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CHAPTER 1: DESCRIBING THE JOURNEY**1.1 *Introduction***

It seems that psychology is facing a crisis in its training model. Bradley (1998, p. 84) stated the following in this regard:

If we are to change the way the sublime leads psychologists to a stance of being above the turbulence of their own subjectivities and of treating others as objects, we must change the way that psychology is taught. The main model of pedagogy in psychology, as in higher education as a whole, is still governed by the sublime, the cult of the expert, wall-to-wall monologue. The aggrandizement of the individual knower, the expert, has as its corollary the almost complete silencing, the passivation of the expert's audience. The learner's highest goal is commonly conceived as being accurately to regurgitate the knowledge that the expert has banked in them.

It is argued later in this chapter and in chapter 2 that teaching research methodology in the social sciences, specifically on an under-graduate level, is facing its own dilemma. This introductory chapter has the purpose of providing the reader with a concise framework of the research that was undertaken in fulfilment of requirements for a doctorate in psychology. To achieve this purpose, several fundamental aspects of the study that was completed are summarised in the sections that follow. These include an overview of the most important issues, in the researcher's opinion, that inform the context in which the topic is located (chapter 2), the theoretical framework in which the researcher positions herself and the topic (chapter 3), the methodology driving the research (chapter 4), the discovery of certain findings (chapter 5) and a discussion that integrates literature, theory and this study's results (chapter 6). The last chapter also contains some proposals for further research in the area. Moreover, the purpose of this chapter is to present the background and rationale of the study. This consists of a discussion of the circumstances that led to the researcher's conceptualisation of the topic and its attendant aspects such as the research problem as well as justifications for particular choices that the researcher made in terms of theory and methodology. Chapter 1 is thus a map that outlines the journey that the researcher followed from start to finish with reasons for choosing the specific followed path. The journey was not unproblematic. There were many forks in the road that the researcher had to choose between, dead-ends where the researcher had to turn back and find a more suitable route, acclivities and declivities, obstacles in the path that had to be overcome and potholes that the researcher attempted to avoid. The researcher takes heart from one of the caveats of critical theory: this document was written to show what *could* be an alternative to the status quo and not what *must* be. It is therefore not the final word on the topic.

1.2 *The research question*

The general topic of this study is related to the sentiment expressed by Tothill and Crothers (1997, p. v) that “[t]here is an important opportunity to be grasped in shaping Social Science research methodology teaching in South Africa for the immediate and long-term future”. Issues related to this statement include curriculum development, quality assurance and accreditation of courses especially through the identification of generic research competencies. As will be described later in this chapter, this study is an attempt to address one part of this major undertaking, namely an aspect dealing with the beliefs that inform the way in which curricula are developed. The research question will be provided at the end of this section, as the reader will first be presented with the context in which the question was formulated. The scope of this study was informed by four dominant factors that the researcher identified as influential in terms of the choice of topic and the subsequent research question that was asked. These four factors are discussed below: political choices in research training, personal (in)experience, the changing context of education in South Africa and past research on methodology courses in South Africa.

1.2.1 *Political choices in research training*

As the reader will encounter in further chapters, the research procedures used by the discipline of psychology cannot escape being characterised as having positivist roots. This foundation has translated into a practice where psychologists follow "a process of research which is pursued by undertaking the careful observation of objectively defined phenomena, by making quantitative measurements of specified variables, and, often by doing so under the controlled conditions of an experiment" (Dyer, 1995, p. 16).

In order to conduct this type of research, psychologists have to be trained in the ways of positivist methods. They must learn how to maintain an objective, neutral stance when doing research, how to define and measure variables, how to perform experiments accomplishing aspects such as control and so on. The alternative paradigms to positivism (some of which are discussed in further chapters) must also feature a training component to familiarise scholars with suitable ways to gather and present information. Describing only these two approaches in social research and placing them as distinctive opposites is not without problems. As Silverman (1993) pointed out, after much criticism of positivism by opponents, "... it became increasingly clear that 'positivists' were made of straw since very few researchers could be found who equated the social and natural worlds or believed that research was properly theory-free" (p. 21). The type of paradigm that students are trained in is, however, not arbitrary as there are specific factors that may influence the choice of theoretical framework, for example political positioning (Popkewitz, 1990), conflict with an existing science (Terre Blanche & Durrheim, 1999b) or being in the midst of several paradigms (Mouton & Joubert, 1990).

Van Staden and Visser (1991) captured a crucial link between curriculum and personal choices made by lecturers, a connection that can probably be applied to more than just statistical content, when they stated that: "[s]tatistical techniques favoured by researchers are likely to be reflected by university curricula in statistical methods" (p. 35). Social scientists are also being challenged on other levels: "[i]n the present

climate of renewal of methodology, researchers are called upon to understand the 'why' of their designs as well as the 'how' for carrying them out" (Polkinghorne, 1983, p. ix). This statement is still relevant today as this study will attempt to explore the extent to which researchers, in their roles as academics, are conscious of these factors and the role that they play in the way they construct their courses. This research thus serves to give recognition to the importance of the context in which training in social science research methodology is provided to students. Even though Silverman (1993) stated that it is meaningless to ask "To what school of social science do you belong?" (p. 22), one of the arguments that will be developed in this study is related to the level of distinction (epistemological or methodological) that informs the curricula of courses in research.

1.2.2 Personal (in)experience

The initial thoughts for this study coincided with my entrance into the life of an academic and my personal (in)experience with teaching at a tertiary level.¹ This experience soon gave rise to questions about undergraduate research methodology courses that remained unanswered. One of the problems with psychology as a discipline identified by Bradley (1998, p. 71) is "the idea that psychology can be lived, taught, and researched without reference to the dynamics of personal experiences for teacher, student, or subject ... ". My issue of concern, in the context of teaching, centred on the task of educating students about psychological research which manifested as an unrewarding and arduous task. I started wondering where I had gone wrong when the students wrote things such as "research methodology was the worst subject of my life" and "why do we have to do this CRAP!" on their evaluation forms. Indeed, Dunn (2000) lamented that "[m]ost courses in the under-graduate psychology curriculum generate student enthusiasm and understanding with ease. Exceptions include statistics and research methods..." (p. 128). She further described the ideas presented in research methodology courses as 'foreign', 'not intuitive', 'difficult' and 'novel'. Terre Blanche and Durrheim (1999a) made a similar statement to Dunn's: "[r]esearch methodology must be one of the most ardently disliked of social science courses ..." (p. v).

These sentiments reflect my own experience (and that expressed by my colleagues) of the negativity amongst students towards research methodology courses. Even authors of methodology texts have tried to correct this situation due to their own encounters with research courses: "[a]s students we experienced some of these frustrations and observed the debilitating effects they have had on our friends ..." (Terre Blanche & Durrheim, 1999a, p. v). The majority of research methodology courses (88,3%) at South African higher education institutions are compulsory (Tothill & Crothers, 1997); when faced with a class full of negative students each year who are not doing the subject by choice, lecturers may experience feelings of inadequacy and helplessness themselves.

When this study was first conceptualised in 1997 two key questions were identified for examination: what are under-graduate students being taught about research methodology in the social sciences and how is

¹ According to Bradley (1998), using the first person singular sets the writer up as the expert over the ignorant on certain topics. This is not the intention in this study. Using the first person allows the researcher to incorporate her experiences and thoughts during the research in addition to the academic description of the process. This also applies to the final chapter where the researcher uses personal terms to describe the reflexive occasions of this study.

this content being taught? I thought that I could kill two birds with one stone: get an academic qualification and solve my teaching problems at the same time. My research question thus became the following: How could I develop a *non-linear* science-practice approach for teaching research methodology that moves away from a *content-based* research methodology curriculum that demands memorisation of knowledge from students for the purposes of assessment and is not sufficient to equip them with the skills of *problem-solving* needed in the practice of research? I thought that changing the content and method of instruction of research courses would result in changing students' attitudes. As Graziano and Raulin (2000, p. 1) stated, "[s]cientists seek answers to their own questions". The study thus limited its scope to searching for answers to the 'what' and 'how' of teaching a research course.

While I was collecting, analysing and interpreting the data I began to realise that I needed to revisit my original research question. The issue at the heart of my findings seemed not to be about teaching research methodology; it is rather about the assumptions and fundamental issues that informed its very nature. I had thus originally not started at the beginning of the problem, but somewhere towards the end. I realised that I could not examine how research methodology is taught if I did not know how academics think about it and how that thinking came to be accepted. Thomas McCarthy (1994) captured this well when he said that critical theory does not wish "to leave to the participants and their traditions the final say about the significance of the practices they engage in" (p. 245). There is a need for "an objectivating 'outsider's' perspective to get beyond shared, unproblematic meanings and their hermeneutic retrieval" (McCarthy, 1994, p. 245). We can create this distance, in the Foucaultian manner, by exposing base origins of social practices "in contingent historical circumstances to dispel their appearance of self-evident givenness by treating them as the outcome of multiple relations of force" (McCarthy, 1994, p. 245). The contexts in which research methodology curricula are constructed thus need to be grasped to enable an account of "how and why purportedly rational practices came to be taken for granted" (McCarthy, 1994, p. 246).

This study is not, however, just an academic exercise to satisfy the researcher's personal quest for academic rewards. The most current literature on teaching research methodology in the social sciences points to the changing nature of our world in terms of its complexity and diversity and how this affects the way in which we search for answers to related problems (Brew, 2003; Tashakkori & Teddlie, 2003). New ways of approaching research problems that relate to the demands of practice need to be explored which are in contrast with the 'either-or' world we coach our students for, that is to be either qualitative or quantitative researchers (Newman & Benz, 1998). This study therefore has implications for the way in which academics position themselves (and their students) in terms of curriculum practice.

1.2.3 The changing context of education in South Africa

George (1997) stated the following about education: "There is a fundamental philosophical shift in curriculum policy, practice and evaluation because of its unrelenting focus of what students have learned rather than on what systems and schools have provided and teachers have taught" (p. 3). Schwab (in Schubert, 1986) argued for moving away from curriculum inquiry based on the theoretic paradigm, that is

concentrating on *what* a curriculum should be like, to a concern for *how* curriculum inquiry should proceed. As discussed in a later chapter, changing international trends in higher education have made their mark on South African policy. This means that tertiary institutions will have to adjust the way in which they deliver education to future generations of South Africans. According to Scott (1997, p. 23) "...the knowledge industry is a key sector within the post-Fordist economy, and higher education systems are a key component of that industry". Post-Fordism (or neo-Fordism as Robins and Webster (1999) prefer calling it because of the continuing similarities with its preceding era²) is characterised by features of globalisation and concepts such as skills and knowledge, inter-sectoral co-operation, flexibility and so on. Robins and Webster (1999) argued that this new context is driven by socio-economic imperatives which means that the structure and content of higher education will have to be linked to the requirements set by industry to train workers who will cope in this environment.

As is described further on in this manuscript, many of these features have made an appearance in documents released by government departments tasked with transforming the education sector in South Africa. For example, the National Commission on Higher Education (1996, p. 7) stated that "[h]igher education institutions will increasingly have to offer a greater mix of programmes, including those based on the development of vocationally-based competencies and skills needed in the workplace". In particular statements have been made about the role that (social science) research should play in achieving the government's goals. This citation from the White Paper on Science and Technology released by the Department of Arts, Culture, Science and Technology illustrates the point:

The dramatic political changes in South Africa over the last few years provide a unique opportunity for social renewal in respect of our value systems, the role of the individual in society and with respect to the state. We will need new knowledge to assist us consolidating democracy, the protection of human rights and the accountability of public authorities in South Africa. Ongoing policy research in areas such as health care, education and employment creation, which are central to improving the quality of life of millions of poor South Africans will also require the active and continuing involvement of social scientists. South Africa needs to clarify the relationship between central and provincial levels of government in practice. Resolving the inherent tensions in any such system will require creative thinking about mechanisms and processes for which there are few, if any, existing models (<http://www.gov.za/whitepaper/1997/sc&tecwp.htm>).

This policy statement implies that the social sciences have not been making the kind of contribution that is necessary to effect the transformation in South African society that the government requires and that this should change. Tothill and Crothers (1997) asserted that this situation could be remedied by improving the class of education received by students in the social sciences, as future researchers.

² According to Robins and Webster, a working environment of mass production and repetitive actions marked the period of Fordism. This is in stark contrast to the post-Fordist era where workers have to deal with constantly changing problems.

1.2.4 Past research on methodology courses in South Africa

Although much literature has been dedicated to assumptions underlying the construction of school subjects (e.g. see Young, 1990), higher education has received relatively less attention. Some attempts have been made to theorise about the topic of teaching research specifically, such as Hoshmand's (1989) lengthy article in which she outlined the merits of including alternate research paradigms in the curricula of methodology courses. She also provided guidelines on how these courses should be taught by discussing content sequence and structure, outcomes, instructional resources and so on. Others such as Lowe (1992) and Richardson (1996) also raised the quantitative versus qualitative research debate when they addressed the need to support more teaching in qualitative approaches. Feminists have probably been the most vocal group of academics advancing a united voice about changing the curriculum to include alternate ways of doing research, usually referred to as post-positivist (e.g. see Bozalek & Sunde, 1993/4).

Most of the research cited above has been published in the international context. A gap remains in information for the South African context. Some attempts have been made to fill this gap such as the research conducted in 1997 by the Centre for Science Development on methodology courses in South Africa. Although Tothill and Crothers' (1997) report covered under-graduate and post-graduate courses at universities and technikons, there is enough differentiation between these categories in most cases to make the results relevant to this study. No specific findings were highlighted about psychology; nevertheless the following information about research courses in the social sciences can be foregrounded:

- There were at least 195 methodology courses at universities at the time of the research. Most of these courses (95) were presented at the fourth year level. More courses were presented at historically white universities (HWUs) than at historically black universities (HBUs) especially at the third year level (27 compared to 30) and fourth year level (34 compared to 61).
- Staff to student ratios in methods courses were most favourable at HBUs.
- Courses were not always devoted to methodology alone, but were mixed with other topics (almost 50%). Sociology, communication and social work departments tend to be the disciplines that present courses solely on methodology.
- Common topics taught across disciplines and institutions were literature review, conceptualisation, research design, data collection, data analysis and report writing.
- Additionally, courses offered some coverage of South African content, interdisciplinary content, quantitative and qualitative methods, meta-theoretical coverage and research ethics. Two aspects that received either no coverage or little to some coverage were apprenticeship/mentoring of students and community involvement.
- Only a quarter (358) of the social scientists in academic departments (approximately 1400) perceived themselves to be experts in methodology. The most experts in a discipline were from anthropology departments (70.04% of staff) while the least hail from political science and public administration (20.85% of staff). Psychology is ranked sixth on this list with a percentage of 38.07 of staff considering themselves to be specialists in the field of methodology. Tothill and Crothers also found

that less than 50% of the academics teaching methodology were conducting research into this area at the time of the study.

- HBUs were more likely to nominate their courses as barely adequate (42.9%) compared to HWUs (12.3%). This perception was reversed with the description of 'adequate' being chosen by 59.30% of HWUs in comparison with 40.80% of HBUs choosing this option. It seems that one of the aspects that determined the evaluations that departments made of themselves was the quality of their staff (mentioned by 40.70% of universities of which 25% were HBU departments and 15.70% HWUs).
- Although the study did not include any student feedback on research courses a question was asked about the content that students find problematic. Statistics and writing skills were on top of the list while disciplines training future professionals reported student opposition to methodology courses in general. It is ironic that the report points out that the skills that students need most in the workplace are those that they experience difficulties with.
- Other aspects of education that had an effect on the level of content that could be presented to students were the numeracy, literacy and information technology skills of learners. The dialectic between theory and practice was also a point of difficulty for students.
- Participants believed that an improved information technology infrastructure would lead to better quality teaching in research courses.
- The lack of research culture in general at some institutions or within individual departments put a damper on methodology training in general.

These findings are useful for providing a general picture of research methodology teaching at tertiary institutions throughout South Africa, but lack detail on specific content provided by departments (although this information was probably available from the questions asked, it was not reported on at any length). Noteworthy conclusions about psychology itself were also lacking. This study could thus update and complement this information in order to develop a national strategy for addressing under-graduate research methodology teaching.

Landman (1990) examined the literature on research methodology available at the time of preparing for her PhD thesis and came to the conclusion that as researchers were being given a wider choice in how to do research, that is not only positivistic criteria, the following should be included in research training: science of philosophy needed to justify different research approaches, collecting, analysing and interpreting quantitative and qualitative data, combining quantitative and qualitative data, research designs, hypothesis formulation and testing, grounded theory formulation, conceptualisation, logical verification of arguments and phenomenological verification of research actions. She did not, however, specify the group of students that this training should be formatted for, but concluded that any researcher in the educational field should be well versed in the various philosophies of science and research traditions and be able to practice them in a competent manner. It thus seems that developing dualistic training in research methodology (discussed in later chapters) has already been suggested for South African higher education more than a decade ago.

In a series of articles, Botes, Van Rensburg and Groenewald (1991), Groenewald (1991), Oosthuizen (1991) and Van Staden and Visser (1991) raised issues about the type of design employed by

researchers who had published in the *South African Journal of Sociology* (SAJS). Although the initial study conducted by Van Staden and Visser was critiqued by some of the contributors mentioned above, the two researchers drew some interesting conclusions. They postulated that, as most sociology students with a first degree were conversant in basic statistical techniques, they would be able to understand 75% of the research methods that were employed in the articles of the SAJS. Not so for highly regarded international journals, however, where they estimated that approximately 20% of the articles would not be understood by students who had not received training in advanced statistics. Following this deduction they advised that a "thorough referencing of local curricula against research methodology courses presented in the social sciences at universities in the United States and Europe seems called for in order to protect local standards of research" (Van Staden & Visser, 1991, p. 41). Comparisons between the content of research courses and the techniques preferred by national and international researchers should also be carried out (Van Staden & Visser, 1990).

Two of the explanations Van Staden and Visser (1990) provided for the lack of use of advanced statistical analysis in the research published in the SAJS are of relevance to this study: (1) researchers and lecturers may not be well versed in advanced statistics and thus would probably not use or teach them, and (2) social scientists may be adopting paradigms that encourage qualitative approaches and therefore use methods that reflect this trend. They rejected the second explanation, however, as not many of the articles dealt with qualitative methods. Oosthuizen (1991) concurred on the point that sociologists lack skills in statistics and therefore avoid teaching them, but also added to these reflections by suggesting that sending students to receive statistical training from statisticians worsens this situation as the content of these courses is removed from the practical world in which the sociologist works.

The authors published similar articles in the *South African Journal of Psychology* (SAJP) (Van Staden & Visser, 1990; Visser & Van Staden, 1990) and the *South African Journal of Science* (Van Staden & Visser, 1992). They postulated that there was a fair overlap between research methodology curricula and the topics being reported on in the SAJP, but that psychology students would only understand 60% of the statistical methods that were used, extending this figure to 76% if the content included the field of reliability and validity coefficients. Qualified psychologists are in the same position as sociologists when it comes to understanding methods used in international literature (Visser & Van Staden, 1990). Although this research provides a picture of the trends in research methodology at the time (even though skewed towards quantitative approaches and statistics [Botes et al., 1990] and representative of only a small number of social scientists), the study was conducted more than a decade ago and thus a more current investigation would be necessary to have a major impact on the direction of this study.

Furthermore, little seems to be known about the inherent assumptions social scientists/lecturers have about research and the influence this has on the way they construct under-graduate research methodology courses in South Africa, especially with the changes in higher education policy as described above. It is therefore hoped that this study can make a contribution to this body of knowledge.

Given the three influencing factors above and my earlier reflection on the research question, the research evolved into a quest for understanding not only what is included in the curricula of under-graduate

research courses, but also to uncover why the individuals constructing the courses include and exclude certain content. As Brew (2003, p. 9) argued “[a] heightened knowledge about the ways in which academic researchers conceptualise research and scholarship throws new light on the relationship between teaching and research”. The research question became: What do the curricula of research methodology courses look like and what are the beliefs held by academics that inform the way in which they think they should or should not construct under-graduate research methodology courses?

Some sub-questions are:

- Can specific beliefs be linked to certain profiles of research courses?
- Are there particular social, economic or political forces affecting the beliefs?
- Do these beliefs contribute to some sort of status quo being upheld?
- Do the beliefs reflect changes in social research in South Africa?
- Are there better beliefs that could inform the construction of courses?
- Are there alternative ways of shaping research methodology curricula?

With these questions in mind, a theoretical framework that would be conducive to explaining the answers was needed. In the section that follows a brief introduction to critical theory is provided.

1.3 ***Theoretical stance***

Critical theory was chosen as the theoretical framework for this research for two reasons: (1) it has been previously been applied to the field of education (e.g. see Carspecken, 1996; Carspecken & Walford, 2001; Freire, 1970; Popkewitz, 1987; Popkewitz, 1991; Popkewitz, 2000; Schubert, 1986; Young, 1990), and (2) aspects of the theory coincide with the researcher's worldview. Also, it is the researcher's stance that the social, cultural and economic conditions that impact on the construction of curricula are best examined by a critical social science. I draw on Popkewitz's (1990) definition of critical as being an approach that "considers the conditions of social regulation, unequal distribution, and power" (p. 48). In educational research a critical approach explores the conflicts and tensions in an academic setting and links them to broader issues in knowledge production as regulated by society. This theoretical approach will allow the socially constructed character of what is conceived to be legitimate knowledge to be deconstructed, and considers how that knowledge is ordered and obtained in the field of research methodology.

By using critical theory, distortions and contradictions within these social practices can be shown and thus highlight the way in which power is circulated in higher education:

[i]t is clear ... that any 'regime of truth' involves privileging certain types of discourse, sanctioning certain ways of distinguishing true from false statements, underwriting certain techniques for arriving at the truth, according a certain status to those who competently employ them, and so forth (McCarthy, 1994, p. 253).

These regimes are usually not apparent social realities. They are held in place by conditions that lie deeper than what is evident on the surface, thus prompting critical theorists to search for the maintaining underlying mechanisms. If it is accepted that social reality has more than one layer and furthermore that people are not aware of the deeper structures that govern their lives, it can be said that they accept the way in which society functions. Critical theorists refer to this as a false consciousness and propose that this functions to reproduce the current state of affairs that benefits powerful individuals or groups. Social reality is thus problematic in certain cases as it oppresses people who are not privileged. Critical theory goes further than exposing, and therefore making people aware of, the taken-for-granted, the established order, the status quo, to propose alternative actions that people can take in order to transform their social reality. Specific to this study it is important to examine and study the assumptions on which curriculum development is based as our paradigms support and sustain what we base the transmission of knowledge on (Brew, 2003; Chin & Russo, 1997; Schubert, 1986).

Although this study adheres to some general principles outlined by a critical theory, the researcher identifies with the unease expressed by the earlier Frankfurt School concerning the rise of instrumental reason and the control of society that this type of philosophy entails. Roderick (1986) captured this idea succinctly: "... the ever-expanding application of science and technology (grown increasingly interdependent) made possible the domination not only of external nature, but of society and the inner nature of individuals as well" (p. 36). For Marcuse (1964) this signified an ideology³ where calculation, standardisation, manipulation and instrumentalisation of nature and people are paramount. In this ideology, technology has the answer to any problem facing humankind, a viewpoint known as technocentrism (Smith, 1998)⁴. This citation from Robins and Webster (1999) aptly illustrates the researcher's worldview: "[m]odern society is fixated by the idea of progress, growth and development without end, and by the power of instrumental reason to achieve this dream" (p. 151). This technological ideology seems to be included in current thoughts on the type of people organisations should employ in order to survive in the changing world economy. Although it will be suggested at the end of this study that future research should concentrate on the demands that the workplace and society place on students in terms of their research skills, a scepticism of unquestioningly accepting a technological ideology should remain steadfastly in place.

³ French philosopher Destutt de Tracy first used the term ideology in 1796. Marx and Engels extended the idea in their work entitled *The German Ideology*, which they wrote between 1845-47, but as Foster (1991) noted, there are many different strands of theorising about the concept. The definition of ideology that will be used in this study is both general – it "refers to widespread ideas, values, representations and practices which serve to legitimise and maintain the social order" (Foster, 1991, p. 18) – and critical meaning that it maintains "uneven relations and distribution of resources and power in society" (Foster, 1991, p. 348). Thus, the basis of the theoretical stance is the milieu that individuals have been socialised in as well as how the systems and practices of this environment uphold established inequalities in people's lives.

⁴ It is ironic that some people believe that technology is the answer to solving the problems that humans created in nature when they implemented advanced technologies for the benefit of humankind. For example, fishing trawlers that could catch bigger yields were built resulting in rapidly declining populations of fish and further ecological disasters. Currently cutting edge equipment is used in many parts of the world to measure the size of fish populations so that the number of fish caught can be controlled and so give them a chance to recover.

1.4 Aim of the study

This study is positioned as a descriptive and exploratory undertaking that will uncover the nature of under-graduate research methodology courses and the beliefs underlying their current structure. The general aim of the study is to gain a picture of under-graduate research methodology courses in order to make suggestions about transformative actions that can be taken to improve the status quo. My assumption can thus be articulated as follows: under-graduate research methodology courses at South African universities are in need of change. This statement is based on my personal experiences and theoretical convictions, as well as previous research conducted in the South African context as discussed above. The aim of the study needs to address the two issues identified, which can be summarised as an exploration of the path to transformation of under-graduate research methodology courses. The two objectives discussed below are based on the contribution that this study can make to fill the gaps identified in current literature dealing with higher education and specifically the teaching of social science research methodology in the context of social change on a grand scale in South Africa.

1.4.1 Objective 1

The first objective of this study is to collect adequate information on the current content included in under-graduate research courses at South African institutions of higher education, specifically universities. This step is necessary to provide a foundation for formulating questions in order to proceed to the next objective, namely uncovering and questioning the assumptions held by academics regarding social research. Certain limits of scope were placed on objective one. Firstly, because this study is located in the broader field of the social sciences and humanities⁵ only those courses that fall within these academic faculties were targeted. Although psychology is the specific discipline in which this study is being completed, I decided to broaden the scope of the research to include all disciplines in the social science and humanities. There are five reasons for the broader scope:

- (1) Data were available for all social sciences and humanities on the NRF's Nexus database and therefore made the researcher's attempt to describe events on a large scale possible in order for the study to be worthy of a doctoral qualification.
- (2) Psychology is not the only discipline to be affected by major social change in South Africa.
- (3) Tothill and Crothers' (1997) finding of an overlap of 75% in the core curriculum of methodology courses as reported in section 2.4, which allows the researcher to make the assumption that

⁵ It is acknowledged that there is much debate about the definition of social sciences versus humanities and which disciplines constitute each of these categories. The rule of thumb that was applied in this study was to include as many disciplines as possible in either the humanities or social sciences faculties depending on the term used by individual tertiary institutions. In some cases a discipline traditionally included in the social sciences or humanities faculty is placed in other faculties such as the health sciences. Care was taken not to exclude such cases.

psychology will not differ radically from other social sciences in terms of the choices lecturers make about content⁶.

- (4) Tothill and Crothers also found that research training is interdisciplinary in some cases, therefore rendering psychology one of the many disciplines that contribute towards the content of courses. It would therefore be difficult to single out the role that psychology plays at all times in deciding the content. Also, trends towards interdisciplinary co-operation will become increasingly common.
- (5) The researcher's personal issues about the positioning of research methodology in the discipline of psychology (this will be expanded on in the final chapter).

The third reason given above does not imply a comparative study of the extent of change in psychology in relation to other social sciences. Certain arguments are made in this manuscript that psychology has been particularly loath to transform the way in which it studies human behaviour (Polkinghorne, 1992), and as such it may be able to learn from its sister disciplines, hence the title of the study. It is the researcher's contention that psychology should be on the forefront of changes to research methodology training in the social sciences as "human issues are often left behind in the stampede to celebrate the supposed liberatory virtues of technology-carried knowledge activities" (Muller, 2000, p. 45) in the knowledge-driven era that we are living in today. Psychology is in a position to ensure that the social and psychological aspects of individuals are not excluded from this trend. From an analysis of the data collected in this study, suggestions can be made for improving the way in which curricula are constructed.

Secondly, to control the magnitude of this study only universities were chosen for inclusion. This refers to both historically white (or advantaged) and historically black (or disadvantaged) tertiary institutions that refer to themselves as universities according to the Higher Education Amendment Act (2001). The term under-graduate is used to refer to courses that conform to level 7 of the South African Qualifications Authority's descriptors for higher education. In some cases this included courses consisting of four years of study if they are still considered under-graduate by their individual departments⁷. The reader may ask why this research focuses on under-graduate and not post-graduate courses when it is usually in the latter courses that students are prepared for a career in research (Tothill & Crothers, 1997). It is also at a post-graduate level that students are expected to be able to do independent research. The counter-arguments made by the researcher are that (1) it is at the under-graduate level that students first encounter research methodology and thus form their first impression of the subject⁸, (2) very few students progress to the post-graduate level and therefore the majority of students practice their discipline using the knowledge they gain in a first degree, (3) the requirements contained in government policy on higher education require under-graduate students to have a certain level of research proficiency, and (4) it is mostly at an under-graduate level that the researcher has encountered problems in the research courses,

⁶ Not all social scientists would agree with this. Botes et al. (1991, p. 51), for example, insisted that "differences in the nature of the two disciplines [psychology and sociology] have much to do with the different approaches in research" and thus the extent to which certain research designs are used psychology, sociology, education and so on cannot be compared.

⁷ A justification for including fourth year courses in this study is the finding in the Tothill and Crothers report (1997) that most methodology courses are taught at fourth year level (out of a total of 195 courses from first year to fourth year, 95 courses are on fourth year level compared to 16 in the first year, 27 in the second year and 57 in the third year).

⁸ Participants in Tothill and Crothers' (1997) research recommend introducing students to research as early as possible.

as discussed earlier. The target group for this study is thus limited to research courses presented to under-graduate social science students.

1.4.2 *Objective 2*

The second objective of this study is to collect information about the assumptions on which academics base the way in which they construct research courses. To this end, participants who were willing to partake in the study - either through face-to-face interviews or electronic format - answered questions formulated by the researcher in an interview guide. The same principle argued in objective one (including all social science disciplines) was applied for selecting a sample. The researcher attempted to gain as much diversity as possible by targeting universities in the historically advantaged and disadvantaged categories and in different geographical regions, as well as those whose training models and courses represent a variety of topics. The ability of the participant to provide the researcher with adequate information about the construction of the course was also a requirement.

The research design that was used to achieve the two objectives presented above is discussed in the section that follows.

1.5 *Methodology*

The two objectives set out above informed the research design for this study. The objectives translate neatly into two phases that are used to approach the broader research question. Both quantitative and qualitative methods are incorporated in this research in order to adequately address the research question. The purpose of using both types of research is not for one to complement the data gained from the other or to achieve validity through multiple methods triangulation. Rather, it is argued in the methodology chapter that the ontological level (critical realism) indicates two types of data: one set that maps an external reality and another set that describes the interpretation of this reality. A quantitative method will be used in the first case and a qualitative in the second. It is argued in the chapter on the research design that criticalists⁹ following a Habermasian approach to research (Habermas, 1971) would not reject this modus operandi as some critical theories embrace theoretical and methodological pluralism.

Phase one addresses the need stated in the first objective, that is to gain a description of current under-graduate research methodology courses. The research conducted in phase one was on a large scale making use of a survey design in order to include as many research methodology courses as possible. The information that was gathered from the NRF's Nexus database and mainly telephonic conversations with academics was entered into an Excel spreadsheet. The data were analysed and reduced on a descriptive level.

⁹ This is a term for critical theorists used by some authors such as Hook (2001) to signify people who work in the critical political realm. The two terms will be used interchangeably in this study.

Phase two allowed the researcher to make a selection of the surveyed courses so that the questions arising from phase one could be put to academics. Gerson and Horowitz (2002) succinctly accentuate the need for conducting interviews in phase two:

To unravel the complexities of large-scale social change, it is necessary to examine the intricacies of individual lives. Individual interviews provide the opportunity to examine how large-scale social transformations are experienced, interpreted, and ultimately shaped by the responses of strategic social actors. Macro-social trends thus provide the starting point for formulating a research problem. The empirical puzzles they raise, however, can be solved only by examining micro-social processes as they unfold in the lives of individuals (p. 201).

The individuals in this case are the academics who construct and lecture under-graduate research courses.

1.6 *Structure of the content*

The study is set out in six chapters including the introduction that has been presented above. Chapter two contains a discussion of the context in which research methodology training in the social sciences takes place. This includes a historical overview of the circumstances in which the social sciences, and particularly psychology, developed and the impact that this has had on the content of research methodology courses. A treatise on the current trends in South African higher education follows the analysis of the past. It is argued that the international focus on globalisation and massification of education has had a major impact on current government policy. Some of the implications of the statements made in policies for under-graduate research methodology training are indicated in the chapter. The paradigm of choice for this study, critical theory, is outlined in chapter 3. It is recognised, however, that there is no unifying critical theory (Kincheloe & McLaren, 2000) and as such the researcher uses some of the general principles of the theory for guidance.

Chapter 4 describes the research design that was used in this study. This chapter begins with some reflections on research within a critical theory framework, including a discussion of the justifications for using plural methods. Thereafter, the two phases of the research are described. The first phase in itself consists of four phases of data collection that together provide a detailed description of how the survey of the content of under-graduate research courses was conducted. This includes information on how the departments were contacted and how the gathered data was structured and analysed to provide insights that would inform the next phase of the research. The value of this phase of the study is twofold: firstly a database was constructed that contains the content of all the surveyed courses, including the frequency of topics; and secondly a diagrammatic profile of individual courses was drawn up. The second part of the chapter provides an outline of the way in which the interviews were conducted. Four approaches to interviewing are distinguished to set the scene for a general discussion on a critical theoretical approach. The rest of the chapter contains a description of how the sample was selected and how the data from the

interviews were analysed using a critical hermeneutic approach based on guidelines provided by researchers such as Carspecken (1996), amongst others. Thoughts on the meaning of the validity and reliability of this research conclude this chapter.

In chapter 5 the results of both phases of the study are presented. Phase one consists of an overview of the content presented in all the research courses included in the study. Frequency tables are used to illustrate the content and the data is further reduced using Strauss and Corbin's (1990) conditional matrix idea. A brief discussion of some applicable literature is also provided. In summary some suggestions are made for further points of enquiry. This is followed by the results of phase two where the sample that was interviewed is described and the themes that were generated from the data are displayed.

The way in which the methodology and results chapters are structured do not follow the order in which the research was conducted. The planning of the research design, collection of data, analysis and interpretation of the results for phase one were completed before phase two could commence. The first parts of chapter 4 and 5 could therefore be read as a unit. The researcher decided, however, to keep to the conventional structure of a thesis by placing methodology and results in separate chapters to 'fit into' the community of academia in terms of the suitability of the layout of a thesis. By saying this the researcher would like to indicate to the reader that her position on the research process is that it does not follow a linear sequence as many textbooks portray. This will be discussed further in chapter two.

The final part of this study, chapter 6, contains the discussion of the results in terms of the literature and theoretical position set out in chapters two and three. The main beliefs held by academics about the reasons they construct their courses in certain ways are questioned. This chapter also includes a plan for further research informed by the results of this study, as well as some personal reflections on the reciprocal interplay between researcher and research.

1.7 Conclusion

In this chapter a framework was provided of the contents and structure of the study. The reader was presented with some of the arguments and ideas that informed the general direction that the researcher chose for answering her research question. The research question (What do the curricula of research methodology courses look like and what are the beliefs held by academics that inform the way in which they think they should or should not construct under-graduate research methodology courses?) was informed by four factors - political choices in research training, personal (in)experience, the changing context of education in South Africa and past research on methodology courses in South Africa. The material presented in this chapter briefly exposes the steps taken by the researcher on the path that she mapped out for approaching this project. The researcher now invites the reader to follow her further down the path, to stop and take time to look more closely at certain aspects of this study along the way so as to understand how the researcher reached her final destination (as there may be many other paths

that lead to many other destinations). Chapter 2 follows with an exploration of the context in which undergraduate research methodology courses are taught in the social sciences.