

Theory Building Approach Using Qualitative Data Analysis

¹J.A. Olaogun and ²O.I. Fatoki

¹Department of Sociology, ²Department of Banking and Finance,
University of Ado Ekiti, Nigeria

Abstract: Within the past 2 or 3 decades or so, a universal pattern of modernity is emerging from the wide diversity of traditional values and institutions and peoples of all nations are confronted with the challenge of defining their attitudes toward fundamental changes that are world wide in scope. These changes have equally in no small measure affect the academia. Social researchers in various disciplines have been challenged to explore practical means of carrying out their researches too. In recognition of this fact, this study sets out to explore theory building using qualitative data analysis. This study is treated in 3 main parts. The first part provides the background information necessary to embark on this form of research process. It thus, introduces the methodology and explains something about the characteristics of users of this method. It further explores the differences among description, conceptual ordering and theorizing. The relationship between qualitative and quantitative forms of analysis are analyzed and the need to maintain a balance objectivity and creativity. The second part presents the specific analytic techniques and procedures to be used in developing theory. It posits the idea of analytic tools, a palate of devices theorists can use to facilitate analysis and enhance discovery. An explanation of how we view process and describes how to code for it. This second part consequently concludes with a review of the sampling procedure involved in theory building. The third and final part explores further matters of concern to all researchers namely what comes after completing the analysis. This is presented in the form of questions that most often asked by researchers who use this methodology along with the answers to those questions. The study concludes with possible provision of criteria needed for evaluating both the research process and the empirical grounding of findings. It finally posits and recommend to research students of social and management sciences the gains of grounded theory if proper procedures are followed.

Key words: Research methodology, qualitative research, grounded theory, coding, interview and observational guides, sampling procedures, memos and diagram, writing up theses

INTRODUCTION

The revolutionary change in people's way of life in modern times, which for several centuries was confined principally to the western peoples, has today come to affect all the countries and nations of the world. Within the past 2 or 3 decades or so, a universal pattern of modernity is emerging from the wide diversity of traditional values and institutions and peoples of all nations are confronted with the challenge of defining their attitudes toward fundamental changes that are world wide in scope. These changes have equally in no small measure affect the academia. It has called for a different ways of studying society. Social researchers in various disciplines have been challenged to explore practical means of carrying out their researches too. In recognition of this fact, this study sets out to explore theory building using qualitative data analysis.

It has been empirically proven that Africans nay Nigeria societies are not anonymous. They practically owned up to facts on any study about them. This study is born out of the dearth of exploration into the area of qualitative research methodology in most of our Nigerian Universities and other higher institutions of learning. It is geared towards providing opportunities for those researchers who might find this methodology appropriate for their research projects. The difficulty in the past must have arisen from the nature of the qualitative research processes. For quite some time, researchers and students engaging in the schools' long project/essay have been making use of methodologies somehow alien to their cultural background. It is important therefore, that rather than borrowing theories; we should instead develop our own, ones that reflect our societies or citizen's cultures and behaviour. Alas, a mistake frequently made is that theories developed in industrialized nations are super

imposed on non-industrialized ones or on other industrialized nations that have different populations and cultures. The imposed theories just do not fit, either in whole or in part and thus, can be very misleading. It is as a result of this super-imposed difficulties that arises the quest for an inquiry into qualitative research process of which this study is addressed

We must admit here that however, exciting the experiences of researchers may be, while gathering data of this research methodology, there comes a time when the data must be analyzed. Researchers often are perplexed by this necessary task. They not only are dismayed by the mountains of data confronting them but also often are troubled by the following questions: How can I make sense out of all this material? How can I have a theoretical interpretation, while grounding it in the empirical reality reflected by my materials? How can I make sure that my data and interpretations are valid and reliable? How do I break through, the inevitable biases, prejudices and stereotypical perspectives that I bring with me to the analytic situation? How do I pull all my analyses together to create a concise theoretical formulation of the area under study?

The purpose of this study is to answer the questions raised above and other questions related to doing qualitative analysis. Its intent is to provide the basic knowledge and procedures needed by persons who are about to embark on their first qualitative research projects and who want to use the methodology to build theory at the substantial level. Its equally to provide an alternative to researchers who might not find quantitative analysis suited for their own methodology. We also believe that we have something to offer in the way of techniques and procedures to those researchers who want to do qualitative analysis but do not wish to build theory. The interest in this methodology, is born out of the 2 researches we undertook during the postgraduate studies. We must bear in mind that building theory is not the only goal of doing research. High-level description and what we call Conceptual ordering also are important to the generation of knowledge and can make a valuable contribution to a discipline. Advanced researchers and those who want further examples and discussion about ways of doing and teaching qualitative analysis no doubt will find this study useful.

Influenced by interactionist and pragmatist writings, Glaser (1992) thinking was inspired by men such as Park *et al.* (1993), Dewey (1938) and Blumer (1969). What this background contributed to his part in the development of this method were the need to get out into

the field to discover what is really going on the relevance of theory, grounded in data, to the development of a discipline and as a basis for social action; the complexity and variability of phenomena and of human action; the belief that persons are actors who take an active role in responding to problematic situations; the realization that persons act on the basis of meaning; the understanding that meaning is defined and redefined through interaction; a sensitivity to the evolving and unfolding nature of events (process) and an awareness of the interrelationships among conditions (structure), action (process) and consequences. Glaser (1992) came from a very different sociological tradition but with some shared features that no doubt permitted the 2 men to work closely together. He received his graduate education at Columbia University and his thinking about research was influenced by Paul Lazarsfeld, known as an innovator of quantitative methods. Later, while doing qualitative analysis, Glaser (1992) especially saw the need for making comparisons between data to identify, develop and relate concepts. The Columbia tradition also emphasized empirical research in conjunction with the development of theory. Both the Chicago and Columbia traditions were directed at producing research that could be of use to professional and lay audiences. For this reason, much of the grounded theory writing that emerged from Glaser and Strauss (1967) collaboration, including the original monographs about dying were addressed to both lay audiences and disciplinary colleagues.

Definition of terms: What is Research Methodology? What is Qualitative Research? And what is Grounded Theory?

So, many definitions might be proposed to answer the questions above, however, we will like to subscribe to definition where they defined methodology as a way of thinking about and studying social reality. If the definition is anything to go by, methods may be defined then as a set of procedures and techniques for gathering and analyzing data (*ibid.*). Coding is The analytic processes through, which data are fractured, conceptualized and integrated to form theory (*op.cit.*).

Methodology provides a sense of vision, where it is that the analyst wants to go with the research. The techniques and procedures (method), on the other hand, furnish the means for bringing that vision into reality. Just as painters need both techniques and vision to bring their novel images to life on canvas, analysts need techniques to help them see beyond the ordinary and to arrive at new understandings of social life. If researchers' purpose is to

create new and theoretically expressed understandings, then theory-building methods are indicated. The value of qualitative methodology lies in its ability not only to generate theory but also to ground that theory in data. Both theory and data analysis involve interpretation, but at least it is interpretation based on systematically carried out inquiry.

What is qualitative research?: By the term qualitative research, we mean any type of research that produces findings not arrived at by statistical procedures or other means of quantification (Becker, 1986; Bradley, 1993; Corbin and Strauss, 1998; Hammersley and Atkinson, 1983). Qualitative research can refer to research about persons' lives, lived experiences, behaviours, emotions and feelings as well as about organizational functioning, social movements, cultural phenomena and interactions between nations. Some of the data may be quantified as with census or background information about the persons or objects studied, but the bulk of the analysis is interpretative. Actually, the term qualitative research is confusing because it can mean different things to different people. For example, some researchers gather data by means of interviews and observations, techniques normally associated with qualitative methods. However, they code the data in a manner that allows them to be statistically analyzed. They are in effect, quantifying qualitative data. In speaking about qualitative analysis, we are referring not to the quantifying of qualitative data but rather to a non-mathematical process of interpretation, carried out for the purpose of discovering concepts and relationships in raw data and then organizing these into a theoretical explanatory scheme. Data might consist of interviews and observations but also might include documents, films or videotapes and even data have been quantified for other purposes such as census data.

There are many valid reasons for doing qualitative research. One reason is preferences and/or experience of the researchers. Some persons are more oriented and temperamentally suited to doing this type of work. Some researchers come from disciplines (e.g., anthropology) or have philosophical orientations (e.g., phenomenology) that traditionally make use of qualitative methods. Another reason and probably a more valid one, for choosing qualitative methods is the nature of the research problem. For example, research that attempts to understand the meaning or nature of experience of persons with problems such as chronic illness, divorce, addiction, cultism and the act of coming out lends itself to getting out into the field and finding out what people are doing and thinking. Qualitative methods can be used to

explore substantive areas about which much is known to gain novel understandings (Stern, 1980). In addition, qualitative methods can be used to obtain the intricate details about phenomena such as feelings, thought processes and emotions that are difficult to extract or learn about through more conventional research methods.

Basically, there are 3 major components of qualitative research. First, there are the which can come from various sources such as interviews, observations, documents, records and films. Secondly, there are the procedures that researchers can employ to interpret and organize the data. These usually consist of conceptualizing and reducing data, elaborating categories in terms of their properties and dimensions and relating through a series of propositional statements. Conceptualising, reducing, elaborating and relating often are referred to as CODING (Becker, 1970; Charmaz, 1983; Lofland, 1971; Miles and Huberman, 1994). Other procedures are part of the analytic process. These include nonstatistical sampling, the writings of memos and diagramming. Written and Verbal reports make up the third component. These may be presented as studies in scientific journals, in talks (e.g., Conferences), or in books.

We must emphasize at this point that there are many different types or approaches to doing qualitative research (Cassel and Symon, 1994; Denzin and Lincoln, 1994; Morse and Field, 1995). Here, we are presenting just one approach, that which is often referred to as grounded theory.

What is grounded theory?: Proponents of this theory refers to it as that theory that was derived from data, systematically gathered and analyzed through the research process. In this method, data collection, analysis and eventual theory stand in close relationship to one another. A clue to this is that a researcher does not begin a project with a preconceived theory in mind (unless his or her purpose is to elaborate and extend existing theory). Rather, the researcher begins with an area of study and allows the theory to emerge from the data. Theory derived from data is more likely to resemble the reality than is theory derived by putting together a series of concepts based on experience or solely through speculation (how one thinks things ought to work). Grounded theories, because they are drawn from data, are likely to offer insight, enhance understanding and provide a meaningful guide to action.

Although, grounding concepts in data is the main feature of this method, creativity of researchers also is an essential ingredient (Sandelowski, 1988). In fact Patton (1990), a qualitative evaluation researcher, made the comment, Qualitative evaluation inquiry draws on both

critical and creative thinking-both the science and the act of analysis. He went on to provide a list of behaviours that he found useful for promoting creative thinking, something every analyst should keep in mind. These include being open to multiple possibilities, generating a list of options, exploring various possibilities before choosing any one, making use of multiple avenues of expression such as art, music and metaphors to stimulate thinking, using non-linear forms of thinking such as going back and forth and circumventing around a subject to get a fresh perspective, diverging from one's usual ways of thinking and working, again to get a fresh perspective, trusting the process and not holding back, not taking shortcuts but rather putting energy and effort into the work and having fun, while doing it. Analysis therefore, is the interplay between researchers and data. It is both science and art. It is science in the sense of maintaining a certain degree of rigor and by grounding analysis in data. Creativity here manifests itself in the ability of researchers to aptly name categories, ask stimulating questions, make comparisons and extract an innovative, integrated, realistic scheme from masses of unorganized raw data. It is balance between science and creativity that we strive for in doing research. There are of course procedures to help provide some standardization and rigor to the process. However, these procedures were designed not to be followed dogmatically but rather to be used creatively and flexibly by researchers as they deem appropriate. The purposes of coding procedures may be summarized as follows:

- To build rather than test theory.
- To provide researchers with analytic tools for handling masses of raw data.
- To help analysts to consider alternative meanings of phenomena.
- To be systematic and simultaneously creative.
- To identify, develop and relate the concepts that are the building blocks of theory.

We emphasize strongly that techniques and procedures, however necessary, are only a means to an end. They are not meant to be used rigidly in a step-by-step fashion. Rather, their intent is to provide researchers with a set of tools that enable them to approach analysis with confidence and to enhance the creativity that is innate, but often undeveloped in all of us. It is the vision of new understandings and the building of useful grounded theory that is the driving force behind this methodology.

Developing Theory is a complex activity for any researcher. For any researcher to acquaint himself/herself

to theorizing, it will serve our purpose here to define what we mean by theory. For the purpose of this research, a theory denotes a set of well-developed categories (e.g., themes, concepts) that are systematically interrelated through statements of relationship to form a theoretical framework that explains some relevant social, psychological, educational, nursing or other phenomenon. The statement of relationship explain who, what, when, where, why, how and with what consequences an event occurs. Once concepts are related through statements of relationship into an explanatory theoretical framework, the research findings move beyond conceptual ordering to theory. The latter is important because therefore, much we can describe social phenomenon with a theoretical concept, we cannot use it to explain or predict. To explain or predict, we need a theoretical statement, a connection between 2 or more concepts (Hage, 1972).

A theory usually is more than a set of findings; it offers an explanation about phenomena. The phenomena that evolve from and are explained by, a theory are varied-work, management, leadership, awareness, illness trajectories, safety, stigma and so on. Generating theories about phenomena, rather than just generating a set of findings, is important to the development of a field of knowledge.

In essence, before beginning the process of developing theory, a researcher must have some understanding of what constitutes theory. The first step toward understanding is to be able to differentiate among description, conceptual ordering and theorizing. A second step is realizing that these forms of data analysis actually build on one another, with the theory incorporating aspects of both. In brief, describing is depicting, telling a story, sometimes a very graphic and detailed one, without stepping back to interpret events or explain why certain events occurred and not others. Conceptual ordering is classifying events and objects along various explicitly stated dimensions, without necessarily relating the classifications to each other to form an overarching explanatory scheme. Theorizing is the act of constructing from data an explanatory scheme that systematically integrates various concepts through, statements of relationship. A theory does more than provide understanding or paint a vivid picture. It enables users to explain and predicts events, thereby providing guides to action.

Having explain theory above, we get to the heart of the matter, which is thinking in terms of the interplay between qualitative and quantitative methods. Comforting but overly simple positions, such as they supplement each other and they complement each other, will not

simply provide sufficient guides in any researchers work if aiming at building theory. True, some interview materials are capable of being supplemented by statistical analysis and conversely, statistical data also are likely to be analyzed qualitatively in part. Yet, the more operational point is that data collection and analysis can be done in both modes and in various combinations, during all phases of the research process. Just as important is that there can be back-and-forth interplay between combinations of both types of procedures, with qualitative data affecting quantitative analyses and vice versa.

We want to make it clear at this point that when we speak about combining methods, we are not talking specifically about triangulation in the traditional sense (Denzin, 1970) although, we recognise this as a valuable research tool and advocate its use where and when appropriate. Rather, we want to make the point that to build dense, well developed, integrated and comprehensive theory, a researcher should make use of any or every method at his or her disposal, keeping in mind that a true interplay of methods is necessary. Most important, because our approach to theory building is one of emergence, we believe that unless the researcher is building on or continuing with his or her own previous studies, the researcher will not be able to enter into the project with a set of pre-established concepts or with a well structured design. Rather, the design, like the concepts, must be allowed to emerge during the research process. As, concepts and relationships emerge from data through qualitative analysis, the researcher can use that information to decide where and how to go about gathering additional data that will further evolution of the theory. Once relevant concepts and hypotheses have emerged from and validated against data, the researcher might turn to quantitative measures and analysis if this will enhance the research process. Remember, the idea behind varying methods is to carry out the most parsimonious and advantageous means for arriving at theory. Such a task calls for sensitivity to the nuances in data, tolerance for ambiguity, flexibility in design and a large dose of creativity.

SOME PRACTICAL CONSIDERATIONS

Having considered the implications in the interplay between qualitative and quantitative research process, we now come to the thorny issue of the practical considerations in research. This will have to do with what goes into research questions. Here, the following aspects will be briefly deliberated upon: Research problem, Research question, Objectivity, Sensitivity and Literature. From experience, these areas poses a lot of problems to researchers.

Choosing a problem and stating the research question:

- One of the most difficult parts of doing research is deciding on a topic. The 2 major questions that seem most troublesome are the following.
- How do I find a researchable problem? How do I narrow it down sufficiently to make it workable? These questions might seem especially difficult if the researcher is a novice at doing qualitative research because at first glance, the process of making choices and commitments seems less well structured and more ambiguous than in quantitative inquiries. The purpose of this study is to clarify some of the basic principles that pertain to making those initial choices.

Sources of research problems: The sources of research problems in qualitative inquiries often are not much different from those in other forms of research. First, there are the suggested or assigned research problems. One way in which to arrive at a problem is to ask for suggestions from a professor doing research in an area of interest. Such an individual often will have ongoing research projects and will welcome having a postgraduate student do a small part of a project. This way of finding a problem tends to increase the possibility of getting involved in a doable and relevant research problem. This is because the more experienced researcher already knows what needs to be done in a particular substantive area. On the other hand, a choice arrived at in this manner, might not be the most interesting to the student. It is important to remember that whenever, problem is selected, the researcher will have to live it for quite a, while, so the final choice should be something that engages his or her interest.

A variant on the assigned or the suggested source is to follow upon a professional or collegial remark that an inquiry into such and such would be useful and interesting. This often is a more palatable source of a research problem, especially if the researcher has some inclination toward that substantive area as this may elicit more research questions. For example, the interest of a woman who is football inclined might be sparked by a remark such as: How do women who go to football pitch feel about their bodies? This broad and open statement can lead to all sorts of questions including the following: Do women, who play football feel differently about their bodies than women who do not? Do women weight-lifters feel differently about their bodies than do women footballers or men weight-lifters? How are women's body images defined and how does going to football field enter

into those definitions? What is the process through which women come to know their bodies and their limitations? What happens when they exceed those limitations?

A second source of problems is the Literature. This can be a stimulus to research in several ways. Sometimes, it points to a relatively unexplored area or suggests a topic in need of further development. Other times, there are contradictions or ambiguities among the accumulated studies and writings. The discrepancies suggest the need for a study that will help to resolve those uncertainties. Alternatively, a researcher's reading on a subject might suggest that a new approach is needed to solve an old problem, even though, it has been well studied in the past. Something about the problem area and the phenomenon associated with it remains illusive and that something, if discovered, might be used to reconstruct understanding. Also, while reading the literature, a researcher might be struck by finding that is dissonant with his or her own experience that can lead to a study resolving that dissonance. Finally, reading might simply stimulate curiosity about a subject. The moment that one asks the question But, what if...? And finds that there is no answer, one has a problem area.

A third source of problems is personal and professional experience. For example, a person may undergo a divorce and wonder how other women and men experienced their own divorces. Or, someone may come across a problem in his or her profession or work-place in which there is no known answer. Professional experience frequently leads to the judgment that some feature of the profession or its practice is less than effective, efficient, human, or equitable. So, it is believed that a good research study might help to correct that situation. Choosing a research problem through the professional or personal experience route might seem more hazardous than choosing one through the suggested or literature routes. This is not necessarily the case. The touchstone of one's own experience might be a more valuable indicator of a potentially successful research endeavor than another more abstract source.

A fourth source is the research itself. A researcher might enter the field having a general notion about what he or she might want to study but no specific problem area. A good way in which to begin is to do some initial interviews and observations. If the researcher is carefully listening to or observing the speech and actions of respondents, then analysis should lead him or her to discover the issues that are important or problematic in the respondents' lives. The acid test of paying attention to respondents' concerns is the key to where the focus of research projects should be.

Certainly, anyone who is curious or concerned about the world around himself or herself and who is willing to take risks should not, after some deliberation, have too much trouble finding a problem area to study. The next step is asking the proper research question.

The research question: The way in which one asks the research question is important because it determines, to a large extent, the research methods that are used to answer it. Here, in lies a dilemma. Does one choose qualitative analysis because the problem area and question stemming from it suggest that this form of research will be most productive? Does one decides to use a qualitative method and then frame the question to fit the method? Is it conscious or unconscious theoretical perspectives that colour approaches?. These issues are difficult to respond to because their answers are not cut-and-dried. Although, the basic premise is that the research should dictate the method, many people are oriented toward quantitative research. So even, when the problem area suggests that qualitative study might be a more fruitful approach, these researchers frame their questions in a quantitative manner. Other researchers, because of personal orientations, training, or convictions, tend to see problems from a qualitative perspective. The questions they ask about any problem areas are couched in qualitative terms because they simply do not see problems in any other way. There is no reason to belabour this point here; we only want to emphasize that some problem areas clearly suggest 1 form of research over another and that an investigator should be true to the problem at hand. For instance, if someone wants to know whether one drug is more effective than another, then a double-blind clinical trial is the appropriate approach. However, if a researcher is interested in knowing what is like to be a participant in a drug study or in knowing some of the problems inherent in adhering to a very rigid drug protocol, then he or she might sensibly engage in qualitative research. Clearly, preference and training play a part in these decisions, but these should not blind investigators to the other methodological options. Even when one decides to use a qualitative approach, there remains the question of which particular method the investigator should use (Morse and Field, 1995).

Another, major aspect of research question is setting the boundaries on what will be studied. It is impossible for any investigator to cover all aspects of a problem. The research question helps to narrow the problem down to a workable size.

Asking the research question: What do questions look like in qualitative studies? How do they differ from those

of quantitative studies and why? To develop theory in this form of qualitative research, it is necessary to frame a research question in a manner that will provide flexibility and freedom to explore a phenomenon in depth. Also underlying this approach to qualitative research is the assumption that all of the concepts pertaining to a given phenomenon have not yet been identified, at least not in this population or place. Or, if so, then the relationship between the concepts are poorly understood or conceptually undeveloped. There must be the need to ask the type of question that will enable researchers to find answers to issues that seem important but remain unanswered.

Although, the initial question might start out broadly, it becomes progressively narrowed and more focused during the research process as concepts and their relationships are discovered. Qualitative research does not entail making statements about relationships between a dependable variable and an independent variable, as is common in quantitative studies, because its purpose is not to test hypothesis.

The research question in a qualitative study is a statement that identifies the phenomenon to be studied. It tells the readers what the researchers specifically wants to know about this subject. An example of this may be, How do women manage pregnancies complicated by a chronic illness?. This question (at least in such global form), although, too broad and unstructured for a quantitative study, is a perfect good one for a qualitative research study. The question tells the readers that the study will investigate women during pregnancies and that the pregnancies will be complicated by a chronic illness. Furthermore, the study will be looking at management of the pregnancies from the women's perspective, that is, what they do and think, not what the doctors or significant others do and say because these actions/interactions might influence how women manage their pregnancies and be an important source of data. However, the focus of the study remains on the women and keeping that in mind prevents the researcher from becoming distracted by unrelated and unproductive issues and from going off on paths that can lead away from the problem.

Also, an investigation can be focused on organisations, industries, interactions and the like, not only on persons. A researcher, who is equally interested in biographical studies or case histories might write a question that looks like this: what difference does it make to patients' responses to pain that they have had long histories with pain management and treatments? Not only will the focus be on present ways of experiencing and managing pain, but this also will be examined in the light of oral histories that shed light on past experiences with pain and its treatment.

Maintaining a balance between objectivity and sensitivity: In qualitative methodology, data collection and analysis occur in alternating sequences. Analysis begins with the first interview and observation, which leads to the next interview or observation, followed by more analysis, more interviews or fieldwork and so on. It is the analysis that drives the data collection. There is a constant interplay between the researcher and the research act. Because this interplay requires immersion in the data, by the end of the enquiry, the researcher is shaped by the data, just as the data are shaped by the researcher. The problem that arises during the mutual shaping process is how one can immerse oneself in the data and still maintain a balance between objectivity and sensitivity. Objectivity is necessary to arrive at an impartial and accurate interpretation of events. Sensitivity is required to perceive the subtle nuances and meanings in data and to recognise the connections between concepts.

It is difficult to say, which is the more problematic-maintaining objectivity or developing sensitivity. During the analytic process, we are asking researchers to set aside their knowledge and experience to form new interpretations about phenomena. Yet, in our every day lives, we rely on knowledge and experience to provide the means for helping to understand the world in which we live and to find solutions to problems we encounter. Fortunately, over the years, researchers have learned that a state of complete objectivity is impossible and that in every piece of research-quantitative or qualitative-there is an element of subjectivity. What is important is to recognise that subjectivity is an issue and that researchers should take appropriate measures to minimise its intrusion into their analyses.

In qualitative research, objectivity does not mean controlling the variables. Rather, it means openness, a willingness to listen and to give voice to respondents, be they individuals or organisations. It means hearing what others have to say, seeing what others do, an understanding, while recognising that researchers' understandings often are based on the values, cultures, training and experiences that they bring to the research situations and that this might be quite different from those of their respondents (Bresler, 1995).

The first technique to employ in controlling biases is to think comparatively. By comparing incident to incident in the data, we are better able to stay grounded in them. However, comparing one piece of data to another does not entirely remove the potential of intrusion of bias into interpretations. Thus, we also might turn to the literature or experience to find examples of similar phenomena. This does not mean that we use the literature or experience as

data per se. Rather, what we do is to use the examples to stimulate our thinking about properties or dimensions that we can then use to examine the data in front of us.

Another, technique for gaining distance is to obtain multiple viewpoints of an event, that is, to attempt to determine how the various actors in a situation view it. Still, another is to gather data on the same event or phenomenon in different ways such as interviews, observations and written reports. It is also, important to interview and/or observe multiple and varied representatives of persons, places, events and times. This process of varying data-gathering techniques and approaches is referred to as triangulation (Begley, 1996; Sandelowski, 1988). In doing this, we want to know how situations are negotiated and how consensus and disensus of meanings are arrived at and maintained.

It is important to periodically step back and ask, what is going on here? and Does what I think I see fit the reality of the data? The data themselves do not lie.

Another, strategy for obtaining objectivity is maintaining an attitude of skepticism. All theoretical explanations, categories, hypotheses and questions about the data arrived at through analysis should be regarded as provisional. These should be validated against data in subsequent interviews or observations. This validation process is especially important for researchers who use categories derived from the research literature because categories always are context specific.

Having sensitivity means having insight into and being able to give meaning to, the events and happenings in data. It means, being able to see beneath the obvious to discover the new. This quality of the researcher occurs as she or he research with data, making comparisons, asking questions and going out to collect more data. Through these alternating process of data collection and analysis, meanings that often are illusive at first become clearer. Immersion in the analysis leads to those sudden insights, aha experiences so familiar to those of us who do qualitative research.

But insights do not just occur haphazardly rather, they happen to prepared minds during interplay with the data. Whether we want to admit it or not, we cannot completely divorce ourselves from who we are or from what we know. The theories that we carry within our heads inform our research in multiple ways, even if we use them quite un-self-consciously (Sandelowski, 1988). Knowledge coupled with objectivity, as explained earlier, does prepare an analyst to understand. To this, Dey (1993) infer, In short, there is a difference between an open mind and an empty head. To analyse data, we need to use accumulated knowledge, not dispense with it. The issue is not whether to use existing knowledge, but how.

As we come an event of interest in our data, we ask, what is this? Later, as we move along in our analysis, it is our knowledge and experience (professional, gender, cultural, etc.) that enables us to recognize incidents as being conceptually similar or dissimilar and to give them conceptual names. It is by using what we bring to the data in a systematic and aware way that we become sensitive to meaning without forcing our explanations on data. Literature can also provide a rich source of events to stimulate thinking about properties and for asking conceptual questions. It can furnish initial ideas to be used for theoretical sampling.

Professional experience is another potential source of sensitivity. Although, it can easily block perception, it also can enable the researcher to move into an area more quickly because he or she does not have to spend time gaining familiarity with surroundings or events. Two things are important to remember. The first is to always compare what one thinks one sees to what one sees at the property or dimensional level because this enables the analyst to use experience without putting the experience itself into the data. The second is that it is not the researcher's perception or perspective that matters but rather how research participants see events or happenings.

Personal experience can increase sensitivity if used correctly. Although, one might never experience a divorce, having undergone the death of a loved one does help a researcher to understand the meaning of grief and loss. Again, it provides a comparative base for asking questions about grief and loss in divorce. Once one has some general properties, one can use them to begin to define the meanings of grief and loss in divorce. One always should look for opposites as well. For instance, one might be happy that a person is dead because that person was abusive (although, it might not be socially acceptable to do so), just like it might be liberating to be divorced.

It is amazing, how insight sparks more insight and how discovery builds. Sometimes analysts come upon a piece of data and are stuck, unable to discern its meaning. From previous researches we have discovered that researchers often carry their analytic problems around in their heads as they go about their daily activities. Then, perhaps, while reading the newspaper, magazines, talking with colleagues on the telephone or via e-mail (if at all), or awakening from dreams, insights occur and the analysts are able to make sense out of previously unexplainable data. Technically, these insights emerged from the data, even though, understanding was stimulated through other experiences. In the end, the essential process to keep in mind is maintaining a workable balance between objectivity and sensitivity.

Using literature: The researcher brings to the inquiry a considerable background in professional and disciplinary literature. This background may be acquired, while studying for examinations or simply through efforts to keep up with the field. During the research itself, the analyst often discovers biographies, manuscripts, reports, or other materials that seems pertinent to the area under investigation. The question is how these can be used to enhanced, rather than constrain, theory development. Of course, the discipline, school and perspective of the researcher will greatly influence how much literature he or she comes with and how it is used. To begin with, let us assure our readers that there is no need to review all of the literature in the field beforehand, as frequently done by analysts using other research approaches. It is impossible to know prior to the investigation what the salient problems will be or what theoretical concepts will emerge. Also, the researcher does not want to be so steeped in the literature that he or she is constrained and even stifled by it. It is not unusual for students to become enamored with previous study (or studies) either before or during their own investigations, so much so that they are nearly paralysed in an analytic sense. It is not until they are able to let go and put trust in their abilities that they generate knowledge that they finally are able to make discoveries of their own.

Ingenious researchers, besides using the usual technical literature, sometimes will use various other types of published and unpublished materials to supplement their interviews and field observations. Although, reports and biographies often come to mind, catalogues (especially, scientific ones) also are sources of data. Non-technical literature can provide questions, initial concepts and ideas for theoretical sampling. It can also, be used as data (both primary and supplemental) or for making comparisons and it can act as the foundation for developing general theory. The important point for the researcher to remember is that the literature can hinder creativity if is allowed to stand between the researcher and the data. But if it is used as an analytic tool, then it can foster conceptualization.

CODING PROCEDURES INTEGRATION

Data become theory: It is our analytic eyes that lead us to see, imperfect as that seeing might be. In this part, we offer some guidelines and techniques for helping researchers through, the analytic process. We offer suggestions for both raising and answering questions. It is our hope that our little explanations will go a long way in helping those interested in carrying out qualitative approach as a methodology.

Watching theory evolve is a fascinating process. It does not happen overnight (although, one might have a sudden insight). It does not arise like magic out of the page. Rather, integration is an ongoing process that occurs over time. One might say that it begins with the first bit of analysis and does not end until the final writing. As with all phases of analysis, integration is an interaction between the analyst and the data. Brought into that interaction is the analytic gestalt, which includes not only who the analyst is but also the evolution of thinking that occurs overtime through, immersion in the data and the cumulative body of findings that have been recorded in memos and diagrams. Although, the cues to how concepts are linked can be found in the data, it is not until relationships are recognised as such by the analyst that they emerge. Also, whenever there is recognition, there is some degree of interpretation and selectivity. But above all, integration is hard work.

If theory building is indeed the goal of a research project, then findings should be presented as a set of interrelated concepts, not just a listing of themes. Relational statements, like concepts, are abstracted from the data. However, because they are interpreted abstractions and not the descriptive details of each case (raw data), they (like concepts) are constructed out of data by the analyst. By constructed, we mean that an analyst reduces data from many cases into concepts and set of relational statements that can be used to explain, in a general sense, what is going on. Rarely are these concepts or statements the exact words of one respondent or case, although, they could be (e.g., in codes). Usually, they represent the voices of many.

The first step in integration is deciding on a central category. The central category (sometime called the core category) represents the main theme of the research. Although, the central category evolves from the research, it too is an abstraction. In an exaggerated sense, it consists of all the products of analysis condensed into a few words that seem to explain what this research is all about.

A central category has analytic power. What gives it that power is its ability to pull the other categories to form an explanatory whole. Also, a central category should be able to account for considerable variation within categories.

A scentral category may evolve out of the list of existing categories, Or a researcher may study the categories and determine that, although, each category tells part of the story, non captures it completely. Therefore, another more abstract term or phrase is needed, a conceptual idea under which all the other categories can be subsumed.

Analysts sometimes identify what could be 2 central themes or ideas in the data. Our suggestion for analysts is to select one idea as the central category and then to relate the other category (or categories) to that central idea. For example, in the instance provided above, the body emerged as an important concept in our study of patients with chronic illness and their spouses, we focused on the research of illness management by couples. It was much later that the issue of body was taken up and through analysis of other data, developed our ideas into a theoretical scheme about body.

Techniques to aid integration: There are several techniques that can be used to facilitate identification of the central category and the integration of concepts. Among these are writing the story-line, making use of diagrams and reviewing and sorting of memos either by hand or by computer programme (if one is being used). We may not have space for this in this study, but it will be taken up in future studies.

Refining the theory: Once the theoretical scheme is outlined, the analyst is ready to refine the theory, trimming off excess and filling in poorly developed categories. Poorly developed categories are saturated through further theoretical sampling. Finally, the theory is validated by comparing it to raw data or by presenting it to respondents for their reactions. A theory that is grounded in data should be recognisable to participants and although, it might not fit every aspect of their cases, the larger concepts should apply.

GENERAL CONSIDERATIONS

Guiding data collection during theoretical sampling are analytic questions and comparisons. The types of questions that an analyst might ask are as follows. What would happen if...? When? How? Where? The answers to these questions serve as the basis for sampling and then making comparisons serve different purposes in each of the 3 modes of sampling that will be mentioned below.

At the beginning of a study, there are many sampling matters that the researcher must consider. The initial decisions made about a project give the researcher a sense of direction and a place from which to launch data gathering. What happens when data collection is underway becomes a matter of how well the initial decisions fit the reality of the data. The following prerequisites must be taken into cognisance.

- A site or group to study must be chosen. This, of course, is directed by the main research question. For

example, if a researcher is interested in studying campus cultism, he or she must go to those places where students resides and study to observe what they do and say verbally, in memos and so on. Also, important is obtaining permission from appropriate sources to use those sites.

- A decision must be made about the types of data to be used. Does the investigator want to use observations, interviews, documents, biographies, audiotapes, videotapes, or combinations of these? The choice should be made on the basis of which data have the greatest potential to capture the types of information desired.
- Another, consideration is how long an area should be studied. If an investigator is studying a developmental or an evolving process, he or she might want to make some initial decisions about whether to follow the same persons or places over time or follow different persons and places at different points in time.
- Initially, decisions regarding the number of sites and observations and/or interviews depend on access, available resources, research goals and the researcher's time schedule and energy. Later, these decisions may be modified according to the evolving theory.

INTERVIEW AND OBSERVATIONAL GUIDES

Once, the researcher has decided on the respondents, the place, the time and the types of data to be gathered (not precluding the use of others), he or she is ready to develop a list of interview questions or areas for observation. (Usually this must be done to satisfy the requirements of human subjects committees). Initial interview questions or areas of observation might be based on concepts derived from literature or experience or, better still, from preliminary field-work.

Once, data collection begins, the initial interview or observational guides give way to concepts that emerge from the data. To adhere rigidly to initial guidelines throughout a study, hinders discovery because it limits the amount and type of data that can be gathered.

Sampling procedures: Sampling is directed by the logic and aim of the 3 basic types of coding mentioned at the beginning of this study: open coding, axial coding and selective coding. It is also closely, related to the sensitivity that a researcher has developed to the emerging concepts. The more sensitive a researcher is to the theoretical relevance of certain concepts, the more likely he or she is to recognise indicators of those concepts in the data. Sensitivity usually grows

throughout the research project and enables the researcher to decide what concepts to look for and where he or she might find indicators of them.

Because sensitivity to the theoretical relevance of certain concepts grows with time, an interesting feature of combined data collection and analysis is that one can sample from previously collected data as well as from data to be gathered (Hammersley and Atkinson, 1983) It is not unusual in the early stages of a project for the investigator to overlook the significance of certain events. Later, when more sensitivity has developed, the investigator can legitimately return to data and re-code them in light of these new insights.

Memos and diagrams: Memos and diagrams are essential procedures in research aimed at theory building because they enable researchers to keep a record of analytic process. Memos and diagrams will vary in form and comply over time and by type of coding. Memos contain the products of coding, provide direction for theoretical sampling and enable the analyst to sort out ideas in his or her mind. Any breaks in logic quickly become evident as thoughts are put down on paper. Diagrams on the other hand, are visual representations of the relationships among concepts. Both memos and diagrams are useful later when writing for publications and giving talks about the research (Strauss and Corbin, 1998).

WRITING UP THESIS

Finally, we come to the last part of this study, which deal with those inevitable questions about writing for publication that are associated with every research project. When should I begin writing the research for publication? How do I know when the research is ready to put into print? What shall I write about? What form (s) should the writing take-a paper (s), a monograph, something else? Is writing papers different from writing monographs or theses? What about oral presentations? Should I try to publish? Where should I publish? What audience (s) am I writing for (including when I am writing a thesis)? What should style of writing look like? How do I get started on the actual writing or the outline for it? How will I know when the writing is good enough to submit for publication?

Naturally, before preparing a presentation, the investigator should try to determine the aspects of the research findings in which this particular audience might be most interested and the style of presentation to which the audience might be most responsive. Collegial audiences can absorb a greater amount of talk couched at more abstract levels and even talks

devoted to research strategies and experiences. Other audiences, will respond well to discussions of concepts and conceptual relationships only if they are spiced with sufficient descriptive narrative or case materials to make them interesting. The researcher also needs to choose carefully the appropriate level of vocabulary for each audience.

When writing a monograph or thesis, the researcher should begin with reliance on several instruments. Over the course of a research project, the investigator develops a strong theoretical sense of what the research is all about. He or she has learned a great deal substantively about the problem under investigation. Both of these will come into play during the writing. Of course, the researcher also needs other skills such as a sense of how to construct sentences and how to clearly present an idea. Unfortunately, a writer can be his or her own worst enemy. Aside from poor writing skills, a writer might have all the usual blocks described in books designed to help people write (Lamont, 1994; Becker, 1986).

Making oral presentation and publishing written reports about findings of research introduces still another challenge for the researcher. With so much complex material available, how does one make choices about what to present, to whom and how? Generally, in a verbal presentation or an study, it is preferable to present only one concept (category) in any depth with perhaps 1 or 2 others woven in as related features. In a monograph, one has a wider range of possibilities, but even here, the writer should carefully think through, the logical order of the material before doing a detailed outline. A thesis presents problems of its own because a standard format must be followed. Again, the writer must carefully think through, how much detail to include and how to present the most relevant facets of the conceptual scheme, while still retaining flow and continuity.

CONCLUSION

Every research study, whether qualitative or quantitative, must be evaluated in terms of the canons and procedures of the method used to generate the research findings. In this study, we have provided criteria for evaluating both the research process and the empirical grounding of findings. Other areas, such as the validity, reliability and credibility of the data as well as the value of the theory, already have been amply covered. The criteria we have presented so far supplement proper guides to researchers from the initial conception of a research process to the writing-up. We hope this can be useful guides to researchers when writing the methodological sections for these and publications as

well as for committee and faculty members who are placed in positions of evaluating their students' or colleagues' works.

There are, no doubt, that if research students stay within the general guidelines outlined in this study and use the procedures and techniques flexibility according to their abilities and realities of their studies, it will go a long way to serve them as panacea for a good qualitative research approach.

REFERENCES

- Becker, H., 1970. *Sociological work: Method and Substance*. New Brunswick, NJ: Transaction.
- Becker, H., 1986. *Writing for social scientists*. Chicago: University of Chicago Press.
- Begley, C.M., 1996. Triangulation of Communication skills in qualitative research instruments. *J. Adv. Nursing*, 24: 688-693.
- Blumer, H., 1969. *Symbolic Interactionism*. Englewood Cliffs, NJ: Prentice Hall.
- Bradley, J., 1993. Methodological issues and practices in qualitative research. *Library Quarterly*, 63: 411-430.
- Bresler, L., 1995. Ethical issues in qualitative research methodology. *Bulletin of the Council for Research. In: Music Edu.*, 126: 29-41.
- Cassell, C. and G. Symon, 1994. *Qualitative Methods in Organizational Research*. Thousand Oaks, CA: Sage.
- Charmaz, K., 1983. The Grounded Theory Method: An Explication and Interpretation. In: Emerson, R. (Ed.). *Contemporary Field Research*. Boston: Little, Brown, pp: 109-126.
- Corbin, J. and A. Strauss, 1998. *Basics of Qualitative Research*. 2nd Ed. Thousand Oaks, CA: Sage.
- Dewey, J., 1938. *Logic: The theory of inquiry*. New York: Holt, Rinehart and Winston.
- Denzin, N., 1970. *The research act: A theoretical introduction to sociological methods*. New York: McGraw-Hill.
- Denzin, N. and Y. Lincoln, 1994. *Handbook of qualitative research*. Thousand Oaks, CA: Sage.
- Dey, I., 1993. *Qualitative data analysis*. Thousand Oaks, CA: Sage.
- Glaser, B., 1992. *Basics of grounded theory analysis: Emergence versus forcing*. Mill Valley, CA: Sociology Press.
- Glaser, B. and A. Strauss, 1967. *Discovery of grounded theory*. Chicago: Aldine.
- Hage, J., 1972. *Techniques and problems of theory construction in sociology*. New York: John Wiley.
- Hammersley, M. and P. Atkinson, 1983. *Ethnography: Principles in practice*. New York: Tavistock.
- Lamont, A., 1994. *Some instructions on writing and life*. New York: Anchor Doubleday.
- Lofland, J., 1971. *Analyzing social settings*. Belmont, CA: Wadsworth.
- Miles, M. and A. Huberman, 1994. *Qualitative data analysis*. Thousand Oaks, CA: Sage.
- Morse, J.M. and P.A. Field, 1995. *Qualitative Research Methods for Health Professionals*. 2nd Edn. Thousand Oaks, CA: Sage.
- Park, P., M. Brydon-Miller, B. Hall and T. Jackson, 1993. *Voices of Change: Participatory Research in the United States and Canada, Ontario, Canada*: Ontario Institute for Studies in Education Press.
- Patton, M.Q., 1990. *Qualitative evaluation and research methods*. Newbury Park, CA: Sage.
- Sandelowski, M., 1988. The problem of rigor in qualitative research. *Adv. Nurs.Sci.*, 8: 27-37.
- Stern, P.N., 1980. Grounded theory methodology: Its Uses and Processes. *Image*, 12: 20-23.