unless it calls for the creation of a new code or the alteration of an existing code. Irurita (1996) describes saturation as being one of the later stages in the analysis where "no additional data [has been] found to develop new categories or properties of the categories, as they related to the core category or process" (Irurita, p. 7). In this study, saturation was reached by seeking parents, through purposive and theoretical sampling, who had different backgrounds and geographical settings, had made specific choices, and had made choices other than Catholic schooling. In the final stages of data analysis and interpretation that continued into the early phases of the actual writing of the thesis, further theoretical sampling was undertaken to fill in small areas where it was necessary to ensure that saturation was achieved.

Theoretical Sensitivity

Theoretical sensitivity is a personal quality of the researcher that is a consequence of the researcher's awareness of the subtleties of meaning of data (Strauss & Corbin, 1990). Such awareness gives the informed researcher an "ability to generate concepts from data and to relate them according to the normal models of theory in general, and theory development in sociology, in particular" (Glaser, 1992, p. 27). Researchers with this ability will be able to conceptualise their data to the highest levels of theoretical abstraction, taking its significance well beyond that of a merely rich description of a substantive area.

> Professional experience, personal experience, and in depth knowledge of the data in the area under study truly help in the substantive sensitivity necessary to generate categories and properties, provided the researcher has conceptual ability (Glaser, 1992, p. 28).

Strauss and Corbin (1990) identify four sources of theoretical sensitivity in the researcher: literature, professional experience, personal experience and the analytic process itself. By reading literature of the substantive discipline in which the research is situated, one can be sensitised to what is relevant to the phenomenon being studied. By working professionally in the area the researcher will often be able to identify more easily the events and actions pertinent to the study. Personal experience, too, can add to the researcher's sensitivity by providing concrete examples from which potentially relevant concepts and possible relationships can be generated. The analytic process itself can also be an additional source of theoretical sensitivity as the researcher interacts with, and interprets, the data. Such sensitivity, however gained, is necessary to undertake the construction of a theory that is appropriately and comprehensively grounded in relevant data from the substantive area.

Theoretical Sampling

Theoretical sampling, which depends on and derives from theoretical sensitivity is "the further collection of data for coding and analysis guided by the identified categories and the generated interpretations or ideas" (Irurita, 1996, p. 6). These categories and interpretations are then used to "direct further data collection, from which the codes are further theoretically developed with respect to their

various properties and their connections with other codes until saturated" (Glaser, 1978, p. 36). The theoretical sampling process interacts continually and cumulatively with the theoretical sensitivity of the researcher to produce an emerging theory. This intrinsic relationship underlines the importance of interweaving data collection with data analysis. "Each feeds into the other thereby increasing insight and recognition of the parameters of the evolving theory" (Strauss & Corbin, 1990, p. 43).

Because the first round of interviews had shown so much similarity that little variation was apparent, theoretical sampling was used to include a more diverse range of participants in order that other perspectives and experiences could enlarge the emerging categories. Deliberate expansion of the participant group continued in this way throughout the study as reflection on the accumulating categories suggested new avenues to be explored with subsequently included participants. For example, one participant was included solely for his experience where his child had been directed to leave a particular school and seek enrolment elsewhere against the original desire and intentions of the family. This incident provided saturation for the relevant category. A further example involved a non-parent with particular expertise in education and pastoral care. As a parish priest over a long period of time, his observations and pastoral knowledge of the educational choices made by parents added further anchorage to the theory and saturation in a specific category. Theoretical sampling was also used in order to include Catholic parents who had chosen to enrol their children in government schools. Participants selected on grounds such as these provided valuable, new information that consolidated, enriched and helped to saturate the categories that had emerged from my ongoing analysis of the transcript data.

Data Coding Procedures

Following each interview, the recording was transcribed ready for analysis. Each transcript was formatted in a single column with wide margins, such that when printed as hard copy hand written codes could be added with ease. The

formatting also included the elements necessary for entering the data into a software package, NUD*IST™ 6, that was used to assist in data management. NUD*IST™ is a QSR™ software application for recording and manipulating free-form text data. NUD*IST™ stands for Non-numerical Unstructured Data Indexing Searching and Theorizing (Richards, 1998, p. 10). The hard copies were maintained in secure storage and were constantly referred to during the analysis and writing up of the present study.

Glaser (1978) refers to two levels of coding; substantive coding and theoretical coding. Substantive coding involves two actions: open coding and selective coding. First, the open coding fractures the transcript data from the substantive area of enquiry and then second, particular codes are selected to delimit the coding as the core variable emerges. The next level uses theoretical codes that "conceptualise how the substantive codes may relate to each other as hypotheses to be integrated into a theory" (Glaser, p.72).

Strauss and Corbin (1990) offer another variant in their coding procedures as they also introduce a further step into the substantive coding, which they call axial coding. The present study has been influenced by Strauss and Corbin's coding procedures to a larger extent than by those of Glaser.

Open Coding
During the open coding of a transcript, each line, sentence or incident is named so that connections can be made through comparative analysis – "the process of breaking down, examining, comparing, conceptualising, and categorizing data" (Strauss & Corbin, 1990). Glaser (1978) stresses that this coding is about typing behaviour, not people, so the open coding mechanism is used to examine in great detail the behaviours represented by the participants in the research.

While Hutchinson (1986) refers to open codes as level I codes, they are also, at times, called *in vivo* codes. *In vivo* means that the actual words of the participants are used and come from the Latin term "in a living thing" (Wilkes & Krebs, 1999). Strauss and Corbin (1990) describe them as being "catchy ones that immediately draw your attention" (Strauss & Corbin, p. 69). Glaser (1978,

p. 70) sees them as the "behaviors or processes which explain how the basic problem is resolved or processed". In the present study, *in vivo* codes become obvious when the actual words of the participant were used in the open coding or when the action was described. They are first level codes (Punch, 1998, p. 205), "requiring little or no inference beyond the piece of data itself." They fracture the data (Glaser, 1978) and also summarize segments of data to provide a basis for later higher-order coding (Punch, 1998).

Glaser (1978, p. 57) offers some rules of operation when open coding to "ensure its proper use and success". Initially, three questions must be continually asked of the data: What is this data a study of? What category does this incident indicate? What is actually happening in the data? For the present study, keeping these three questions in constant view was of great assistance.

Glaser (1978) also insists that the analysis be done line by line. This can be very difficult for neophyte researchers and so it was greatly beneficial that I had been able to join the grounded theory seminar group at Curtin University where the members assisted each other. Open coding selections of each other's transcripts helped establish as many variant views as possible, and thus to avoid the danger of coding on the basis of the analyst's preconceived or narrowly interpreted ideas.

Glaser (1978) insists also that the analyst must do his or her own coding. Personally doing the transcribing and the open coding means that the researcher will develop a very thorough knowledge and appreciation of the data and that theoretical sensitivity is maximised. For the interviews that I did not transcribe, I was careful to listen to the tapes and read through the hard copies so that I not only corrected any typographical errors, but also increased familiarity with the text and developed some early ideas about the thematic content of the data.

Further, Glaser (1978, p. 60) insists that the researcher should "stay within the confines of his substantive area and the field study" At one stage of this research, fascination with a great deal of historical data about education in Western Australia thwarted the analysis and Glaser's rule became obviously

appropriate to the furtherance of the desired theory. It was necessary to curtail any further work on the historical context of education in Western Australia so that the substantive area of the research returned to be the central focus.

Finally, Glaser (1978, p. 60) directs the researcher not to "assume the analytic relevance of any … variable such as age, sex, social class, race, skin color etc., until it emerges as relevant". Earlier in this chapter (Table 2.1) variables describing and differentiating the participants were presented but no theoretical relevance was drawn unless it came out later in the coding of the data. The inclusion of this information was to indicate where the theoretical coding and analysis directed the theoretical sampling to occur without making any assumption about the relevance of the information provided in the participant profiles.

Examples of open coding used in the present study are shown in Tables 2.3 and 2.4 to illustrate both the nature and depth of the coding and the intensity of scrutiny applied to the data.

Table 2.3. **Sample of open coding**

Transcript example	Open coding
Started with [our son's] needs. We know he's got a very rare chromosomal abnormality which is irrelevant in itself but it means that he is physically small, that's got implications for choosing a school.	*Assessing* *Parent describing needs* *Rare disorder – medical, intellectual, physical* *Implicating school choice as important*

The open coding shown in Table 2.3 and 2.4 records what, in my understanding, the participant was actually conveying in her statement about her son's needs. My coding connects the participant's description to actions or circumstances that I was able to discern had been important contributors to her choice or influential in her deliberations. The word "implicating" was used as an *in vivo* code as it freshly presented the participant's immediate concerns.

While such extensive open coding was time consuming and laborious, the experience of coding and the resultant codes themselves were extremely important in 'opening up' the data so that the underlying meaning in the participants' descriptions and explanations was available for conceptual development. Interviews later in the sequence were not as laboriously or extensively open coded, as they were for the most part focussed on specific incidents or ideas that were being pursued through theoretical sampling to ensure saturation of the theory.

Table 2.4. **Further sample of open coding**

Transcript example	Open coding
I think probably by year 9, she felt secure enough to be able to make the move. In herself. She's a shy girl, so I don't think it was boys. It wasn't to be with the boys. Maybe the closeness to home too. 'Cause often, she was in athletics and sports and was often after school – it was late. Ah, yeah, the closeness. She always had to get the bus, whereas [our son] just hopped onto his bike and rode to school.	*Increase in maturity $\rightarrow$ could change choice* *Characteristic – shy, likes being close to home* *Geographical disadvantage for her* *Closeness to home important* *Son had advantage of proximity and independence* *Geographical advantage*

Software for Qualitative Data Analysis: N UD*IST™ 6 and Inspiration®

Once the interview transcripts had been appropriately formatted and hand-coded, they were imported into the qualitative database NUD*IST™ 6. Within the NUD*IST™ database, each of the researcher-coded sections is assigned a numeric code that allows whole transcript, or sets of related transcript, to be efficiently searched for the purpose of comparative analysis and the extraction and grouping of passages that share common codes or are related through other codes in a tree-structure.

The assigned codes can be changed within NUD*IST™ at any point as the conceptualisation of the data progresses, and new codes can be attached to the existing tree of codes. NUD*IST™ was used for the first nine interviews as they were intensely open coded and were well suited to the structured analysis

made possible by the software. However, the first major breakthrough in the conceptualisation of the data occurred when the tree of codes in NUD*IST™ was exported to *Inspiration®*, a specialised conceptual imaging application that was designed to assist in the development of a variety of schema. The export of the tree of codes resulted in a visual image that greatly assisted the development of the emerging categories. Clusters generated within *Inspiration®* revealed the inherent directionality in the coding structure, enabling me to proceed with the theoretical development. In order to see the whole picture I printed out the entire tree of codes and placed it on a wall where it took almost the entire expanse. As such, it is physically too extensive to be reproduced here.

Axial Coding

Open coding and axial coding do not occur in simple linear sequence, but rather are engaged in the analysis simultaneously (Strauss & Corbin 1990, Chenitz & Swanson 1986). Whereas open coding fractures the data so that individual categories can be identified (Strauss & Corbin, 1990), axial coding puts the data back together again by "making connections between a category and its sub-categories" (Strauss & Corbin, p. 97).

Glaser (1992) does not use the term axial coding, and in fact he severely criticises Strauss and Corbin on this issue. Glaser uses the term theoretical coding for the part of the analysis where

> … theoretical codes conceptualise how the substantive codes may relate to each other as hypotheses to be integrated into a theory. They, like substantive codes, are emergent; they weave the fractured story back together again (Glaser, p. 72).

Glaser's use of theoretical families of codes is undoubtedly useful for sociological theory, but this study does not presume to be fully sociological. It is therefore appropriate to use Strauss and Corbin's axial coding for the analysis.

In the present study, for instance, open coding revealed that "rumbling", an *in vivo* code, developed into a category that related to the participants' behaviour as they responded to the realisation that the time for decision about school

choice was approaching. As other parents began to talk about their possible choices and their ideas, the participants began to look at what they needed and what was possible. They also included in their deliberations their own schooling experiences. While considering all of this data, it emerged that they were linked and so axial codes entered the picture. As axial coding began to reconnect the data, *rumbling* became associated with *refining* as the family began to deeply assess what they wanted in schooling. The *child's needs*, *attitudes of others*, the influence of the *wider family* and their own *personal history* all became important as they refined their own imperatives in the first stage of making a choice about schooling. During this phase of the analysis many memos were written describing each step and connection of data to keep track of the ideas and the development of the theoretical construct.

Inspiration® assisted in imaging such theoretical constructs throughout the comparative analysis. The graphical connections between items and codes were readily moved and changed and this facilitated the development and visual manipulation of the ideas. Images generated within *Inspiration®* could then be exported as stand-alone graphics to conventional documents as illustrated in Figure 2.4.

Although some of the ideas and connections that emerged during the axial and open coding process were described by schema produced using *Inspiration®* others were represented as simple box diagrams drawn directly within Microsoft Word as illustrated in Figure 2.5

Management of the changing names of codes was initially a difficulty. In NUD*IST™ it soon became excessively complicated to be changing the codes continually and then re-imaging the relationships to be assured of the development. Consequently, an alternative introduced whereby every code entered into the margin of a particular transcript hard copy was listed in a separate document where it was placed under its appropriate category heading, with its transcript page number noted. An extract from one such transcript cover

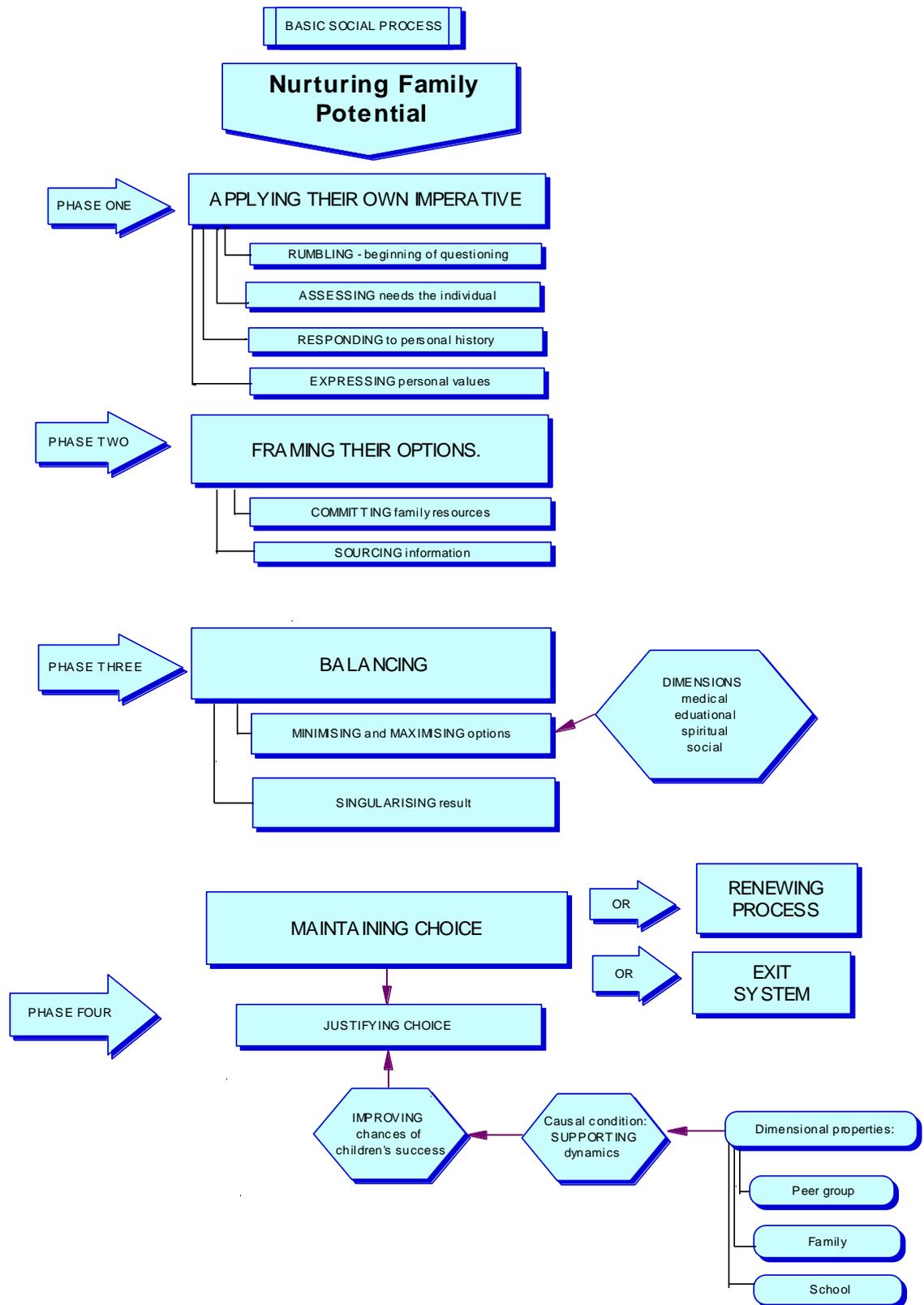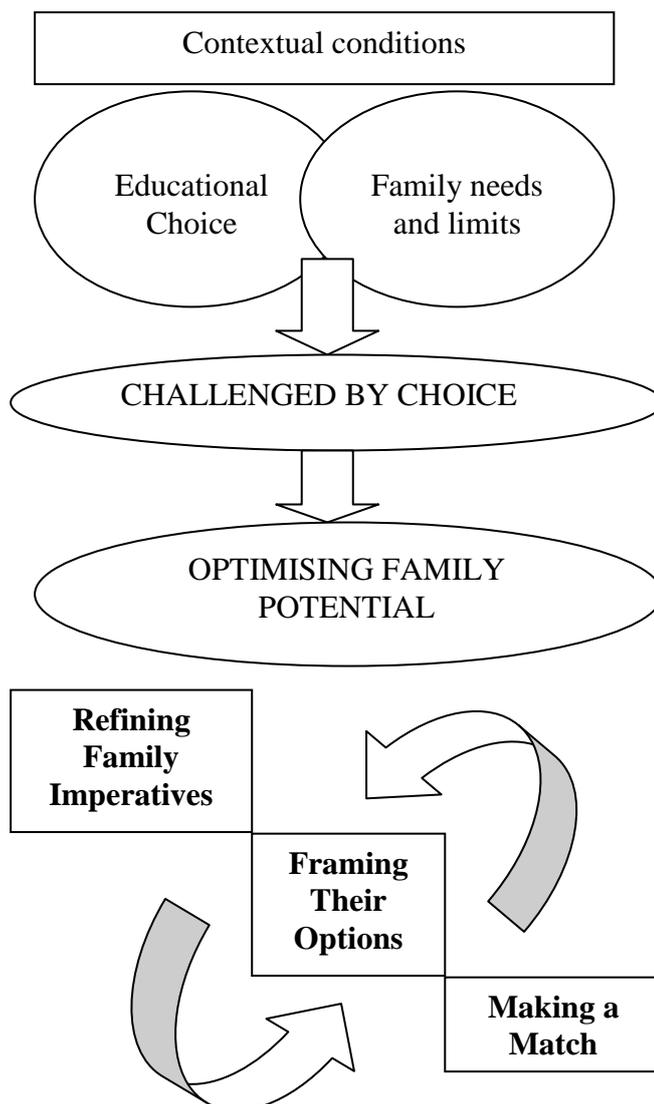*Figure 2.4.* **Diagram generated with *Inspiration* ®**

Figure 2.5. **Microsoft Word diagram**

Contextual conditions

Educational Choice

Family needs and limits

CHALLENGED BY CHOICE

OPTIMISING FAMILY POTENTIAL

Refining Family Imperatives

Framing Their Options

Making a Match

sheet is shown in Figure 2.6. This document was then attached to the front of the transcript for ease of reference. If insertion of data was needed for quotation in the thesis it was easy to locate it and transfer it from the transcript file. While this was a laborious activity initially, it ensured that the tracking and replication of data was efficient and reliable. As various diagrams were drawn and redrawn during the development of the analysis, the original code names could easily be assumed into the new development.

Figure 2.6. **Summary of specific participant codes as grouped under the category "Responding to personal history"**

Responding to personal history P12

showing development of values in own history, family p1
authoritarian experience in very large class p2
not all kids survived in class of 50 p2
financial constraints precluded non-gov schooling p2
gov schools had boundaries – no choice p2
remembers respecting science teacher p2
edn a good experience – above average student p2
family economic need – propelled into workforce – limited edn p2
tradesperson and life long learner p2
disappointment at lack of edn p2
no family knowledge or culture of tertiary edn p3
tried part time, limited help in making edn choices p3
marriage intervened in edn pursuit p3
deep desire to be professional – started at para-professional level p3
now at uni full time p3
Level of engagement – personal desire for edn continual, persistent p4
wife held responsible bank position p6

Identifying Causal Concerns

While some of this development remained and was included in the final theoretical construct, much of it was discarded as the theory emerged through further use of the data and coding. During this phase of the development of the theory, a causal concern began to emerge. This was a particularly difficult aspect of the analysis but was assisted by the Curtin University seminar group discussions on grounded theory. A high level of abstraction was needed to identify a causal concern from the categories that had already been developed. By the continual use of comparative analysis, the perspectives of each participant were compared to those of other participants so that a common causal concern could be elucidated. Many schemas, including Figure 2.7, were developed to establish the basic social concern.

Eventually the analysis produced a basic social concern called *being challenged to choose,* the emergence and consolidation of which is described thoroughly in Chapter 3.

Figure 2.7. **Schema describing a possible causal concern**
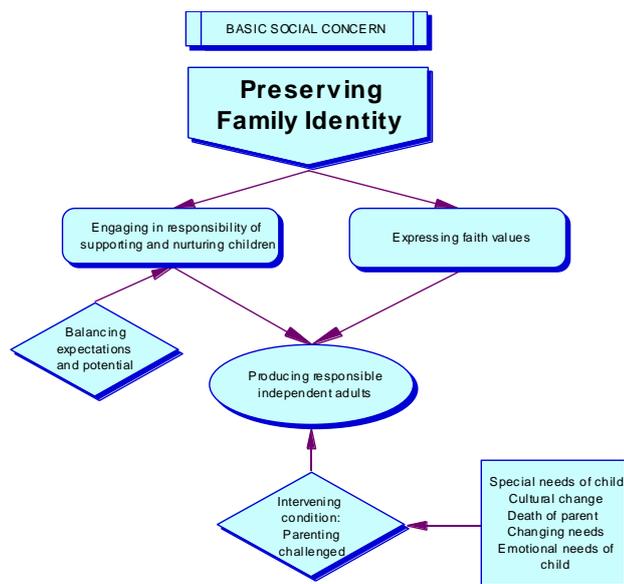
Intervening Conditions

As the emerging theory began to crystallise and the various categories began to fit into a more coherent structure, it became evident that there were conditions that would facilitate or constrain the parents' actions or interactions as they moved closer to making the choice of school. For example, during the deliberations that were taking place as parents progressed through their r*umbling and refining* activity, conditions often intervened that facilitated or constrained the direction that the deliberations were taking. These included the child's needs, the attitudes of others, the influence of the wider family, and the personal history of the participants. The result of this particular action and interaction was that the family's imperatives in regard to educational choice were refined so that the next step could eventuate. The influence of intervening conditions such as these, in shaping and constraining the course of the family's deliberations was relevant to all stages of the decision process as the family moved towards eventually making their choice of schooling. Figure 2.8 illustrates graphically the nature of the interaction generated by these intervening conditions.

Figure 2.8. **Intervening conditions relevant to *Rumbling and Refining***
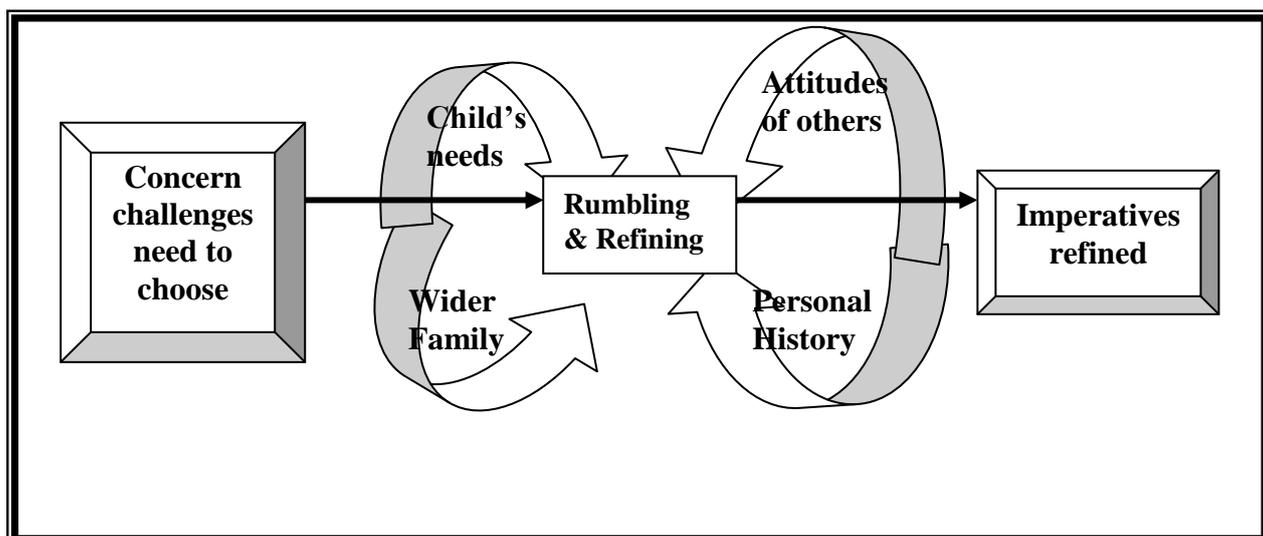
Selective Coding

Although a yet higher level of conceptual integration is necessary for selective coding, it is in many respects simply a further step of axial coding (Strauss & Corbin, 1990). The result of selective coding is the selection of the core category. During axial coding, the categories were described carefully with full substantiation from the data ensuring that they had "richness and density" (Strauss & Corbin, p. 117). During this time, consideration was also being given to the totality of relationships and how a theoretical construct could be developed around a core category. Many ideas developed along the way but proved unable to absorb all categories and therefore were unable to explain their position in the story. Formulating the story line was an important step in identifying the core category, as is fully described in Appendix 2.8. The particular version in that Appendix is one of the early explications of the story and further developments saw the emergence of the final core category that is fully described in Chapters 4 and 5.

Evaluating a Grounded Theory

There are four significant criteria for evaluating a grounded theory (Glaser, 1978, 1992; Hutchinson, 1986, Charmaz, 2000): fit, work, relevance and

modifiability. The categories that are developed from the collected data must *fit* – the data must be clearly explained by the categories (Morse & Singleton, 2001, p. 841).

> Fit refers to the process of identifying characteristics of one entity and comparing them with the characteristics of another entity to see if similar characteristics are present. Fit may also refer to complementary relationships, as in fitting pieces of a jigsaw puzzle. Fit is therefore the process of examining two entities and identifying their similarities or compatibilities along some identifiable dimensions.

The extent to which fit has been achieved for the present theory is evidenced in Chapters 3, 4 and 5 where the theory is explained. Every aspect is described with the appropriate data so that it is clear that the categories have emerged directly from the data and therefore *fit*. Figure 2.7 shows schematically one of the early versions of the basic social concern that was named *preserving family identity*. This category emerged early in the construction of the theory but, as the data collection and analysis continued, it became evident that *preserving family identity* could no longer provide a *fit* and was therefore discarded. Through theoretical sampling further data enabled a more robust basic social concern to emerge.

A grounded theory must also be able to *work,* that is, it must be useful in providing a theoretical construct that explains the phenomenon that is being studied (Charmaz, 2000). The major behaviour in the substantive area, along with the variations within that behaviour, must be explained by the theory. If any observed variation cannot be explained then it must be accepted that the theory does not *work* (Charmaz, 2000). In order to prove that parents choose schooling outside the freely provided government system, the theory has to encompass all possible variations within the parent group. When the data collection reached saturation, there were no other variants emerging that would change the categories that had emerged through the analysis of the data. To this extent, the theory about choice of schooling thus can be said to *work*. And, moreover, taking the full theory back to families who were participants and reviewing it with them to ensure that it works in their case provided further

confirmation that the theory does indeed *work*. The theory has also been tested against other scenarios of choice presented in newspaper articles and informal conversations.

The *relevance* of a grounded theory is demonstrated when the core variable is able to explain the social processes that are ongoing in the context of the phenomenon (Charmaz, 2000, Hutchinson, 1986). In this study, the core variable was the process through which the family moved when they made choices for and during the schooling of their children. As is explained fully in Chapters 3, 4 and 5 the core variable, *realising family potential,* is able to explain the actual problems and basic processes of how parents make a choice of schooling.

A final characteristic of a quality grounded theory is its *modifiability.* Researchers can "modify their emerging or established analyses as conditions change or further data are gathered" (Charmaz, 2000, p. 511). Should further variables emerge in the process of parents choosing education for their children, the theory should be able to be modified to accommodate those changes. While the present theory, as it stands, fully accommodates all of the data obtained to date, the construction of the theory is such that it allows for subsequent variation or modification should further data require it.

Conclusion

This chapter has described the way in which qualitative methodology has been used to form a grounded theory that explains the processes and meanings surrounding the complex substantive area of choice of schooling. The primary means of collecting data was formal interviews of thirty-nine participants. NUD*IST™ 6 and Inspiration® software as well as other self-generated processes using Microsoft Word were used to manage the data. An overview of the ways by which the eventual theory has been evaluated was presented along with measures taken to ensure that the confidentiality and anonymity of the participants was protected.

PERSONAL NOTES

Attaining sufficient competency in the grounded theory method so that a parsimonious theory could be developed proved to be much harder than originally anticipated. My data collection periods were immensely stimulating as I shared rich conversations with my participants about the education of their children in particular. Transcribing and coding the data was laborious and time consuming although it improved as my expertise increased, and became really fascinating as the categories began to develop. It was exciting to uncover the first categories and begin to make sense of the data. Being a highly visual person, my first real breakthrough came with the use of Inspiration®, as it enabled me literally to see the clusters of information and the development of the first categories as I wallpapered one wall of my office with the whole picture. While the categories had all been coded and arranged through NUD*IST™ 6 software, the visual presentation through Inspiration® changed the dynamics and made the distinctions clear. Being part of the postgraduate student grounded theory seminar group at Curtin University greatly assisted me in being able to carefully remain within the norms of the grounded theory method.