

**THE EXPERIENCE OF THE RESEARCH EVENT IN  
PSYCHOLOGY**

**by**

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# **THE EXPERIENCE OF THE RESEARCH EVENT IN PSYCHOLOGY**

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It is hereby declared that this is my own work, both in conception and execution.

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## SUMMARY

This investigation explores and describes the experiences of psychology students who have recently completed their honours research projects. This is apparently the first study to explicate this research event by approaching it from an existential-phenomenological viewpoint and by making use of the phenomenological method of research.

The guiding idea behind the investigation is that we need to train our students to become able and enthusiastic researchers. In order to accomplish this task we instruct them about research and/or allow them to conduct a relatively independent research project at honours level. In order to enhance their training, explicit accounts of students' research experiences can be useful sources of information, to provide insight into and to alert students to the challenges facing them when they become involved in this research event.

Honours students were asked to write the story of their research experiences in as much detail as possible, and to focus on their own subjective experiences of the complete event. Seven students participated in the investigation. The individual protocols were divided into natural meaning units and the natural meaning units were collapsed into themes. A brief summary of each theme was compiled. These themes were then used to formulate a general structure which reflects the collective experience of the students. The general structure as a whole, and the themes in the structure in particular, were validated by making use of subjective methods and statistical analysis.

Four general themes were identified as representative of the shared experiences of the individual respondents. The four themes were: time constraints, problem-solving, personal growth, and capacity for understanding.

The following important observations were made regarding these themes:

- The themes represent the general essence of students' experience of the research event during their honours year of study.
- The themes that emerged from the data reflect some of the problems identified by authors and instructors in the field of research methodology.

This investigation can be seen as a starting point for further research on the research experiences of students. Insights generated by the study provide some useful guidelines for academics involved in the training and teaching of research methodology students.

## OPSOMMING

Hierdie ondersoek verken en beskryf die belewenisse van sielkunde studente wat onlangs hulle honneurs navorsingsprojekte voltooi het. Hierdie is skynbaar die eerste studie wat die gebeurtenis verduidelik deur dit vanuit 'n eksistensiële-fenomenologiese gesigspunt te benader en deur van die fenomenologiese navorsingsmetode gebruik te maak.

Die idee wat die studie gerig het, is dat ons studente moet oplei om vaardige en geesdriftige navorsers te word. Om hierdie doelwit te bereik, leer ons hulle oor navorsing en/of ons laat hulle toe om op honneursvlak 'n relatief onafhanklike navorsingsprojek uit te voer. Eksplisiete beskrywings van studente se navorsings-ervarings kan hulle opleiding bevorder, omdat dit nuttige bronne van inligting kan wees om studente insig te bied en om hulle bedag te maak op die uitdagings wat hulle in die gesig staar wanneer hulle by die navorsingsgebeure betrokke raak.

Honneurs-studente is versoek om die storie van hulle navorsingsbelewenisse in so veel besonderhede as moontlik neer te skryf en om hulle aandag op hulle subjektiewe belewenis van die hele gebeurtenis te fokus. Sewe studente het aan die ondersoek deelgeneem. Die individuele protokolle is opgebreek in natuurlike betekenis eenhede en die natuurlike betekenis eenhede is op hulle beurt weer saamgevoeg in temas. Die temas is gebruik om 'n algemene struktuur saam te stel wat die kollektiewe belewenisse van die studente reflekteer. Die algemene struktuur, sowel as die temas in besonder, is gevalideer deur van subjektiewe metodes en statistiese ontledings gebruik te maak.

Vier algemene temas is geïdentifiseer as verteenwoordigend van die gedeelde belewenisse van die individuele respondente. Die vier temas is: tydsbeperkings, probleemoplossing, persoonlike groei en kapasiteit vir begrip.

Die volgende belangrike waarnemings is gemaak rakende die temas:

- Die temas verteenwoordig die algemene essensie van studente se belewenis van die navorsingsgebeurtenis gedurende hulle honneurs studiejaar.
- Die temas wat uit die data voortgevloei het, reflekteer sommige van die probleme wat outeurs en instrukteurs geïdentifiseer het in die veld van navorsingsmetodologie.

Die ondersoek kan as 'n beginpunt vir verdere navorsing oor die navorsings-belewenisse van studente gesien word. Insigte wat deur die studie gegenereer is bied bruikbare riglyne vir akademici wat betrokke is by die opleiding van studente in navorsingsmetodologie.

## CHAPTER ONE

*"A wise man learns from experience and an even wiser man from the experience of others" (Plato).*

### **1 INTRODUCTION**

#### **1.1 Introduction and motivation**

Although scientists are troubled by the relationship between research in the human sciences and the practical demands of society (Fiske and Shweder, 1986), they believe that psychology as a discipline has the potential to help solve human problems in South Africa. This is an important task facing the discipline, because human problems are probably the most serious problems facing scientists in this country. However, in order to perform this task, psychology must be based on good science (Fowler, 1990:1-20). Training plays an important role in developing excellent researchers. Psychology attracts large numbers of students and one of the purposes of training in psychology is to transform these students into competent scientists and researchers.

As with all critical problems of our time (Smith, 1990), research training also has its psychological, experiential and behavioural aspects. During the course of their study students may, at some point, find themselves confronting unexpected difficulties with what they learn to think about research and how to do research. These problems and challenges have been referred to by numerous authors in textbooks on research in the social and behavioural sciences.

The focus of the present investigation is embryonic researchers (students) in psychology who are trying to cope with the problems and challenges related to the research event in the discipline. The original purpose of the study was to explore the structure and essence of the experience of psychologists involved in the psychological research event. In literature on the experience of researchers involved in research, accomplished behavioural scientists and psychologists have reflected and reported on their own research experiences during a particular research project

or during their entire careers (Brannigan and Merrens, 1993; Platt, 1976; Reinharz, 1979; Shipman, 1976). However, as the investigation progressed, the importance of doing research on the structure and essence of the experiences of the research event, in order to understand the meaning of the research event in psychology for novice, or embryonic researchers became evident. They are probably the group who experience the most problems with doing research. From a comprehensive literature search it became apparent that no study has so far been executed to explicate the meaning of the experience of students who have been involved in their first relatively independent research project and who are able to reflect in a pre-scientific manner on their experiences.

The purpose of this project is to describe, in depth, the structure and essence of the research event for honours students in psychology who have recently completed an individual research project as part of their course work in psychology and to answer the question: What is the meaning of the individual research event that an honours student in psychology experiences as part of his/her training? An answer to this phenomenological question will result in an in-depth reflective description of the experience of what it means to do or participate in the event. The result of this investigation is a description of how the research event is experienced by the participants in this study.

According to Martin (1981) students need to understand the meaning of the research event for themselves and for other students. Research on the research event is important, because reading about the experiences of other students may alert students to the pitfalls of research and provide general suggestions to overcome them. According to Reinharz (1979):

- \* it might help to speed up students' transition from being novice researchers to becoming more mature researchers;
- \* it might serve as a corrective to the idealized image of research provided by methodological instruction and to help solve the discrepancy between the teaching and practice of research ;
- \* it might help to demystify and rehumanize the research process;

- \* it might help to break the hold of the natural scientific paradigm on research, to reduce researchers' detachment and to emphasize the context boundedness of research; and
- \* it might help researchers to reconceptualize research from a closed process of verification to an open process of discovery in which the process itself is important, not just the content and results of research.

Research of this nature could then help to yield information on the novice researcher and the research process in psychology. This investigation will, hopefully, add to literature on the psychology of psychologists in which psychologists, and now also psychology students, share their subjective, personal research experiences. Reinharz (1979) believes that a discipline is revitalized through critical examination by its newcomers. Thus, illumination and understanding of students' problems with research could potentially contribute to the field's development. It might contribute to facilitating the teaching of students by articulating the meaning of their experiences and by encouraging both students and professionals to return to their own experiences. By grounding ourselves in our own experience, perhaps we will be able to rehumanize psychological research and allow experience to become the foundation of useful knowledge.

What began as a personal struggle with the actualities of research in psychology, has become, in the present study, an in-depth phenomenological explication of the meaning of the research event as it is experienced by novice researchers in psychology, not as it is ideally described in research textbooks, but as they actually experience the research event during their training.

The guiding idea of this investigation (based on personal and some shared experiences) is that the actual research act is frequently blurred in deference to the ideal image of research and that the process of research is in reality muddled and problematic.

An added motivation for doing research on the subject is that it constitutes an empirical investigation of a subject about which a group of people (psychologists) apparently agree intersubjectively and thus apparently do not believe that research on that specific subject is needed. Psychologists seem to agree, in general, that they know what the meaning of the research event is for their colleagues and students

and that research on the subject is not necessary. Another purpose of the present investigation then, is to determine empirically what the meaning of the event is for students, instead of accepting that a predetermined answer to the question is known. Thus, the study has been approached with no preconceived ideas as to the meaning of the research event for students in psychology. The arguments of the study are embedded in the model of discovery rather than the model of testing because I believe that the research event must first be adequately described before it can be explained.

## **1.2 Definition of terms**

The central term employed and that needs to be explicated in this investigation, is the "research event" in psychology.

### **1.2.1 An event**

Fowler and Fowler (1969:282) define an "event" as the "...occurrence of a thing." It is something that happens. Tullock (1993:508) also describes an event in a similar fashion as "...a thing that happens or takes place... occurrence, happening, incident, episode... experience ...". Dobbert (1982:169-170) discusses the concept "event" in more detail. She describes an event as "...any kind of a labelled happening", also a process, that may be recognized by the following characteristics:

- \* an event is named;
- \* an event has a definite beginning and end; and
- \* an event usually requires a set of personnel, such as the researcher(s) involved in an investigation.

Dobbert also makes the statement that one should carefully select the event to be studied. One should choose the event that will prove to be most revealing to illuminate the entire process.

### **1.2.2 The research process as an event**

Process signifies a series of operations or actions that bring about an end result (Singleton *et al.*, 1993). Mouton and Marais (1990) define the research event as a process of problem-solving and decision-making and Meulenberg-Buskens (1993:2)

defines research as a process of knowledge construction. Drew and Hardman (1985) describe it as a sequence of events or activities. It thus seems that research can be conceptualized as a process consisting of a sequence of activities and decisions with the purpose of furthering knowledge. Research in psychology is also generally defined by a number of authors as a closed loop cyclical process of inquiry (Bailey, 1987; Drew and Hardman, 1985; Graziano and Raulin, 1993). This implies that research is a never ending process. According to Dixon *et al.* (1987:11), research is a process and to do research is to be involved in a process, a series of linked activities with a beginning and an end. The end product of any research project is knowledge (Singleton *et al.*, 1993). The end of one investigation could be the beginning of a next research project. However, each individual research project could be viewed as a research event that is named, has a definite beginning and end and that an investigation is conducted by at least one researcher.

One description of the study object of psychology is that psychologists study events and phenomena (Humpherys, 1993). Thus, the research event, viewed as an individual research project, is a legitimate area of research in psychology. Research methodologists in particular focus their attention on the research process. The field of research methodology can be defined as the study of the research process in all its broadness and complexity (Meulenberg-Buskens, 1993; Mouton and Marais, 1990).

In almost every research textbook the specific author provides his/her own model of the technical parts of the research process (Mason and Bramble, 1989). These models sometimes divide the research process into phases (Graziano and Raulin, 1993; Smit, 1993). Alternatively, the research process is further subdivided and/or represented by differing numbers of typical stages (Graziano and Raulin, 1993; Smit, 1994; Wilkinson and McNell, 1996) or steps (Bausell, 1986; Bless and Higson-Smith, 1995; Pietersen, 1994) to identify the different sequential, interdependent parts of the research process. The number of steps, stages or phases depend on how much detail a specific author includes in his/her model (Mason and Bramble, 1989). When these models are compared, it becomes evident that they all are more detailed representations of adaptations of the basic steps of the scientific method. The scientific method, in its most basic form, can be divided into three broad areas (Drew and Hardman, 1985):

- \* problem-identification;
- \* data gathering; and
- \* inference.

All the authors of research textbooks, irrespective of whether they are discussing quantitative or qualitative research, have to some degree structured and formalized the research process (Mouton and Marais, 1990). The different approaches to conducting research in the social and behavioural sciences (Bailey, 1987) and variations in these approaches are the result of, among other factors:

- \* the wide variety of questions amenable to research;
- \* the different settings for research;
- \* the disciplinary background of the researcher; and
- \* the personal paradigmatic preferences of the researcher.

These differences result in different methodologies (quantitative or qualitative in nature), but do not change the overall research process. The research process consists of the same elements for all types of research and this implies that there is a basic research process for all types of research (Meulenberg-Buskens, 1993). Under specific circumstances and in accordance with the demands of the different methodological approaches to research (more or less qualitative or quantitative) some of the activities are more important than others, or interpreted differently, or may even be omitted from the process (Bailey, 1987). As a consequence, there are variations in the specific details of the phases, stages or steps of the research process, but all share some basic decisions and activities (Mouton and Marais, 1990). Although each research project is unique in its own way, all have a common goal of furthering knowledge and differences in methodologies do not actually change the basic process (Mouton and Marais, 1990). A specific research approach will also result in a specific research process and in the end in specific content or research results and knowledge (Denzin, 1978; Meulenberg-Buskens, 1993).

It should be remembered that these models are not complete representations of reality, but only attempt to simplify complexities and to emphasize the most common elements of the research process (Graziano and Raulin, 1993). Models of the research process have didactic value, but the sequence of activities described in the models is almost never followed in the actual process of research. The research process as an activity is a vague process in which personal reference of theory and method merges (Denzin, 1978), and research is not an orderly process, instead, its nature remains illusive (Christensen, 1994).

### 1.3 General research perspective

#### 1.3.1 The phenomenological method

The purpose of qualitative research is to describe an event and to develop an understanding of it (Cassell and Snyman, 1994). The nature and format of the research question asked in this study is typical of a question asked within the phenomenological-existential perspective, that forms the basis of phenomenological psychology. In a comparison of qualitative research strategies, Morse (1994) describes the phenomenological research approach to inquiry as applicable in research situations where the research question concerns meaning and eliciting the essence and structure of experiences, as is the purpose of the present study. In order to explore and describe the experience of doing research in psychology in depth, the inquiry is thus approached from the phenomenological-existential perspective. Phenomenological psychology is concerned with reality-constituting interpretive practices and examines how human beings experience, construct and give meaning to their actions in concrete everyday situations (Denzin and Lincoln, 1994; Hendricks *et al.*, 1990). This implies that phenomenological psychology focuses on the experiential aspects of the world in its subjectivity. It is defined by Valle *et al.* (1989:6) as that psychological discipline that seeks to explicate the essence, structure or form of human experience and behaviour as revealed through essentially descriptive techniques, including disciplined reflection. This means that my perspective on psychology could be classified as part of the branch that uses the phenomenological method, qualitative data analysis and an inductive understanding of the meaning of grounded experience.

According to Casanova (1981), the principle weakness of psychology, among other disciplines, is a disregard for the qualitative aspects of research problems. In his article on alternative modes of inquiry, Friedlander (1982:428,434) calls for the further exploration and development of research methods:

- (1) that focus more on induction of theory based on grounded data,
- (2) that study whole systems of the human enterprise,
- (3) that employ trans-causal thinking,
- (4) that acknowledge the researcher as a primary and whole person in research,
- (5) that utilize the subjective experience and mutual reality of the researcher-subject relationship,
- and (6) that define the presence or absence of reliability and variability as personal constructs rather than as measurement characteristics.

According to Friedlander (1982:434) psychology needs a research method that "...views subjectivity as the major and legitimate focus that is the essence of psychology...The methodology and perspective closest to capturing the richness of subjectivity is phenomenology."

The phenomenological method was developed by phenomenologists and it has been adopted and used by the existential movement to study human existence. The use of the phenomenological method linked phenomenology and existentialism in psychology. It is used to locate underlying themes or patterns for the observed event in a search for underlying structures or meaning (Royce, 1982). When a research question is a meaning question, as is the case in this study, a phenomenological strategy is appropriate (Morse, 1994).

Other reasons for using this qualitative research strategy are:

- \* The purpose of the study is to understand a complete research event as experienced by informants and a phenomenological method can be used to obtain a holistic view, a complete understanding of the research event in its entirety;
- \* Phenomenology implies a grounded, inductive approach. It begins with specific observations and moves towards development of general patterns that emerge from the individual cases studied (Cleaver, 1988). It does not impose a pre-determined organizing structure or make assumptions about interrelationships prior to data collection. The purpose of this study is to explore the experiences of informants and to be open to their spontaneous reflections of their experiences of the event under investigation, without pre-structuring response categories;
- \* When phenomenology is applied to research the focus is on what the person experiences in a language that is as loyal to the lived experience as possible (Polkinghorne, 1989). Thus phenomenological inquiry attempts to describe and elucidate the meanings of human experience. It involves descriptions of experience in its original pathic, pre-reflective format. Research includes human experience and the purpose of this study is to describe and explicate the structure, essence, and eventually, the meanings of the informants' experiences.

With this study I add my voice to those who wish to reduce the dominance of the natural scientific paradigm over the reproduction of knowledge.

The general format of the phenomenological method may be summarized as follows (Polkinghorne, 1989):

- (1) Gathering a number of naïve descriptions from persons who are having or had the experience under investigation;
- (2) analysing the descriptions in order to grasp common elements that make the experience what it is ; and
- (3) describing or giving a clear, accurate and articulate account of the phenomenon so that it can be understood by others.

### **1.3.2 Respondents**

For the purpose of this research project honours students who have completed a research project as part of their course work in industrial psychology at the University of the Orange Free State at the end of 1995 are used as key informants. These respondents are included because their training includes didactic instruction as well as a complete individual research project. They are also to communicate in their and my home language and are able to describe their recently remembered experiences clearly and comprehensively. These respondents are also accessible to read and evaluate the interpreted descriptions of their experiences, as part of the process of determining the intersubjective validity of the study.

### **1.3.3 Aims of this investigation**

The aims of the present investigation are:

- \* to gain knowledge and understanding of psychology students' experience of the research event;
- \* to accomplish this by applying the phenomenological method; and
- \* to present the results in such a way that they can be useful to students and psychology instructors.

### **1.3.4 The structure of the investigation**

The study consists of two parts. The first part is a literature review of the research event in psychology. This is covered in chapters two and three. The second part covers a theoretical orientation to and application of the phenomenological method, as well as the analysis of the research results, and the conclusions and recommendations inferred from the results. This part of the investigation is covered in chapters four to six.

In chapter two a general model of the research process in psychology is described. In the model the research process is divided into a pre-data-gathering-, a data-gathering- and a post-data-gathering phase. The phases are subdivided in accordance with the tasks that the researcher has to perform in each phase. Throughout the discussion a distinction is made between qualitative and quantitative research in psychology.

In chapter three the research training of psychology students is discussed, by referring to the importance of psychological research training in South Africa. Different training methods in psychology are discussed, as well as the continuing influence of the natural scientific paradigm in descriptive accounts of research in psychology and the human side of research, in order to provide background, context and a rationale for the study.

Chapter four consists of the statement of the problem, the theoretical foundations, the phenomenological-existential approach and discussion on the steps of the phenomenological method used in this study.

The methodology and results of the study are described in chapter five.

In chapter six the research results are related to existing theory. Recommendations are made as to how the results can be used in research training and in research.

## CHAPTER TWO

### 2 A GENERAL MODEL OF THE RESEARCH PROCESS IN PSYCHOLOGY

The main focus of the present study is the psychological research process as experienced by individual researchers and, more specifically, by students. A researcher needs to focus on the determinants of research decisions, as well as on the research process, when the focus of an investigation is a typical research project, as carried out by individual researchers (Mouton and Marais, 1990). According to Kerlinger (1973) the dynamic view of science describes science as an activity, in other words, what scientists do. The purpose of the present chapter is to provide an overview of the various activities that generally form part of the research process, as well as the factors that influence the tasks that the researcher needs to carry out in the different phases of the research process. According to Mouton and Marais (1990) it is possible to identify a number of activities and decisions to be taken when one is interested in a typical research project, irrespective of how structured or unstructured the event is likely to be.

For the purpose of this discussion, the research event is divided into three phases: the pre-data-gathering-, data-gathering- and the post-data-gathering phase.

#### 2.1 Pre-data-gathering phase

The pre-data-gathering phase has a specific purpose. All the activities and decisions that are made prior to data collection function as preparation for the rest of the research process (Graziano and Raulin, 1993). These activities typically include:

- \* identifying a topic to study;
- \* problem formulation;
- \* procedure design; and
- \* writing a research proposal.

##### 2.1.1 Identifying a topic to research

The purpose of this activity is to identify a general area of interest (Graziano and Raulin, 1993). The researcher has to decide what to investigate. He/she has to determine what problem or question interests him/her, or on what subject in

his/her field of study research is needed. This is usually the first step in any research project. Initial ideas give research a focus by identifying the area of the proposed research. This, in many instances, is a difficult process. The interest, dedication, tenacity, curiosity and enthusiasm of the researcher are of critical importance to successfully complete this activity in any research project (Rudestam and Newton, 1992). Choosing the right study is one of the most difficult tasks facing the novice researcher. The reason for this is that researchable topics are usually not readily available (Huysamen, 1993; Mason and Bramble, 1989). The researcher usually has to look for a suitable topic. Knowledge and experience in a particular area are needed in order to ask questions and to know what knowledge is needed to answer them (Ary *et al.*, 1990).

It is difficult to prepare new researchers for the problems that they will have to face when they have to choose a research topic. One of the reasons for this is that little research has so far been done to generate information and understanding about the processes involved in this creative part of the research process (Graziano and Raulin, 1993). The result of this oversight seems to be that the novice researcher has no idea of what awaits him/her in identifying and choosing a research topic and how to approach and complete this task. Despite the fact that researchers need insight into the nature, scope and intensity of this part of the research event, only general guidelines are available on how to find a researchable topic (Patton, 1990; Rudestam and Newton, 1992).

The generation of an idea can begin with very vague thoughts, and initial ideas can emerge in very non-scientific ways. However, ideas for research are usually generated in a highly systematic fashion, by studying literature and previous research results. According to Graziano and Raulin (1993) it is important not to be too critical in these early stages and to lose a viable idea by disregarding it too early. Sources of ideas include a researcher's personal interest and observations, theory testing, research by other investigators, and seeking solutions for practical problems (Mouton and Marais, 1990).

Researchers engage in research for various reasons. They may do so in order to upgrade their qualifications or to obtain practical experience in a particular method or because of intellectual curiosity (Borchardt and Francis, 1984). A number of other factors play a role when a researcher engages in this activity. Some of these factors are the researcher's background and training, as well as his/her perspective

on research. They also influence his/her awareness of accessible topics for research (Mouton and Marais, 1990). The factors could be divided into paradigmatic and pragmatic factors, both of which influence researchers when they choose problems to investigate (Bailey, 1987; Smaling, 1992).

The end result of this activity is a fairly general research question in need of further refinement and clarification. According to Singleton *et al.* (1993) problems initially chosen almost always require more precise formulation to be amenable to research. One must decide more specifically what one wants to find out and for what purpose. This task is executed in the next general step of the research process, namely during problem formulation.

### **2.1.2 Problem formulation**

Once a general problem has been chosen, it must be stated in researchable terms (Singleton *et al.*, 1993). This involves translating the problem into one or more specific questions or problems that are amenable to research. There is no way to do research until a problem has been recognized and formulated in useful ways (Ary *et al.*, 1990). According to Smit (1993) it is difficult to transform ideas into practical and meaningful research questions. The process of refining ideas and making them sufficiently specific so that they are amenable to research, is a continuous process and is divided into steps for instructional purposes only (Drew and Hardman, 1985). In practice it is difficult to subdivide the actual process into specific steps.

The goal of this activity is to develop one or more clearly posed, precise and researchable questions, based on well developed knowledge of previous research, as well as the researcher's own ideas (Graziano and Raulin, 1993). A thorough literature review is particularly important. The main goals of a literature review are:

- \* to gather information and clarify the research problem (Wilkinson and McNell, 1996); and
- \* to provide justification for the study (Mason and Bramble, 1989).

It also gives the investigator a chance to determine how other researchers have conceptualized and investigated similar ideas and to determine if the question(s) that he/she wishes to pose have already been answered (Leedy, 1989; Sommer and Sommer, 1980). A literature review should be carried out systematically and

implications for the proposed study should be considered. More and less mature researchers apparently do literature reviews differently. Experienced researchers tend to develop their own ways of doing a review, but new researchers tend to limit themselves in their search for relevant literature (Rudestam and Newton, 1992). The quantity of literature used in a particular study depends on the problem. It is important to remember that quantity is less important than comprehensiveness (Mason and Bramble, 1989).

The statement of the problem has developed a particular format over the years. The initial idea needs to be narrowed down to a specific statement of the problem, traditionally formulated as a question or in declarative form (Ary *et al.*, 1990). Careful conceptualization and phrasing of the research question is important, because everything that follows is aimed at answering the research question. Once refined, the research question will implicitly help to identify major variables of interest and structure the way in which the researcher will carry out the rest of his/her investigation. The very way in which a question is asked will often determine how a study will be carried out (Graziano and Raulin, 1993).

A number of factors influence the formulation of a research problem. Babbie (1989) described three factors to be taken into consideration. Firstly the researcher has to determine what entities, events or objects (Singleton *et al.*, 1993) he/she plans to investigate (individuals, groups, or organisations). Then he/she has to decide which aspects, conditions or activities, and in what time frame (cross-sectional or longitudinal) the study will be conducted. The investigator also has to decide what broad research goal he/she plans to attain (exploration, description, explanation, prediction or evaluation). Different goals will result in different types of question (Drew and Hardman, 1985). Lastly the researcher has to choose an appropriate research strategy.

Psychologists have a variety of strategies at their disposal with which to approach research problems. It is the responsibility of a researcher to be aware of the variety of research strategies available and the different purposes for which they could be used, as well as to be aware of the ramification of selecting one method over another. They also need to become competent in selecting appropriate method(s) for a particular project (Morse, 1994). Each research strategy offers a unique and particular perspective that illuminates certain aspects of reality more easily than others and produces results better suited for some applications than others.

Psychology is characterized by methodological specialization. The reason for this is that psychologists are trained and interested in particular methods and this interest is reinforced by successful use of a particular method. In addition they are convinced that some approaches are superior not only for a particular project, but for all research projects. This implies that the choice of a particular approach is, to a large extent, determined by a researcher's background, training, interest and professional activities, and that researchers tend to share views common to a particular setting or period of time (Coan, 1973).

Research strategies can be divided into two main categories (Conway, 1988; Kimble, 1984; Krasner, 1978; Phillips, 1987; Schneider, 1990). The division between qualitative and quantitative research is entrenched in psychology (Fielding and Fielding, 1986). Different authors use different terms to label these two strategies. Authors, such as Mouton and Marais (1990), distinguish between nomothetic (law stating) and ideographic strategies and methods, while Pietersen (1989) used the terms analytical mode versus synthetic mode for the same purpose. Polkinghorne (1982) described empirical-experimental strategies, with an emphasis on randomization, isolation of variables, and comparison between groups or events, and contrasted this with a structural approach, with the purpose of locating underlying themes and patterns for observed events. Lastly, Henwood and Pigeon (1992) discussed the hypothetico-deductive strategy (with emphasis on laws, causality, a priori theory, control, operationalization and measurement, quantification, replication, generalization, and prediction). They contrasted this strategy with a naturalistic, interpretive strategy in which description of phenomena from the perspective of the person experiencing it is important, hypotheses are generated and the contextual embeddedness of phenomena is critical.

According to Mouton and Marais (1990) it is possible to distinguish between two corresponding methodological approaches, when attention is focused on the research process as it is applied in individual projects. These two approaches are qualitative and quantitative methodologies. The research strategy that is implemented in a specific project develops as a result of the interaction between a proposed project and a researcher's perspective and beliefs about the phenomenon of interest.

From this discussion of some of the factors influencing problem choice and the formulation of a statement of a problem it is evident that different types of research

impose different demands regarding the necessity of an explicit statement of the problem. In general, a question is developed to the highest level of refinement possible, given the state of knowledge about a particular area of interest and a researcher's preferred paradigmatic preference. For example, when research is qualitative and/or exploratory in nature and little is known about the topic of interest, research questions are less specific (Graziano and Raulin, 1993). The most specific questions are formulated to test causal relationships among variables (Drew and Hardman, 1985).

However, if researchers are to comprehend fully the meaning of the problem, they need to have additional information other than the statement of the problem. After finding and stating a problem and examining relevant literature, the researcher is ready to predict the expected outcome of his/her investigation (Ary *et al.*, 1990). This means that the research question is generally refined further into specific, testable research hypotheses (Graziano and Raulin, 1993). Bunker *et al.* (1975) defines a hypothesis as a prediction about the outcome of an investigation. Research hypotheses should be based on the research problem, the literature review, previous research, preliminary studies and other pertinent information (Mason and Bramble, 1989). Questions may be accompanied by highly specific and precise hypotheses, or they may be phrased in a much more general manner typical of more qualitative research, where the purpose is to identify contingencies and to generate rather than to test hypotheses. In qualitative studies researchers might not know what specific questions to ask or they might not have a preconceived image of the study. This means that they might proceed without hypotheses and might only have some general research question in mind (Taylor and Bogdan, 1984). This implies that it is not always possible or desirable to formulate hypotheses. However, some authors, such as Miller and Fredricks (1987), believe that hypotheses should also be employed in qualitative research, although the form and uses of these hypotheses may differ from hypotheses used in hypothetico-deductive research.

The statement of a problem is converted into a research hypothesis when the theoretical concepts in the statement are converted into specific procedures for measurement. This activity consists of two distinct steps (Graziano and Raulin, 1993). By making use of a literature review the researcher conceptualizes the concepts in the statement of the problem. This means that the investigator specifies the central shades of meaning of a concept in a logical, systematic manner (Mouton and Marais, 1990). Theory plays a critical role in each step towards the

development of a hypothesis (Graziano and Raulin, 1993). Quantitative research involves studying concepts that have usually been studied extensively. In such research endeavours, theories guide decisions. Several theories will usually be assessed. These theories and established empirical relationships between variables provide a critical foundation for a specific study.

After conceptualization, the researcher operationalizes the concepts by designing concrete representations (procedures for measurement or manipulation) of the abstract theoretical concepts/variables (Rudestam and Newton, 1992). He/she then formulates a research hypothesis.

At this stage many critical tasks have been completed. Once these tasks have been completed, the researcher has to pay attention to further considerations to be taken into account and activities to be performed in order to, eventually, collect reliable data on specific phenomena. The next task to be completed by the investigator is to plan and design the study (Mason and Bramble, 1989).

### **2.1.3 Procedure design**

According to Coolican (1990) psychologists conduct research by planning and designing investigations, by making use of samples and by analysing data. In more detail, these activities include:

- \* decisions about the sort of observations to be made;
- \* the choice of a research design (research format, description of samples, and sampling procedures);
- \* choosing or constructing data collection methods and techniques;
- \* choosing statistical procedures, appropriate to the nature of the question, for analysing data; and
- \* considering the ethical implications, time limits and the budget of the project (Smit, 1993).

Support for the use of a particular research design comes from the literature review (Mason and Bramble, 1989).

A project is designed to plan for data gathering, data processing and data interpretation in order to provide solutions to research problems and to anticipate problems to be faced during the research endeavour (Singleton *et al.*, 1993). A project is structured and planned in such a way that the relevance of the research purpose is combined with economy of procedures (Mouton and Marais, 1990). The purpose of these activities and choices is to decide on the specific procedures to be used for gathering and analysing data, to plan and structure a project in such a manner that the validity of the findings is maximized and to align the research goal with the practical considerations and limitations of the project (Graziano and Raulin, 1993). According to Mouton and Marais (1990) it is the duty of all researchers, irrespective of their specific research approach, to determine nuisance variables and to take steps to eliminate the influence of such factors in order to enhance the validity of research projects.

Planning a study is a complex process. According to Drew and Hardman (1985) most students would prefer not to study research design, because they see it as a difficult subject to learn. However, it is probably the most systematic part of the research endeavour and much of the content of research textbooks focuses specifically on this section of the research process, because careful planning is crucial to enhancing the success of any research event and promoting the reliability and validity of any project. However, according to Mouton and Marais (1990) little literature is available on the planning of qualitative research, in which control and accurate planning are largely ruled out.

Experimental design is a special use of the general concept of research design. The design process at this level of research is extremely important and most completely developed. There is a detailed, customized design process available for each specific type of experimental study. A study of this nature usually requires extensive pre-planning and design (Mouton and Marais, 1990). The general design characteristics of a true experiment include careful, detailed planning, elimination or control of extraneous, interfering and confounding variables, and carrying out the study exactly as planned to enhance the possibility of replication.

However, many questions asked in psychological research cannot be answered with experimental, quasi-experimental and other types of more structured quantitative research (Graziano and Raulin, 1993). Over the years psychology has begun to move out of the laboratory and psychologists have begun to realize that more qualitative

procedures need to be utilized to answer questions not amenable to pre-structured designs. Design and planning is directly related to the amount of structure and control in a project (Mouton and Marais, 1990). In general, the nature of qualitative research makes it impossible and undesirable to rigorously pre-structure and pre-plan a research endeavour in detail or to make assumptions about the relationships between variables before data collection (Rudestam and Newton, 1992). Qualitative research aims at understanding phenomena in naturally occurring sites and does not make use of controlled conditions and a limited set of outcome variables. The amount of pre-structuring will depend on what is known from literature about the phenomenon under investigation, the measuring instruments available and the time limits of the project. In most studies of this nature only a tentative conceptual framework will bound the research endeavour (Rudestam and Newton, 1992). The more qualitative researcher does not aim at selecting random, representative samples (Patton, 1990). He/she would rather make use of relatively small samples and purposively select information rich cases, not statistically representative samples. This means that the number and nature of cases are usually not determined in advance (Taylor and Bogdan, 1984). The sample is defined on an ongoing basis as the study progresses.

In qualitative research the researcher is usually the research instrument. He/she is involved in the research event as a total human being (Smaling, 1992). Thus, the validity of the results of such a project will, to a large extent, depend on the researcher's skill and competence (Patton, 1990).

All this indicates that, as in the case of problem identification and choice, the specific methodology chosen to answer research questions and to obtain the most precise answers possible depends, among others, on factors such as practical and ethical concerns, as well as on the paradigmatic preferences and background of a specific researcher and the nature of a specific research problem. The goals of a specific project also influence the choices that a researcher has to make during this part of the research process (Dane, 1990). This implies that there is no universally accepted approach to plan, investigate and answer a specific research question, although each discipline has its preferred approach (Rudestam and Newton, 1992). The investigator's paradigmatic and pragmatic preferences will exert a pervasive influence on every aspect of the research process (Barber, 1976). According to Rudestam and Newton (1992) the methodology to be used should evolve from the research question, unless the purpose of a project is to illustrate an innovative or promising methodology.

Psychology makes use of different research approaches, because there is a remarkable intolerance between adherents of different perspectives in this field of study and also because it is impossible to use a single approach to study the full range and complexity of human behaviour and experience. Mouton and Marais (1990), as well as Smaling (1992), recommend that psychologists should reject any extremist positions, that they should rather view the different approaches as complementary, and that this stance could eventually help the discipline to better understand and investigate its subject matter.

The next essential activity to be performed in the pre-data-gathering phase of many research projects, and more specifically projects for which approval is needed, is the writing of a research proposal in order to build an argument to support the proposed study (Marshall and Rossman, 1989).

#### **2.1.4 Writing a research proposal**

Proposal writing allows the investigator to formulate his/her research design in a usable form (Dobbert, 1982). The research proposal is a planning document in which researchers indicate what they plan to do and how they plan to do it (Smit, 1993). According to Mason and Bramble (1989:345) it is "...a written exposition of the reasoning that goes into the design and development of a study; it explains the basis for the research and the procedures that will follow." The proposal is used to monitor the ongoing study to ensure that it is conducted as planned and it is also used to help the audience for whom it is written to decide whether or not to approve a specific research project and/or grant funds for the project. It can be used to determine:

- \* if the project is worthwhile;
- \* whether the study will contribute to knowledge and/or stimulate further research;
- \* if the rationale for the study supports the project;
- \* if it is possible to conduct the investigation;
- \* if the researcher shows insight and has knowledge of literature on the subject;
- \* if the researcher is capable of carrying out the proposed research; and
- \* what the ethical implications of the study might be (Ary *et al.*, 1990; True, 1989).

It is especially important for a qualitative researcher to convince the research committee that he/she understands the approach that will be used in a study (Rudestam and Newton, 1992). According to Dobbert (1982) all forms of qualitative research make demands on the planning process that are different from those encountered in quantitative research. The basic purpose of the proposal remains the same, but instead of formulating a closed contract, as in quantitative research, the contract is more open and may change as the study progresses, because neither the focus of the investigation, nor the exact and final form of the data-gathering and data-analysis methods can be specified in advance. In some instances the qualitative researcher may even decide to conduct a literature review after a preliminary analysis of data. Once the unique problems associated with qualitative studies have been addressed, the more general tasks of proposal writing could be addressed in a similar form as the format that is used for quantitative proposals.

There is, however, no specific format for writing a research proposal, although different institutions usually have their own prescriptions in this regard and the nature of the project also, to a large extent, determines the form and content of the proposal. However, there are certain characteristic issues that need to be addressed in the document. One important characteristic of a successful research proposal is usually good planning. Good planning facilitates the writing of a successful research proposal. Much of the work needed for a proposal is usually done before it is submitted for approval. From a design perspective, preparation of a research blueprint is a multifaceted activity and includes more than just writing it (Dobbert, 1982).

- \* The researcher has to determine what the current submission requirements for the specific institution are;
- \* he/she has to make sure that the project is of such a nature that the institution will approve it;
- \* strengths and weaknesses of the project need to be determined;
- \* the researcher has to ascertain that the study is scientifically justifiable; and
- \* he/she should have a clear idea of the scope of the study and the manner in which he/she proposes to conduct it (Mouton and Marais, 1990).

The aim of a proposal is:

- \* to indicate what the specific aim of the study is;
- \* to explain the rationale for the project;
- \* to describe the methodology the researcher plans to use to investigate the research problem in relative detail; and
- \* to motivate the feasibility of the study and to speculate on the possible contribution of the study to the existing body of knowledge on the research subject.

The contents of a research proposal usually consist of:

- \* a title that gives a short, clear description of the research theme (Smit, 1993);
- \* a brief introduction to outline the background of the problem, the general aim and rationale, and the possible contributions of the project;
- \* a literature review and a tentative conceptual framework for the project;
- \* a section on the specific aim(s) of the study;
- \* the statement of the problem and the hypotheses or the central theoretical arguments that will guide the study;
- \* a description of the methodology to be used; and
- \* in some instances, an indication of the time schedule and budget. Any supporting documentation that the researcher deems necessary should be attached to the proposal (Babbie, 1989).

The writing style should be brief, clear, legible and free of unnecessary and irrelevant information. In the past a research proposal (and also a research report) had to be written in the third person. Today, especially in qualitative research where

the researcher is the research instrument, it is acceptable and even desirable to write the document in the first person.

According to Dobbert (1982) each student will discover his/her own special set of problems in planning and writing a research proposal. Some of the problems will only be solved through practice and the accumulation of research experience. There seems to be no indication in literature on the subject as to what these problems are or how students experience this part of the research event.

Proposal writing is the culmination of the first phase of a research project, which begins with finding and defining a research problem and proceeds through selection of appropriate theories and research procedures (Dobbert, 1982). Once the proposal has been accepted the researcher can make his/her observations.

## **2.2 Data-gathering phase**

The goal of activities in this phase of the research event is to use the methods, techniques and procedures devised in the previous phase to collect information from participants selected for the investigation and to record the data obtained (Smit, 1994). Students generally believe that research is synonymous with data-gathering and do not realize that there is more to the research event than making and recording observations of phenomena under the conditions specified in the previous research phase (Graziano and Raulin, 1993). According to Bless and Higson-Smith (1995:99) a research project "...stands or falls on the quality of the facts on which it is based."

Before the researcher can begin to gather research information a number of administrative activities need to be completed (Smit, 1994):

- \* The researcher needs to arrange for an appropriate venue and trained personnel if he/she will need help to gather data;
- \* The researcher also needs to gain entry and approval and he/she will have to decide how participants will be approached and how much information about the proposed investigation will be given to them;

- \* The investigator will also have to make sure that the material and/or apparatus that he/she will need is available and will have to arrange with the participants to be available at specific times;
- \* Methods and materials should conform to specifications in the proposal and should be used as described in the proposal (Mason and Bramble, 1989); and
- \* Data should be recorded systematically. Any deviation should be taken into account and noted. Researchers should be prepared to deal with any unforeseen circumstances. If observations take place over time, daily logs should be kept and any changes and irregularities should be noted. This could be useful when seeking explanations or to interpret unexpected or unusual events.

The fact that human beings are unique and their behaviour not static and pre-determined, could cause problems in this research phase because, to a greater or lesser extent, participants might be aware that they are being studied and they could react to the situation, even when a project has been relatively pre-structured and provision has been made to control extraneous variables (Mouton and Marais, 1990). Researchers themselves could also unwittingly influence the data gathering process (boredom, bias or anxiety). In qualitative research there is the added problem that the researcher is usually interested in naturally occurring, contextually bounded phenomena and that the procedures used to gather information, as well as the type of information gathered, may have to change to include relevant information (Taylor and Bogdan, 1984). Ethical considerations should also be kept in mind during data collection (Bless and Higson-Smith, 1995).

After research data has been gathered in a scientific manner, by implementing appropriate research methods, techniques and procedures, the meaning of the results needs to be determined and the research findings communicated (Smit, 1994). This is done during the last phase of the research process, the post-data-gathering phase.

### **2.3 Post-data-gathering phase**

This phase of the research process includes the processing and analysis of the raw data gathered in the previous phase, understanding and making sense of the results

and communication of the results to the scientific community (Graziano and Raulin, 1993).

The purpose of the activities included in this phase of the research process is to prove that the information gathered during the previous research phase is reliable and that it is possible to draw valid conclusions from the results (Smit, 1994).

### 2.3.1 Data analysis

Analysis and presentation of findings require:

- \* the organisation of data, by hand or by making use of a computer, into categories, or into tables, charts and graphs;
- \* statistical, or other forms of manipulation; and
- \* summarizing the findings in reference to the research question (True, 1989).

Raw data is analysed by using the appropriate statistical or alternative procedures selected when the project had been designed (Graziano and Raulin, 1993). Analytical procedures can vary from narrative, verbal accounts to highly structured and sophisticated statistical tests and these techniques are used to make sense of data (Mouton and Marais, 1990). Most psychological research usually produces a form of numerical record representing the data (Graziano and Raulin, 1993). The raw data needs to be ordered, processed and statistically described and calculated and the statistical significance of the results determined, usually by making use of statistical computer packages (May *et al.*, 1990). According to Drew and Hardman (1985) statistics tends to produce anxiety in most students.

Non-numerical data, in the form of words are more difficult to analyse (Mouton and Marais, 1990). Qualitative data includes rich, thick descriptions of informants' own words or observable activities (Taylor and Bogdan, 1984). Qualitative data collection and analysis usually occur together (Shipman, 1988). Qualitative analysis takes place during data collection (within-site analysis) and the data has to be recorded, reduced and displayed as a narrative text (Miles and Huberman, 1984). Categories and dimensions emerge from the data during analysis (Patton, 1990).

### **2.3.2 Interpretation**

The purpose of interpretation is to determine the meaning of the research results and to evaluate the implications of the results (Smit, 1994). In quantitative research the researcher has to compare his/her results with the results predicted in the hypotheses on the basis of theory and decide if the results support a specific theory. The researcher has to decide if the data is reliable and if the results provide adequate support for the hypotheses, and for the conclusions drawn from the results (Mouton and Marais, 1990). Sense is made of the research results in terms of how well they help answer the research question(s) and by deciding how the answer(s) contribute(s) to knowledge in the field. The findings are put into context to help relate them to the research question and to other concepts and findings in the field of study, by making use of an inductive process of reasoning (Graziano and Raulin, 1993). Results are then generalized to the target population, if at all conceivable, recommendations are made regarding further research on the subject under investigation. The interpretations, conclusions and generalization of research results can thus enhance the application of knowledge (Smit, 1994).

In qualitative research minimal interpretations of research results are usually made and the reader of research reports is allowed to draw his/her own conclusions and generalizations from the data (Taylor and Bogdan, 1984). The researcher usually does not make generalizations, but interprets results in the context in which observations are made.

### **2.3.3 Communicating research findings**

Science is a public enterprise and the purpose of communicating research results is to inform others about a specific project (Dane, 1990). Major venues for communicating research findings include, among others, formal written publications and permanent records, as well as oral and graphic presentations at scientific meetings. The research report is a scholarly document, and as such it should comply with the general standards of science. Research publications differ in form, length, aim and the audience for whom they are written (Babbie, 1989). Different institutions and official agencies have their own prescriptions and standards regarding the format of research publications, such as the manual for writing research reports by the American Psychological Association, published in 1983 (Graziano and Raulin, 1993). General guidebooks on how to write and publish a

scientific paper are also available, such as a book by Day (1996). The following factors should be taken into account in writing a report:

- \* the format and length of the report;
- \* the number of copies needed;
- \* the reference style;
- \* acknowledgements; and
- \* the need for a summary and abstract (Mouton and Marais, 1990).

Quantitative and qualitative reports differ in that quantitative publications are written in a more rigorous, parsimonious and impersonal style (Mouton and Marais, 1990). Qualitative researchers use a more fluid, rich and redundant style and prefer to write in the first person.

The essential elements of a research report can be identified, although different researchers will deal with them in different ways (Mouton and Marais, 1990). According to these two authors the following guidelines should be used in report writing.

- \* The research project should be integrated into a wider framework of relevant theory and research in which a review of relevant literature is reflected;
- \* all central and important concepts should be defined explicitly;
- \* methodological assumptions of the researcher, applicable to the specific project, should be stated explicitly;
- \* research hypotheses or the central theoretical thesis, as well as the aim of the investigation, should be clearly formulated;
- \* information should be provided on the nature, credibility, relevance and representativeness of data and information sources;
- \* the report should include information on ways in which reliability/validity and objectivity of the information have been controlled;
- \* the report should give detailed information on the methodology and context of data collection;

- \* the procedures for data analysis should be described in full;
- \* interpretations should take place against the background of the original research problem;
- \* interpretations and conclusions should be provided within the framework of the original research problem and design and should include all relevant data and information;
- \* and the report should comply with the technical guidelines laid down by the organisation or journal for which it is written.

A report should be written in such a way that others can understand and replicate the research, if they so wish (Graziano and Raulin, 1993). A research report should also be planned before the researcher writes it, the style and content should be adjusted to suit the audience, readers should know where the researcher is going (purposes and how topics relate), and good writing is grounded in examples (Taylor and Bogdan, 1984).

According to Graziano and Raulin (1993), the text of a research report usually consists of three parts.

- \* Firstly an introduction (a statement of the research problem and discussion of prior research). This section usually begins with a broad statement that is narrowed down to focus on a discussion of specific relevant research. It is usually not a long section. It ends with a specific statement of the research hypotheses or research goal. The hypotheses, and in the case of qualitative research the research goal, should seem to follow naturally from everything preceding them.
- \* This section is followed by the method section. The purpose of this part of the research report is to describe exactly how the study was carried out, by describing, in detail, the nature of the sample and how it was selected, the apparatus, equipment or materials used, the procedures and how they were carried out, and the results (statistical tests or alternative procedures used, and tables and figures), in separate subsections. Enough information should be provided to allow the reader to interpret the results without reading the text.

- \* The last part of the report consists of a discussion of the research results. The purpose with this part of the report is to interpret and evaluate the results. It begins with a brief summary of the results in non-technical language and the interpretation follows logically from this summary. It is also useful to provide future research directions and to suggest new hypotheses. The weakness and/or limitations of the research should also be reported.

In addition, a qualitative research report should cover the following basic points (Taylor and Bogdan, 1984): The researcher should report on his/her own frame of mind (original purpose and how it changed), his/her relationships with informants, and checks on his/her data.

Both types of report have a title page (title, author's name and affiliation, and the date and place of issue), a statement of acknowledgements, a table of contents, a list of illustrations, a preface, a text, appendixes and a bibliography (True, 1989).

According to Graziano and Raulin (1993) report writing is a demanding and challenging activity, easiest when well planned. This implies that the experienced researcher might find report writing less demanding than the novice researcher. It is important to remember that practice is essential for understanding and competence in carrying out the tasks needed in all phases of the research process.

This discussion of the research process is only an overview of the research event in psychology. It is impossible to describe the research event in psychology in detail, unless a research methodology book is written on the subject. However, it is not the purpose of this study to provide an exhaustive explication of the research process in psychology. The focus of the study is on that part of the process that is not described in a general, technical model of the event, namely the subjective experiences of those involved in the event. In order to approach attainment of this objective, the purpose of the next chapter is to discuss the training of psychology students in research methodology and the problems that they encounter during their training.

## CHAPTER THREE

### 3 RESEARCH TRAINING OF PSYCHOLOGY STUDENTS

#### 3.1 Importance of research training in South Africa

Psychology can be regarded as one of the most important disciplines to help solve human problems in the Western world in general, and in South Africa in particular. This awareness is reflected in a report by the Science Forum (1992). In this report research in psychology is regarded as a necessary precondition for the development and well-being of South Africans. Psychologists' awareness of the important role that they have to fulfil in this country is also reflected in a mission statement for psychology, formulated by Gerdes (1992). According to this statement psychology is committed to the pursuit of knowledge and research in order to improve the understanding of human beings. Fowler (1990) believes that in order for society to benefit from research, psychology has a responsibility to promote and integrate research and practice. It would appear that research in psychology can be of particular importance in enhancing the discipline's role in South Africa.

However, it would seem that psychologists are not always equal to this task. They apparently encounter problems in meeting the demands of research practice in particular. As early as 1972, Anastasi wrote that psychologists had started to question their contributions in solving human problems. Even more alarmingly, they have also started to question the significance of much research in psychology (Howard, 1985a). There is evidence that society does not make use of research findings in psychology. According to Ruback and Innes (1988) psychological research is largely irrelevant to policymakers.

Psychologists in South Africa have also begun to question the significance of research in a changing South Africa. Biesheuvel (1987), Jordaan (1989), Mauer (1987), Retief (1986), Retief (1989), and Sellschop (1992) are among the authors who have argued for a greater investment in research into social and psychological problems and for relevant, excellent and prolific research in South Africa. However, in a study by Mauer *et al.* (1991), the investigators found that only about one third of registered psychologists in South Africa have published during the previous five years. They reached the conclusion that it either takes a psychologist in South Africa

up to fifteen years to write an article or research report, or that most of them have nothing to say. Another possible indication of their lack of interest in research is the fact that only 16,7% of registered psychologists in South Africa were affiliated to the former Institute of Academic and Research Psychology (Biesheuvel, 1991). This is despite the fact that research has supposedly always been one of the core concerns of psychologists (Nell, 1990). This lack of involvement in doing research is also apparent in academic psychology. It would appear that lecturers spend more of their time teaching than doing research (Benassi & Fernald, 1993).

All this seems to indicate that South Africa needs psychologists who are well versed in research methodology. However, although research has traditionally been an important part of the training of psychology students, not all South African universities even present masters degree courses in research methodology. According to Van der Westhuizen and Plug (1987), South Africa not only needs more universities to present these courses but the country needs psychologists well versed in research methodology and interested in doing relevant research. Universities have an important role to play in the training of competent and motivated researchers. However, according to Gerstein *et al.* (1988) an overall greater demand is placed on universities to prepare students for non-research careers and the proportion of time devoted to developing researchers and research interest is limited.

It is important to remember that psychologists' engagement and interest in research activities are in part dependent on their attitudes toward research (Hoshmond and Polkinghorne, 1992). Students' socialization is an important factor that influences their attitudes. Positive or negative attitudes (and values) toward a field of study are in part formed during their training (John, 1985). This is also true of attitudes concerning research practice. According to Anderson and Louis (1994) an important part of socializing novices to do research takes place during their training. This implies that training in research does not only teach a student about research and how to conduct it, but will also form the basis of his/her attitudes towards research and will possibly influence his/her future involvement and interest in research. In order to prepare psychologists for the demands and challenges facing them when they encounter the research event and to help orientate them positively toward research, they need to be adequately trained, at tertiary level, in the theory and practice of research in psychology. According to Agnew and Pyke (1969) the importance of education as a prerequisite for a researcher can hardly be

overestimated. One of the purposes of university training, then, is the preparation of competent researchers to search for knowledge and the preparation of ever more professional servants of mankind.

### **3.2 Preparation for higher degrees**

In the discussion so far, it has been implied that one of the causes for the low research productivity of psychologists might have something to do with their training. They are, however, not the only group who might be influenced by this. Doctoral students in psychology also appear to experience problems with research and in completing their studies in time. Attrition among these students is apparently high and they take much longer to complete their studies than did students in the natural sciences (Cude, 1981). This is a disturbing trend. According to Garcia *et al.* (1988) as many as half of the students entering graduate programmes drop out before completion of their masters or doctoral studies.

One of the possible causes associated with problems in execution of research at this level of study is that a doctoral project requires many difficult tasks that call for skills that students did not necessarily develop at undergraduate level. According to Brown and Atkins (1988) these students experience problems such as methodological difficulties, time management and communicating research results. In their study it was found that students who had been well prepared at lower levels did better in masters and doctoral programmes, than those with less preparation in research practice. This seems to indicate that research training at undergraduate and honours levels before a student undertakes masters or doctoral studies might be an important factor for successful completion of these programmes. This implies that adequate training in research at undergraduate level and in honours courses is not only important for psychologists but also for those who propose to complete masters and doctoral studies. Conway (1988) found that experience in actually doing research during these levels of psychology training is viewed as an important part of university training by young scientists.

How do psychology departments train their students to do research? It is important to answer this question if the ultimate aim of training is to enhance the quality of research (Bless and Achola, 1988). In the next section the instructional methods used to teach psychology students are discussed.

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formal instruction and theories to train their students in research. The purpose of these courses is usually to familiarize students with the principles and methods of research. Much of what has been called course work in psychology is actually telling students about research. Authors, such as Chadwick *et al.* (1984), believe that they can use textbooks to transform students into craftsmen.

However, books on research tend to contain formalized statements about the principles and methods of research, necessarily presented as distilled ideas (Bachrach, 1981). The research process implied by the order of journal headings and chapter titles, in its simplest form consists of steps, stages or research phases. This idea of a sequential process in which activities and decisions proceed in a given order presents a synthetic model of the research event. It is an idealized, simplified, proscriptive and normative guide of how research ought to be conducted, not how it is actually done in practice. According to Drew and Hardman (1985) the sequential idea is useful for instructional purposes but out of step with the realities of the actual research event. This idea tends to lead students into thinking of it as a checklist. However, research practice is not only a logical, highly organized body of knowledge revolving around the hard core of scientific methodology. The real nature of the research process is elusive and the sequence described in literature on the subject is almost never followed (Leedy, 1989; Rudestam and Newton, 1992). The research event also includes many activities not described in formalized accounts of research projects in published literature (Christensen, 1994). Students probably experience problems with the sequential presentation of the research process, because it causes them to view the process as rigid, mechanical, easy and rational. This is not true. Although textbooks usually describe the beginning of a typical research project as the identification of a research topic or idea, and the end of a project as the research report, this is not necessarily the case. In practice it is possible to enter the research process at any point. It happens quite often that a researcher chooses a research method prior to choosing a topic, although Dunnette (1966) warned against this practice. It is also possible to leave out some of the steps described in the sequential models of the research process, or to emphasize different tasks and decisions, depending on a researcher's preferred research approach (Mouton and Marais, 1990; Smaling, 1992). Researchers using either a qualitative or a quantitative research strategy will interpret the tasks differently. A qualitative researcher will, for example, emphasize entry requirements into the field (Taylor and Bogdan (1984). In a more quantitative and structured study, research design would probably receive more attention (Graziano and Raulin, 1993).

### 3.3 Research training methods

Psychology is a very popular subject choice for students at university. It has attracted more majors than any other discipline and continues to do so (Annis *et al.*, 1987).

Most psychology departments turn out three types of graduates:

- \* professional psychologists with masters and doctoral degrees;
- \* students with an honours degree; and
- \* three year undergraduate courses (Borchardt and Francis, 1984).

A typical requirement for psychology majors is at least one research methodology course at undergraduate level or honours level. Research methodology courses are usually presented during their second and third year of study (Brewer, 1993) and/or as one of their honours courses. Not all university departments use the same set of activities to instruct students. The methods used for teaching research methodology vary from institution to institution (Agnew and Pyke, 1969). However, a variety of methods could be employed to train/teach students in research methodology.

Shipman (1988) and Coleman (1977) distinguish between methods focused on information assimilation or teaching students about research and experiential learning, or doing actual research. The primary purpose of both these groups of methods is to teach students how to do research (Chadwick *et al.*, 1984). One or the other type of method is not necessarily more desirable. According to Van der Westhuizen and Plug (1987) theoretical instruction and research applications should be of equal importance in the training of psychologists. The purpose of this discussion is not to describe the variety of methods available in detail, but to use an overview of the major ways of teaching the subject to distinguish between research in theory and research in practice and to put the present study into perspective. A classification system used for this purpose is proposed by Reinhartz (1979). She identified three major ways of teaching research to students:

- \* didactic or theoretical instruction;
- \* experiential learning; and
- \* descriptive instruction.

#### 3.3.1 Didactic instruction

Traditionally, learning for the most part has consisted of abstraction and theories (Conrad, 1978). This means that psychology departments have used textbooks,

A presentation of the research event as sequential oversimplifies a complex event. It cannot capture the creativity and adaptability researchers bring to their work. According to Hoshmond and Polkinghorne (1992) and Marshall and Rossman (1989), the researcher's activities do not take place along the rigorous lines set out by his/her training. Quite unlike the pristine and logical presentation in journals, textbooks and lectures, actual research is often messy, intensely frustrating, and fundamentally non-linear. It is not a sequential and objective endeavour, but the real inner drama of a researcher's work includes an intuitive base, halting time line and extensive recycling of concepts and perspectives. This means that research is not as clear-cut and easy as it is explained in textbooks. The process is not only logical and rational but includes other subjective elements that students have to be made aware of. When students are exclusively exposed to the theory of research practice, their training provides them with a one sided view of research (Korn, 1985). It is not necessarily undesirable when a course or textbook outlines the principles and methods of research, but "...we fool ourselves into thinking that our students are trained in research when in fact they have been talked at about it but they have not experienced it" (Runcie, 1976:xiii).

Thus, research is not the rigid, formalized activity described in theory, but a dynamic and captivating process. Even a broad conception of research as a linear sequential process muddles the issue. Actual difficulties in the research event can be demonstrated at all stages. Research is far from a predictable process of solving problems. It can be described as organized anarchy.

Exclusive exposure to the theory of research probably causes the average psychology major to complete his/her training with the idea that research is non problematic as long as one adheres to the rules. The idealized, formalized presentation of the research event as a trouble free activity misleads students into thinking that research is mechanical (Williamson *et al.*, 1977). They do not come to appreciate the complexities of actual research.

The "first law of research" formulated by Bachrach (1981:2) sums up this problem. According to this law "People don't usually do research the way people who write about research say that people do research." Students need to be exposed to the realities of research practice to be made aware of the realities of the research event in psychology. Science consists of knowing and doing and students need skills in both.

### 3.3.2 Experiential learning

Research by students include varying levels of skills, competence, independence, accountability and active learning (Mathie, 1993). Included under experiential learning are, for example, practicals, situations wherein students serve as research assistants and research projects carried out by students themselves.

- \* Many textbooks and manuals, such as the Manual of psychological practicals by McIlveen *et al.* (1993) and the book by True (1989), include practical activities. The purpose of these activities is to illustrate selected research activities (Brewer, 1993).
- \* Where students are used as research assistants, activities are usually limited and affected by the availability of opportunities and time factors. These activities also provide only limited exposure to research, because the student is usually involved in selected and limited aspects of research, such as helping a lecturer to find literature predetermined by the lecturer or scoring and coding questionnaires.

All these activities usually do not provide the student with opportunities to become involved in a complete research project. Student numbers and limitations on time available for research limit these kinds of activities (Reinharz, 1979). Students will only understand the intricate and complex nature of the research event if they are involved in the entire research sequence from beginning to end.

Research conducted by students in the course of their training has traditionally been an important aspect of training in psychology (Mathie, 1993). Unfortunately growing numbers of students increase the difficulty of allowing every psychology major to choose, plan and execute an own, independent research project at undergraduate level (Pauw, 1975). However, at post-graduate level students need to prove that they can carry out these tasks and that they are able to conduct a relatively independent investigation and that they can eventually, at doctoral level, make creative and original contributions to the existing body of knowledge in the discipline (Isaac *et al.*, 1989). A psychology student's first opportunity to prepare himself/herself for a more advanced degree and to execute a relatively independent project usually comes at honours level. One requirement of honours training is that a student has to

present an independent research project as an honours thesis (Mathie, 1993). An independent research project is usually an important part of a honours student's studies. According to Halpern (1993), initiating, designing and executing an individual research project is one of the capstone, integrative courses of any honours programme. This needs to be a hands-on experience for students, supervised by department members (Brewer, 1993; Conrad, 1993). A research project can be an important learning experience for a student. According to Coleman (1977), an independent research project, successfully completed, will go a long way towards enhancing the self-assurance of students. They might come to realize that research is not a humourless, dry, hard activity, but rather an enjoyable event, even in a situation where they have to do research because they have to and not so much because they want to.

According to Krause (1983) he, as a lecturer, experiences research as an enjoyable and delightful pastime. He believes, however, that students who have to do research as part of their course work do not experience research in a similar way. They may, instead, experience the event as time consuming, intrusive into their personal lives and as a thoroughly frustrating activity. Many authors in the field of research have written that their own experiences in teaching have convinced them that students experience diverse problems in conducting research projects. Each individual student will apparently discover his/her own set of problems and some of these problems will only be solved through practice and accumulation of research experience. There are some facets of research that can only be learned through experience. The emotional side of research - its joy and frustration - can only be learned by doing research (Sommer & Sommer, 1980).

In general students seem to have no clear notion of what real research implies (Leedy, 1989). They are apparently unaware of the real nature and demands of doing research. They do not seem to realize that they will need to make judgements and that the process implies refocussing, redefining and re-assessment (Williamson *et al.*, 1977). According to Drew and Hardman (1985) they need to see research as a learning experience, instead of getting lost and finding it distasteful. When one looks at the conventional research process, students seem to experience problems with:

- \* finding a researchable problem (Graziano and Raulin, 1993);
- \* formulating a research problem and hypotheses (Bargar and Duncan, 1982; Kerlinger, 1973);

- \* carrying out a literature review (Rudestam and Newton, 1992);
- \* choosing appropriate research methods and techniques (Mouton & Marais, 1990);
- \* writing a research proposal (Leedy, 1989);
- \* analysing and interpreting research results (Smit, 1994); and
- \* report writing (Rudestam and Newton, 1992).

This implies that they experience problems with all facets of the research process.

### 3.3.3 Descriptive instruction

Authors who have made statements concerning the problems that students might experience in doing research have usually stated that they have perceived this state of affairs from their own contact with students. They seem to accept that research about the experience of students involved in research activities is not necessary, because they, as instructors, already know the answers. However, students are in unique positions to report on their courses as they appear to them and on their own activities, motivation and understanding and enjoyment (McDowell, 1991). According to McDowell, no one else is in the position to report on these matters and students can contribute to knowledge on the subject. He also believes that they should have the opportunity to do so in a personal way and that they, as well as students in the future, could benefit from these reports. Students, and researchers, involved in research can provide an insider view on the research event. Reports of this nature can contribute to psychology's shared experiential culture.

However, according to Martin (1981), students who are trying to understand research are constantly faced with gaps between models of their textbooks and teachers and the realities of research in practice. Many students are forced to learn about the actualities of research in a haphazard fashion. "They decipher rules of thumb from throwaway lines in conversations with faculty, asides in methodology textbooks, and embarrassed footnotes in journals" (Martin, 1981:131). More importantly, they are faced with uncovering implicit language in published accounts of research, because few explicit accounts of the subjective experience of conducting research are available (Reinharz, 1979). Descriptions of subjective research experiences of psychologists are scarce because they tend to minimize the importance of this area of investigation or because they believe that they know what goes on during the research event. They have either considered subjective, personal experience as irrelevant or insignificant or have denied that there is more to the

research process than just method. They tend to be problem-orientated rather than process-orientated. Psychology has consistently separated private research experience from public, publicized accounts of the research event (Reinharz, 1979). This means that the most important component of research, the subjective experience of the research event, has been neglected or accorded a back stage by the established psychological community (Jones, 1985). One possible reason for this oversight is the continuing influence of the natural science paradigm in psychology.

### **3.3.3.1 The influence of the natural scientific paradigm in descriptive accounts of research in psychology**

According to Danzinger (1990), research practice in any field of study is dominated by the prevailing paradigm in the particular field of study. Mainstream psychology, and especially academic psychology, is still being dominated by the natural science paradigm, with the rigorous scientific method at its core (Beshai, 1971; Cooper, 1981; Coward and Royce, 1981; Deese, 1972; Henwood and Pidgeon, 1992; Nuyen, 1990; Odegaard, 1987; Polkinghorne, 1982). One alternative term generally used to identify this approach to research is positivism. It is often used to describe a strictly scientific approach to research in psychology. This situation is slowly changing in psychology. However, the natural scientific paradigm is still predominant in teaching and research in academia (Madsen 1987).

The study object of psychology, according to this viewpoint, does not include subjective experience (Eysenck, 1987; Giorgi, 1970; Ingelby, 1981; Mouton, 1990; Overman, 1988b; Valle *et al.*, 1989). The subjective personal influences and experiences of researchers are eliminated or ignored. According to this viewpoint the researcher is not an integral part of the research event, except as another variable to be controlled (Graziano and Raulin, 1993). Thus, subjective phenomena such as the inner experience of researchers - their feelings, mental images, thoughts, perceptions, sensations and intentions - have been excluded from research and publications on the research event (Bell and Newby, 1977; Fee, 1983; Miller, 1972; Sperry, 1988). Objectivity and neutrality are demanded from the researcher. The researcher strives to be an objective, detached observer (John, 1986; Mouton, 1988). According to this approach, valid research is synonymous with objective research and objectivity is enhanced by insisting on a neutral, uninvolved observer.

This tradition has resulted in objective, neutral descriptions of research in publications. It has resulted in publications in which only distilled, technical components of research have been reported in textbooks, scientific journals and research reports (Crane, 1967; Danzinger, 1990). An example of this is the typical headings of a scientific paper, namely:

- \* A statement of the hypothesis to be tested;
- \* A description of the sample to be studied and methods used;
- \* An account of the results; and
- \* A discussion of the meaning and implications of these results (Silverman, 1985).

The focus is on the logical structure of methods used and excludes all aspects that do not serve this function, such as important but, for adherents to this tradition, irrelevant psychological aspects of research. There is no concern for the meaning of the research event for those engaged in it. Anything non-standard, particular and contextual is eliminated (Nuyen, 1990). Rules and guidelines direct the researcher's reporting style and the format used. An impersonal, objective writing style is used and logical, not emotional, accounts devoid of interpersonal contact are produced (Holton, 1978). According to Brannigan and Merrens (1993) conventions of reporting in the scientific community may actually conceal the true nature of the research event.

Evidence also suggests that the degree of orthodoxy in accepting a dominant paradigm also influences editors' and referees' decisions in accepting or rejecting publications in scientific journals (Barber, 1976). These decision makers tend to approve manuscripts for publication that are in line with their own paradigmatic preferences. This implies that publications are dependent upon the methodological assumptions of these persons (Du Preez, 1990). Those who wish to publish accounts of subjective research experiences risk the disapproval of their colleagues who believe that personal accounts should be ignored (Reinharz, 1979).

According to Friedlander (1982) and Cohen (1978) the reliability of research could be enhanced by researchers' degree of self-knowledge, insight, self-awareness, self-acceptance and openness to self-knowledge. Psychologists have, however, been notoriously uninterested in examining themselves as scientists and they have consistently underreported their own activities (Van Leeuwen, 1988). This is despite the fact that as early as 1975 Buss had seen greater self-awareness as essential for

further growth and development in any living system and also for the psychological community. The intellectual development of any field of knowledge is fostered and accelerated by the exchange of ideas by those working in it (Borchardt and Francis, 1984), and the personal, subjective accounts of research experience need to be published to contribute to scientific knowledge (Overington, 1979). According to Edwards (1982:13) psychology's greatest gift to offer is to teach more about ourselves. Mahoney (1979) argued that psychology needs to take a more concrete interest in the subjective experience of researchers, as an adequate understanding of human factors in research can only be provided by psychologists. The research process is ultimately part of the study object of psychology and psychologists need to investigate themselves as researchers. They need information on research as a process and truly reflective, descriptive reports obtained through interviews will help to reveal the subjective experience of researchers (Reinharz, 1979).

### **3.3.3.2 The human side of research**

The supremacy of the natural scientific paradigm has been challenged since the nineteen fifties (Filstead, 1970; Humpherys, 1993). Authors, such as Cosgrove (1982), Edwards (1988), Giorgi (1970), Giorgi (1986), Kruger (1988a) and Van Vuuren (1989) described psychology as a descriptive human science in dialogue with its subject matter. They challenge scientific detachment and are interested in the meaning of a phenomenon from the viewpoint of the person experiencing it. In part, this has led to a redefinition of the study object of psychology. Instead of only studying behaviour, psychology as a human science studies behaviour and experience (Bugental, 1989). The researcher is an experiencing human being. Psychology as a human science is also interested in the research event (Tyler, 1981), because science is really a very human enterprise (Nuyen, 1990). It is essentially human in nature in that the researcher is a central actor in the research event. The researcher is inevitably present in the whole of the event (Beshai, 1971; Stewart, 1978). When research is viewed as a form of human activity, the need to understand the experience of the persons engaged in it becomes very important (Coan, 1979; Manning, 1982). What is needed is an alternative approach to do justice to the humanness of all involved in the research event (Reason and Rowan, 1981). By omitting relevant experiential aspects from research, psychologists depersonalize themselves. They also distance themselves from what really goes on during research (Barber, 1976). Psychologists should find out what the research event means to those who are engaged in it. They should not put their own meaning to the act, but

should allow individual researchers to define their own meaning, because meaning is what it is to the person engaged in a given act. To understand subjectively is to understand subjective, internal, unobserved thoughts, feelings, sensations and intentions of a person engaged in an event (Valle and Halling, 1989). This means that the researcher should go to the experiencing individual and find out what the event means to him/her. Intersubjectivity should not be taken for granted (Holstein and Gubrium, 1994). Researchers should not assume that other researchers experience the research event as they themselves do and that they therefore understand one another. This is not necessarily true. Research experiences are uniquely individual. Few aspects of research should be taken for granted. This nevertheless, happens in practice (De Beer, 1991).

Psychologists and students can learn from the detailed descriptions of personal, subjective experiences of the research event. The descriptions can provide insight into the structure and essence of the research event in psychology. Explicit reconstructed accounts of this nature should be studied by students. These descriptions can be regarded as important sources of information on actual research and can be used to prepare students for their own research careers (Burgess, 1985). However, descriptions of this nature are rarely part of the published literature on the subject. Libraries are full of research reports and findings, but little research has been done to investigate the research experiences of psychologists.

Brannigan and Merrens (1993) reported on the research adventures of fifteen psychologists. The purpose of their study was to gain general insight into how the psychologists encountered research situations that were unique, empirically interesting and/or problematic. The psychologists were asked to describe their activities and motivation for their research projects. The study does not provide insight into the subjective, personal meaning of the event for the psychologists. Shipman (1976) documented investigations by six influential authors in education and the behavioural sciences. The focus of this study was primarily on the personal and professional influences behind these researchers' design choices and the implementation and uses of their research results. Coan (1979) interviewed thirteen of the most eminent psychologists of that time. The aim of his study was to identify different approaches to research and to determine how they affect psychologists in what they do. In both these studies the novice researcher was excluded from the investigation.

After an extensive and comprehensive literature review it became apparent that studies on the meaning of the subjective experience of psychology students of the research event are non-existent.

Reinharz (1979) labeled investigations into subjective experience of the research event as contributions to the "studies of studies" literature. Investigations of this nature broadly falls into the field known as the psychology of psychologists, a subdivision of the psychology of science (Buss, 1975; Mitroff and Kilman, 1977; Mitroff and Kilman, 1978). According to Coan (1973) and Veldsman (1990) this field of study designates efforts to comprehend the nature of scientific activity and understand people engaged in different scientific disciplines, among others, psychology. The psychology of science is one component of metatheoretical analysis (Coan, 1979). Investigations into the subjective experience of researchers is conducted at the empirical level of abstraction as described by Madsen (1982). Accounts of subjective experience of researchers are grounded in the reality of everyday life and contribute to understanding in psychology. When research is viewed as an open process of discovery it yields data on researchers as human beings, on the research problem and on the research event (Reinharz, 1979).

With this literature review as background and as support for the rationale of the study, a statement of the problem is formulated in the first part of the next chapter, before the theoretical foundations of the research strategy used in this investigation are explicated.

## CHAPTER FOUR

### 4 FOUNDATIONS OF THE RESEARCH STRATEGY USED IN THIS STUDY

#### 4.1 Statement of the problem

In the natural scientific tradition the researcher is not part of the study object of psychology, despite the fact that adequate understanding of human factors in research is critical (Mahoney, 1979). Friedlander (1982:433) asked the question: "How else are we to learn about research and build our knowledge base other than to understand ... the researcher." Burgess (1985) as well as Drew and Hardman (1985) recommended that the research community should collect and preserve the research experiences of its members. Reflective accounts of research can serve as a corrective to the idealization inherent in research methodology textbooks and journal articles. Severe limitations on reports of this nature reinforce the scientific ideal and help preserve the unembodiedness of science. Fuller documentation of subjective experiences of the research event could help to rehumanize and demystify the research process (Reinharz, 1979) for professionals and students in psychology. Persons in the field need to look back and describe what went on from the inside. This is the only place, according to Brannigan and Merrens (1993), where the meaning of research experiences can be truly appreciated and the only way to reduce detachment in psychology is to understand our own behaviour.

No study has apparently been executed to describe the subjective experience of students involved in research in psychology and to answer the question: What does it mean to identify, plan and execute a research project at honours level in psychology? In order to obtain an answer to this question informants have to answer the following: "Please describe your experience of your honours research project from the beginning to the end of this event in as complete a story as possible."

It is of particular importance to find answers to this question in the South African context and to use this knowledge to enhance the training experience of psychology

students in order to prepare them for the demands of research in psychology. According to Mahoney (1985) the quality and development of our knowledge must be enhanced by investigating researchers.

## **4.2 Rationale for using the phenomenological method**

The motivation for the choice of the specific qualitative research method used in this study is discussed in the Chapter 1 and will not be repeated here. However, the following is added to further support the choice of this specific method.

In previous sections it is mentioned that a number of authors, for example Morse (1994) and Royce (1982), link the choice of a research method to the nature of the research question, as well as to the researcher's paradigmatic preference. The nature of the research question to be answered in this study, as well as my paradigmatic preference, makes the use of quantitative methods impossible in the present investigation, because:

**4.2.1** The research statement is descriptive instead of explanatory. Descriptive research can be defined as "...an investigatory focus that tends to have as its goal the careful mapping out of a situation or set of events in order to describe what is happening..." (Rosenthal and Rosnow, 1991:10). The purpose of descriptive research is not to test hypotheses. Its goal is the exploration and clarification of some phenomenon where accurate information is lacking (Forcese and Richer, 1973). It is used where little information is available about a phenomenon and/or when the researcher wishes to describe a phenomenon in detail. A further goal of a descriptive science, then, is to describe, understand and interpret the meaning of the phenomena of consciousness instead of explaining them (Lee and Mandelbaum, 1967; Mouton, 1988). This means that descriptive research includes inquiries with the goal of providing thorough, in-depth accounts of topics (Polkinghorne, 1989:44-45). In this mode of inquiry the meaning of an experience becomes clear (Reason and Hawkins, 1988). A topic is not approached with firm pre-assumptions and a predetermined set of hypotheses in mind, but in an open manner. This is done in order to obtain first person, subjective accounts, discover the essential attributes and to present the research results as clear "verbal portraits" by making use of natural language (Dooley, 1984). The primary purpose of research of this nature is not to generalize to large populations, but to focus on the experience of specific respondents. Because of the fact that the research

endeavour is approached without specific hypotheses and only a general research question is formulated, research of this nature is in many instances descriptive, as well as exploratory in nature.

One manner in which theory building begins is with description. In order to approach this goal a phenomenon is observed and described repeatedly. During this process of obtaining information from more than one informant, a researcher may come to identify recurrent patterns in the data that can be abstracted. Ultimately such patterns can be clustered together. It is thus possible to identify variables that occur regularly and to group them together.

No attempt has so far been made to construct a dynamic model to describe the subjective elements of the research event in psychology (Martin, 1981). It would appear that this study is a first attempt to do so and to use a grounded, descriptive approach to try and approach this goal. Authors such as Cosgrove (1982), Duvenhage (1987), Giorgi (1970), Korn (1985), Kruger (1988a), and Van Vuuren (1989) argue for psychology as a descriptive, human science. Descriptive phenomenology is "... an attempt to intuit, analyse and describe the data of direct experience in a fresh and systematic manner, guided especially by the patterns of intentionality." (Spiegelberg, 1972:xxix). Concrete descriptions form the foundation of empirical phenomenological research (Fischer and Wertz, 1979; Linschoten, 1979; Smith, 1978). Researchers of this orientation believe that psychology should do justice to the phenomena of man and that psychologists should start their investigations with primary experience. This also means that by getting as close to experiential data as possible, the validity of data is enhanced (Walker, 1985).

According to Giorgi (1986) phenomenology uses the phenomenological method to obtain descriptive, grounded research data. The purpose of phenomenological research is to "...illuminate intersubjective experiences by describing the essence of the subjective experience." (Van Vuuren, 1992:6). The use of this method of research demands the exclusion of pre-conceived structure, theories and hypotheses (Chadwick *et al.*, 1984). By being open to the unique experiences of informants the method allows for flexibility and depth of understanding.

**4.2.2.** Phenomenologists believe that all knowledge, including scientific knowledge, should be gained from the concrete fact of being in the world and that experience is the means by which man relates to the world (Beshai, 1971). The

purpose of this study is to obtain information from students who have experienced the event under investigation. The aim of the investigation is to understand the phenomenon from the insider's perspective (Winch, 1958). Qualitative methods are employed where the purpose of an investigation is to understand the complex world of lived experience from the point of view of those who live it and to reconstruct the person's life world as accurately as possible (Schwandt, 1994). Experience could be described as the stories people live, as well as a function of the observer's interest (Clandinin and Connelly, 1994). It is the ability to exist with a consciousness of self and unique personal experience cannot be fully comprehended by others (Bachrach, 1981). Much of what appears to be private and unapproachable from the standpoint of the researcher is the personal experience of the individual. In order to describe and understand such unique experiences, no predefined categories are used in qualitative studies. In this study the purpose of the research is to go to the students themselves and find out about their experiences of the dynamics of the research event, and not to pre-structure experiences in advance.

The research process in psychology is generally approached from a positivistic viewpoint, because of its usefulness in clarifying the basic process of research. It is, however, doubtful that this approach is sufficient to explicate the dynamics of the process exhaustively. The natural scientific approach is inadequate to gather empirical knowledge of man (Van Lill, 1989). An alternative approach to research in psychology is needed to study and understand human behaviour and experience. The term human science is used to identify a science founded on methods that study human existence as it is experienced (Polkinghorne, 1982). Phenomenology is one structural approach to obtaining and working with descriptions (Giorgi, 1985) and trying to locate underlying themes for an observed event. The phenomenological method can be used to describe, explicate and interpret descriptions of the research experience as experienced, defined, or constituted by respondents. An experiential approach begins with phenomenological analysis (Price and Barrell, 1980). It can be used to grasp the first-order constructs which constitute the frame of meaning of a person's experiences in the life world and to reconstruct the person's world through the second-order constructs of psychology.

**4.2.3** The privileged nature of the person also calls for an approach essentially different from traditionally objective procedures (Thinès, 1977). In the previous chapters reference is made to a literature review regarding the variability and uniqueness of the experiences of students of the research event in psychology. It

was noted that many authors believe that it is a waste of time to study student experiences. There are also indications in literature on the subject that publications do not accurately reflect subjective experiences in research. Researchers are reluctant to expose themselves and to describe their research experiences. However, those involved in psychological research need self-insight. They need to dig deeper than publicized accounts of research events and they also need a methodology to deal with experience, not just with studying behaviour (Valle *et al.*, 1989). The phenomenological method is aimed at laying the foundation of trust in order to facilitate the spontaneous expressions of the authentic experiences of individuals. The person is guided to reflect beyond immediate defence in an attempt to gain self-insight in order to answer meaning-orientated questions and to elicit the essences of the experiences of the research event (Taylor and Bogdan, 1984).

#### **4.3 Assumptions underlying the phenomenological method**

The phenomenological-existential perspective is characterized by an "... attempt to reflectively evoke and verbally articulate by means of the phenomenological method of description various phenomena, including a variety of invariant structures or conditions of our experience to itself as it is lived through within the 'world' or horizon of ordinary experience" (Brockelman, 1980:52). The phenomenological method is essentially an attempt to allow a phenomenon under investigation to reveal itself in its original pre-reflective reality (Edwards SD, 1991). The following primary themes and spirit distinguish phenomenological-existentialism as a separate and unique perspective. Phenomenological-existentialism is, according to Spurling (1977), a fulfilment of Husserl's promise to return to lived experience. It is, in the words of Valle *et al.* (1989), a blending of the two interrelated perspectives. It is a synthesis of the views of existentialists such as Heidegger, Kierkegaard, Jaspers, Ricoeur, Sartre, Schelling and Nietzsche with those of pure phenomenologists such as Husserl, Brentano, Merleau-Ponty, Phänder and Reinach. Many contemporary existentialists are phenomenological at least in the spirit of seeking a radical empirical or descriptive disclosure of concrete experience. Many phenomenologists are existential in that they do not limit their descriptive analysis to consciousness in its various modes, but attempt to focus upon and describe the fundamental structure and essence of human experience (Brockelman, 1980).

According to Brockelman phenomenological-existentialism inherited from pure its existential forebear a distrust in speculation and a belief in the primacy of

existence or concrete experience. The central focus is on human experience as it is lived through in all its richness (Bugental, 1989). The pure phenomenology, with Husserl as founder, on the other hand, developed the disciplined phenomenological method by means of which to get at that existence or conscious experience, as well as a conception of the kind of reflection involved in it. Phenomenology implies both a philosophical movement and a method of inquiry (Edwards SD, 1991). According to Valle *et al.* (1989) the development of specific methods for studying human experience is one of the primary contributions of phenomenology. It should be kept in mind that the term phenomenology is generally used as an umbrella term for the pure phenomenology of Husserl as well as historical variations, such as Heidegger's hermeneutic phenomenology (Rossouw, 1989; Schrag, 1991). Husserl's followers moved from transcendental to hermeneutical and existential-phenomenology (Kockelmans, 1987). This means that the classical phenomenology of Husserl has evolved into a changing and dynamic system of philosophy (De Beer, 1991). A phenomenological-existential based philosophy of human existence differs from the original in maintaining that existence can be approached phenomenologically. In this process the phenomenological method underwent further development in a hermeneutic rather than a descriptive direction (Spiegelberg, 1972). Discourse is used to recount the experiences of persons and these texts are then interpreted (Titelman, 1979). However, it does not matter in what context the term phenomenon is used. It always refers back to the appearance of reality in consciousness (Lauer, 1958). Most phenomenologists agree that the self as centre of intentionality is an active agent within the environment and not just a reactive product of forces working in on it from without (Tageson, 1982; Trigg, 1985). This means that Brentano's (Edwards SD, 1991) and later Husserl's conception of the intentionality of consciousness, the idea that human consciousness actively co-constitutes the objects of experience, remains a foundational tenet in present day phenomenology (Holstein and Gubrium, 1994). In the words of Preller (1972) man is a conscious being in the world instead of having a consciousness.

As with most qualitative approaches (Denzin and Lincoln, 1994) phenomenological-existentialism cuts across disciplinary boundaries. It is an important and growing contemporary intellectual perspective in different disciplines, among them psychology (Misiak and Sexton, 1973). In fact, it has become customary to accept this approach as one of the two main paradigms in psychology (Taylor and Bogdan, 1984). According to Craig (1990) the perspective gained much ground and has become an increasingly significant and accepted approach in psychology conceived

as a human science. Existentialism, as well as phenomenology, has brought about significant changes in the way in which psychologists of empirical persuasion approach their tasks (Thinès, 1977). Psychologists no longer use methodology that is designed to deal with only part of psychology's subject matter (Valle *et al.*, 1989). In order to answer questions about human experience psychology is approached from a human scientific perspective (Cosgrove, 1982; Farson, 1978). The discipline is now able to use methods to study human existence as it is experienced (Polkinghorne, 1982). The study object of phenomenological psychology is the essences, form or structure of human behaviour and experience as revealed by means of descriptive techniques (Valle *et al.*, 1989). Existential-phenomenological psychology is characterized by a dialogical approach to research (Nel *et al.*, 1965) and by its basic method of research, the phenomenological method (Misiak and Sexton, 1973).

The aim of phenomenological-existentialism is to determine what an experience means for those who have had the experience and are able to provide a comprehensive description and interpretation of it. From individual descriptions, general or universal meanings are derived, in other words, the essences or structures of experiences (Moustakas, 1994).

The two perspectives have the following characteristics in common:

- both emphasise experience as it is lived through (from the point of view of the person experiencing it in the life-world) (Edwards, 1988). Phenomena are allowed to speak for themselves and the researcher must remain true to the facts (Kruger, 1983);
- both share a distrust of metaphysical speculations in and for itself;
- both are radically empirical; and
- both seek to tie philosophy more closely to experience.

#### **4.3.1 Contextuality**

Phenomenological-existentialists seek to reveal to us what Husserl has called the "Lebenswelt" (Misiak and Sexton, 1973). This life-world is the world of ordinary,

everyday experience (Retief, 1986). It is the world we live through as opposed to the world we have constructed from our assumptions, fundamental interpretations and thought. It is the setting for our everyday lives, not the world conceived as the totality of objects.

Human life is always situational or contextualized (Kruger, 1985; Plug *et al.*, 1988). In other words we always find ourselves in some situation or other in which we have some freedom of choice. Within such situations activities are always enmeshed in the context of things and other people. There exists an interrelationship between a person and his/her world and vice versa and they co-constitute each other (Kruger, 1986b). Human beings are continuously in dialogue with their world (Edwards, 1988; Kruger, 1986b). Preller (1972) goes as far as saying that man is dialogue. This means that there is no such thing as human existence apart from the environment and people without a familiar surrounding world. For the phenomenological-existentialist existence implies that being is actually "dasein" or becoming and being open and present in the world (Edwards, 1988; Kruger, 1988b). The meaning of a person's existence emerges from this context and others and each individual's existence gives his/her world its meaning. The world is viewed as a pre-conscious experiential field, not as an independent reality. The so called "natural attitude", the everyday interpretive stance that takes the world primarily as a separate and distinct reality, based on the presupposition that an objective reality exists independently from any act of perception or interpretation, is bracketed out by means of a reflective analysis ("epoche"). Such bracketing implies setting aside or suspending one's taken for granted orientations and ontological judgements about the nature and essence of things and events (Holstein and Gubrium, 1994; Phillips, 1987). A person's first and pre-thematic reality then, is a set of immediate and relational experiences of the world and others. The approach is characterized by radical empiricism. Any attempt to know must begin with pre-reflective experience and in this viewpoint immediate experience is the starting point for a dialogical psychology. Husserl's slogan "Zurück zu den Sachen selbst" (De Beer, 1991:86) or back to the things themselves (Nel *et al.*, 1965) is the leitmotif of phenomenological research. Only when someone asks the question: "What is meant by that?" or "What does it mean to go through this experience?", the meaning of phenomena comes to life. This question may be called the reflective question, for it asks for a kind of stepping back from the life of our ordinary activities in the world and a shifting of attention to the pre-conceptual experience itself. This does not imply that phenomenology is synonymous with introspection (Kuenzli, 1959; Kruger, 1986a). According to

Beshai (1971) introspection does not constitute a science of man. The phenomenologist is interested in generating contextually relevant descriptions of human action (Taylor and Bogdan, 1984).

This is a radical departure from the assumptions of the "natural attitude" - the everyday interpretive stance that takes the world to exist independently from any act of perception or interpretation (Stones, 1988). In the natural attitude, persons assume that the life-world existed before they were present and will be there after they depart. All ontological judgments about the nature and essence of things and events are suspended. The observer can then focus on the ways in which members of the life-world themselves interpretively produce the recognizable forms they treat as real. Meaning requires the interpretive application of a category to the concrete particulars of a situation. Language is a central medium for transmitting meaning. Language is used interactively to obtain detailed descriptions and to report on the meaning of the descriptions.

#### **4.3.2 Phenomenological reflection**

The primary means of coming to understand what is meant by various terms, phenomena, or events is to turn back in reflection and focus on immediate experience. Because of the implicit awareness which goes along with every act or experience, it is possible to reflectively consult the experience and articulate it or verbally express and thematize it. The purpose of reflection is to make explicit what has been until this point merely implicit within our pre-thematic, ordinary and lived experience.

#### **4.4 Phenomenological method of exploration**

The raw material of qualitative knowing is remembered experience (Overman, 1988a). The phenomenological method is nothing but a formalization of this process of immediate reflective turning back to explore and describe experience in order to verbally express it. The phenomenological method is used to study the eidetic structure or essence of phenomena (Beshai, 1971). It makes use of unstructured, in-depth interviewing and/or written anecdotal descriptions of events to elicit information from informants (Taylor and Bogdan, 1984). The researcher is the research instrument (Van Vuuren, 1992). This implies that the researcher tends to become personally involved in the research act (Dooley, 1984).

The fundamental steps of this process are:

#### **4.4.1 Choosing a phenomenon**

A phenomenon is what appears, that which makes itself manifest, i.e., any discrete aspect of experience.

#### **4.4.2 Process of epoche**

This process of subjective reduction (Edwards, 1988:18; Phillips, 1987) consists of consciously bracketing out all preconceptions (including the ones derived from science), orientations, speculations, subjective biases, prejudices and theoretical constructions in an attempt to clearly understand the life-world of the respondents. Since the locus of any phenomenological analysis must reside in the confrontation and disclosure of various aspects of experience, as they present themselves, all speculative, constructed or metaphysical views and assumptions must be laid aside in favour of a disciplined understanding. Husserl's call upon his followers to set aside theories and preconceptions and come back to things themselves, to life as we live it, is reflected in this process. It is impossible to see the phenomenon in question as it presents itself if the researcher carries to it a priori views, assumptions and assertions about it. During this process of bracketing the researcher uses reduction to move from a natural to a transcendental attitude (suspend or put in abeyance one's preconceptions and presuppositions) to understand a phenomenon. This is a difficult process, because it can be difficult to identify and deliberately eliminate, among others, one's own ontological judgements about the nature and essence of events (Holstein and Gubrium, 1994; Spiegelberg, 1965).

#### **4.4.3 Phenomenological reflection and eidetic reduction ("Wesenschau")**

The purpose of eidetic reduction is to reduce the revealed experience to its essence (Edwards, 1988: Spiegelberg, 1965) or core meaning. The researcher needs to reflect on the experience to make sense of the meaning of a phenomenon as it is encountered and lived through in immediate experience and then express it verbally and attend to the essence of the experience. Meaning can be defined as the: "... noematic correlative of experience" (Brockelman, 1980:64). It is what is experienced and what the informant tries to express or articulate in language. The limitations of language have always been a problem in the process of expressing

pre-reflective experience clearly (Kruger, 1986b). Since words are not meaning, a phenomenological analysis will never be exhaustive. By including various informants in a study and reflecting upon their various experiences of the phenomenon in question, the researcher can come to see the meaning which all the cases exemplify (Edwards DJA, 1991).

#### **4.4.4 Transcendental reduction**

In the last step in the phenomenological process the central themes and processes from the situated structures are reviewed and integrated into a coherent and organized summary and the material from the respondents is used to derive a general account of the structure of the experience (Edwards DJA, 1991:56).

#### **4.5 Format of the phenomenological method**

According to Edwards SD (1991) researchers who make use of phenomenological research methods do not, in general, agree on the steps of the methods. The phenomenological method should, in fact, be viewed as a set of guidelines and not a method *per se* (Stones, 1988). Spiegelberg (1987:682) lists seven steps and according to him there is general agreement about only the first three steps. Van Kaam (1969) describes six steps for analysing data. According to Stones (1986b) there are three main variants of the phenomenological method. Spiegelberg (1965), as well as Stones (1988a), concentrate on the phenomenological method as developed under the leadership of Giorgi. Although the method allows some freedom, Giorgi (1985) describes it as a rigorous, systematic and descriptive phenomenological psychological method for doing justice to human phenomena as they are lived and experienced. The psychologist uses phenomenological research methods, because psychological aspects of interest are present in all forms of experience:

The steps of the method used in this study are described by Du Toit (1991:91-99). These steps are based on the methodological style of the abovementioned authors. Du Toit's description of the steps of the phenomenological method is the most comprehensive description currently available in literature on the subject.

#### **4.5.1 Step 1: Identification of the phenomenon**

The first step of this variation of the phenomenological method is determining which phenomenon to study. The researcher needs to identify and describe the phenomenon in detail and he/she has to narrow down and formulate the research question explicitly. In order to execute this task the researcher has to implement the process of epoche, described earlier.

#### **4.5.2 Step 2: Selection of respondents**

Informants are selected so as to ensure inclusion of persons with characteristics and experiences that seem important in the context of the study. A good informant is a person who has knowledge and experience that interests the researcher, has the ability to reflect on his experience, is articulate, has time to be interviewed and is willing to participate in a particular investigation (Morse, 1994). The informants must also have the same home language as the researcher (Stones, 1988). Morse (1994) recommended that at least six informants should be asked to participate in a phenomenological study. However, the general rule for qualitative data gathering is to add key informants until information begins to repeat itself.

#### **4.5.3 Step 3: The first person description**

Qualitative research techniques are designed to capture informants' interpretation of what is occurring and to understand the phenomenon from the informant's point of view (Howard, 1985). There are different techniques that could be employed to gather phenomenological data, such as verbal and/or written descriptions. According to Taylor and Bogdan (1984:78) many of the classical life histories in the social sciences have been based on a combination of interviewing and narratives written by informants themselves. By allowing informants to write their own stories and to order their experiences without interference from the researcher, detailed descriptions of an event, as well as personal reactions to the experiences can be obtained. These narratives can be used to guide interviews.

The in-depth, unstructured interview is the most frequently used technique in phenomenological research (Taylor and Bogdan, 1984). The advantage of the interview is that it is closely related to the goal of qualitative research, namely the reality as reconstructed from the view of the respondent (Schurink, 1988). The

major disadvantages of this technique are that it is time consuming, that vast amounts of data make ordering and interpretation difficult and that the researcher needs to conduct the interviews personally (Schurink, 1988).

Interviews consist of interactions between an interviewer and a respondent (Schurink, 1988). In-depth interviewing consists of conversations in which the researcher encourages informants to relate their experiences in their own terms and language (Walker, 1985). Interviews are used to introduce and develop a theme or topic in the course of a conversation. The emphasis is on conversation as a means of establishing rapport and trust. The conversations are usually recorded on audiotape and are later transcribed before categories of meaning are developed. According to Cleaver (1988) an in-depth interview is generally one hour in length.

The researcher should assist the respondent in reconstructing the most reliable and valid image of reality in order to describe and interpret phenomena. The researcher who uses in-depth interviewing as research technique is concerned with understanding and subjective exploration of reality from the perspective of the respondent (Schurink, 1988). The researcher usually does not acquaint him/herself with existing literature, fearing that existing theoretical constructs might affect his/her objectivity. The interviewer limits his/her contributions during the interview to an absolute minimum. His/her role is to introduce the general theme on which information is required, motivate the informant to participate spontaneously, stimulate the respondent through probing, and to steer him/her back to the topic tactfully when he/she digresses.

The following assumptions underlie unstructured interviewing (Howard, 1985a):

- relevant dimensions to be covered will emerge in the course of the interview;
- informants know what issues are important; and
- the lack of structure will lead to greater richness in data.

The unstructured interview consists of four phases (Schurink, 1988):

- emotional preparation by the researcher before the interview;
- becoming acquainted;
- gathering the data; and
- concluding the conversation.

Rapport, creating a relaxed situation, an assurance of the confidentiality of information, and the use of a Personal Data Form to gather relevant biographical information, as well as the use of open-ended questions and the clarification of questions (but not the use of leading questions) are recommended by Stones (1988) in order to enhance data gathering during conversations.

#### **4.5.4 Step 4: Reading the descriptions**

Initial reading of the research protocol(s) consists of bracketing out personal preconceptions and judgements and remaining faithful to data (Stones, 1988). The idea is to get a sense of the whole (Giorgi, 1979). The descriptions are then read again with a more reflective attitude and more slowly.

#### **4.5.5 Step 5: Breaking descriptions down into natural meaning units**

The idea is to break a particular description down into spontaneously occurring natural meaning units. This is achieved by delineating a unit each time that a transition of meaning is perceived (De Koning, 1979). Each natural meaning unit conveys a particular meaning which emerges spontaneously from the reading (Stones, 1988). According to Stones (1988:153) a natural meaning unit is "... a statement made by an individual which is self-defining and self-delimiting in the expression of a single, recognizable aspect of the individual's experience". A researcher should use the respondent's words in verbalizing a natural meaning unit, in order to stay as close as possible to the original meaning intended by the person and to let the data speak for itself. The researcher may articulate the essence of each unit to convey the intended meaning clearly (Stones, 1988).

#### **4.5.6 Step 6: Reduction and linguistic transformation**

Here those natural meaning units that are clearly closely related are clustered into themes. In this step the natural meaning units and themes must faithfully reflect the original experience of the phenomenon under investigation. The aim here is to reduce the respondent's words to their experienced essence (Edwards, 1988) by restating a respondent's words and by eliminating redundancies (De Koning, 1979). According to Kruger (1991:107) interpretation is a necessary component of all meaningful psychological research. This means that the researcher interprets descriptions (Brooke, 1991; Todres, 1991) in this and in the following steps.

#### **4.5.7 Step 7: Situated structures for each respondent**

The researcher synthesizes and integrates his/her insights into a consistent description of the structure of the experience for each person (De Koning, 1979). This is done by transforming the respondent's language into psychological language (Stones, 1988), revelatory of the phenomenon.

#### **4.4.8 Step 8: General structure**

In this step the researcher reflectively transforms the synthesized themes into a final structure. The investigator attempts to interpret the meaning of the descriptions.

Validity and reliability of findings are of special concern to phenomenological researchers (Dooley, 1984). The researcher usually works alone, in varying circumstances, and with varying categories, all good reasons to expect unreliability to be a major problem. Even without this, there is still concern for measurement construct validity. The measuring instrument is the researcher as an individual without the support of standardized instruments. He/she intentionally uses his/her feelings, hunches and intuition to explore and understand. Thus, he/she may arrive at results different from another setting. He/she also runs the risk of developing bias generated by experience with the phenomenon and actors. In order to obtain consensual validity the researcher could try to obtain outside evaluations of his results. He/she could also do so by interviewing other respondents to determine if the underlying themes are the same for them, by returning to respondents and asking them if the descriptions truly reflect their meanings and experiences, or by comparing findings with theory on the phenomenon of interest (Du Toit, 1991).

#### **4.5.9 Step 9: Communicating the research findings**

As in the case of more conventional research, a qualitative research report is also written to provide a detailed description of the whole research endeavour (Mouton and Marais, 1990). The theoretical foundations of the research approach, as well as an explication of the research method(s), research technique(s) and procedures used to gather and analyse the research data are provided. Recommendations are also made concerning uses for the findings and possible research in the future. Enough documented evidence is provided to enable the reader to evaluate the investigation and report on its validity and reliability. Protocols should be attached

to the report. It is important to remember that the obtained results should be credible and should be more than just speculation (Huysamen, 1993).

#### **4.6 Respondents**

In the present study students who have completed their honours theses in psychology at the end of 1995 at the University of the Orange Free State are interviewed.

#### **4.7 Conclusion**

The phenomenological method is used when (Taylor and Bogdan, 1984):

- a research interest is relatively clear and well-defined - in this study the research interest, students' experiences of the research event in psychology, is clear and well-defined;
- When settings are not otherwise accessible, or to investigate past events - in the present study the purpose is to investigate the whole, complete research event as it was experienced by the respondents and their reflections on it; and
- when a researcher is interested in subjective experiences - in this project the interest centres on the subjective experiences of students.

No use is made of documentary sources of data in the present study. The main reason for this is that "... documentary evidence, where it deals explicitly with problems of investigative practice, is typically limited to the purely technical aspects ... we must look for other sources of evidence." (Danzinger, 1990:13). In this investigation the data sources used are interview data.

The actual application of the phenomenological method and procedures to obtain descriptions of psychology students' experiences of the research event during their university training are explained in detail in the next chapter.

## **CHAPTER FIVE**

### **EMPLOYMENT OF THE PHENOMENOLOGICAL METHOD**

#### **5.1 The focus of the investigation - The phenomenon**

My conception of the phenomenon under investigation changed as the study progressed. This implies that the purpose of the study also changed over time. Eventually, the focus of the present study was delineated as an investigation into students' experiences of the research event in psychology during their honours year of study. In order to attain this objective I consciously and continuously attempted to bracket out all preconceptions of the event to allow the phenomenon to "speak for itself".

#### **5.2 The data-generating situation - The texts**

##### **5.2.1 The respondents**

A list of all the honours students who had completed their research projects at the end of 1995 was obtained from the secretary of the relevant department at the University of the Orange Free State. All the students were contacted personally, the purpose of the investigation was explained to them, and they were invited to participate and to share their experiences of the relevant research event.

The reasons for including these students as respondents are provided in Chapter 4. Added motivation for their inclusion in the study is that their third-year curriculum, as well as their honours curriculum, included courses in research methodology, and that one important requirement of the research paper was that they had to plan and execute their research projects relatively independently, which they did.

Three female and four male students volunteered to participate in the project. They wrote down the story of their experiences in their own home languages.

Descriptive texts were obtained from the following respondents:

Respondent	Gender	Home language
1	F	Afrikaans
2	M	Afrikaans
3	M	Afrikaans
4	F	Afrikaans
5	M	English
6	M	Afrikaans
7	F	Afrikaans

### 5.2.2 Protocols - First person descriptions

I decided to give the students a chance to write their stories, instead of asking them to communicate their experiences in a face-to-face interview situation. There are three reasons for this choice:

- (a) According to Eisner (1991) the most typical approach to obtaining information on educational phenomena (as in the case of the present study), and to interpret these phenomena, is to make use of some kind of narrative. It is assumed that meaning is contained in narrative texts and the study of texts is the primary focus of educational studies (Clandinin and Connelly, 1994). This implies the respondent can be instructed to write a self-formulated story (Manning and Cullum-Swan, 1994) and this text can then be interpreted. The respondents can in fact be viewed as co-researchers who report on their experiences in writing (Von Eckartsberg, 1985). Eisner (1991) believes that by employing a storied mode of representing the experience of the individual, and by interpreting the description obtained in this way, the re-education of the reader (one goal of this dissertation) can be attained.
- (b) In general, the more conventional phenomenologist uses conversations to gather information. However, according to Clandinin and Connelly (1994) the current disposition is toward studying texts rather than people, and there is a willingness to experiment with research texts. This implies that this dissertation was written at an important time in the development of methods for studying personal experience. Thus, the spirit of the times also influenced my choice of a research technique.

- (c) A further motivation for the choice of a narrative technique is that this technique probably provided the respondents with a chance to take their time and to reflect on their experiences and to reconstruct their experiences of the event in question in more detail on their own, without interference from the researcher.

The respondents were contacted individually. They were asked to: "Think back and write down the story of your research in the honours course - from beginning to end - and describe your subjective experience of the event in as much detail as possible."

They were informed of the confidentiality of the information and that feedback would be provided on the outcome of the study.

The respondents all delivered their written stories over a period of three weeks, the written descriptions were typed, and the Afrikaans protocols translated into English.

### **5.3 Data analysis - Explication and interpretation**

#### **5.3.1 Reading the descriptions**

In this step each protocol was analysed independently of the others. I read and reread the description (protocol) in order to obtain an intuitive, holistic grasp of the protocol, as described by Edwards DJA (1991), and to make sure that each natural meaning unit would be interpreted in context. (Each protocol, with its natural meaning units, and themes identified from each protocol, are attached as Appendices 1-7).

#### **5.3.2 Identifying the natural meaning units**

The purpose of this step is to identify the natural meaning units which reflect the central themes in the protocol (Edwards DJA, 1991). Every separate assertion, expressed in words, was listed and numbered. These natural meaning units were stated in the exact same words used by the respondent.

### **5.3.3 Integrating natural meaning units into themes**

The natural meaning units were grouped together into themes and the themes were summarized. Repetitive material was discarded, as recommended by Edwards DJA (1991). I identified the themes as they revealed themselves in a protocol. These summaries are in fact reductions and linguistic transformations of the natural meaning units and are used to reveal the meaning of the event in a condensed form. I attempted to stay as close to the essence of each description as possible.

### **5.3.4 The general structure**

The final step in a phenomenological analysis is either to derive individual situated structures, and/or a general account of the structure of the experience (Edwards DJA, 1991). The objective of the present study was to derive a general structure. The individual themes identified for each respondent were clustered into a number of general themes that appeared to be common to all the respondents' descriptions. The themes identified for each respondent were reviewed to determine under which general theme they best fitted in. An essential general structure was then formulated to answer the questions of general structure so aptly formulated by Von Eckartsberg (1985:337): "What does the text tell me about the phenomenon in its generality and universality? What is its meaning essence?"

The general structure is composed of the following four themes:  
(Appendix 8 indicates how the themes in the individual protocols were synthesized into the general structure)

#### **5.3.4.1 Time constraints**

Honours students are constantly apprehensive about, and are frustrated in, their efforts to structure and use their time effectively. They wage a constant battle to find time and energy for the amount of work that they have to do, as most of the tasks that they have to complete are time-consuming. They feel that they need to learn how to use their time effectively.

The limited time available in which to complete the research project makes it difficult to work alone and drains their energy. However, by working alone they are in control and involved in every aspect of the research project.

They also note that the quality of their work suffers as a result of the constraints and they feel that it is wise to postpone the research project until the rest of their honours studies has been completed. Target dates and deadlines make them anxious and they are forced to neglect their research in favour of other claims on their time, or vice versa.

#### **5.3.4.2 Problem solving**

Honours students view the research event as a succession of problems that they have to solve. These problems include identifying and delineating a researchable phenomenon, compiling a research framework, gaining access to respondents, writing a research proposal, waiting for the proposal to be approved, gathering data, analysing data, writing a research report, preparing the report for submission and handling expenses. Each problem in turn is experienced as a stressful crisis. They see the event as frustrating, demanding, daunting, and time consuming. They become irritated, frustrated, disillusioned and pessimistic, especially when they feel that there is no satisfactory progress in their work. Once they solve a specific problem they are motivated and positive about continuing, and more relaxed. Initially they see it as something that they have to do, they are apprehensive and afraid of making mistakes, but as they become more involved and interested, they become more positive. In the end they are proud of and satisfied with what they have accomplished.

#### **5.3.4.3 Personal growth**

Honours students initially harbour unrealistic expectations of what this novel event entails. They are either over-confident and optimistic, because they perceive research as enjoyable and relatively simple and straightforward, and believe they know what is expected of them, or they feel unsure, unable, and unwilling to become involved in the event. Those who are unwilling expect that the event will be difficult and doubt their ability to shoulder the responsibilities of a research project on their own.

The perceptions of honours students change as the research event progresses. They experience the decisions and tasks inherent in the research event as difficult and frustrating, because they are unsure of themselves, or because they believe that they do not have the knowledge to execute the endeavour. They feel that they need

support from their study leader, from contact persons in their target organizations, from their respondents and from university support personnel in these decisions and in completing these tasks. They are disillusioned when the help that they expect does not materialise, but very grateful when they receive help. However, when they are forced to make their own decisions and to use their initiative to overcome their problems, they experience this as a personal revelation. They discover hidden qualities and strengths in themselves and they experience personal growth. In the end they feel stronger and more sure of themselves. The event demands hard work from them, but in the end they are proud of their final products and derive pleasure and satisfaction from their accomplishments. They feel that they are rewarded for their hard work. They realise the research demands tenacity, determination and commitment. In the end they feel that they are more informed about their topic and better prepared for future research.

#### **5.3.4.4 Capacity for understanding**

They experience the event as a learning adventure. Honours students quickly come to realise that research in practice and research as described in their textbooks differ notably and they come to appreciate these differences. They realise that research is not an easy task and that it can be confusing. Although guidelines help them a lot, they realise that the process does not necessarily progress in a specific, rigid sequence. It is sometimes necessary and unavoidable to deviate from the rules of scientific research. For example, they are afraid that they may not be able to complete the project in time and choose their respondents very early in the event, to make sure of their accessibility. They also have to consider a number of tasks and decisions simultaneously. They also realise that research is not just a rational process, but that expedient flashes of insight may be of great value.

They broaden their insight into the nature of the event as they get a chance to experience practical research problems personally and feel that they comprehend the event better. They become more confident in handling the challenges of the research event.

#### **5.4 Validation of the general structure**

The validation of the contents of the general structure and the themes identified was done by applying the method employed by Du Toit (1991:123-125).

**5.4.1** In order to validate the content of the general structure the respondents were requested in an interview to indicate on a subjective scale (0 - 10) the extent to which the general structure reflected their own experiences of the research event in their honours year, and to rank the themes according to the significance that they had for them.

**Table 5.1**

**Ratings by seven respondents to indicate the extent to which the general structure discloses their own research experiences**

RESPONDENT	RATING
1	7
2	8
3	8
4	7
5	6
6	6
7	7

Scale (0 - 10)

$X = 7$

All the respondents indicated that the general structure was a relatively accurate reflection of their own experiences of the research event in their honours year of study.

**5.4.2** The respondents were asked to rank the themes of the general structure in order to indicate the significance of the different themes in their research project. Their rankings of the themes are reflected in Table 5.2.

(Theme 1 = Time constraints

Theme 2 = Problem solving

Theme 3 = Personal growth

Theme 4 = Capacity for understanding)

Kendall developed a statistical technique to measure the overall agreement among the ratings of a number of judges (m) who ranked a number of objects (n). Kendall's coefficient of concordance, W, enables a researcher to determine the divergence of actual agreement from maximum possible or perfect agreement (Siegel and Castellan, 1988). The size of W indicates the degree of agreement among respondents. Perfect agreement is indicated by a W = 1 and a total lack of agreement by a W = 0. In order to determine the degree of agreement among the respondents on the order of significance of the themes in their research experiences, Kendall's coefficient of concordance was calculated by making use of the formula in Downie and Heath (1974). In this formula W is calculated as follows:

$$W = \frac{12 \sum D^2}{m^2(n)(n^2 - 1)}$$

where

- m = number of respondents
- n = number of themes being ranked
- D = difference of the sum of the ranks of each row in table 5.2. from the mean.

**Table 5.2**

**Rankings of the four themes in order of significance to each of the seven respondents**

Themes	Respondents' Ranks	Sum of Ranks	D	D <sup>2</sup>
	1 2 3 4 5 6 7			
1	1 3 2 1 1 2 2	12	5.25	27.5625
2	3 1 1 3 4 3 3	18	-0.75	0.5625
3	1 2 3 2 2 4 4	18	-0.75	0.5625
4	4 4 4 4 3 1 1	21	-3.75	14.0625
		Sum = 69		Sum D <sup>2</sup> = 42.75

The value of  $W$  was 0.18 where all the respondents' ratings were considered. This evidently demonstrates that the general structure of the research experience of the respondents was experienced in a distinct way by each respondent.

Taken together, these results indicate that each respondent had an authentic individual experience of the research event. Simultaneously, the shared essence of the phenomenon was explicated and validated.

## CHAPTER SIX

### 6 CONCLUSION

#### 6.1 Discussion

The purpose of this study was to explore and describe the subjective experiences of students who had completed their honours research projects. Students who had completed their honours theses were asked to reflect on and to describe their experiences of this event.

The brief given to the seven respondents focused attention on the subjective experiences of the students. The nature of the phenomenon and the research question lend themselves to a phenomenological investigation. This method of research enabled me to isolate the essence that underpins this experience, and to answer the basic phenomenological questions posed by Von Eckartsberg (1985). In order to locate this essence the descriptions of the experiences were continuously reduced. I believe that no other method would have been of value, because other, more positivistic methods have to presuppose something in addition to what is actually given. By allowing the respondents to notice and explicate their experiences in their own terms the experiences were left whole and accessible.

The rationale for the present study is that experiential training is an important factor in transforming novice researchers, or students, into confident and competent researchers. The university has an important role to play in approaching this goal. Researchers' engagement in research activities is in part dependent upon their knowledge, experience and attitudes. Their attitudes toward research are partially formed during their training when they learn how to do research. This can directly influence their future involvement in research and the confidence with which they approach research for a higher degree. In the literature review I referred to Brown and Atkins (1988), who believe that masters and doctoral students experience problems with time management, methodology, and in communicating their research results, when they are not adequately prepared at undergraduate and honours levels. From the results of the present investigation, it is clear that students

at honours level also experience similar problems. They indicated that exposure to a relatively independent research project helped them to become aware of these frustrations and gave them the opportunity to develop skills in handling these demands. This means that honours research is a fruitful training ground in the preparation of students for future research. It helps boost their confidence and during their research they experience attitude changes. In the beginning they are usually negative, but as their studies progress they become involved and interested in what they are doing. In the end they feel quite positive about the whole event and more prepared to handle the challenges of research.

I also referred to Krause (1983) in the literature review. He stated that researchers enjoy research, but students do not, because they are forced to engage in the activity. They, instead, experience research as time-consuming, frustrating, and intrusive into their lives. Sommer and Sommer (1980) believe that students need to subjectively experience the joy and frustration of doing research. From the results of the present study it is apparent that students, in general, are initially unwilling to become involved in the event. As a result they experience the event negatively. Fortunately, however, they tend to become interested in what they are doing as the event progresses, and they enjoy research once they are able to solve the problems confronting them. This implies that students do not necessarily experience research as disagreeable. However, they do experience feelings of frustration, they do see the process as time consuming, and it does interfere with their other activities. Students who work full-time are particularly bothered by time constraints (For example Respondent 7). This means that their subjective experiences of the event include a whole range of emotions. They would not be able to become aware of these feelings without doing research on their own.

The way in which students are exposed to research varies from university to university. However, from the literature review it is apparent that most universities see the honours research project as a capstone course (Halpern,1993). As in the case of the present study, they are supposedly exposed to didactic instruction in research methodology at undergraduate and honours level, but their first opportunity to do a research project comes at honours level. The possibility that some universities do not follow this pattern can limit the generalizability of the results of the present study. The students who were included in this investigation were identified as key informants, because they received instruction in research methodology during their third and honours years of study.

According to Van der Westhuizen and Plug (1987), didactic instruction and experiential learning should be of equal importance. We cannot expect our students to apply research knowledge if they have not previously assimilated relevant information. The results of this dissertation support this statement. Students felt that they had learned a lot from didactic instruction and that it at least gave them the necessary background information as to how the research event appears in books. They need to learn about research, but they also need to do research.

However, didactic instruction apparently also causes problems for students. It can create unrealistic expectations. At least one of the respondents in this investigation had expected the research event to be simple and easy, only to find out that this was not necessarily true (Respondent 2). Didactic instruction can cause students to think that research is rigid and formalized and that they would not experience problems as long as they adhere to the rules. In doing research students quickly learn that research theory and research practice differ and that didactic instruction alone provides them with no clear notion of what actual research entails. The novice researchers in the present investigation experienced unexpected difficulties with what they learned about research and how to do it. Each experienced his or her own unique set of problems (as can be seen, for example, from the differences in their ranking of the themes of the general structure), although the results of the study made it possible to capture the essence of students' experience of the research event.

Bachrach (1981) tells us that research practice differs from what is written about research in textbooks. The honours research event in psychology is a dynamic and captivating process. Through the personal accounts of the seven honours students one is able to see how science really happens. Research generally progresses in small steps, as a result of planning and perseverance and, at times, a bit of luck. Research is exacting, but also rewarding. Most of the respondents experienced the event as rewarding, and they were proud of their accomplishments.

There are specifics that can be learned from stories such as these. For example, according to the literature on the subject, students experience serious problems with all the phases, stages, and steps of the research process. However, from this study it is also apparent that each student experienced his or her own set of unique problems in identifying a research topic, conducting a literature review, designing a

study, writing a research proposal, gathering data, analysing data, interpreting research results and writing and preparing a research report.

According to Rudestam and Newton (1992) finding a topic to study is one of the most difficult tasks facing the novice researcher. In comparison to what is written about the research event in their textbooks novice researchers come to realise that the tasks inherent in the research process are not clear-cut. In order to complete this task, interest in a topic, dedication, tenacity and enthusiasm are critical. From the results of the present study it is evident that students are, as a rule, not enthusiastic about or interested in research. As a result this part of the research event is stressful and frustrating. For some students the substantive issues on which they work are taken from their lecturers. Choosing a topic to satisfy others can create even more problems for students. They may come to blame the person who steered them in a specific direction for problems that they encounter later in the research process (Respondent 3).

Students also find literature searches difficult and tend to limit themselves in their searches. As a result they find it difficult and frustrating to obtain relevant literature. The one respondent who showed initiative and made use of alternative literature sources (Respondent 6) also became frustrated as he found it difficult to integrate all the literature that he had obtained.

From the results of this investigation it is apparent that research is far from a predictable problem-solving endeavour with established conventions and with adequate support. It remains an opportunity for individual enterprise, demanding high personal investment, limited resources and ingenuity.

The results demonstrate a reciprocal relationship between the student as researcher and the process of research. Students learn about themselves and their perspectives on research become clarified as they become involved in the research activities. They bring with them a set of anticipations, and experience conflict between an idealised research model and actual research activities. They experience this conflict as a reality shock in their research training. They discover themselves and tend to feel that the event changed their perceptions of themselves (Respondent 1). They not only acquire skills, but also learn how to resolve the practical and psychological conflicts that they encounter in the research event. They suffer from deadlines and can easily defer tasks to meet the demands of other roles when they become

pressing. There is a tendency for research to consume time beyond that which was anticipated. In order to perform practical research considerations such as time, money, equipment and supportive networks are necessary.

Phenomenological analysis enabled me to utilise the experiences that students had to better understand the experience of doing research and to explicate the inner story of doing research. An analysis of these reflective accounts of research contributes to our understanding of the real similarities and differences among research enterprises in contrast with the contrived uniformity of research methods as described in textbooks. By demonstrating that there is a gap between the ideal and reality, this study provides a base which educators can employ in training their students in research practice. Although each research project progresses through similar broad stages these broad stages are misleading in their over-simplification and their suggestion of linear progress. The actual complexity of the research process can be demonstrated at all stages. This is one feature that recurs in the contributions of students, when they look back at the entire sequence of their work from start to finish. The pattern is not linear. Deviations from the conventional research model occur in most of the respondents' contributions to this study. Each successive stage produces insights that reflect back on the preceding stages and suggest possibilities for what follows. In practice, the cycle from selecting a problem to reporting the results can be entered at various stages. Students, for example, tend to choose a research instrument and then build their study around it (Respondents 3 and 6). This caused frustration and regret for some of the respondents, as it made the rest of their research more difficult, although the problem of a fit between instruments and procedures on the one side, and the phenomenon being investigated on the other, is rarely spelled out in detail.

## **6.2 Contributions**

The purpose of this dissertation is to describe this phenomenon which apparently has not yet been investigated extensively. Information about how the honours research event is experienced is available only if students make public their experiences as researchers. This has apparently not been done in the past. In general, instructors believe that research on this event is not necessary, as they know what students experience. However, students are in a unique position to report on their own experiences of the research event. From the results it is apparent that there are gaps in our knowledge about our students. We are, for example unaware

of their frustrations while waiting for us to approve their research proposals and how we affect their motivation because of the time that they have to wait for approval. We are also unaware of the frustrations and stress that they experience because the library personnel are unable to help them with in depth, comprehensive literature surveys. We should also take note of the fact that it is often very difficult and frustrating for students to find willing respondents for their research. Lastly we should review the amount of work included in the honours programme, because students apparently experience great difficulties in doing all that is demanded of them.

Students' descriptions of their own research experiences contribute to our knowledge. Their personal research accounts can benefit other students. These explicit accounts can be an important source of information to prepare students for the challenges and demands of research practice. Their descriptions can provide an insider's view of the research event, and insight into the structure and essence of this research experience. Research accounts of this nature contribute to the growing shared experiential culture in psychology. A study of this nature can help to break the hold of the natural scientific paradigm in the discipline and to find a central place for the human side of research, instead of hiding or ignoring this important facet of research. As no study of this nature has apparently been done on honours students, the present investigation provides an original contribution to the "studies-of-studies" literature (Reinharz, 1979).

As the objective of this dissertation was an exploratory and descriptive account of the respondents' experiences of this particular research event, it was difficult to relate the results to previous research on the phenomenon, because I was unable to find any previous research. Furthermore, because the study was exploratory and the results may be relatively limited to the group of respondents who participated in the study, suggestions about future research can only be rather general. One possibility is to explicate the experience of students who have not received didactic instruction in research methodology, but who have to conduct a honours research project, or to describe the experience of students who failed to complete their projects successfully.

### 6.3 Reflections

Conducting a phenomenological study was a challenging and exciting experience. According to Smaling (1992:12-13) a research project may have a theoretical and a practical relevance, as well as an intended personal relevance to the researcher, for example, to improve research experience and thus to become a more all-round researcher. One of my motivations for undertaking this research project was to increase my experience with the phenomenological method. It was difficult to change my own mind-set, as I was trained in the positivistic tradition. It took a long time to master the phenomenological language, to integrate the relevant literature, and to gain enough confidence to conduct this research. It was a learning experience and a chance to experience qualitative research firsthand, and to really appreciate the importance of a research tradition that cherishes the uniqueness of the individual person.

The data-gathering phase was exciting. The respondents were really interested in the investigation. I also enjoyed analysing the data. In contrast with my experience of quantitative data analysis, I found this interesting and I felt that I was personally involved throughout the process. The data spoke to me personally, instead of just being a lot of summarized statistical information. It was a time-consuming process and I would not have been able to reduce the descriptions without using a personal computer.

It was gratifying to write the dissertation in a more literary style. Because of the fact that I was able to write in the first person, I really experience this manuscript as my own creation. It was interesting and never became just another tedious chore. I believe that this research project fulfilled my expectations and that it helped me to become a more competent researcher.

### 6.4 Summary of the results

There seems to be evidence that the phenomenon under investigation has a shared general structure. The general structure of the event includes four themes: time constraints, problem solving, personal growth, and capacity for understanding. However, honours students each experienced the importance of the themes differently, which confirm their uniqueness as human beings and researchers.

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RESPONDENT 1

My first reaction after hearing that I had to do a research paper was one of shock, because I wasn't sure what it included. I talked to a number of persons who had already completed their research papers to find out what it involved. All these things took place in my third year. I woke up one morning and knew exactly about what I wanted to do my paper. The fact is, my father works at Telkom and I received a study loan from them. This played a large role in my choice of a topic. I thought that it would help me to get a job at Telkom. The fact that we were to make use of populations also influenced my decision. Telkom's training college is the ideal population, because it is near and they have the facilities, for example computers and faxes. Subjects for the study are also no problem. I made an appointment with the manager. From the beginning the two of us really liked each other. I felt that I could talk to him and that he was always ready to help. I explained my circumstances and the background of the study to him. He was especially impressed with my choice of theme - adult literacy. This made me feel very proud and more confident, because I felt that I was on the right track. He immediately approved the study and instructed one of his personnel to help me. I really felt at home and very optimistic about my study. He also arranged a number of interviews and introduced me to a number of persons in the training division. He also gave me some general information on adult literacy to read, in order to gain some background information. This helped a lot to focus my thoughts. This was at the end of my third year.

From the start of my honours year everything went well. The personnel at Telkom's college were very well-disposed towards me. Their co-operation was excellent. I was exposed to a training programme - ABET level 1. This gave me a relatively broad frame of reference. After that my study caused no more problems. In terms of providing relevant information about my study theme this was very good. I felt that I had a good idea what their training was all about.

I paid for typing, photocopying and all other expenses. I used all their facilities, paper, etc. This meant that I did not need any money for this part of my study. After completing my study they thanked me at a special function. I really appreciated that and enjoyed myself. My study supported previous research by Telkom and was sent to their head office. The feedback from their side was that my study was experienced very positively. This really was a compliment and I appreciated it. Apparently it meant a lot to the company.

I also experienced no problems in my dealings with the university. The personnel at the computer center were very friendly and helped me a lot. I also felt that the doctor in the statistics department really helped me a lot in analysing my data. This made things so much easier. I do not think that I could ever have chosen the correct statistical methods (graphs, tables. etc.) without his help. He performed wonders with my shortcomings in respect of the data that I gathered. Because of certain practical problems I encountered, I was unable to obtain certain biographical information and that made data analysis and comparisons between groups difficult. I realised that things do not always work in the way they are described in the handbooks, but I know now that there are ways to solve problems of this kind in practice. I was very worried that this might harm the quality of my study, but with his help I was able to perform adequate statistical analysis and I could reach my research objectives. This was a great relief, because I realised that the research paper had to meet certain standards to be acceptable and with his help I was able to meet them.

I think the role of the study leader is very important, because of his/her knowledge, insight and experience. It is important to have a good relationship with your study leader. I had a really positive experience with my study leader. She was always there for me. She supplied good criticism, because of her insight and experience. I really appreciated that she never forced her ideas on me, but allowed me to do things my way and to develop my research independently.

The steps of the research process are important guidelines and I worked according to them. The knowledge that I gained in my third year was valuable. At least I had an idea of how the process looked on paper. By looking at the research papers of previous students I obtained a good overview of what I had to do. It was appalling and alarming. I experienced it extremely negatively because I felt uninformed. But, as time progressed, I came to appreciate the value of the experience.

The fact that I had a population to work on simplified the whole event. The number of persons, as well as their scores, was already known. I worked backwards and started my research paper by forming it around the research subjects. By discussing the project with the manager at Telkom I started to form ideas about a framework. I wrote the framework down and worked according to it. I formulated my research hypothesis, objectives and the statement of the problem. I was able to do this because of the information provided by Telkom. But problems suddenly started to appear, for example the reliability of the scores on the two pre-post tests (developed by Telkom). They are, as we know, not established psychometric tests. It was impossible to identify a control group and such a group was out of the question. Again, because I believed in my study, I was able to solve this problem. Only after these steps/problems were solved was I able to continue with my study. I then continued with my literature review (one is suppose to do this first).

After weeks of reading, interviews and by attending the literacy programme, I eventually was able to compile a literature review. A natural outcome of this was an introduction. I had no problem in writing this. On the whole, I think these parts of the paper caused the least problems, but contained the most work. All the books and journals in the library were available and accessible. The most difficult work for me was the research procedures, because of the problems I experienced with control groups, reliability and measuring instruments. But at least I was able to solve these problems. Data gathering was easy, because Telkom clearly set out the information on the subjects and on the data. It was not necessary for me to administer the tests. This saved a lot of time. Ethical issues were also handled in a satisfactory manner. I took the data to the Department of Statistics and the doctor there helped me to transform the data into understandable and relevant data. This phase - the development of graphs and tables - was enjoyable and a lot of fun. I enjoyed playing around with the graphs and observing how to interpret them. It was easy to read the results from the tables and graphs, because the interpretations were obvious. I had no problem in writing the conclusion, because it is, after all, a summary of the whole study. Reading the literature, travelling to obtain information and typing took a lot of time. I did it all by myself and that took me double the time that it would otherwise have done.

But it was my choice, because in that way I was involved in all the aspects of my study. If you do something by yourself you can change the content and format. Again, I was able to do it, so why not use my skills and the facilities available?

I think it is important to work according to a research procedure. It gives you a framework to structure your work and thoughts, especially if you are, like I was, totally uninformed. But, when you really start conducting a study and do the work you do not work as structured and specified as in the guidelines. Because, while you are thinking about one thing, something else comes to mind. You simultaneously work on a literature study and an introduction. In the meantime you still have to handle ethical issues. When the different chapters are in front of you, you feel as if you are unable to comprehend anything. It is a very challenging feeling to integrate the whole caboodle and to fit the different pieces together. At a certain stage you feel that you really do not know which way to go - and then you literally have a "brainwave". The physical conducting of each step of the research process does not always progress in the expected sequence. I do not think the format of the research paper should be changed. Only allow the student to deviate from the strict scientific method. Some circumstances, such as mine, make it impossible to stick to the rules.

During the course of the study one experiences many feelings. At times I became very anxious, especially when the "deadline" dates approached. I sometimes felt that I neglected my research paper, because I had to divide my time so carefully. It makes you wonder if you really gave your best. But I also learned a lot. That one can really do a lot in a little time. I really experienced feelings of challenge and tenacity - to let a lot of facts make sense. The more I became involved in this study, the more equal to the task and the more inspired I became. It was something that I really enjoyed a lot. The advantages of such a study are numerous. My ability to think analytically developed further. I obtained so much more insight to reason things out for myself. Today, in my work, I need to perform many tasks and become involved in many situations where I need to use insight. My ability to reason logically developed. When you do a study that you like, you will learn much from it and get as much from it as you put into it!

For further studies (as in my case) the fact of already doing a research paper at honours level is very meaningful. I find it indispensable for the honours year. A research paper really finishes off your honours year.

I feel that I am a better person - academically speaking! I discovered characteristics that I did not know I have!

## NATURAL MEANING UNITS

- 1 My first reaction after hearing that I had to do a research paper was one of shock,
- 2 ...because I wasn't sure what it included.
- 3 I talked to a number of persons who had already completed their research papers to find out what it involved.
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- 8 I thought that it would help me to get a job at Telkom.
- 9 The fact that we were to make use of populations also influenced my decision.
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24 From the start of my honours year everything went well.  
25 The personnel at Telkom's college were very well-disposed towards me.  
26 Their co-operation was excellent.  
27 I was exposed to a training programme - "ABET" level 1.  
28 This gave me a relatively broad frame of reference.  
29 After that my study caused no more problems.  
30 In terms of providing relevant information about my study theme this was  
very good.  
31 I felt that I had a good idea what their training was all about.  
32 I paid for typing, photocopying and all other expenses.  
33 I used all their facilities, paper, etc.  
34 This meant that I did not need any money for this part of my study.  
35 After completing my study they thanked me at a special function.  
36 I really appreciated that and enjoyed myself.  
37 My study supported previous research by Telkom and was sent to their head  
office.  
38 The feedback from their side was that my study was experienced very  
positively.  
39 This really was a compliment and I appreciated it.  
40 Apparently it meant a lot to the company.  
41 I also experienced no problems in my dealings with the university.  
42 The personnel at the computer center were very friendly and helped me a  
lot.  
43 I also felt that the doctor in the statistics department really helped me a lot in  
analysing my data.  
44 This made things so much easier.  
45 I do not think that I could ever have chosen the correct statistical methods  
(graphs, tables. etc.) without his help.  
46 He performed wonders with my shortcomings in respect of the data that I  
had gathered.  
47 Because of certain practical problems I encountered, I was unable to obtain  
certain biographical information  
48 ... and that made data analysis and comparisons between groups difficult.  
49 I realised that things do not always work in the way they are described in the  
handbooks.  
50 ...but I know now that there are ways to solve problems of this kind in  
practice.

51 I was very worried that this might harm the quality of my study,  
52 ...but with his help I was able to perform adequate statistical analysis  
53 ...and I could reach my research objectives.  
54 This was great relief, because I realised that the research paper had to meet  
certain standards to be acceptable and with his help I was able to meet them.  
55 I think the role of the study leader is very important, because of his/her  
knowledge, insight and experience.  
56 It is important to have a good relationship with your study leader.  
57 I had a really positive experience with my study leader.  
58 She was always there for me.  
59 She supplied good criticism, because of her insight and experience.  
60 I really appreciated that she never forced her ideas on me,  
61 ...but allowed me to do things my way  
62 ...and to develop my research independently.  
63 The steps of the research process are important guidelines  
64 ...and I worked according to them.  
65 The knowledge that I gained in my third year was valuable.  
66 At least I had an idea of how the process looked on paper.  
67 By looking at the research papers of previous students I obtained a good  
overview of what I had to do.  
68 It was appalling and alarming.  
69 I experienced it extremely negatively because I felt uninformed.  
70 But, as time progressed, I came to appreciate the value of the experience.  
71 The fact that I had a population to work on simplified the whole event.  
72 The number of persons, as well as their scores was already known.  
73 I worked backwards and started my research paper by forming it around the  
research subjects.  
74 By discussing the project with the manager at Telkom I started to form ideas  
about a framework.  
75 I wrote the framework down and worked according to it.  
76 I formulated my research hypothesis, objectives and the statement of the  
problem.  
77 I was able to do this because of the information provided by Telkom.  
78 But problems suddenly started to appear, for example the reliability of the  
scores on the two pre-post tests (developed by Telkom).  
79 They are, as we know, not established psychometric tests.

80 It was impossible to identify a control group and such a group was out of the question.

81 Again, because I believed in my study, I was able to solve this problem.

82 Only after these steps/problems were solved was I able to continue with my study.

83 I then continued with my literature review (one is suppose to do this first).

84 After weeks of reading, interviews and by attending the literacy programme, I eventually was able to compile a literature review.

85 A natural outcome of this was an introduction.

86 I had no problem in writing this.

87 On the whole, I think these parts of the paper caused the least problems, but contained the most work.

88 All the books and journals in the library were available and accessible.

89 The most difficult work for me was the research procedures, because of the problems I experienced with control groups, reliability and measuring instruments.

90 But at least I was able to solve these problems.

91 Data gathering was easy, because Telkom clearly set out the information on the subjects and on the data.

92 It was not necessary for me to administer the tests.

93 This saved a lot of time.

94 Ethical issues were also handled in a satisfactory manner.

95 I took the data to the Department of Statistics and the doctor there helped me to transform the data into understandable and relevant data.

96 This phase - the development of graphs and tables - was enjoyable and a lot of fun.

97 I enjoyed playing around with the graphs and to observing how to interpret them.

98 It was easy to read the results from the tables and graphs, because the interpretations were obvious.

99 I had no problem in writing the conclusion, because it is, after all, a summary of the whole study.

100 Reading the literature, travelling to obtain information and typing took a lot of time.

101 I did it all by myself and that took me double the time that it would otherwise have done.

- 102 But it was my choice, because in that way I was involved in all the aspects of my study.
- 103 If you do something by yourself you can change the content and format.
- 104 Again, I was able to do it, so why not use my skills and the facilities available?
- 105 I think it is important to work according to a research procedure.
- 106 It gives you a framework to structure your work and thoughts, especially if you are, like I was, totally uninformed.
- 107 But, when you really start conducting a study and do the work you do not work as structured and specified as in the guidelines.
- 108 Because, while you are thinking about one thing, something else comes to mind.
- 109 You simultaneously work on a literature study and an introduction.
- 110 In the meantime you still have to handle ethical issues.
- 111 When the different chapters are in front of you, you feel as if you are unable to comprehend anything.
- 112 It is a very challenging feeling to integrate the whole caboodle and to fit the different pieces together.
- 113 At a certain stage you feel that you really do not know which way to go - and then you literally have a "brainwave".
- 114 The physical conducting of each step of the research process does not always progress in the expected sequence.
- 115 I do not think the format of the research paper should be changed.
- 116 Only allow the student to deviate from the strict scientific method.
- 117 Some circumstances, such as mine, make it impossible to stick to the rules.
- 118 During the course of the study one experiences many feelings.
- 119 At times I became very anxious, especially when the "deadline" dates approached.
- 120 I sometimes felt that I neglected my research paper, because I had to divide my time so carefully.
- 121 It makes you wonder if you really gave your best.
- 122 But I also learned a lot.
- 123 That one can really do a lot in a little time.
- 124 I really experienced feelings of challenge and tenacity - to let a lot of facts make sense.
- 125 The more I became involved, in this study, the more equal to the task and the more inspired I became.

- 126 It was something that I really enjoyed a lot.
- 127 The advantages of such a study are numerous.
- 128 My ability to think analytically developed further.
- 129 I obtained so much more insight to reason things out for myself.
- 130 Today, in my work, I need to perform many tasks and become involved in many situations where I need to use insight.
- 131 My ability to reason logically developed.
- 132 When you do a study that you like, you will learn much from it
- 133 ...and get as much from it as you put into it!
- 134 For further studies (as in my case) the fact of already doing a research paper at honours level is very meaningful.
- 135 I find it indispensable for the honours year.
- 136 A research paper really finishes off your honours year.
- 137 I feel that I am a better person - academically speaking!
- 138 I discovered characteristics that I did not know I have!

## THEMES

### Expectations

- 1 My first reaction after hearing that I had to do a research paper was one of shock,
- 2 ...because I wasn't sure what it included.

She initially experienced this as a crisis, because of the novelty of what awaited her. (1a)

### Identifying the phenomenon

- 3 I talked to a number of persons who had already completed their research papers to find out what it involved.
- 4 All these things took place in my third year.
- 5 I woke up one morning and knew exactly about what I wanted to do my paper.
- 6 The fact is, my father works at Telkom and I received a study loan from them.
- 7 This played a large role in my choice of a topic.
- 8 I thought that it would help me to get a job at Telkom.
- 9 The fact that we were to make use of populations also influenced my decision.
- 10 Telkom's training college is the ideal population, because it is near and they have the facilities, for example computers and faxes.
- 11 Subjects for the study are also no problem.
- 23 This was at the end of my third year.

She approached the problem of identifying a researchable phenomenon in a systematic way by starting early and by discussing it with persons who had already experienced the event. The most important factor influencing her choice of a phenomenon was to conduct a research project for the organisation which provided her with a study loan, in the hope of obtaining a job in the organisation at a later stage. She realised the advantages of using this organisation as a target population as research subjects are readily available. (1b)

## **Respondents**

- 12 I made an appointment with the manager.  
13 From the beginning the two of us really liked each other.  
14 I felt that I could talk to him and that he was always ready to help.  
15 I explained my circumstances and the background of the study to him.  
16 He was especially impressed with my choice of theme - adult literacy.  
17 This made me feel very proud and more confident, because I felt that I was on the right track.  
18 He immediately approved the study and instructed one of his personnel to help me.  
19 I really felt at home and very optimistic about my study.  
20 He also arranged a number of interviews and introduced me to a number of persons in the training division.  
25 The personnel at Telkom's college were very well-disposed towards me.  
26 Their co-operation was excellent.  
35 After completing my study they thanked me at a special function.  
36 I really appreciated that and enjoyed myself.  
37 My study supported previous research by Telkom and was sent to their head office.  
38 The feedback from their side was that my study was experienced very positively.  
39 This really was a compliment and I appreciated it.  
40 Apparently it meant a lot to the company.  
71 The fact that I had a population to work on simplified the whole event.

She experienced her dealings with her target organisation in a very positive manner. She liked the people there and they worked well together and she felt at home with them. She felt very proud, optimistic and confident when her project was approved. She also appreciated and enjoyed the organisation's feedback on her research. She feels that the fact that a target group was readily available made her research much easier. (1c)

## **Gathering relevant background information and literature**

- 21 He also gave me some general information on adult literacy to read, in order to gain some background information.

- 22 This helped a lot to focus my thoughts.  
24 From the start of my honours year everything went well.  
27 I was exposed to a training programme - "ABET" level 1.  
28 This gave me a relatively broad frame of reference.  
29 After that my study caused no more problems.  
30 In terms of providing relevant information about my study theme this was very good.  
31 I felt that I had a good idea what their training was all about.  
83 I then continued with my literature review (one is supposed to do this first).  
84 After weeks of reading, interviews and by attending the literacy programme, I eventually was able to compile a literature review.  
85 A natural outcome of this was an introduction.  
86 I had no problem in writing this.  
87 On the whole, I think these parts of the paper caused the least problems, but contained the most work.  
88 All the books and journals in the library were available and accessible.  
125 The more I became involved in this study, the more equal to the task and the more inspired I became.  
126 It was something that I really enjoyed a lot.

She apparently found this part of the research event relatively easy and it caused her no problems. She was confident and knowledgeable, and felt able to complete this task, although she felt that this was a great deal of work. She feels that adequate background information facilitated her activities. Once the project started to gain momentum and she felt more and more involved in it she started to enjoy the experience and became more confident and inspired. (1d)

#### **Relationship with study leader**

- 55 I think the role of the study leader is very important, because of his/her knowledge, insight and experience.  
56 It is important to have a good relationship with your study leader.  
57 I had a really positive experience with my study leader.  
58 She was always there for me.  
59 She supplied good criticism, because of her insight and experience.  
60 I really appreciated that she never forced her ideas on me,

- 61 ...but allowed me to do things my way  
62 ...and to develop my research independently.

She believes that the relationship between student and study leader is very important and she feels positive about the relationship with her study leader. She appreciated the advice provided. She likes to work independently and to develop her own ideas. (1e)

### **Research framework**

- 74 By discussing the project with the manager at Telkom I started to form ideas about a framework.  
75 I wrote the framework down and worked according to it.  
76 I formulated my research hypothesis, objectives and the statement of the problem.  
77 I was able to do this because of the information provided by Telkom.

She did not experience any problems in constructing a framework for her project. (1f)

### **Data-gathering**

- 72 The number of persons, as well as their scores was already known.  
78 But problems suddenly started to appear, for example the reliability of the scores on the two pre-post tests (developed by Telkom).  
79 They are, as we know, not established psychometric tests.  
80 It was impossible to identify a control group and such a group was out of the question.  
81 Again, because I believed in my study, I was able to solve this problem.  
82 Only after these steps/problems were solved was I able to continue with my study.  
89 The most difficult work for me was the research procedures, because of the problems I experienced with control groups, reliability and measuring instruments.  
90 But at least I was able to solve these problems.  
91 Data gathering was easy, because Telkom clearly set out the information on the subjects and on the data.

94 Ethical issues were also handled in a satisfactory manner.

She was faced with a number of difficult data-gathering problems and decisions, but came to realise that it was possible to solve these practical research problems. She needed a lot of tenacity and determination and successfully solved this, for her, demanding and challenging tasks. (1g)

### Data analysis

- 41 I also experienced no problems in my dealings with the university.  
42 The personnel at the computer center were very friendly and helped me a lot.  
43 I also felt that the doctor in the statistics department really helped me a lot in analysing my data.  
44 This made things so much easier.  
45 I do not think that I could ever have chosen the correct statistical methods (graphs, tables. etc.) without his help.  
46 He performed wonders with my shortcomings in respect of the data that I had gathered.  
47 Because of certain practical problems I encountered, I was unable to obtain certain biographical information  
48 ...and that made data analysis and comparisons between groups difficult.  
51 I was very worried that this might harm the quality of my study,  
52 ...but with his help I was able to perform adequate statistical analysis  
53 ...and I could reach my research objectives.  
54 This was a great relief, because I realized that the research paper had to meet certain standards to be acceptable and with his help I was able to meet them.  
95 I took the data to the Department of Statistics and the doctor there helped me to transform the data into understandable and relevant data.  
96 This phase - the development of graphs and tables - was enjoyable and a lot of fun.

She feels that she was unable to deal with this part of the research event on her own and that she needed help. She was very worried that her data was inadequate and would not meet the standards set by the department. She was very relieved when

things worked out. She is always very positive in describing her relationships with those who assisted her and appreciates their help. (1h)

### **Research report**

- 97 I enjoyed playing around with the graphs and to observe how to interpret them.
- 98 It was easy to read the results from the tables and graphs, because the interpretations were obvious.
- 99 I had no problem in writing the conclusion, because it is, after all, a summary of the whole study.
- 111 When the different chapters are in front of you, you feel as if you are unable to comprehend anything.
- 112 It is a very challenging feeling to integrate the whole caboodle and to fit the different pieces together.
- 113 At a certain stage you feel that you really do not know which way to go - and then you literally have a "brainwave".
- 124 I really experienced feelings of challenge and tenacity - to let a lot of facts make sense.

*She enjoyed working with her data and had no problems in interpreting the data and in writing up her results. To her the task was obvious. However, she sometimes felt that she was unable to comprehend what she had to do and that it was difficult to integrate the information in the research report. She found that she sometimes experienced flashes of insight at times when she needed this most. She saw this task as a challenge and feels that she needed perseverance to complete it successfully. (1i)*

### **Budget**

- 32 I paid for typing, photocopying and all other expenses.
- 33 I used all their facilities, paper, etc.
- 34 This meant that I did not need any money for this part of my study.

*She needed little money as she made use of the facilities at the target organisation. (1j)*

## **Time constraints**

- 92 If was not necessary for me to administer the tests.
- 93 This saved a lot of time.
- 100 Reading the literature, travelling to obtain information and typing took a lot of time.
- 101 I did it all by myself and that took me double the time that it would otherwise have done.
- 102 But it was my choice, because in that way I was involved in all the aspects of my study.
- 103 If you do something by yourself you can change the content and format.
- 104 Again, I was able to do it, so why not use my skills and the facilities available?
- 118 During the course of the study one experiences many feelings.
- 119 At times I became very anxious, especially when the "deadline" dates approached.
- 120 I sometimes felt that I neglected my research paper, because I had to divide my time so carefully.
- 121 It makes you wonder if you really gave you best.
- 122 But I also learned a lot.
- 123 That one can really do a lot in a little time.

She found that target dates and deadlines made her anxious and she sometimes felt that she was neglecting her research, because she had other claims on the time available. This caused her to question the quality of the work. She feels that she learned how to use her time effectively. Although she found it demanding to be personally involved in every part of her study, except in administering the tests, she feels that this helped her to control every aspect of the project. (1k)

## **Research as a learning experience**

- 49 I realized that things do not always work in the way they are described in the handbooks,
- 50 ...but I know now that there are ways to solve problems of this kind in practice.
- 63 The steps of the research process are important guidelines
- 64 ...and I worked according to them.

65 The knowledge that I gained in my third year was valuable.  
66 At least I had an idea of how the process looked on paper.  
67 By looking at the research papers of previous students I obtained a good  
overview of what I had to do.  
68 It was appalling and alarming.  
69 I experienced it extremely negatively because I felt uninformed.  
70 But, as time progressed, I came to appreciate the value of the experience.  
73 I worked backwards and started my research paper by forming it around the  
research subjects.  
105 I think it is important to work according to a research procedure.  
106 It gives you a framework to structure your work and thoughts, especially if  
you are, like I was, totally uninformed.  
107 But, when you really start conducting a study and do the work you do not  
work as structured as specified in the guidelines.  
108 Because, while you are thinking about one thing, something else comes to  
mind.  
109 You simultaneously work on a literature study and an introduction.  
110 In the meantime you still have to handle ethical issues.  
114 The physical conducting of each step of the research process does not always  
progress in the expected sequence.  
115 I do not think the format of the research paper should be changed.  
116 Only allow the student to deviate from the strict scientific method.  
117 Some circumstances, such as mine, make it impossible to stick to the rules.  
127 The advantages of such a study are numerous.  
128 My ability to think analytically developed further.  
129 I obtained so much more insight to reason things out for myself.  
130 Today, in my work, I need to perform many tasks and become involved in  
many situations where I need to use insight.  
131 My ability to reason logically developed.  
132 When you do a study that you like, you will learn much from it  
133 ...and get as much from it as you put into it!  
134 For further studies (as in my case) the fact of already doing a research paper  
at honours level is very meaningful.  
135 I find it indispensable for the honours year.  
136 A research paper really finishes off your honours year.

- 137 I feel that I am a better person - academically speaking!  
138 I discovered characteristics that I did not know I have!

In the beginning she felt inadequate to this task and she felt extremely negative. She in fact describes the tasks as appalling and alarming. She came to realise that research described in textbooks differs from actual research in practice. Although she believes that it is important to follow guidelines and that she needed a structure and a framework to use, it is not always possible to do so. She feels that it is sometimes necessary and unavoidable to deviate from the rules of scientific research. She realized that she had to consider a number of tasks and decisions simultaneously and not, as she expected, in sequence. Although she experienced the research event extremely negatively in the beginning, she came to appreciate the value of the research event. She prepared herself and used her existing knowledge to solve the practical problems that she encountered. She feels that she was able to solve the problems facing her, because she believed in her project. She feels that she learned a lot from the experience and that what she learned depended on what she was willing to invest in the project. She experienced it as a meaningful event and important part of the honours course and it helped to prepare her for her work and master programme. She feels that her insight and reasoning abilities improved and sees it as a growth experience. She learned a lot about herself. (11)

**RESPONDENT 2**

At the beginning of my honours year I heard that we had to hand in a research paper. Guidelines for writing a research proposal and research report were also provided. I personally like research and statistics as subjects and I was very intent on doing the project. The project also seemed relatively simple and I foresaw no problems.

A subject that really interests me is performance appraisal and in the process of performance appraisal at my work it occurred to me that I would like to find out how people at my work experienced performance appraisals. After a number of informal interviews with people at my work I came to realise that there was no easy answer and I decided to investigate the problem.

The first step was to obtain approval from our head office in Pretoria. This after all levels of management at our base office had approved the idea. What a rude awakening! The reaction from head office was totally negative. They instructed me to stop all work immediately. The feeling at head office was so strong that they sent a formal command through in writing and also phoned me twice. This was really a great disappointment. I could not believe that my organisation did not want to help me. In general they support further studies, but apparently this topic was too sensitive to their taste.

However, I still felt that I wanted to investigate the topic. I approached the manpower department of a large organisation in the city. The reception there was sincere and I got the impression that my research would be welcome and of help to the specific department. However, they told me that they were not ready for such an investigation and that they would inform me of a starting date in a month or two. This made me feel really worried. I worried that I might run out of time. But at least now I had a place to do my research.

During this waiting period I commenced with a large-scale literature study. This was a very interesting and informative phase of my research project and I obtained a lot of knowledge on performance appraisal and relevant systems.

After about two months I went back to my target organisation to find out when I could start. To my disappointment they subtly made it clear that the investigation was undesirable. And this after two months of waiting!

I then approached a different organisation. I wanted to determine how effective their system is and more specifically how the personnel feel about this system. They were busy with developing a new system and my investigation at that stage would have been worthless.

I then approached another organisation. The Director Personnel informed me that they did not use any system of performance appraisal.

At this time I started to experience feelings of despondency. Apparently investigations of this nature are very unwelcome in organisations. I also became very worried about my progress, because it was impossible to continue if I was unable to find an organisation to do my research in. I also began to fear that I might have to change the topic of my research and this after I had already spent a considerable amount of time on a literature review.

At this time I already experienced a lot of work pressure, because I worked full-time and studied part-time. I had little time to work on my research. I decided to postpone my research project until the next year and to concentrate on my other subjects. This was a wise decision. It gave me enough time to really dig in and do the study during the next year and it removed some time pressure.

Early in the new year I again began to focus on my study and more specifically on finding an accessible organisation. It took me three months to find an organisation.

Shortly after my research proposal was approved a study leader was appointed. Here something went wrong. I was under the impression that I should conduct the study and hand in the completed research report. I did not realise that I could consult with my study leader on a regular basis.

I used my own initiative and developed a questionnaire, distributed it and analysed the data. It was now about September (in my second year of study). I calculated all the statistics (descriptive and inferential) on my own. By this time I had completed the honours research methodology course and I was able to perform the statistical calculations without help. The course really helped a lot and I knew exactly what to do and how to do it. It was a major task but very informative and interesting. I really learned a lot by doing everything on my own. One frustrating aspect was logistical problems, such as bad typing, bad photocopying and unsatisfactory binding of the research report. The persons responsible for this had to do the work over and really took their time. These problems were not serious, but they were frustrating, because the target date for handing in the research report was fast approaching. I also started to become tense and pressure escalated, because of the coming exams.

At last the research report was ready. I was really happy, proud and satisfied to hand it in. What a disillusionment when the study leader told me that I should have consulted with him on a continuous basis! He also told me that there were mistakes in the construction of the research report. Fortunately I had all the reference works that I had used to compile the report with me and I was able to show him why I had constructed it as I had done. He decided to accept the report as it was. He also told me that I had done very good work considering the fact that I had no help and that the report was my own work. I experienced a wonderful feeling of relief, not only because I passed the specific course, but also because I was at last relieved of the weight of two years of struggle.

The problem with a research paper is that it places so much pressure on one. It is a lot of extra work and takes up so much of one's time. An added problem in my case was that I work full-time and it was really difficult to visit the target organisation during working hours. I had to apply for leave and my superior wasn't always too happy about it. This created tension at work and in my relationship with him, especially when there was a lot to be done at work.

I really experienced a lot of negative feelings during my studies, such as disappointment, frustration, disillusionment, uncertainty, worry, and in the end, great relief.

I think I learned a lot from all this. Research is no easy process. From our textbooks and from other research reports one gets the impression that things always work smoothly. This is definitely not the case. I do feel that the project helped to prepare me for future research and for potential problems. After completion of my research I believe that I can manage research for a higher degree. I know what is expected of me. I also learned a lot about my specific topic. I feel that I now know more about the specific topic than do the average honours student who hasn't done research on the same topic. It gave me a chance to test my own mettle. I am proud of what I have achieved.

## NATURAL MEANING UNITS

- 1 At the beginning of my honours year I heard that we had to hand in a  
research paper.
- 2 Guidelines for writing a research proposal and research report were also  
provided.
- 3 I personally like research and statistics as subjects  
4 ...and I was very intent on doing the project.
- 5 The project also seemed relatively simple  
6 ...and I foresaw no problems.
- 7 A subject that really interests me is performance appraisal and in the process  
of performance appraisal at my work  
8 ... it occurred to me that I would like to find out how people at my work  
experienced performance appraisals.
- 9 After a number of informal interviews with people at my work  
10 ... I came to realise that there was no easy answer  
11 ... and I decided to investigate the problem.
- 12 The first step was to obtain approval from our head office in Pretoria.  
13 This after all levels of management at our base office had approved the idea.  
14 What a rude awakening!
- 15 The reaction from head office was totally negative.  
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- 17 The feeling at head office was so strong, that they sent a formal command  
through in writing and also phoned me twice.
- 18 This was really a great disappointment.  
19 I could not believe that my organisation did not want to help me.  
20 In general they support further studies,  
21 ... but apparently this topic was too sensitive to their taste.  
22 However, I still felt that I wanted to investigate the topic.
- 23 I approached the manpower department of a large organisation in the city.  
24 The reception there was sincere  
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the specific department.
- 26 However, they told me that they were not ready for such an investigation and  
that they would inform me of a starting date in a month or two.

27 This made me feel really worried.  
28 I worried that I might run out of time.  
29 But at least now I had a place to do my research.  
30 During this waiting period I commenced with a large-scale literature study.  
31 This was a very interesting and informative phase of my research project  
32 ... and I obtained a lot of knowledge on performance appraisal and relevant  
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33 After about two months I went back to my target organisation to find out  
when I could start.  
34 To my disappointment they subtly made it clear that the investigation was  
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35 And this after two months of waiting!  
36 I then approached a different organisation.  
37 I wanted to determine how effective their system is and more specifically how  
the personnel feel about this system.  
38 They were busy with developing a new system and my investigation at that  
stage would have been worthless.  
39 I then approached another organisation.  
40 The Director Personnel informed me that they did not use any system of  
performance appraisal.  
41 At this time I started to experience feelings of despondency.  
42 Apparently investigations of this nature are very unwelcome in organisations.  
43 I also became very worried about my progress,  
44 ... because it was impossible to continue if I was unable to find an  
organisation to do my research in.  
45 I also began to fear that I might have to change the topic of my research  
46 ... and this after I had already spent a considerable amount of time on a  
literature review.  
47 At this time I already experienced a lot of work pressure,  
48 ... because I worked full-time and studied part-time.  
49 I had little time to work on my research.  
50 I decided to postpone my research project until the next year  
51 ... and to concentrate on my other subjects.  
52 This was a wise decision.  
53 It gave me enough time to really dig in and do the study during the next year  
54 ... and it removed some time pressure.

- 55 Early in the new year I again began to focus on my study and more specifically on finding an accessible organisation.
- 56 It took me three months to find an organisation.
- 57 Shortly after my research proposal was approved a study leader was appointed.
- 58 Here something went wrong.
- 59 I was under the impression that I should conduct the study and hand in the completed research report.
- 60 I did not realise that I could consult with my study leader on a regular basis.
- 61 I used my own initiative and developed a questionnaire, distributed it and analysed the data.
- 62 It was now about September (in my second year of study).
- 63 I calculated all the statistics (descriptive and inferential) on my own.
- 64 By this time I had completed the honours research methodology course
- 65 ... and I was able to perform the statistical calculations without help.
- 66 The course really helped a lot and I knew exactly what to do and how to do it.
- 68 It was a major task but very informative and interesting.
- 69 I really learned a lot by doing everything on my own.
- 70 One frustrating aspect was logistical problems, such as bad typing, bad photocopying and unsatisfactory binding of the research report.
- 71 The persons responsible for this had to do the work over and really took their time.
- 72 These problems were not serious, but they were frustrating, because the target date for handing in the research report was fast approaching.
- 73 I also started to become tense and pressure escalated, because of the coming exams.
- 74 At last the research report was ready.
- 75 I was really happy, proud and satisfied to hand it in.
- 76 What a disillusionment when the study leader told me that I should have consulted with him on a continuous basis!
- 77 He also told me that there were mistakes in the construction of the research report.
- 78 Fortunately I had all the reference works that I had used to compile the report with me and I was able to show him why I had constructed it as I had done.
- 79 He decided to accept the report as it was.

- 80 He also told me that I had done very good work considering the fact that I had no help and that the report was my own work.
- 81 I experienced a wonderful feeling of relief, not only because I passed the specific course, but also because I was at last relieved of the weight of two years of struggle.
- 82 The problem with a research paper is that it places so much pressure on one.
- 83 It is a lot of extra work and takes up so much of one's time.
- 84 An added problem in my case was that I work full-time and it was really difficult to visit the target organisation during working hours.
- 85 I had to apply for leave and my superior wasn't always too happy about it.
- 86 This created tension at work and in my relationship with him, especially when there was a lot to be done at work.
- 87 I really experienced a lot of negative feelings during my studies, such as disappointment, frustration, disillusionment, uncertainty, worry,
- 88 ... and in the end, great relief.
- 89 I think I learned a lot from all this.
- 90 Research is no easy process.
- 91 From our textbooks and from other research reports one gets the impression that things always work smoothly.
- 92 This is definitely not the case.
- 93 I do feel that the project helped to prepare me for future research and for potential problems.
- 94 After completion of my research I believe that I can manage research for a higher degree.
- 95 I know what is expected of me.
- 96 I also learned a lot about my specific topic.
- 97 I feel that I now know more about the specific topic than do the average honours student who hasn't done research on the same topic.
- 98 It gave me a chance to test my own mettle.
- 99 I am proud of what I have achieved.

## THEMES

### Expectations

- 1 At the beginning of my honours year I heard that we had to hand in a research paper.
- 2 Guidelines for writing a research proposal and research report were also provided.
- 3 I personally like research and statistics as subjects
- 4 ... and I was very intent on doing the project.
- 5 The project also seemed relatively simple
- 6 ...and I foresaw no problems.

At the beginning of the research project the respondent was optimistic about the event. He believed that he knew what was expected of him as he had some information at his disposal on how to conduct the research project. He likes research and believed that the whole event would be simple and straightforward. (2a)

### Identifying the phenomenon

- 7 A subject that really interests me is performance appraisal and in the process of performance appraisal at my work
- 8 ... it occurred to me that I would like to find out how people at my work experienced performance appraisals.
- 9 After a number of informal interviews with people at my work
- 10 ... I came to realise that there was no easy answer
- 11 ... and I decided to investigate the problem.
- 22 However, I still felt that I wanted to investigate the topic.
- 37 I wanted to determine how effective their system is and more specifically how the personnel feel about this system.

He was interested in a specific phenomenon to research and determined to do research on it. He discussed his idea with others and came to realise research was needed to help find an answer to the problem that he had identified. (2b)

## Respondents

- 12 The first step was to obtain approval from our head office in Pretoria.  
13 This after all levels of management at our base office had approved the idea.  
14 What a rude awakening!  
15 The reaction from head office was totally negative.  
16 They instructed me to stop all work immediately.  
17 The feeling at head office was so strong that they sent a formal command  
through in writing and also phoned me twice.  
18 This was really a great disappointment.  
19 I could not believe that my organisation did not want to help me.  
20 In general they support further studies,  
21 ... but apparently this topic was too sensitive to their taste.  
23 I approached the manpower department of a large organisation in the city.  
24 The reception there was sincere  
25 ... and I got the impression that my research would be welcome and of help to  
the specific department.  
26 However, they told me that they were not ready for such an investigation and  
that they would inform me of a starting date in a month or two.  
27 This made me feel really worried.  
28 I worried that I might run out of time.  
29 But at least now I had a place to do my research.  
33 After about two months I went back to my target organisation to find out  
when I could start.  
34 To my disappointment they subtly made it clear that the investigation was  
undesirable.  
35 And this after two months of waiting!  
36 I then approached a different organisation.  
38 They were busy with developing a new system and my investigation at that  
stage would have been worthless.  
39 I then approached another organisation.  
40 The Director Personnel informed me that they did not use any system of  
performance appraisal.  
41 At this time I started to experience feelings of despondency.  
42 Apparently investigations of this nature are very unwelcome in organisations.  
43 I also became very worried about my progress,

- 44 ... because it was impossible to continue if I was unable to find an organisation to do my research in.
- 45 I also began to fear that I might have to change the topic of my research.
- 55 Early in the new year I again began to focus on my study and more specifically on finding an accessible organisation.
- 56 It took me three months to find an organisation.

Over a period of time this important aspect of the research event caused a lot of problems for the respondent. At the beginning of his search he was still optimistic, but he soon realised that he was faced with a serious problem and became disillusioned. For a long and agonizing period he was unable to solve the problem, although his determination paid off in the end. He felt despondent and worried about the way in which his research was progressing. His inability to find a willing target organisation forced him to postpone his research project and at one stage he even questioned the feasibility of his study. (2c)

#### **Literature search**

- 30 During this waiting period I commenced with a large-scale literature study.
- 31 This was a very interesting and informative phase of my research project
- 32 ... and I obtained a lot of knowledge on performance appraisal and relevant systems.
- 46 ... and this after I had already spent a considerable amount of time on a literature review.

He feels that this was an interesting and informative phase of the research event and that it helped him to learn a lot about his research topic. (2d)

#### **Relationship with study leader**

- 57 Shortly after my research proposal was approved a study leader was appointed.
- 58 Here something went wrong.
- 59 I was under the impression that I should conduct the study and hand in the completed research report.

- 60 I did not realise that I could consult with my study leader on a regular basis.  
61 I used my own initiative and developed a questionnaire, distributed it and analysed the data.  
62 It was now about September (in my second year of study).  
76 What a disillusionment when the study leader told me that I should have consulted with him on a continuous basis!

For some or other reason the respondent was under the impression that he had to conduct the research project totally on his own, without any help from his study leader. He was shocked when he handed in the research report, only to realise that he could and should have consulted with his study leader. (2e)

### **Data analysis**

- 63 I calculated all the statistics (descriptive and inferential) on my own.  
64 By this time I had completed the honours research methodology course  
65 ... and I was able to perform the statistical calculations without help.  
66 The course really helped a lot and I knew exactly what to do and how to do it.  
68 It was a major task but very informative and interesting.  
69 I really learned a lot by doing everything on my own.

He experienced no problems in analysing the data and enjoyed doing it on his own. He learned a lot from performing the data analysis independently and found it interesting, although it was a major task to complete. He completed the honours research methodology course before he conducted his investigation and feels that this helped him a lot, as he knew exactly what to do and was able to do the calculations on his own. (2f)

### **Preparing the manuscript for submission**

- 70 One frustrating aspect was logistical problems, such as bad typing, bad photocopying and unsatisfactory binding of the research report.  
71 The persons responsible for this had to do the work over and really took their time.

72 These problems were not serious, but they were frustrating, because the target date for handing in the research report was fast approaching.

He feels that the problems that he experienced here were not serious, but that he was frustrated by the quality of the work done, as well as by the time it took to complete the work. (2g)

### **Time constraints**

47 At this time I already experienced a lot of work pressure,  
48 ... because I worked full-time and studied part-time.  
49 I had little time to work on my research.  
50 I decided to postpone my research project until the next year  
51 ... and to concentrate on my other subjects.  
52 This was a wise decision.  
53 It gave me enough time to really dig in and do the study during the next year  
54 ... and it removed some time pressure.  
73 I also started to become tense and pressure escalated, because of the coming exams.  
82 The problem with a research paper is that it places so much pressure on one.  
83 It is a lot of extra work and takes up so much of one's time.  
84 An added problem in my case was that I work full-time and it was really difficult to visit the target organisation during working hours.  
85 I had to apply for leave and my superior wasn't always too happy about it.  
86 This created tension at work and in my relationship with him, especially when there was a lot to be done at work.

The fact that he works full-time placed the respondent under pressure and he feels that the pressure just kept on escalating. It created tension in his relationship with his superior at work and because of his working hours he found it difficult to get in touch with his respondents. He was worried that he would be unable to complete his study in the required time and that the workload would force him to neglect the rest of his honours work, because the project required a lot of extra time, and work. He feels that his decision to postpone the project helped him to complete the rest of his

studies successfully, that it gave him enough time to concentrate on the research project at a later stage, and that it relieved some of the pressures that he experienced at the time. (2h)

### **Research report**

- 74 At last the research report was ready.  
75 I was really happy, proud and satisfied to hand it in.  
77 He also told me that there were mistakes in the construction of the research report.  
78 Fortunately I had all the reference works that I had used to compile the report with me and I was able to show him why I had constructed it as I had done.  
79 He decided to accept the report as it was.  
80 He also told me that I had done very good work considering the fact that I had no help and that the report was my own work.  
81 I experienced a wonderful feeling of relief, not only because I passed the specific course, but also because I was at last relieved of the weight of two years of struggle.  
87 I really experienced a lot of negative feeling during my studies, such as disappointment, frustration, disillusionment, uncertainty, worry,  
88 ... and in the end, great relief.

He was relieved and satisfied when his research report was completed, only to realise that it was not done according to the format required by the department. The respondent was extremely relieved when it was decided to accept the report and was quite proud of the fact that he was complimented on his work. After all the months during which he experienced feelings such as disappointment, uncertainty and worry, he was relieved that the project was finally completed. (2i)

### **Research as a learning experience**

- 89 I think I learned a lot from all this.  
90 Research is no easy process.  
91 From our textbooks and from other research reports one gets the impression that things always work smoothly.  
92 This is definitely not the case.

- 93 I do feel that the project helped to prepare me for research in future and potential problems.
- 94 After completion of my research I believe that I can manage research for a higher degree.
- 95 I know what is expected of me.
- 96 I also learned a lot about my specific topic.
- 97 I feel that I now know more about the specific topic than do the average honours student who hasn't done research on the same topic.
- 98 It gave me a chance to test my own mettle.
- 99 I am proud of what I have achieved.

The respondent experienced this research event as a valuable learning experience. He learned a lot about a topic that interests him. He believes that he is better prepared for further studies and is proud of his achievements. He also feels that he proved something to himself. He came to realise that actual research is a difficult process and that it differs from what is written about it. However he believes that this practical research project prepared him for what to expect in future and to deal with some of the practical problems that he might experience during a research project. (2j)

RESPONDENT 3

In the beginning I planned to do the research paper at a later stage. The reason for this is that I was very scared to do the paper. I was unsure of what was expected of me. After I had handed in the research proposal, things went better. Before this event I experienced a lot of stress. Once the proposal was in, a lot of the stress disappeared. By that time most of the data was together. The worst task of all was to get all the data together. I really hated to do this.

From the beginning I had to cast about in order to find a topic. That was really frustrating. I experienced a lot of stress. I had no idea what to do. I paged through some of my textbooks in order to find a field of interest. I had considered two possible themes before I spoke to the professor about a topic. He told me about an available questionnaire. This wasn't what I had in mind. However, I decided that the questionnaire was a good starting point. It helped me to choose a topic. I must say that research looks easy on paper, but real research is no easy task. I really feel that to do research made me flounder about. A lot depends on one's study leader.

After I had decided on the theme, I phoned Potchefstroom to find out if the questionnaire was available. It was quite easy to obtain. The people there sent it by courier. I was surprised, because this was really not expensive. Photocopying, typing and binding the research proposal and report were more expensive. The questionnaire was available in the library, but it was too expensive to photocopy everything. I also obtained an M-study. This helped me to get ideas on how to approach the topic. However, it was difficult to obtain enough literature on the topic. Little was available in the library. I should have worked on my original topic and not the one suggested by professor. More information is available on that topic. It would have been an easier topic.

After I had obtained the questionnaire, I looked at literature on the topic. A lot of the information in the library was dated. This was my biggest problem. The lady at the library tried to obtain the information for me. The information on the lists was

older than ten years. I then decided to go to the library and to look through the books and journals. This took up a lot of my time. I found this a daunting, exhausting and frustrating task. It was difficult to physically look for relevant information, I was unsure of where to look. At least I was able to obtain enough relatively recent information on the subject. I worked full-time and had to do the literature study in the evenings. I had to do it over an extended period of time. I even worked on my fiancée's twenty-first birthday! I felt bad about this. However, I was so pressed for time that I had to do this. Fortunately she understood. One positive thing was that once I became involved in what I was doing, things went easier. Once I had a framework the rest was easy. After I had handed in the research proposal I started to relax. The period before the research proposal was approved was definitely the most difficult part of the research. After the research proposal things worked better. By that time I knew what I wanted to do and what goal I wanted to reach. The proposal was very difficult. I made a lot of mistakes. This was the first time that I had to write a research proposal. I found it difficult to write scientifically. I also tended to write in the first person. It was difficult to formulate a research question. I was unable to do so on my own. Prof had to help me. It was also very complex to formulate the research hypotheses. It took me a long time to do this. I tried to use what I had learned in the research methods courses, but still found it difficult to do.

I originally wanted to work on stress. I had thought the Police, who experience a lot of stress and intimidation, would be the ideal group to do the research on. This means that my eventual choice of a group to work on was influenced by this original idea. Because of my fear that I might not be able to complete the project in the allotted time, I approached the Police even before I handed in my proposal. I personally contacted a police officer. I think he was really very willing to help me. This was quite a relief and made things easier. At least I knew from the beginning that I had a group to work on. Initially I had problems to reach the right person. This initially caused a lot of stress.

Gathering the data was easier than I had thought it would be. I left the questionnaires and instructions with the officer. He distributed them. This happened quickly.

It was, however, more difficult to choose methods for data analysis. I am really stupid with statistics and am unable to understand how to go about choosing the

right method. Prof helped a lot. Without him I would have been lost.

Marking the questionnaires was chaos. It took me ages to do this. I only had photocopies of the scoring keys and had to cut them out with a scalpel. This took a lot of time and effort. It was also frustrating to do this.

I had to make sure that I marked the questionnaires correctly. I was scared of making mistakes. The computer centre analysed the data. I had to give them the necessary instructions. This made things easy and it caused me no problems. I did the interpretations.

It was very difficult to bring everything together in the end, for example the hypotheses and the results. I consulted with my study leader on a regular basis (once a week). Before I wrote the report I consulted with him to make sure of the format. It was difficult to write the paper and to find the right words. I had to rewrite it a couple of times. I thought that it had to look like an essay. However, I came to realise that I had to write it with a specific audience in mind and I realised that I had to speak their language. This was difficult to do. I wrote it in its final form only after my study leader had marked it and had shown me what to cut and what to add.

I think my biggest problem was to find recent literature. I also realised that one's questionnaire should be recent. If you want to continue your studies, a research paper is very important. I got the chance to be in the field and to experience the problems personally.

## NATURAL MEANING UNITS

- 1 In the beginning I planned to do the research paper at a later stage.
- 2 The reason for this is that I was very scared to do the paper.
- 3 I was unsure of what was expected of me.
- 4 After I had handed in the research proposal, things went better.
- 5 Before this event I experienced a lot of stress.
- 6 Once the proposal was in, a lot of the stress disappeared.
- 7 By that time most of the data was together.
- 8 The worst task of all was to get all the data together.
- 9 I really hated to do this.
- 10 From the beginning I had to cast about in order to find a topic.
- 11 That was really frustrating.
- 12 I experienced a lot of stress.
- 13 I had no idea what to do.
- 14 I paged through some of my textbooks in order to find a field of interest.
- 15 I had considered two possible themes before I spoke to the professor about a topic.
- 16 He told me about an available questionnaire.
- 17 This wasn't what I had in mind.
- 18 However, I decided that the questionnaire was a good starting point.
- 19 It helped me to choose a topic.
- 20 I must say that research looks easy on paper,
- 21 ... but real research is no easy task.
- 22 I really feel that to do research made me flounder about.
- 23 A lot depends on one's study leader.
- 24 After I had decided on the theme, I phoned Potchefstroom to find out if the questionnaire was available.
- 25 It was quite easy to obtain.
- 26 The people there sent it by courier.
- 27 I was surprised, because this was really not expensive.
- 28 Photocopying, typing and binding the research proposal and report were more expensive.
- 29 The questionnaire was available in the library, but it was too expensive to photocopy everything.

30 I also obtained an M-study.  
31 This helped me to get ideas on how to approach the topic.  
32 However, it was difficult to obtain enough literature on the topic.  
33 Little was available in the library.  
34 I should have worked on my original topic and not the one suggested by professor.  
35 More information is available on that topic.  
36 It would have been an easier topic.  
37 After I had obtained the questionnaire, I looked at literature on the topic.  
38 A lot of the information in the library was dated.  
39 This was my biggest problem.  
40 The lady at the library tried to obtain the information for me.  
41 The information on the lists was older than ten years.  
42 I then decided to go to the library and to look through the books and journals.  
43 This took up a lot of my time.  
44 I found this a daunting, exhausting and frustrating task.  
45 It was difficult to physically look for relevant information.  
46 I was unsure of where to look.  
47 At least I was able to obtain enough relatively recent information on the subject.  
48 I worked full-time and had to do the literature study in the evenings.  
49 I had to do it over an extended period of time.  
50 I even worked on my fiancée's twenty-first birthday!  
51 I felt bad about this.  
52 However, I was so pressed for time that I had to do this.  
53 Fortunately she understood.  
54 One positive thing was that once I became involved in what I was doing, things went easier.  
55 Once I had a framework the rest was easy.  
56 After I had handed in the research proposal I started to relax.  
57 The period before the research proposal was approved was definitely the most difficult part of the research.  
58 After the research proposal things worked better.  
59 By that time I knew what I wanted to do and what goal I wanted to reach.  
60 The proposal was very difficult.

61 I made a lot of mistakes.  
62 This was the first time that I had to write a research proposal.  
63 I found it difficult to write scientifically.  
64 I also tended to write in the first person.  
65 It was difficult to formulate a research question.  
66 I was unable to do so on my own.  
67 Prof had to help me.  
68 It was also very complex to formulate the research hypotheses.  
69 It took me a long time to do this.  
70 I tried to use what I had learned in the research methods courses, but still found it difficult to do.  
71 I originally wanted to work on stress.  
72 I had thought the Police, who experience a lot of stress and intimidation, would be the ideal group to do the research on.  
73 This means that my eventual choice of a group to work on was influenced by this original idea.  
74 Because of my fear that I might not be able to complete the project in the allotted time,  
75 ... I approached the Police even before I handed in my proposal.  
76 I personally contacted a police officer.  
77 I think he was really very willing to help me.  
78 This was quite a relief and made things easier.  
79 At least I knew from the beginning that I had a group to work on.  
80 Initially I had problems to reach the right person.  
81 This initially caused a lot of stress.  
82 Gathering the data was easier than I had thought it would be.  
83 I left the questionnaires and instructions with the officer.  
84 He distributed them.  
85 This happened quickly.  
86 It was, however, more difficult to choose methods for data analysis.  
87 I am really stupid with statistics  
88 ....and am unable to understand how to go about choosing the right method.  
89 Prof helped a lot.  
90 Without him I would have been lost.  
91 Marking the questionnaires was chaos.  
92 It took me ages to do this.

- 93 I only had photocopies of the "masks" and had to cut them out with a scalpel.  
94 This took a lot of time and effort.  
95 It was also frustrating to do this.  
96 I had to make sure that I marked the questionnaires correctly.  
97 I was scared of making mistakes.  
98 The computer centre analysed the data.  
99 I had to give them the necessary instructions.  
100 This made things easy and it caused me no problems.  
101 I did the interpretations.  
102 It was very difficult to bring everything together in the end, for example the hypotheses and the results.  
103 I consulted with my study leader on a regular basis (once a week).  
104 Before I wrote the report I consulted with him to make sure of the format.  
105 It was difficult to write the paper and to find the right words.  
106 I had to rewrite it a couple of times.  
107 I thought that it had to look like an essay.  
108 However, I came to realize that I had to write it with a specific audience in mind  
109 ...and I realized that I had to speak their language.  
110 This was difficult to do.  
111 I wrote it in its final form only after my study leader had marked it and had shown me what to cut and what to add.  
112 I think my biggest problem was to find recent literature.  
113 I also realised that one's questionnaire should be recent.  
114 If you want to continue your studies, a research paper is very important.  
115 I got the chance to be in the field and to experience the problems personally.

## THEMES

### Expectations

- 1 In the beginning I planned to do the research paper at a later stage.
- 2 The reason for this is that I was very scared to do the paper.
- 3 I was unsure of what was expected of me.

The respondent was very scared and unsure before he commenced with the project, because he did not know what to expect. (3a)

### Identifying a phenomenon

- 10 From the beginning I had to cast about in order to find a topic.
- 11 That was really frustrating.
- 12 I experienced a lot of stress.
- 13 I had no idea what to do.
- 14 I paged through some of my textbooks in order to find a field of interest.
- 15 I had considered two possible themes before I spoke to the professor about a topic.
- 16 He told me about an available questionnaire.
- 17 This wasn't what I had in mind.
- 18 However, I decided that the questionnaire was a good starting point.
- 19 It helped me to choose a topic.

In the beginning he struggled to identify a phenomenon to investigate. He tried to do this on his own and this caused a lot of stress and frustration. He had some idea of what he wanted to do but, against his own wishes, he allowed himself to be persuaded to tackle a different phenomenon, because a suitable questionnaire was available. (3b)

## Research proposal

- 4 After I had handed in the research proposal, things went better.  
5 Before this event I experienced a lot of stress.  
6 Once the proposal was in, a lot of the stress disappeared.  
7 By that time most of the data was together.  
8 The worst task of all was to get all the data together.  
9 I really hated to do this.  
56 After I had handed in the research proposal I started to relax.  
57 The period before the research proposal was approved was definitely the most difficult part of the research.  
58 After the research proposal things worked better.  
59 By that time I knew what I wanted to do and what goal I wanted to reach.  
60 The proposal was very difficult.  
61 I made a lot of mistakes.  
62 This was the first time that I had to write a research proposal.  
63 I found it difficult to write scientifically.  
64 I also tended to write in the first person.  
65 It was difficult to formulate a research question.  
66 I was unable to do so on my own.  
67 Prof had to help me.  
68 It was also very complex to formulate the research hypotheses.  
69 It took me a long time to do this.  
70 I tried to use what I had learned in the research methods courses, but still found it difficult to do.

The respondent experienced very particular problems with his research proposal. The idea of writing this document generated a lot of stress in him. He was unable to do it on his own and had to find help. He was very unsure of himself and unable to apply what he had learned. He experienced this as the most difficult and time-consuming part of the whole project. He struggled to formulate the statement of the problem and the research hypotheses, and to write scientifically. He also found it difficult to integrate what he needed in the proposal. After the proposal was approved he felt much more relaxed. (3c)

### **The research instrument**

- 24 After I had decided on the theme, I phoned Potchefstroom to find out if the questionnaire was available.
- 25 It was quite easy to obtain.
- 26 The people there sent it by courier.
- 27 I was surprised, because this was really not expensive.
- 113 I also realised that one's questionnaire should be recent.

He had no problems or expenses in obtaining the questionnaire, but was a bit unhappy because he felt the questionnaire was dated. (3d)

### **Research framework**

- 30 I also obtained an M-study.
- 31 This helped me to get ideas on how to approach the topic.
- 54 One positive thing was that once I became involved in what I was doing, things went easier.
- 55 Once I had a framework the rest was easy.

Once he became involved in his study and after he had identified a research framework, he felt much more relaxed and positive and the rest of the research project seemed relatively easy, compared to what went before. (3e)

### **Literature search**

- 32 However, it was difficult to obtain enough literature on the topic.
- 33 Little was available in the library.
- 34 I should have worked on my original topic and not the one suggested by professor.
- 35 More information is available on that topic.
- 36 It would have been an easier topic.
- 37 After I had obtained the questionnaire, I looked at literature on the topic.
- 38 A lot of the information in the library was dated.
- 39 This was my biggest problem.
- 40 The lady at the library tried to obtain the information for me.

- 41 The information on the lists was older than ten years.  
42 I then decided to go to the library and to look through the books and journals.  
43 This took up a lot of my time.  
44 I found this a daunting, exhausting and frustrating task.  
45 It was difficult to physically look for relevant information.  
46 I was unsure of where to look.  
47 At least I was able to obtain enough relatively recent information on the subject.  
48 I worked full-time and had to do the literature study in the evenings.  
49 I had to do it over an extended period of time.  
50 I even worked on my fiancée's twenty-first birthday!  
51 I felt bad about this.  
52 However, I was so pressed for time that I had to do this.  
53 Fortunately she understood.  
112 I think my biggest problem was to find recent literature.

The respondent found it difficult to obtain recent literature on his topic and berated himself for not sticking to his own original choice of a research topic. He experienced his literature search as a frustrating, daunting, and exhausting task, that asked for a lot of time, sacrifice, and energy. (3f)

### **Respondents**

- 71 I originally wanted to work on stress.  
72 I had thought the Police, who experience a lot of stress and intimidation, would be the ideal group to do the research on.  
73 This means that my eventual choice of a group to work on was influenced by this original idea.  
74 Because of my fear that I might not be able to complete the project in the allotted time,  
75 ... I approached the Police even before I handed in my proposal.  
76 I personally contacted a police officer.  
77 I think he was really very willing to help me.  
78 This was quite a relief and made things easier.  
79 At least I knew from the beginning that I had a group to work on.

- 80 Initially I had problems to reach the right person.  
81 This initially caused a lot of stress.

He was afraid that he might not be able to complete the study in the allotted time and made sure of access to a target group of interest early on. Initially he found it difficult to get in touch with a contact person in the target organisation and experienced stress because of this. He was relieved when he gained access to an appropriate group, because he then knew that this problem had been solved in a satisfactory way. (3g)

### **Data-gathering**

- 82 Gathering the data was easier than I had thought it would be.  
83 I left the questionnaires and instructions with the officer.  
84 He distributed them.  
85 This happened quickly.

He was relieved, because the data gathering was much easier than he expected and was completed in a relatively short period of time. (3h)

### **Statistics**

- 86 It was, however, more difficult to choose methods for data analysis.  
87 I am really stupid with statistics  
88 ....and am unable to understand how to go about choosing the right method.  
89 Prof helped a lot.  
90 Without him I would have been lost.

He feels that he was unable to choose the appropriate statistical method with which to analyse his data, as he finds statistics really difficult. Without help he would not have been able to make the correct choice. (3i)

### **Scoring**

- 91 Marking the questionnaires was chaos.  
92 It took me ages to do this.  
93 I only had photocopies of the "masks" and had to cut them out with a scalpel.

- 94 This took a lot of time and effort.
- 95 It was also frustrating to do this.
- 96 I had to make sure that I marked the questionnaires correctly.
- 97 I was scared of making mistakes.

For the respondent scoring the questionnaire was a confusing, frustrating, and time-consuming process. He found that this needed a lot of effort and he was scared of making mistakes. (3j)

### **Data analysis**

- 98 The computer centre analysed the data.
- 99 I had to give them the necessary instructions.
- 100 This made things easy and it caused me no problems.

He experienced no problems with data analysis and found it easy to do. (3k)

### **Research report**

- 101 I did the interpretations.
- 102 It was very difficult to bring everything together in the end, for example the hypotheses and the results.
- 103 I consulted with my study leader on a regular basis (once a week).
- 104 Before I wrote the report I consulted with him to make sure of the format.
- 105 It was difficult to write the paper and to find the right words.
- 106 I had to rewrite it a couple of times.
- 107 I thought that it had to look like an essay.
- 108 However, I came to realise that I had to write it with a specific audience in mind
- 109 ...and I realised that I had to speak their language.
- 110 This was difficult to do.
- 111 I wrote it in its final form only after my study leader had marked it and had shown me what to cut and what to add.

He found it difficult to write a research report and to tie everything together. Again he needed guidance from his study leader. He had to rewrite it a couple of times

and came to realise that it had to be done in a specific way. It was not an essay, but a scientific paper. (3l)

### **Budget**

- 28 Photocopying, typing and binding the research proposal and report were more expensive.
- 29 The questionnaire was available in the library, but it was too expensive to photocopy everything.

He found that photocopying the questionnaire and the final technical preparation and editing of the research report were quite expensive. (3m)

### **Research as a learning experience**

- 20 I must say that research looks easy on paper,
- 21 ... but real research is no easy task.
- 22 I really feel that to do research made me flounder about.
- 23 A lot depends on one's study leader.
- 114 If you want to continue your studies, a research paper is very important.
- 115 I got the chance to be in the field and to experience the problems personally.

The respondent came to appreciate the differences between research theory and research in practice. He realised that research is no easy task and really found it confusing. However, he believes that the event prepared him better for further studies, as he had a chance to experience the problems personally. (3n)

RESPONDENT 4

Early in the year we had heard that we were supposed to do a mini thesis and that it was to be completed by a certain date. My first thought was: What can I do a study about? One can think of an unlimited number of topics, but to find an appropriate one is difficult. One does not know where to start and how to go about finding a topic. At that stage I just wanted the whole idea to go away. I felt very lonely and unsure of myself. The idea of handling all the responsibility was a daunting thought. It seemed like an impossible amount of work and I felt that I was unable to handle it on my own.

I realised that I had to start somewhere. I thought about what I had learned in the third year research methodology course on how to find a topic. At least now I had a place to start and ideas on how to go about finding a topic. This made me feel more comfortable with the idea of doing a thesis, although I realised that I still had to do a lot of work in a given period of time.

In order to find an appropriate topic I looked at previous honours theses. It was interesting to see what other students had done and this gave me ideas on what to do and how to go about doing it. Before looking at these theses I had no real conception of the format and content of an honours thesis and what exactly was expected of me. I felt that after looking at them, I had a better idea of what was expected of me. Some of the students had done theses on women and I felt that this was an area that interested me personally and that I wanted to know more about the subject. Some of them had also worked on subjects such as role conflict, self-image, self-esteem and job satisfaction and productivity. I spoke to one of my lecturers and she told me that the purpose of the thesis is to give us a chance to do an independent study and that I could use only one or two variables in my study. This seemed to simplify the study and I felt that this might not be such an impossible task after all. The problem now was to choose variables to study.

After this I went to the library and paged through a number of books and journals on women issues. This was time-consuming and I still found it difficult to decide on a specific topic on women. I realised that I needed help in pinpointing specific variables to use. I went back to my lecturer and she recommended that I do a thesis similar to one that was done previously on married graduated women, but to use a different group. I felt very relieved once a topic was identified.

The next problem was to find a group to study. My mother was a social worker and she recommended that I use social workers. They have a body to which they belong and it was possible to obtain a list of their names and addresses from this association. This made my task much easier.

Writing a research proposal was a very confusing task. I knew so little about hypotheses, objectives and how to formulate and define them. I made use of an example and tried to do it in a similar way. This made it easier to do.

Finding literature on the subject was a major problem. So little has been written about the variables, and social workers in particular. It was very difficult to find enough books and articles on the subject. It took a lot of time and effort. Fortunately the contact person in the library was very helpful. It was difficult to decide what literature to include in the proposal and to integrate all the different information.

The proposal was handed in on time, but I waited a long time to get it back. I could not continue, because I was not sure whether it was accepted or not. This created a lot of stress. I felt that a lot of time was wasted. It was a difficult period of waiting and not knowing if my work so far was good enough. I was very relieved when I heard that it was accepted. This motivated me to continue. I was quite eager to continue with the thesis. The proposal was the most difficult part of the work. It was such a novel experience. It took me a long time and a lot of rewriting to complete the proposal. The examples that we worked through in class helped a lot, but it is still difficult to do it on your own.

I phoned a number of social workers in town. I had to find out how many of them were married and if they were willing to participate. They were pessimistic and one could see that they worked hard and did not have time to complete a lot of

questions in questionnaires. I felt quite guilty to ask them to complete the questionnaires. I distributed the questionnaires personally and arranged to collect them at a later stage. This was a difficult part of the investigation. It was difficult to get the questionnaires back. Most of them forgot to fill out the questionnaires, mislaid them, or had not found the time to look at them. In some cases I had to go back as many as four times. I now realise that obtaining data is not the easiest part of research. In fact, is very difficult, because one has to rely on other persons and you are not in control of their actions.

A very nice man at the computer centre helped me to analyse the data. He worked very fast and went to a lot of trouble to help.

I typed the research report myself. This helped a lot because I did not have to find someone to do it for me. It was also cheaper. A thesis can be quite expensive when one thinks of expenses such as telephone calls, petrol, photocopies of questionnaires and binding.

I submitted the report a couple of times. My study leader looked at it and I had to correct mistakes or had to make improvements. Every time it felt as if I started from the beginning, because there were so many mistakes. It was also very difficult to write the chapter on the results. It was difficult to decide which graphs to draw and how to accept or reject the hypothesis.

The honours year was a busy year. There were so many tasks and assignments to complete and hours of psychometric testing. It was difficult to find time for the thesis. The distribution of the questionnaires took a lot of time and I spent hours in the library to find information.

After rewriting the report a number of times and starting from scratch, I finally typed the report and then it was bound. I was really proud of the final product and to see all the typed pages and to know how hard I worked and that the thesis was finally completed.

At times I was quite irritated and frustrated, especially when I felt that there was no progress. At the end of the year I felt stronger and more sure of myself.

To write a thesis is hard work. A lot of research is needed and a lot of reading is necessary. However it is a learning experience, because in every step one learns how things should be done.

## NATURAL MEANING UNITS

- 1 Early in the year we had heard that we were supposed to do a mini thesis and that it was to be completed by a certain date.
- 2 My first thought was: What can I do a study about?
- 3 One can think of an unlimited number of topics,
- 4 ... but to find an appropriate one is difficult.
- 5 One does not know where to start and how to go about finding a topic.
- 6 At that stage I just wanted the whole idea to go away.
- 7 I felt very lonely and unsure of myself.
- 8 The idea of handling all the responsibility was a daunting thought.
- 9 It seemed like an impossible amount of work
- 10 ...and I felt that I was unable to handle it on my own.
- 11 I realised that I had to start somewhere.
- 12 I thought about what I had learned in the third year research methodology course on how to find a topic.
- 13 At least now I had a place to start and ideas on how to go about finding a topic.
- 14 This made me feel more comfortable with the idea of doing a thesis,
- 15 ....although I realised that I still had to do a lot of work in a given period of time.
- 16 In order to find an appropriate topic I looked at previous honours theses.
- 17 It was interesting to see what other students had done
- 18 ... and this gave me ideas on what to do and how to go about doing it.
- 19 Before looking at these theses I had no real conception of the format and content of an honours thesis
- 20 ... and what exactly was expected of me.
- 21 I felt that after looking at them, I had a better idea of what was expected of me.
- 22 Some of the students had done theses on women and I felt that this was an area that interested me personally
- 23 ... and that I wanted to know more about the subject.
- 24 Some of them had also worked on subjects such as role conflict, self-image, self-esteem and job satisfaction and productivity.

25 I spoke to one of my lecturers and she told me that the purpose of the thesis  
is to give us a chance to do an independent study  
26 ...and that I could use only one or two variables in my study.  
27 This seemed to simplify the study  
28 ...and I felt that this might not be such an impossible task after all.  
29 The problem now was to choose variables to study.  
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different group.  
35 I felt very relieved once a topic was identified.  
36 The next problem was to find a group to study.  
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workers.  
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their names and addresses from this association.  
39 This made my task much easier.  
40 Writing a research proposal was a very confusing task.  
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them.  
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44 Finding literature on the subject was a major problem.  
45 So little has been written about the variables, and social workers in  
particular.  
46 It was very difficult to find enough books and articles on the subject.  
47 It took a lot of time and effort.  
48 Fortunately the contact person in the library was very helpful.  
49 It was difficult to decide what literature to include in the proposal  
50 ...and to integrate all the different information.  
51 The proposal was handed in on time,  
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65 The examples that we worked through in class helped a lot,  
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later stage.  
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74 Most of them forgot to fill out the questionnaires, mislaid them, or had not  
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75 In some cases I had to go back as many as four time.  
76 I now realise that obtaining data is not the easiest part of research.  
77 In fact, is very difficult,  
78 .... because one has to rely on other persons and you are not in control of  
their actions.  
79 A very nice man at the computer centre helped me to analyse our data.  
80 He worked very fast and went to a lot of trouble to help.  
81 I typed the research report myself.  
82 This helped a lot because I did not have to find someone to do it for me.  
83 It was also cheaper.

- 84 A thesis can be quite expensive when one thinks of expenses such as telephone calls, petrol, photocopies of questionnaires and binding.
- 85 I submitted the report a couple of times.
- 86 My study leader looked at it and I had to correct mistakes or had to make improvements.
- 87 Every time it felt as if I started from the beginning, because there were so many mistakes.
- 88 It was also very difficult to write the chapter on the results.
- 89 It was difficult to decide which graphs to draw and how to accept or reject the hypothesis.
- 90 The honours year was a busy year.
- 91 There were so many tasks and assignments to complete and hours of psychometric testing.
- 92 It was difficult to find time for the thesis.
- 93 The distribution of the questionnaires took a lot of time
- 94 ... and I spent hours in the library to find information.
- 95 After rewriting the report a number of times and starting from scratch, I finally typed the report and then it was bound.
- 96 I was really proud of the final product and to see all the typed pages
- 97 .... and to know how hard I worked and that the thesis was finally completed.
- 98 At times I was quite irritated and frustrated, especially when I felt that there was no progress.
- 99 At the end of the year I felt stronger and more sure of myself.
- 100 To write a thesis is hard work.
- 101 A lot of research is needed and a lot of reading is necessary.
- 102 However it is a learning experience, because in every step one learns how things should be done.

## THEMES

### Expectations

- 1 Early in the year we had heard that we were supposed to do a mini thesis and that it was to be completed by a certain date.
- 6 At that stage I just wanted the whole idea to go away.
- 7 I felt very lonely and unsure of myself.
- 8 The idea of handling all the responsibility was a daunting thought.
- 9 It seemed like an impossible amount of work
- 10 ...and I felt that I was unable to handle it on my own.

Before the respondent commenced with her research project she doubted her ability to conduct the investigation. She had thought that it would entail an impossible amount of work and she questioned her ability to assume the responsibility on her own. She felt lonely, would have preferred not to do a research project at all. (4a)

### Identifying a phenomenon

- 2 My first thought was: What can I do a study about?
- 3 One can think of an unlimited number of topics,
- 4 ... but to find an appropriate one is difficult.
- 5 One does not know where to start and how to go about finding a topic.
- 11 I realised that I had to start somewhere.
- 12 I thought about what I had learned in the third year research methodology course on how to find a topic.
- 13 At least now I had a place to start and ideas on how to go about finding a topic.
- 14 This made me feel more comfortable with the idea of doing a thesis,
- 15 ...although I realised that I still had to do a lot of work in a given period of time.
- 16 In order to find an appropriate topic I looked at previous honours theses.
- 17 It was interesting to see what other students had done
- 18 ... and this gave me ideas on what to do and how to go about doing it.

- 19 Before looking at these theses I had no real conception of the format and  
content of an honours thesis
- 20 ... and what exactly was expected of me.
- 21 I felt that after looking at them, I had a better idea of what was expected of  
me.
- 22 Some of the students had done theses on women and I felt that this was an  
area that interested me personally
- 23 ... and that I wanted to know more about the subject.
- 24 Some of them had also worked on subjects such as role conflict, self-image,  
self-esteem and job satisfaction and productivity.
- 25 I spoke to one of my lecturers and she told me that the purpose of the thesis  
is to give us a chance to do an independent study
- 26 ...and that I could use only one or two variables in my study.
- 27 This seemed to simplify the study
- 28 ...and I felt that this might not be such an impossible task after all.
- 29 The problem now was to choose variables to study.
- 30 After this I went to the library and paged through a number of books and  
journals on women issues.
- 31 This was time-consuming
- 32 ... and I still found it difficult to decide on a specific topic on women.
- 33 I realised that I needed help in pinpointing specific variables to use.
- 34 I went back to my lecturer and she recommended that I do a thesis similar to  
one that was done previously on married graduated women, but to use a  
different group.
- 35 I felt very relieved once a topic was identified.

Although she dreaded the idea of finding a phenomenon to study, she approached this task in a systematic manner. It was time-consuming, but she was able to complete the task and became more confident as her understanding of what she had to do became clearer to her. She found this task interesting and was relieved once her research phenomenon was specified. (4b)

## Respondents

- 36 The next problem was to find a group to study.
- 37 My mother was a social worker and she recommended that I use social workers.
- 38 They have a body to which they belong and it was possible to obtain a list of their names and addresses from this association.
- 39 This made my task much easier.

She was able to choose a group to study without too much trouble and found this an easy task. (4c)

## Research proposal

- 40 Writing a research proposal was a very confusing task.
- 41 I knew so little about hypotheses, objectives and how to formulate and define them.
- 42 I made use of an example and tried to do it in a similar way.
- 43 This made it easier to do.
- 49 It was difficult to decide what literature to include in the proposal
- 50 ...and to integrate all the different information.
- 51 The proposal was handed in on time,
- 52 ... but I waited a long time to get it back.
- 53 I could not continue, because I was not sure whether it was accepted or not.
- 54 This created a lot of stress.
- 55 I felt that a lot of time was wasted.
- 56 It was a difficult period of waiting
- 57 ... and not knowing if my work so far was good enough.
- 58 I was very relieved when I heard that it was accepted.
- 59 This motivated me to continue.
- 60 I was quite eager to continue with the thesis.
- 61 The proposal was the most difficult part of the work.
- 62 It was such a novel experience.
- 63 It took me a long time
- 64 ... and a lot of rewriting to complete the proposal.
- 65 The examples that we worked through in class helped a lot,

66 ... but it is still difficult to do it on your own.

She found this a confusing, difficult, and time-consuming task, because she had no experience in writing a research proposal. She solved the problem by making use of an example and this simplified the task for her. She feels that waiting for the proposal to be approved created a lot of unnecessary tension and that valuable time was wasted. She feels that she was motivated and eager to continue with the project, once the proposal was approved. (4d)

### **Literature search**

- 44 Finding literature on the subject was a major problem.
- 45 So little has been written about the variables, and social workers in particular.
- 46 It was very difficult to find enough books and articles on the subject.
- 47 It took a lot of time and effort.
- 48 Fortunately the contact person in the library was very helpful.

This was a difficult task for the respondent, because it was difficult to find relevant literature. She does appreciate the help that she received from the library. (4e)

### **Data-gathering**

- 67 I phoned a number of social workers in town.
- 68 I had to find out how many of them were married and if they were willing to participate.
- 69 They were pessimistic and one could see that they worked hard and did not have time to complete a lot of questions in questionnaires.
- 70 I felt quite guilty to ask them to complete the questionnaires.
- 71 I distributed the questionnaires personally and arranged to collect them at a later stage.
- 72 This was a difficult part of the investigation.
- 73 It was difficult to get the questionnaires back.
- 74 Most of them forgot to fill out the questionnaires, mislaid them, or had not found the time to look at them.
- 75 In some cases I had to go back as many as four times.

- 76 I now realise that obtaining data is not the easiest part of research.  
77 In fact, is very difficult,  
78 .... because one has to rely on other persons and you are not in control of their actions.

She experienced a number of problems with this part of her project. Her respondents are busy people and this made her feel guilty when they had to complete the questionnaires. She came to appreciate that data gathering is no easy task and that a researcher needs respondents able and willing to participate in a research project. (4f)

#### **Data analysis**

- 79 A very nice man at the computer centre helped me to analyse our data.  
80 He worked very fast and went to a lot of trouble to help.

She experienced this part of the project as trouble-free. She is very appreciative and thankful for the help that she received. (4g)

#### **Preparing the manuscript for submission**

- 81 I typed the research report myself.  
82 This helped a lot because I did not have to find someone to do it for me.

She found this task easy. (4h)

#### **Budget**

- 83 It was also cheaper.  
84 A thesis can be quite expensive when one thinks of expenses such as telephone calls, petrol, photocopies of questionnaires and binding.

She realised that research is quite expensive. (4i)

## **Research report**

- 85 I submitted the report a couple of times.  
86 My study leader looked at it and I had to correct mistakes or had to make improvements.  
87 Every time it felt as if I started from the beginning, because there were so many mistakes.  
88 It was also very difficult to write the chapter on the results.  
89 It was difficult to decide which graphs to draw and how to accept or reject the hypothesis.

She found this a difficult and time-consuming task. She felt that she was starting all over every time she had to correct something in the report and this was a discouraging task. (4j)

## **Time constraints**

- 90 The honours year was a busy year.  
91 There were so many tasks and assignments to complete and hours of psychometric testing.  
92 It was difficult to find time for the thesis.  
93 The distribution of the questionnaires took a lot of time  
94 ... and I spent hours in the library to find information.  
95 After rewriting the report a number of times and starting from scratch, I finally typed the report and then it was bound.

She was very busy with her studies and found it difficult to find time to work on her research project. Most of the tasks were time-consuming. (4k)

## **Research as a learning experience**

- 96 I was really proud of the final product and to see all the typed pages  
97 .... and to know how hard I worked and that the thesis was finally completed.  
98 At times I was quite irritated and frustrated, especially when I felt that there was no progress.  
99 At the end of the year I felt stronger and more sure of myself.

100 To write a thesis is hard work.

101 A lot of research is needed and a lot of reading is necessary.

101 However it is a learning experience, because in every step one learns how things should be done.

During the research event she sometimes felt irritated and frustrated, but in the end it was worth it. She is proud of her accomplishment and experienced the event as a growth experience. She now feels stronger and more sure of herself. (41)

RESPONDENT 5

Unlike many things at university the honours thesis was not made out to be more difficult than it was. The lecturers told us it would be difficult and difficult it was.

I found it very difficult to work on my own. I think one person working on his/her own will always forget certain aspects or simply be too tired at the end to "polish" the thesis and to present it well. There are always things an individual targets to do that are difficult to pick up on. I had very high standards and refused to accept sub-standard work and arguments. I really suffered to do things as well as I wanted to. I would never recommend that someone takes on a thesis like this on his own. I feel that he would lose sight of the purposes of the project and because of the extreme workload he will take short-cuts just to get it finished and not aim to contribute to the field of research. I was really pressed for time and experienced stress because I refused to do less than my best.

I think that the selection of a topic or research problem is very difficult and obviously very important. The lecturers were a great help here in guiding me to decide on a direction for my research.

Finding a sample to study was difficult as I did not want to use students for my research. Access to an organisation was difficult to obtain. I think the university should approach persons and organisations in need of research and ask what type of research they would like. The university would then present the students with the needs of various persons and allow them to select from these various topics. I had to beg for access. I felt that my efforts did not have a purpose beyond trying to get my degree as it did not have real value to the outside world.

My research leader was a great help and his excellent experience in the research field made the thesis much more thorough. Getting to see him was difficult at times because he was so busy. When I handed in my research proposal the whole thesis seemed to lose momentum because it took so long to get it handed in, evaluated,

handed back, discussed and corrected. I realise, however, that it was a very important part of the thesis and that I had to get it right before going on.

The thesis took up a lot of my time and I spent many nights refining the work. It was particularly difficult for me, working full-time in a new job and then still having to work until 23:00 on the thesis. It goes without saying that as a part-time student I found it difficult to complete the thesis on my own.

I am very pleased with the results of my thesis as it was a great reward for a great deal of commitment.

I cannot lie and say that I enjoyed doing the thesis. I was doing it to get it done. I think the results of the thesis are valuable to research, but was a bonus to me and not my actual goal as it should have been.

I thank the Lord for helping me finish with a distinction, and now that it is done I can and do take pride in it.

## NATURAL MEANING UNITS

- 1 Unlike many things at university the honours thesis was not made out to be more difficult than it was.
- 2 The lecturers told us it would be difficult and difficult it was.
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- 7 I really suffered to do things as well as I wanted to.
- 8 I would never recommend that someone takes on a thesis like this on his own.
- 9 I feel that he would lose sight of the purposes of the project and because of the extreme workload he will take short-cuts just to get it finished and not aim to contribute to the field of research.
- 10 I was really pressed for time and experienced stress because I refused to do less than my best.
- 11 I think that the selection of a topic or research problem is very difficult and obviously very important.
- 12 The lecturers were a great help here in guiding me to decide on a direction for my research.
- 13 Finding a sample to study was difficult
- 14 ... as I did not want to use students for my research.
- 15 Access to an organisation was difficult to obtain.
- 16 I think the university should approach persons and organisations in need of research and ask what type of research they would like.
- 17 The university would then present the students with the needs of these persons and allow them to select from these various topics.
- 18 I had to beg for access.
- 19 I felt that my efforts did not have a purpose beyond trying to get my degree as it did not have real value to the outside world.

- 20 My research leader was a great help and his excellent experience in the research field made the thesis much more thorough.
- 21 Getting to see him was difficult at times because he was so busy.
- 22 When I handed in my research proposal the whole thesis seemed to lose momentum because it took so long to get it handed in, evaluated, handed back, discussed and corrected.
- 23 I realise, however, that it was a very important part of the thesis and that I had to get it right before going on.
- 24 The thesis took up a lot of my time and I spent many nights refining the work.
- 25 It was particularly difficult for me, working full-time in a new job and then still having to work until 23:00 on the thesis.
- 26 It goes without saying that as a part-time student I found it difficult to complete the thesis on my own.
- 27 I am very pleased with the results of my thesis as it was a great reward for a great deal of commitment.
- 28 I cannot lie and say that I enjoyed doing the thesis.
- 29 I was doing it to get it done.
- 30 I think the results of the thesis are valuable to research, but was a bonus to me and not my actual goal as it should have been.
- 31 I thank the Lord for helping me finish with a distinction, and now that it is done I can and do take pride in it.

## THEMES

### Expectations

- 1 Unlike many things at university the honours thesis was not made out to be more difficult than it was.
- 2 The lecturers told us it would be difficult and difficult it was.

The respondent feels that the research paper fulfilled his expectations. It was a difficult endeavour, exactly as he had expected. (5a)

### Time constraints

- 3 I found it very difficult to work on my own.
- 4 I think one person working on his/her own will always forget certain aspects or simply be too tired at the end to "polish" the thesis and to present it well.
- 5 There are always things an individual targets to do that are difficult to pick up on.
- 6 I had very high standards and refused to accept sub-standard work and arguments.
- 7 I really suffered to do things as well as I wanted to.
- 8 I would never recommend that someone takes on a thesis like this on his own.
- 9 I feel that he would lose sight of the purposes of the project and because of the extreme workload he will take short-cuts just to get it finished and not aim to contribute to the field of research.
- 10 I was really pressed for time and experienced stress because I refused to do less than my best.
- 24 The thesis took up a lot of my time and I spent many nights refining the work.
- 25 It was particularly difficult for me, working full-time in a new job and then still having to work until 23:00 on the thesis.
- 26 It goes without saying that as a part-time student I found it difficult to complete the thesis on my own.

Because of the limited time at his disposal, the respondent found it very difficult to execute the project on his own. The effort sapped his energy. He experienced a lot of stress and put in a huge effort to meet his own high standards. (5b)

### **Identifying a phenomenon**

- 11 I think that the selection of a topic or research problem is very difficult and obviously very important.
- 12 The lecturers were a great help here in guiding me to decide on a direction for my research.

He found it difficult to select a research phenomenon, but views this task as important. He was able to obtain guidance and was thankful for this help. (5c)

### **Respondents**

- 13 Finding a sample to study was difficult
- 14 ... as I did not want to use students for my research.
- 15 Access to an organisation was difficult to obtain.
- 16 I think the university should approach persons and organisations in need of research and ask what type of research they would like.
- 17 The university would then present the students with the needs of these persons and allow them to select from these various topics.
- 18 I had to beg for access.

Finding respondents for his project was difficult. He had to beg for access. He was apparently frustrated and humiliated by this problem. (5d)

### **Relationship with study leader**

- 20 My research leader was a great help and his excellent experience in the research field made the thesis much more thorough.
- 21 Getting to see him was difficult at times because he was so busy.

He had a good relationship with his busy study leader who, he feels, was always helpful. He has a good opinion of his study leader. (5e)

## Research proposal

- 22 When I handed in my research proposal the whole thesis seemed to lose momentum because it took so long to get it handed in, evaluated, handed back, discussed and corrected.
- 23 I realise, however, that it was a very important part of the thesis and that I had to get it right before going on.

He came to realise that the research proposal is an important part of a research project. However, he lost some of his enthusiasm and motivation because of the long time it took to get approval for the proposal. (5f)

## Research as a learning experience

- 19 I felt that my efforts did not have a purpose beyond trying to get my degree as it did not have real value to the outside world.
- 27 I am very pleased with the results of my thesis as it was a great reward for a great deal of commitment.
- 28 I cannot lie and say that I enjoyed doing the thesis.
- 29 I was doing it to get it done.
- 30 I think the results of the thesis are valuable to research, but was a bonus to me and not my actual goal as it should have been.
- 31 I thank the Lord for helping me finish with a distinction, and now that it is done I can and do take pride in it.

Apparently the respondent viewed the event negatively and did not experience it as a learning experience. He was disappointed with the outcome of his study and feels that its only value lies in the fact that it helped him to obtain his degree. He never really enjoyed the experience, but only went through it because he had to. However, he feels proud of his achievement, especially in the light of all the commitment it asked for. (5g)

RESPONDENT 6

In order to obtain a clear picture of the impact of the research paper it is important to mention the following. I decided to do my honours over a period of 18 months instead of the normal one year. There are several reasons for this decision:

- \* I wanted to do well academically and I realised that doing a paper as well as the rest of my course work would probably make this impossible. This proved to be a good choice as I did well in my studies and obtained a distinction for my research paper.
- \* I worked part-time and it was difficult to spend as much time on my studies as I would have liked to do. Therefore it was necessary to postpone a part of the work. I decided to postpone my research paper. I had to work on my paper during the evenings or when I wasn't on duty.
- \* In the beginning I was unsure of the topic and I wanted to choose a topic that would later be useful in a work-situation.
- \* I was unsure of the amount of work involved and wanted to ensure that I had enough time to do it properly.

I only decided on a topic in October of my first honours year. We studied learning styles in the psychometric part of our course and I became interested in this topic. Little had been done under South Africa's multi-cultural conditions and I thought that it would really be a contribution to do a study of this nature. I started by doing a library search and I also spoke to the head of the department.

I decided to do a very comprehensive literature review in order to limit literature searches later on and so save time. This worked very well. It really did not take that much time to find literature on the subject. The personnel in the library provided little help and their searches were superficial. Somebody I know at the Bureau for Academic Support helped me to do a comprehensive literature review. It did not take long to find relevant sources. The major problem I experienced was that the literature review was too comprehensive. It was too long and it was difficult to

decide what to include and what to leave out. Sometimes some of the material did not make sense and it was difficult to decide on the order of presentation. It was also difficult to translate the material into Afrikaans and to arrange it chronologically. I set target dates for myself, but it was difficult to keep to them, because of my part-time job and because the literature review took longer to complete than I had anticipated.

The literature review was so comprehensive that it was completed before I handed in my research proposal. I used it almost unchanged for the research report. After the proposal was approved it was only necessary to find a small amount of extra literature to supplement the literature review. This really saved a lot of time. I was very pleased with my literature review and felt that I did a good job.

The next big step was to write a research proposal. The material that we studied in the research methodology courses in the third and honours year helped me a lot, not only with the research proposal, but with all facets of my research. I also made use of the departmental guidelines for writing an honours research paper and looked at papers completed by students in previous years to determine what methods to use and what and how to do it. I had no problem writing the proposal and finding a rationale for the study or in formulating the research question. I did descriptive research and did not formulate a hypothesis. I used a questionnaire. We used the questionnaire in our psychometric training and I knew it well. I must admit that the questionnaire had a direct influence on my choice of a topic. I made use of descriptive statistics and had no problem in deciding what tables and diagrams to use. I have a statistical program on my computer and analysed the data on my own.

One of the biggest frustrations of the whole process was that I had to wait for approximately four weeks for the research committee to approve my research proposal. I handed it in during the examinations and had to wait until after the holidays to get an answer. This meant that I was forced to waste a lot of time. I was frustrated because I wanted to get on with it and finish the paper.

I experienced major problems in gathering the data for my research paper and more specifically with the sample that I used. It was easy to identify the sample (non-traditional students over the age of 23), but very difficult to gather the data. More than half did not live on campus and many of them rarely attended classes. I was

never able to get more than 1, 2, 3, or 4 students together at one time to use the questionnaire. In desperation I visited students at their homes to get them to complete the questionnaire. This was quite expensive and took a lot of time, patience and effort and was extremely inconvenient. If I ever do research in future I will first choose a sample and make sure that they are available before I decide on a topic! In the end I researched between fifty and sixty per cent of the target group. I will make sure that I never land in a similar situation in future.

After the data was processed I wrote a tentative research report. I had to re-write it a couple of times. I believe that this is a normal and necessary part of writing a research report. It gives one time to refine your ideas and get rid of unnecessary material.

I personally typed the research proposal and research paper. A friend edited both. I again followed the guidelines provided and had no difficulty in writing the paper. Unfortunately something went wrong. I think my computer's brain was full or something and it became confused. After the research paper was printed there were fifteen spelling errors in the paper!! This caused me a lot of anguish and I still feel extremely irritated about it.

When I look back on the whole experience I realise that I learned a lot from it, positive as well as negative. I obtained insight into the world of black people and came to realise that we need to adapt our teaching styles to fit their learning styles. During the process it was quite painful and I was really afraid that I would not be able to complete it in time. I now realise that I learned a lot and that I now know how a research project progresses. It differs from what is written in books. I started out by completing my literature review before anything else. I am really sorry about my carelessness in allowing the spelling errors to slip through. My computer should have been one hundred per cent and somebody else should have read it through. I am, however, still proud of my work. I feel that the process prepared me for further studies. I will definitely be prepared for problems, such as data gathering and choosing a reachable sample in advance. I have spoken to students at another university who were not exposed to this kind of experience and they are definitely not as prepared for further studies as I am.

## NATURAL MEANING UNITS

- 1 In order to obtain a clear picture of the impact of the research paper it is important to mention the following.
- 2 I decided to do my honours over a period of 18 months instead of the normal one year.
- 3 There are several reasons for this decision:
- 4 I wanted to do well academically and I realised that doing a paper as well as the rest of my course work would probably make this impossible.
- 5 This proved to be a good choice as I did well in my studies and obtained a distinction for my research paper.
- 6 I worked part-time
- 7 ... and it was difficult to spend as much time on my studies as I would have liked to do.
- 8 Therefore it was necessary to postpone a part of the work.
- 9 I decided to postpone my research paper.
- 10 I had to work on my paper during the evenings or when I wasn't on duty.
- 11 In the beginning I was unsure of the topic
- 12 ... and I wanted to choose a topic that would later be useful in a work situation.
- 13 I was unsure of the amount of work involved
- 14 ... and wanted to ensure that I had enough time to do it properly.
- 15 I only decided on a topic in October of my first honours year.
- 16 We studied learning styles in the psychometric part of our course and I became interested in this topic.
- 17 Little had been done under South Africa's multi-cultural conditions and I thought that it would really be a contribution to do a study of this nature.
- 18 I started by doing a library search
- 19 ... and I also spoke to the head of the department.
- 20 I decided to do a very comprehensive literature review in order to limit literature searches later on and so save time.
- 21 This worked very well.
- 22 It really did not take that much time to find literature on the subject.
- 23 The personnel in the library provided little help and their searches were superficial.

24 Somebody I know at the Bureau for Academic Support helped me to do a  
comprehensive literature review.

25 It did not take long to find relevant sources.

26 The major problem I experienced was that the literature review was too  
comprehensive.

27 It was too long and it was difficult to decide what to include and what to  
leave out.

28 Sometimes some of the material did not make sense

29 ... and it was difficult to decide on the order of presentation.

30 It was also difficult to translate the material into Afrikaans

31 ... and to arrange it chronologically.

32 I set target dates for myself,

33 ... but it was difficult to keep to them, because of my part-time job

34 ... and because the literature review took longer to complete than I had  
anticipated.

35 The literature review was so comprehensive that it was completed before I  
handed in my research proposal.

36 I used it almost unchanged for the research report.

37 After the proposal was approved it was only necessary to find a small amount  
of extra literature to supplement the literature review.

38 This really saved a lot of time.

39 I was very pleased with my literature review and felt that I did a good job.

40 The next big step was to write a research proposal.

41 The material that we studied in the research methodology courses in the  
third and honours year helped me a lot, not only with the research proposal,  
but with all facets of my research.

42 I also made use of the departmental guidelines for writing an honours  
research paper

43 ... and looked at papers completed by students in previous years to determine  
what methods to use and what and how to do it.

44 I had no problem writing the proposal and finding a rationale for the study or  
in formulating the research question.

45 I did descriptive research and did not formulate a hypothesis.

46 I used a questionnaire.

47 We used the questionnaire in our psychometric training and I knew it well.

48 I must admit that the questionnaire had a direct influence on my choice of a  
topic.

- 49 I made use of descriptive statistics and had no problem in deciding what tables and diagrams to use.
- 50 I have a statistical program on my computer and analysed the data on my own.
- 51 One of the biggest frustrations of the whole process was that I had to wait for approximately four weeks for the research committee to approve my research proposal.
- 52 I handed it in during the examinations and had to wait until after the holidays to get an answer.
- 53 This meant that I was forced to waste a lot of time.
- 54 I was frustrated because I wanted to get on with it and finish the paper.
- 55 I experienced major problems in gathering the data for my research paper
- 56 ... and more specifically with the sample that I used.
- 57 It was easy to identify the sample (non-traditional students over the age of 23),
- 58 ... but very difficult to gather the data.
- 59 More than half did not live on campus and many of them rarely attended classes.
- 60 I was never able to get more than 1, 2, 3, or 4 students together at one time to use the questionnaire.
- 61 In desperation I visited students at their homes to get them to complete the questionnaire.
- 62 This was quite expensive and took a lot of time, patience and effort and was extremely inconvenient.
- 63 If I ever do research in future I will first choose a sample and make sure that they are available before I decide on a topic!
- 64 In the end I researched between fifty and sixty per cent of the target group.
- 65 I will make sure that I never land in a similar situation in future.
- 66 After the data was processed I wrote a tentative research report.
- 67 I had to re-write it a couple of times.
- 68 I believe that this is a normal and necessary part of writing a research report.
- 69 It gives one time to refine your ideas and get rid of unnecessary material.
- 70 I personally typed the research proposal and research paper.
- 71 A friend edited both.
- 72 I again followed the guidelines provided and had no difficulty in writing the paper.

- 73 Unfortunately something went wrong.
- 74 I think my computer's brain was full or something and it became confused.
- 75 After the research paper was printed there were fifteen spelling errors in the paper!!
- 76 This caused me a lot of anguish and I still feel extremely irritated about it.
- 77 When I look back on the whole experience I realise that I learned a lot from it, positive as well as negative.
- 78 I obtained insight into the world of black people and came to realise that we need to adapt our teaching styles to fit their learning styles.
- 79 During the process it was quite painful
- 80 ...and I was really afraid that I would not be able to complete it in time.
- 81 I now realise that I learned a lot
- 82 ... and that I now know how a research project progresses.
- 83 It differs from what is written in books.
- 84 I started out by completing my literature review before anything else.
- 85 I am really sorry about my carelessness in allowing the spelling errors to slip through.
- 86 My computer should have been one hundred per cent
- 87 ... and somebody else should have read it through.
- 88 I am, however, still proud of my work.
- 89 I feel that the process prepared me for further studies.
- 90 I will definitely be prepared for problems, such as data gathering
- 91 ... and choosing a reachable sample in advance.
- 92 I have spoken to students at another university who were not exposed to this kind of experience and they are definitely not as prepared for further studies as I am.

## THEMES

### Time constraints

- 1 In order to obtain a clear picture of the impact of the research paper it is important to mention the following.
- 2 I decided to do my honours over a period of 18 months instead of the normal one year.
- 3 There are several reasons for this decision:
- 4 I wanted to do well academically and I realised that doing a paper as well as the rest of my course work would probably make this impossible.
- 5 This proved to be a good choice as I did well in my studies and obtained a distinction for my research paper.
- 6 I worked part-time
- 7 ... and it was difficult to spend as much time on my studies as I would have liked to do.
- 8 Therefore it was necessary to postpone a part of the work.
- 9 I decided to postpone my research paper.
- 10 I had to work on my paper during the evenings or when I wasn't on duty.
- 13 I was unsure of the amount of work involved
- 14 ... and wanted to ensure that I had enough time to do it properly.
- 32 I set target dates for myself,
- 33 ... but it was difficult to keep to them, because of my part-time job
- 34 ... and because the literature review took longer to complete than I had anticipated.
- 79 During the process it was quite painful
- 80 ...and I was really afraid that I would not be able to complete it in time.

This respondent constantly worried about the amount of work involved in the project and that he would not be able to complete his project in time. He was afraid that the quality of his work would suffer because of the limited time available for the project. Because of these worries, the event was painful. He believes that his decision to complete the rest of his course work before doing the research project was a wise decision and that this enabled him to reach his goal. (6a)

## Identifying a phenomenon

- 11 In the beginning I was unsure of the topic  
12 ... and I wanted to choose a topic that would later be useful in a work situation.  
15 I only decided on a topic in October of my first honours year.  
16 We studied learning styles in the psychometric part of our course and I became interested in this topic.  
17 Little had been done under South Africa's multi-cultural conditions and I thought that it would really be a contribution to do a study of this nature.  
19 ... and I also spoke to the head of the department.  
46 I used a questionnaire.  
47 We used the questionnaire in our psychometric training and I knew it well.  
48 I must admit that the questionnaire had a direct influence on my choice of a topic.

Initially he was unsure of what he wanted to investigate. However, it was important to him to make a contribution and to do a useful study. He is honest enough to admit that he constructed his research project around an available research instrument. (6b)

## Literature search

- 20 I decided to do a very comprehensive literature review in order to limit literature searches later on and so save time.  
21 This worked very well.  
22 It really did not take that much time to find literature on the subject.  
23 The personnel in the library provided little help and their searches were superficial.  
24 Somebody I know at the Bureau for Academic Support helped me to do a comprehensive literature review.  
25 It did not take long to find relevant sources.  
26 The major problem I experienced was that the literature review was too comprehensive.  
27 It was too long and it was difficult to decide what to include and what to leave out.

- 28 Sometimes some of the material did not make sense  
29 ... and it was difficult to decide on the order of presentation.  
30 It was also difficult to translate the material into Afrikaans  
31 ... and to arrange it chronologically.  
35 The literature review was so comprehensive that it was completed before I  
handed in my research proposal.  
36 I used it almost unchanged for the research report.  
37 After the proposal was approved it was only necessary to find a small amount  
of extra literature to supplement the literature review.  
38 This really saved a lot of time.  
39 I was very pleased with my literature review and felt that I did a good job.

He was determined to do a good, comprehensive literature study, but was disappointed with the help from the library. He could not accept a superficial review and made use of an alternative source of information. He found it difficult to integrate all the relevant information, but was quite pleased and satisfied with the result and feels that he did a good job. (6c)

### **Research proposal**

- 40 The next big step was to write a research proposal.  
41 The material that we studied in the research methodology courses in the  
third and honours year helped me a lot, not only with the research proposal,  
but with all facets of my research.  
42 I also made use of the departmental guidelines for writing an honours  
research paper  
43 ... and looked at papers completed by students in previous years to determine  
what methods to use and what and how to do it.  
44 I had no problem writing the proposal and finding a rationale for the study or  
in formulating the research question.  
45 I did descriptive research and did not formulate a hypothesis.  
51 One of the biggest frustrations of the whole process was that I had to wait for  
approximately four weeks for the research committee to approve my research  
proposal...  
52 I handed it in during the examinations and had to wait until after the holidays  
to get an answer.

- 53 This meant that I was forced to waste a lot of time.  
54 I was frustrated because I wanted to get on with it and finish the paper.

The respondent was quite comfortable with writing a research proposal. He completed this task with ease, but felt frustrated because of the time he had to wait before the proposal was approved. (6d)

### **Data analysis**

- 49 I made use of descriptive statistics and had no problem in deciding what tables and diagrams to use.  
50 I have a statistical program on my computer and analysed the data on my own.

He experienced no problems with data analysis and is satisfied with the way in which he handled this task. (6e)

### **Respondents**

- 56 ... and more specifically with the sample that I used.  
57 It was easy to identify the sample (non-traditional students over the age of 23),  
63 If I ever do research in future I will first choose a sample and make sure that they are available before I decide on a topic!  
64 In the end I researched between fifty and sixty per cent of the target group.  
65 I will make sure that I never land in a similar situation in future.

He found it easy to identify respondents for his study, but in the end his respondents caused him a lot of anxiety and pain, because he had difficulties in reaching them. (6f)

### **Data-gathering**

- 55 I experienced major problems in gathering the data for my research paper  
58 ... but very difficult to gather the data.  
59 More than half did not live on campus and many of them rarely attended classes.

- 60 I was never able to get more than 1, 2, 3, or 4 students together at one time to use the questionnaire.
- 61 In desperation I visited students at their homes to get them to complete the questionnaire.
- 62 This was quite expensive and took a lot of time, patience and effort and was extremely inconvenient.

He feels that this was the most difficult part of his research and because of the problems he experienced, he became desperate and felt negative. He needed to be patient and had to make alternative plans to gather his data. He experienced the task as inconvenient and a lot of trouble. (6g)

### **Research report**

- 66 After the data was processed I wrote a tentative research report.
- 67 I had to re-write it a couple of times.
- 68 I believe that this is a normal and necessary part of writing a research report.
- 69 It gives one time to refine your ideas and get rid of unnecessary material.
- 72 I again followed the guidelines provided and had no difficulty in writing the paper.

He was positive and patient and aware of the demands of writing a research report and he found this task easy. (6h)

### **Preparing the manuscript for submission**

- 70 I personally typed the research proposal and research paper.
- 71 A friend edited both.
- 73 Unfortunately something went wrong.
- 74 I think my computer's brain was full or something and it became confused.
- 75 After the research paper was printed there were fifteen spelling errors in the paper!!
- 76 This caused me a lot of anguish and I still feel extremely irritated about it.
- 85 I am really sorry about my carelessness in allowing the spelling errors to slip through.
- 86 My computer should have been one hundred per cent

87 ... and somebody else should have read it through.

This part of the research project caused a lot of anguish and irritation for the respondent. He was very unhappy when he picked up the mistakes in his research paper. He is sorry for, and blames himself for, the mistakes in his report and feels that he was careless. He still feels unhappy about this. (6i)

### **Research as a learning experience**

18 I started by doing a library search

77 When I look back on the whole experience I realise that I learned a lot from it, positive as well as negative.

78 I obtained insight into the world of black people and came to realise that we need to adapt our teaching styles to fit their learning styles.

81 I now realise that I learned a lot

82 ... and that I now know how a research project progresses.

83 It differs from what is written in books.

84 I started out by completing my literature review before anything else.

88 I am, however, still proud of my work.

89 I feel that the process prepared me for further studies.

90 I will definitely be prepared for problems, such as data gathering

91 ... and choosing a reachable sample in advance.

92 I have spoken to students at another university who were not exposed to this kind of experience and they are definitely not as prepared for further studies as I am.

The event caused a lot of positive and negative feelings for the respondent. He better understands the problems that respondents face in their studies. He is proud of his accomplishment and feels more confident and prepared to do research in future. (6j)

RESPONDENT 7

I did my honours studies over a period of two years. I work full-time and decided to complete the two year-courses before I do my research project. Because I studied part-time, I had little free time and it was difficult to find enough time and energy to do the project. Because I only worked part-time on it, it was also a problem to get in touch with the contact person at the library. She works office hours. I constantly worried that I would be unable to complete the project in time.

One of the major problems was to find a suitable topic. I read a lot to try and find a topic that hadn't been exhausted. I found that I also continuously thought about a possible sample to use. "Where can I do the research?" was a constant question. There are so few organisations which are willing to accommodate a research project.

I had thought about a possible theme in my third year and in desperation decided to use this. I had a contact person at an educational institution. I found it very difficult to get to know the topic, because most of the references were not available. The articles that I worked through supplied only limited insight into, and information on, the topic. I used the guidelines provided by the department to write the research proposal. I moved through the different steps as set out in the guidelines. This was not too difficult to do. After the research proposal was approved I discussed the proposal with my study leader and corrected the mistakes. I also decided what chapters to include in my research report and what information to include in each chapter. This was easy to do, but it was very difficult to see my study leader on a regular basis, because of my work.

I tried to work according to a plan and to make optimal use of my time. Adapting a questionnaire took a lot of time and effort. It was difficult to do, but I had no other option.

I decided to distribute the questionnaires by hand. The contact person at the college was not available for a long period of time. This really developed into a

serious problem because the teachers were not available during the school holidays and because of the time factor involved. I was very worried and lost a lot of sleep. This drained my energy and influenced my studies. Eventually I was able to reach the contact person and he distributed the questionnaires.

I analysed the data by hand, because I used a small sample. I had to rework the data a couple of times, because the format of the data made it difficult to transform it into tables and graphs. This was frustrating and I really hated to do it. I did not use the statistical methods that I had originally chosen when I wrote my research proposal. The methods that I used in the end were unknown to me and I had to read up on them. This was difficult and took a lot of time. It was also difficult to understand them.

I did not make use of the guidelines in writing the result section of the research report. This caused a lot of duplication, my sentence construction was clumsy and I had to page back and forth in order to find the data. The discussion of the results was also a difficult part of the study.

I also had a lot of problems with typing the research report. My typist wanted enough time to type the report. Somebody else told me that she would do it in a shorter time. This nearly was my downfall. She told me that she would type it in a week. Suddenly she did not have as much time as she had thought. This meant that she had to type it in two days. I only had one evening to read through it and to correct the mistakes. This was so difficult to do! I did not have time to do it properly. It was also impossible to make any drastic changes. I had to draw the graphs by hand. The final piece was neatly done but definitely not faultless. I felt very unhappy about this.

The completion of the research project was definitely a learning experience. The project gave me a basic idea of how to do research and what is expected in research. It was impossible to follow all the steps because in practice things do not always work according to the theoretical framework and because time is such a problem.

## NATURAL MEANING UNITS

- 1 I did my honours studies over a period of two years.
- 2 I work full-time and decided to complete the two year-courses before I do my research project.
- 3 Because I studied part-time, I had little free time and it was difficult to find enough time and energy to do the project.
- 4 Because I only worked part-time on it, it was also a problem to get in touch with the contact person at the library.
- 5 She works office hours.
- 6 I constantly worried that I would be unable to complete the project in time.
- 7 One of the major problems was to find a suitable topic.
- 8 I read a lot to try and find a topic that hadn't been exhausted.
- 9 I found that I also continuously thought about a possible sample to use.
- 10 "Where can I do the research?" was a constant question.
- 11 There are so few organisations which are willing to accommodate a research project.
- 12 I had thought about a possible theme in my third year and in desperation decided to use this.
- 13 I had a contact person at an educational institution.
- 14 I found it very difficult to get to know the topic, because most of the references were not available.
- 15 The articles that I worked through supplied only limited insight into, and information on, the topic.
- 16 I used the guidelines provided by the department to write the research proposal.
- 17 I moved through the different steps as set out in the guidelines.
- 18 This was not too difficult to do.
- 19 After the research proposal was approved I discussed the proposal with my study leader and corrected the mistakes.
- 20 I also decided what chapters to include in my research report and what information to include in each chapter.
- 21 This was easy to do,
- 22 ... but it was very difficult to see my study leader on a regular basis, because of my work.

23 I tried to work according to a plan and to make optimal use of my time.  
24 Adapting a questionnaire took a lot of time and effort.  
25 It was difficult to do, but I had no other option.  
26 I decided to distribute the questionnaires by hand.  
27 The contact person at the college was not available for a long period of time.  
28 This really developed into a serious problem, because the teachers were not  
available during the school holidays and because of the time factor involved.  
29 I was very worried and lost a lot of sleep.  
30 This drained my energy and influenced my studies.  
31 Eventually I was able to reach the contact person and he distributed the  
questionnaires.  
32 I analysed the data by hand, because I used a small sample.  
33 I had to rework the data a couple of times, because the format of the data  
made it difficult to transform it into tables and graphs.  
34 This was frustrating and I really hated to do it.  
35 I did not use the statistical methods that I had originally chosen when I wrote  
my research proposal.  
36 The methods that I used in the end were unknown to me and I had to read  
up on them.  
37 This was difficult and took a lot of time.  
38 It was also difficult to understand them.  
39 I did not make use of the guidelines in writing the result section of the  
research report.  
40 This caused a lot of duplication,  
41 ... my sentence construction was clumsy  
42 ...and I had to page back and forth in order to find the data.  
43 The discussion of the results was also a difficult part of the study.  
44 I also had a lot of problems with typing the research report.  
45 My typist wanted enough time to type the report.  
46 Somebody else told me that she would do it in a shorter time.  
47 This nearly was my downfall.  
48 She told me that she would type it in a week.  
49 Suddenly she did not have as much time as she had thought.  
50 This meant that she had to type it in two days.  
51 I only had one evening to read through it and to correct the mistakes.  
52 This was so difficult to do!

- 53 I did not have time to do it properly.
- 54 It was also impossible to make any drastic changes.
- 55 I had to draw the graphs by hand.
- 56 The final piece was neatly done but definitely not faultless.
- 57 I felt very unhappy about this.
- 58 The completion of the research project was definitely a learning experience.
- 59 The project gave me a basic idea of how to do research and what is expected in research.
- 60 It was impossible to follow all the steps
- 61 ... because in practice things do not always work according to the theoretical framework
- 62 ...and because time is such a problem.

## THEMES

### Time constraints

- 1 I did my honours studies over a period of two years.
- 2 I work full-time and decided to complete the two year-courses before I do my research project.
- 3 Because I studied part-time, I had little free time and it was difficult to find enough time and energy to do the project.
- 4 Because I only worked part-time on it, it was also a problem to get in touch with the contact person at the library.
- 5 She works office hours.
- 6 I constantly worried that I would be unable to complete the project in time.
- 22 ... but it was very difficult to see my study leader on a regular basis, because of my work.
- 23 I tried to work according to a plan and to make optimal use of my time.
- 24 Adapting a questionnaire took a lot of time and effort.
- 25 It was difficult to do, but I had no other option.

The respondent was constantly worried about and frustrated in her efforts to structure her time. She feels that this made the project difficult and she had to wage a constant battle to find the time and energy for her work. (7a)

### Identifying a phenomenon

- 7 One of the major problems was to find a suitable topic.
- 8 I read a lot to try and find a topic that hadn't been exhausted.
- 12 I had thought about a possible theme in my third year and in desperation decided to use this.

She feels that this was a major problem and she became quite desperate in her search to identify a researchable phenomenon. (7b)

## **Respondents**

- 9 I found that I also continuously thought about a possible sample to use.
- 10 "Where can I do the research?" was a constant question.
- 11 There are so few organisations which are willing to accommodate a research project.
- 13 I had a contact person at an educational institution.

Finding a suitable group of respondents was a constant worry to the respondent, because she realised that most organisations are unwilling to grant access to students. (7c)

## **Library search**

- 14 I found it very difficult to get to know the topic, because most of the references were not available.
- 15 The articles that I worked through supplied only limited insight into, and information on, the topic.

She found it difficult to do a literature search, because most of the relevant literature on her topic. She also feels that she only obtained limited insight and information on the topic. (7d)

## **Research proposal**

- 16 I used the guidelines provided by the department to write the research proposal.
- 17 I moved through the different steps as set out in the guidelines.
- 18 This was not too difficult to do.
- 19 After the research proposal was approved I discussed the proposal with my study leader and corrected the mistakes.
- 20 I also decided what chapters to include in my research report and what information to include in each chapter.
- 21 This was easy to do,

Writing a research proposal was an easy task for the respondent. She was able to make the necessary decisions and to use her knowledge to complete this task in a satisfactory manner. (7e)

### **Data-gathering**

- 26 I decided to distribute the questionnaires by hand.
- 27 The contact person at the college was not available for a long period of time.
- 28 This really developed into a serious problem because the teachers were not available during the school holidays and because of the time factor involved.
- 29 I was very worried and lost a lot of sleep.
- 30 This drained my energy and influenced my studies.
- 31 Eventually I was able to reach the contact person and he distributed the questionnaires.

This task generated a lot of negative feelings in the respondent. She viewed the problems that she had to face as serious. She was worried and consequently had sleepless nights. This drained her energy and influenced her ability to attend to her other courses. (7f)

### **Data analysis**

- 32 I analysed the data by hand, because I used a small sample.
- 33 I had to rework the data a couple of times, because the format of the data made it difficult to transform it into tables and graphs.
- 34 This was frustrating and I really hated to do it.
- 35 I did not use the statistical methods that I had originally chosen when I wrote my research proposal.
- 36 The methods that I used in the end were unknown to me and I had to read up on them.
- 37 This was difficult and took a lot of time.
- 38 It was also difficult to understand them.

Data analysis was no easy task for the respondent. She actually hated it and found it difficult and frustrating. She also found it difficult to comprehend what she had to do. (7g)

## Research report

- 39 I did not make use of the guidelines in writing the result section of the research report.
- 40 This caused a lot of duplication,
- 41 ... my sentence construction was clumsy
- 42 ...and I had to page back and forth in order to find the data.
- 43 The discussion of the results was also a difficult part of the study.

She feels that it was difficult to write a research report, and especially some of the sections of the report, and she was apparently frustrated by this time consuming task, because it was difficult to write scientifically. She also feels that it was difficult to integrate all the relevant information. (7h)

## Preparing the manuscript for submission

- 44 I also had a lot of problems with typing the research report.
- 45 My typist wanted enough time to type the report.
- 46 Somebody else told me that she would do it in a shorter time.
- 47 This nearly was my downfall.
- 48 She told me that she would type it in a week.
- 49 Suddenly she did not have as much time as she had thought.
- 50 This meant that she had to type it in two days.
- 51 I only had one evening to read through it and to correct the mistakes.
- 52 This was so difficult to do!
- 53 I did not have time to do it properly.
- 54 It was also impossible to make any drastic changes.
- 55 I had to draw the graphs by hand.
- 56 The final piece was neatly done but definitely not faultless.
- 57 I felt very unhappy about this.

She found this task difficult and frustrating and was very unhappy with the end product. She feels that she was forced to neglect some important facets of this task. She feels that it was neatly done, but is aware of the faults in the report. (7i)

## **Research as a learning experience**

- 58 The completion of the research project was definitely a learning experience.
- 59 The project gave me a basic idea of how to do research and what is expected in research.
- 60 It was impossible to follow all the steps
- 61 ... because in practice things do not always work according to the theoretical framework
- 62 ...and because time is such a problem.

She learned a lot from the event and came to appreciate the demands of actual research. She is more aware of what to expect in actual practice and came to realise that research in practice differs from what is written about it in textbooks. (7j)

**SYNTHESIS OF INDIVIDUAL THEMES INTO THE GENERAL STRUCTURE**

**Theme 1: Time constraints**

Honours students are constantly apprehensive about, and are frustrated in, their efforts to structure and use their time effectively (1k, 2h, 5a, 7a).

They wage a constant battle to find time and energy for the amount of work that they have to do, as most of the tasks that they have to complete are time-consuming (2g, 2h, 4k, 5b, 7a).

They feel that they need to learn how to use their time effectively (1k).

The limited time available in which to complete the research project makes it difficult to work alone and drains their energy (1k, 2h, 5b).

However, by working alone they are in control and involved in every aspect of the research project (1k).

They also note that the quality of their work suffers as a result of the constraints and they feel that it is wise to postpone the research project until the rest of their honours studies has been completed (1k, 2h, 6a).

Target dates and deadlines make them anxious and they are forced to neglect their research in favour of other claims on their time, or vice versa (1k, 2h, 4k).

**Theme 2: Problem solving**

Honours students view the research event as a succession of problems that they have to solve (1g, 4b).

These problems include identifying and delineating a researchable phenomenon, compiling a research framework, gaining access to respondents, writing a research proposal, waiting for the proposal to be approved, gathering data, analysing data, writing a research report, preparing the report for submission and handling expenses (1a, 1b, 1c, 1d, 1f, 1g, 1h, 1i, 1j, 2c, 2g, 3c, 3f, 3i, 3j, 3l, 3m, 4b, 4d, 4e, 4f, 4i, 4j, 5b, 5c, 5d, 5f, 6c, 6d, 6f, 6g, 6i, 7b, 7c, 7d, 7f, 7g, 7h, 7i).

Each problem in turn is experienced as a stressful crisis (1a, 1g, 1h, 1i, 2c, 3c, 4b, 5d, 7b, 7c, 7d, 7e, 7f, 7g, 7h, 7i).

They see the event as frustrating, demanding, daunting, and time consuming (1g, 1h, 1i, 2c, 2g, 2h, 2i, 3f, 4b, 4i, 4l, 5d, 7g, 7h, 7i).

They become irritated, frustrated, disillusioned and pessimistic, especially when they feel that there is no satisfactory progress in their work (2c, 3d, 5f).

Once they solve a specific problem they are motivated and positive about continuing, and more relaxed (1a, 1c, 1d, 1h, 3c, 3e, 3g, 4b, 4d).

Initially they see it as something that they have to do, they are apprehensive and afraid of making mistakes, but as they become more involved and interested, they become more positive (1d, 3e, 4a, 4b).

In the end they are proud of and satisfied with what they have accomplished (1c, 2i, 2j, 4l).

### **Theme 3: Personal growth**

Honours students initially harbour unrealistic expectations of what this novel event entails (1a, 2a, 6a).

They are either overconfident and optimistic, because they perceive research as enjoyable and relatively simple and straightforward, and believe they know what is expected of them, or they feel unsure, unable, and unwilling to become involved in the event (1a, 2a, 3a, 4a, 5a, 6a, 7a).

Those who are unwilling expect that the event will be difficult and doubt their own ability to shoulder the responsibilities of a research project on their own (1h, 1i, 4a, 5a, 7a).

The perceptions of honours students usually change as the research event progresses (1d, 5g).

They experience the decisions and tasks inherent in the research event as difficult and frustrating, because they are unsure of themselves, or because they believe that they do not have the knowledge to execute the endeavour (3a, 3i, 3j, 3l, 4a, 5a, 7a).

They feel that they need support from their study leader, from contact persons in their target organisations, from their respondents and from university support personnel in these decisions and in completing these tasks (1a, 1e, 1h, 3i, 3l, 4g, 5c).

They are disillusioned when the help that they expect does not materialise, but very grateful when they receive help (1a, 1e, 1h, 3f, 4e, 4g, 5c, 5e, 6g).

However, when they are forced to make their own decisions and to use their initiative to overcome their problems, they experience this as a personal revelation (1l, 2g, 3g, 6c).

They discover hidden qualities and strengths in themselves and they experience personal growth (1l, 2j).

In the end they feel stronger and more sure of themselves (1l, 2j).

The event demands hard work from them, but in the end they are proud of their final products and derive pleasure and satisfaction from their accomplishments (1c, 2j, 6j).

They feel that they are rewarded for their hard work (1c, 5g).

They realise the research demands tenacity, determination and commitment (1g, 1i, 1l, 5g).

In the end they feel that they are more informed about their topic and better prepared for future research (1l, 2j, 4l, 6j).

#### **Theme 4: Capacity for understanding**

They experience the event as a learning adventure (1l, 7j).

Honours students quickly come to realise that research in practice and research as described in their textbooks differs notably and they come to appreciate these differences (1l, 2j, 3l, 7j).

They realise that research is not an easy task and that it can be confusing (1l, 2j, 3l, 7j).

Although guidelines help them a lot, they realise that the process does not necessarily progress in a specific, rigid sequence (1l, 2j).

It is sometimes necessary and unavoidable to deviate from the rules of scientific research (1l).

For example, they are afraid that they may not be able to complete the project in time and choose their respondents very early in the event, to make sure of their accessibility (1b, 2h, 3g).

They also have to consider a number of tasks and decisions simultaneously (3g).

They also realise that research is not just a rational process, but that expedient flashes of insight may be of great value (1l)

They broaden their insight into the nature of the event as they get a chance to experience practical research problems personally and feel that they comprehend the event better (1l, 2j, 3l, 7j).

They become more confident in handling the challenges of the research event (1g, 2j, 3l).