

CHAPTER 1

ORIENTATION AND SCIENTIFIC BACKGROUND OF THE RESEARCH

The aim of chapter 1 is to introduce to the reader the general and specific objectives of this research. The first part of this chapter will provide background to the research problem and motivate why this study is both important and relevant. This will be followed by the formulation of the research questions, literature and empirical aims of the study. The paradigm perspective, foundations of the research design and research method will also be presented. The chapter will conclude with a brief format of chapter flow.

Work stress, associated with the profession of medicine, and its consequences and implications for the quality of health care has received a great deal of media attention in recent years. With reference to occupational functioning and the relationship of stress to illness and injury, researchers focusing on junior hospital doctors have reported positive correlations (Graham & Ramirez, 1997; Gerrity, White & De Vellis, 1995; Guthrie, Black & Shaw, 1997; Lingenfelser, Kaschel & Wehaiser, 1994; Mathers & Gask, 1995; McCue, 1986; Richardsen & Burke, 1991; Ullrich & FitzGerald, 1990; Wolf, 1994). According to Graham and Ramirez (1997, p. 229), the way in which hospital consultants respond to stress at work seems to be related to their mental health. It is also a commonly held assumption that major changes in humans' lives are linked to stress emotions and coping efforts to adapt to the new circumstances (Lazarus & Folkman, 1984a). The inherently stressful work of medicine, coupled with the life-changing introduction of compulsory community service, is expected to make the compulsory community service year a trying one for junior hospital doctors.

From an industrial psychological perspective, this research is an attempt to unravel the experiences of South Africa's first set of community service doctors in terms of the aetiology, symptoms and manifestations of this experience with

specific focus on the role that salutogenic personality constructs play in coping with stress and burnout.

1.1 BACKGROUND AND MOTIVATION OF THE RESEARCH

Formerly, the requirements for the completion of a Bachelor of Medicine and Surgery consisted of six-years of academic training, followed by a one year period of internship service. According to Reid (2000, p. 2), the recruitment and retention of professional health workers in under served areas is a complex and global issue. On 12 December 1997, the demands of rural health care in South Africa left the health ministry with no alternative but to adopt the law that newly qualified doctors would have to complete one year of compulsory community service directly after completion of internship training.

In 1999, the first set of community service doctors was allocated to hospitals around the country. Recent reports highlight the following impressions and pose the following questions with regard to the state of health care and community service in South Africa:

- Post-intern doctors are grossly unhappy about the unilateral manner in which compulsory community service was implemented by the health ministry. (This decision has implications for these doctors' future career options, family lives, social lives and financial obligations.)
- The number of crises in government hospitals has escalated and will continue to escalate due, for example, to lack of funding and understaffing.
- The number of newly qualified South African doctors who are emigrating are increasing.
- The number of foreign doctors being imported is increasing.

- Debate: Should students with state subsidies be allowed to choose whether to pay back their student loans in monetary terms or through community service?
- Dilemma: Do interns and post-interns have the necessary experience to work in rural areas? What about the lack of supervision? How do these factors impact on the experience of the community service doctors and the quality of community service?

Prior to this research project, the researcher was involved in a study which assessed whether the introduction of community service was successful in contributing to alleviating the health care crises in South Africa (Reid, 2000). After meeting with the community service doctors (many of whom participated in the present study), the researcher observed individual doctors experiences of community service and the effects this community service had on their mental and emotional wellbeing. This served as background to the problems which may exist and which may warrant further investigation. Focus group discussions in Kwazulu-Natal were held in Hluhluwe (27 May 1999), Durban (28 May 1999) and Kokstad (24 June 1999)(Reid, 2000). The following is a list of some of the issues that arose from the focus group discussions:

- Community service doctors expressed unhappiness about the autocratic manner in which the government had imposed community service on them.
- Community service doctors experienced work overload, both quantitatively and qualitatively.
- Community service doctors perceived the lack of supervision in rural hospitals as a definite stressor. They felt pressurised when required to perform procedures beyond their capabilities. Many expressed feeling responsible and guilty when patients died because of this. Many of these doctors also admitted to feeling panic-stricken when on casualty duty, because they felt that too much responsibility for making crucial decisions was placed on their shoulders.

- Community service doctors experienced role conflict. Owing to staff shortages, they were performing many roles – many of which were out of their capacity and job-description.
- Role overload was another stressor experienced by the community service doctors, who indicated that they regularly worked extra long hours.
- Limited resources, particularly in rural hospitals, made it more difficult for them to perform their work efficiently.
- Community service doctors expressed concern about the lack of standardisation because many of them who were placed in urban hospitals had the unfair advantage of greater supervision and a lighter workload. These doctors expressed a need for flexible work arrangements, such as rotating between urban and rural areas.
- Many community service doctors expressed that they felt unwelcome in urban hospitals; there was a general feeling that they were taking up registrar posts.
- Many community service doctors expressed frustration at the lack of ambulance services; people were dying because of delays in being transferred.
- Community service doctors based in rural areas highlighted that their family and social lives are disrupted and that there are a lack of recreation and other major facilities in the rural areas.
- Many of the community service doctors indicated that there was a lack of social support systems available. Peers were their only source of comfort.
- The community service doctors used the following words to describe how they were feeling: angered, frustrated, aggressive, psychotic, suicidal, depressed, emotionally exhausted, helpless and unappreciated.

Despite the difficult circumstances, many community service doctors said that they were coping.

- Some community service doctors indicated that community service was a positive and enjoyable experience; they considered it an excellent learning experience.
- Being forced to make decisions alone made many of these doctors feel autonomous, thereby improving their self-confidence.
- Community service doctors felt that they were making a difference by serving rural communities and they viewed the difficulties as a challenge.
- Community service broadened their scope of future career decisions, as some planned to stay on in rural hospitals even though they had not initially considered it.

From the above list of issues, it became evident that whilst some community service doctors were surviving and even flourishing, others were not coping. It was interesting to see that individuals in similar settings reacted differently to identical stressors. It is this finding that has inspired the researcher to investigate the incidence of stress and burnout from a salutogenic point of view.

The following quotations and evidence from recent reports indicate the need for further research in this field, which clearly falls within the scope of Industrial Psychology and would be of benefit to the discipline:

- “Many graduates feel unprepared by their undergraduate training for independent practice, especially in a rural area - this has been formally recognized by the Interim National Medical and Dental Council” (Reid, Chabikuli, Jaques, & Fehrsen, 1999, p. 768).

- “Qualitative results revealed two scenarios in the rural hospital situation: one where doctors felt that they were coping and learning from the work under the supervision of peers or senior colleagues, and the other where they felt stressed by being alone and having to deal with emergencies, especially when short staffed” (Jaques, Reid, Chabikuli, & Fehrsen, 1993, p. 18).
- “The researchers identified that junior doctors with greater degree of self-confidence appeared to cope better without supervision than those with lower levels of self-confidence. The researchers recommended that this observation is a foundation from which to build” (Jaques et al, 1993, p. 18).
- “A South African study showed that 77,8% of junior doctors had experienced symptoms consistent with burnout since graduating” (Schweitzer, 1994, p. 352).
- “The review of the vocational training program for doctors based at McCord Hospital in Durban emphasized that besides clinical training, it is important to focus on the attitudinal and motivational aspects of equipping young doctors for the tasks that lie ahead of them” (Reid et al, 1999, p. 769).

These reports, together with evidence in the South African and international literature, convince us that the career of the junior hospital doctor is a stressful one. This current situation has serious implications for health professionals in South Africa, who, are forced to function under extremely difficult situations on a daily basis. From a salutogenic point of view, it would be valuable to see how community service doctors are coping with the pressures they are exposed to. The field of Industrial Psychology can play an important role in attempting to understand how junior hospital doctors cope with their unique world of work, what satisfies their needs and what motivates them with a view to implementing strategies to alleviate these crises. It is established that the junior doctor can play a crucial role in alleviating the rural health crisis in South Africa. Their career options and mental health status will determine to what extent they voluntarily choose to stay on in South African state hospitals. This research will also

contribute to the limited research on coping in a South African health professional context.

1.2 PROBLEM FORMULATION

As outlined in section 1.1 above, community service, particularly in rural hospitals, appears to be a difficult and challenging task. From this it can be assumed that it takes a certain type of individual to cope with the unique demands of rural hospital life, especially if such a situation is been forced on an individual. According to Ashford (1988, p. 20), there is no clear picture as to why, in a given situation, some people cope and others do not. Based on this, the following problem can be formulated:

What predisposes some community service doctors to choose a style of coping that would result in positive outcomes in comparison to other community service doctors whose makeup predisposes them to choose a style of coping that would result in negative outcomes? As this formulated problem will be addressed from a salutogenic perspective, the question asked is as follows: “Does salutogenic functioning play a role in coping and what effect does this have on the reported levels of stress and burnout?”

The research questions can be phrased as follows:

- (1) How can stress be conceptualised in terms of its behavioural dimensions, symptoms and manifestations and what are the levels of stress in the sample?
- (2) How can burnout be conceptualised in terms of its behavioural dimensions, symptoms and manifestations and what are the levels of burnout in the sample?
- (3) How can coping be conceptualised (from the salutogenic paradigm) in terms of its behavioural constructs, symptoms and manifestations and what are the levels of salutogenic functioning in the sample? Can the salutogenic construct scores differentiate between copers and noncopers in the sample, and is

there a relationship between stress, burnout and the salutogenic constructs amongst community service doctors?

- (4) Using these results what recommendations can be formulated with regard to future research, training and development of community service doctors?

1.3 AIMS

From the above mentioned research questions, the following aims are formulated:

1.3.1 General aim

To report on stress, burnout and salutogenic functioning amongst community service doctors in KwaZulu-Natal Hospitals.

1.3.2 Specific aims

The specific literature aims of this research are as follows:

- (1) To conceptualise the existing literature on stress with emphasis on stress in the medical profession.
- (2) To conceptualise the existing literature on burnout with emphasis on burnout in the medical profession.
- (3) To conceptualise the existing literature on coping from the salutogenic paradigm. To select and discuss the salutogenic constructs to be used for the research and how these constructs act as coping mechanisms in stress and burnout.
- (4) To integrate the literature on stress, burnout and coping, and to determine the ability of salutogenic personality constructs to differentiate between copers and noncopers.

The specific empirical objectives of this research entail the following:

- (1) To ascertain the levels of stress amongst community service doctors in KwaZulu-Natal hospitals.
- (2) To determine the levels of burnout amongst community service doctors in KwaZulu-Natal hospitals.
- (3) To measure the levels of salutogenic functioning amongst community service doctors in KwaZulu-Natal hospitals.
- (4) To determine the relationship between stress and salutogenic functioning amongst community service doctors in KwaZulu-Natal hospitals.
- (5) To determine the relationship between burnout and salutogenic functioning amongst community service doctors in KwaZulu-Natal hospitals.
- (6) To ascertain the difference between coping and noncoping in salutogenic terms amongst community service doctors in KwaZulu-Natal hospitals.
- (7) To formulate recommendations based on the literature and empirical findings of this research with regard to future research, and training and development of community service doctors in KwaZulu-Natal hospitals.

1.4 THE RESEARCH MODEL

According to Mouton and Marais (1993, p. 7), social sciences research is a collaborative human activity in which social reality is studied objectively in order to gain a valid understanding of it. For the purpose of this research, the research model of Mouton and Marais (1993) will be utilised. The aim of this model is to summarise and systematise the five dimensions of social research, namely, the sociological, ontological, teleological, epistemological and methodological dimensions, within the framework of the research process.

This model is described as a systems theoretical model. Figure 1.1 describes the three subsystems, which interact with each other and with the research domain of the specific discipline (Mouton & Marais, 1993). The subsystems are the intellectual climate, the market of intellectual resources and the research process itself.

The term “intellectual climate” (see fig. 1.1) is used to refer to the variety of metatheoretical values or beliefs of which the following will be formulated for the purpose of this research: industrial psychology, stress theory, burnout theory, coping theory and salutogenesis. These are not directly related to the theoretical goals of the practice of scientific research and can usually be traced to nonscientific contexts. These sets of beliefs, values and assumptions may be traced back to traditions in philosophy and are usually neither testable, nor are meant to be tested.

The market of intellectual resources refers to the “collection of beliefs which has a direct bearing upon the epistemic status of scientific statements” (Mouton & Marais, 1993, p. 21). Two major types of intellectual resources are: theoretical beliefs about the nature and structure of domain phenomena, and methodological beliefs concerning the nature of the research process.

With regard to theoretical beliefs, as explained by Mouton and Marais (1993), for the purpose of this research, hypotheses are presented, as well as theoretical models and theories including a conceptual description concerning stress, burnout, and salutogenic constructs.

With regard to methodological beliefs, as explained by Mouton and Marais (1993), this research falls within the behaviourist and humanistic schools of thought. The empirical method will assume a positivist approach and will focus on quantitative instruments.

According to Mouton and Marais (1993, p. 23), “in the research process itself, the researcher internalises specific inputs from the paradigm(s) to which he or she subscribes, in order to enable him or her to interact with research domain in a

fruitful manner, and to produce scientifically valid research.” During the research process, a distinction is made between the determinants of research decisions on the one hand, and the decision-making process on the other.

The determinants of the research decisions may be defined as “those task or problem oriented beliefs which derive from a given paradigm which have been internalised” (Mouton & Marais, 1993). It is important to stress that the determinants of research decisions are the result of the interaction between the researcher and the research domain (see fig. 1.1: An integrated model of social science research, as illustrated by Mouton & Marais, 1993, p. 22).

The decision-making steps in the research process include five typical stages, namely choice of a research topic or theme, formulating the research problem, conceptualisation and operationalisation, data collection, analysis and interpretation of data. The research process does not necessarily have to follow this outlined process; this research will, however, follow the above mentioned stages.

1.5 THE PARADIGM PERSPECTIVE OF THE RESEARCH

Mouton and Marais (1993, p. 12) refer to paradigms as collections of metatheoretical, theoretical and methodological beliefs, which have been selected from the intellectual climate and the market of intellectual resources of a particular discipline. The concept “paradigmatic research” refers to research which is conducted within the framework of a given research tradition or paradigm.

1.5.1 Disciplinary relationship to the research

From a discipline perspective, this research focuses primarily on industrial psychology which, according to Bass and Ryterband (1979, p. 5), is rooted in other disciplines, particularly in the behavioural sciences (psychology, anthropology, sociology), economics and physical science. Furthermore, the subdisciplines of industrial psychology are organisational psychology, psychometrics and occupational mental health; which investigates the effect of organisational dynamics on the individual.

Mouton and Marais (1993) indicate that the variations in the different schools of thought are not unbridgeable, since a substantive degree of overlap exists between different theoretical orientations, models and methodologies. For the purposes of this research, a multi-paradigmatic approach will be adopted.

Applicable psychological paradigms for this research are discussed below.

1.5.1.1 The pathogenic paradigm

Historically, the majority of health-related research was characterised by what is termed a pathogenic focus (Antonovsky, 1987a). Early stress researchers assumed that stress experienced by an individual would negatively affect the individual. According to this perspective, illness and disease are seen as contributing towards entropy at all levels of society, while health is seen simply as the absence of illness or disease (Cannon, 1929, 1932). This notion forms the basis of the pathogenic paradigm, which is concerned with why people fall ill and why they develop specific disease entities. While not discounting the valuable role of pathogenic investigation, this paradigm has been criticised for failing to take into account the apparently healthy status of those individuals who manage to stay well despite the presence of risk factors which often predict poor health (Antonovsky, 1987b, Kobasa, 1982).

1.5.1.2 The salutogenic paradigm

In contrast salutogenesis (from Latin: *salus* = health; from Greek: *genesis* = origins) emphasises the origins of health or wellness and considers the fact that coping with unavoidable stress can lead to illness or even growth (Strümpfer, 1990, p. 265). The salutogenic paradigm makes the fundamental assumption that disorder and pressure towards increasing entropy are the prototypical characteristic of the living organism (Antonovsky, 1988). This paradigm does not deny the stress-illness relationship, but it concludes that “stressors are omnipresent in human existence” and that “the human condition is stressful” (Antonovsky, 1979, p. 9). Salutogenesis, as a paradigm, makes the following assumptions (Antonovsky, 1987a; De Wet, 1998; Strümpfer, 1990):

- This paradigm assumes that stress is omnipotent and neutral in terms of effect on illness; the effect of the stressor is determined by the individual reaction to the stressor. Stressors are not inherently bad.
- The salutogenic paradigm does away with dichotomy of illness-health and evaluates it as a continuum with an individual falling anywhere between the two extremes. Antonovsky (1987a, p. 50) calls it the “health ease/dis-ease continuum”. By investigating the “story” of the person, it enables the researcher to seek an understanding of the factors involved in the individuals’ maintenance of health on a health continuum or else their move towards the healthy pole (Antonovsky, 1987a, p. 49, 1987b, p. 3).
- This paradigm focuses research on the deviant case (Antonovsky & Bernstein, 1986, p. 53; Strümpfer, 1990, p. 266) People stay healthy in spite of the numerous stressors they face (see chapter 4 for a detailed discussion of salutogenesis).

According to the salutogenic paradigm, not all people become ill as a result of stress, and for the purpose of this research, not all people will become burned out. The literature states that personality traits act as moderator variables in buffering the effect of the stress (chapter four is dedicated to confirming this association). Associated with the salutogenic paradigm are numerous personality constructs known to moderate this stress-illness relationship (Antonovsky, 1991a; Kraft, Mussman, Rimann, Udris, & Muheim, 1993; Schröder, Reschrke, Johnston, & Maes, 1993). The following four constructs have become popular with empirical backing and proven validity, and will be used for the purposes of this study: Antonovsky’s (1982) “sense of coherence”, Kobasa’s (1979a) “hardiness”, Rosenbaum’s (1980) “learned resourcefulness” and Rotter’s (1975) “locus of control”. The literature suggests that certain individuals who have good salutogenic functioning (those scoring high on these salutogenic constructs) move closer to the health side of the ease/dis-ease continuum (Kraft et al, 1993; Schröder et al, 1993).

1.5.2 Theoretical beliefs regarding this research

The theoretical statements for this research include the central thesis and the theoretical models of this research.

The central thesis for this project is that there is a relationship between the community service doctors' salutogenic functioning and their stress and burnout levels.

The following theoretical models will be discussed as part of the literature review:

- Transactional model of stress: Lazarus and Folkman (1984b) (see chap. 2).
- Three component model of burnout: Maslach and Jackson (1981) (see chap. 3).
- Salutogenic functioning: Antonovsky (1982); Kobasa (1979 a, 1979b), Rosenbaum (1989, 1990), Rotter (1966, 1975, 1989) (see chap. 4).

1.5.3 Methodological Beliefs

Methodological beliefs are beliefs about the nature of social science and scientific research and includes different types of traditions or schools in the philosophy of the social sciences and methodological models, such as the quantitative and qualitative models (Mouton & Marais, 1993, p. 23).

The literature components of this research fall within the behaviouristic and the humanistic schools of thought.

The basic assumption of behaviourism, founded by John B Watson (1887-1958), is that behavior is determined primarily by experiences within the environment and not by instinct or inherited traits (Benjamin, Hopkins & Nation, 1990). According to this school of thought, an individual's achievements are limited only by the

restrictions the environment places on him or her. In this regard, behaviorists rely exclusively on scientific and objective manipulation to assess the relationship between environmental events, that is, the stimuli and the organisms' responses to them (Benjamin et al, 1990; Crooks & Stein 1988, p. 11).

The underlying assumption of humanism is that people are free agents with a free will, and who have a creative and self-motivated drive toward self-fulfilment which is considered an essential criteria for psychological health (Chiang & Maslow, 1977). From an integrated existential philosophy, Frankl (1959) postulates that individuals who have attained psychological health, have realistic perceptions of their situation and employ a number of effective coping strategies to manage life. These include using a sense of humour, a dedication to search for meaning in life, an active seeking of opportunities for the future and a regard for work as a profession in which he or she can make a worthwhile contribution while remaining fulfilled and involved.

The empirical part of this research falls within a positivist framework, with the focus on psychometrics and statistical analysis, in an attempt to solve the research problem. Positivism, according to Johnsen (1975, p. 172), assumes that all known events have various properties that stand in different realities to each other and the only "facts" are those properties and relations which can be observed and measured empirically. Thus, positivism constructs a language in which all knowledge can be reduced to a small number of axioms and consequences, in a way to make science objective by eliminating the subjective side (Baker, 1992, p. 10).

1.6 RESEARCH DESIGN

According to Bless and Higson-Smith (1995, p. 63), research design has two meanings: It is a programme used to guide the researcher in collecting, analysing and interpreting observed facts, and it is a specification of the most adequate operations to be performed in order to attain specific hypothesis under given conditions. The aim of research design, according to Mouton and Marais (1993, p.

33), is to plan and structure a given research project in such a way that the eventual validity of the research findings is maximised.

1.6.1 Independent and dependent variables

According to Mouton and Marais (1993, p.130), the distinction between independent and dependent variables refers to the basic cause-effect relationship between specific events or phenomena. The independent variable refers to the antecedent phenomenon and the dependent variable to the consequent phenomenon.

The independent variable in this research is the salutogenic constructs and the dependent variables are stress and burnout.

1.6.2 Typology of the research

Mouton and Marais (1993, pp. 42-46) distinguish between three basic types of research goals: exploratory, descriptive and explanatory. The presentation of this research can be categorised as descriptive. Descriptive studies allow for a variety of types of research ranging from an in-depth description of an individual, situation, group or organisation, to an emphasis of the frequency with which a specific characteristic or variable occurs in a sample. Descriptive research can be quantitative or qualitative in nature.

According to the criteria set out by Mouton and Marais (1993) regarding the classification of major type of research designs, this research can be classified as second-order phenomena, since it focuses on the salutogenic model and other constructs. There is also a distinction between the collection of new data and the use of available data; this research will make use of existing data and collect new material. The research strategy can be considered of general interest.

1.6.3 The unit of analysis

The focus of this research will be on the individual. The different roles assumed are firstly, as an individual employed by the department of health in the position of community service doctor and secondly, as a respondent when attempting the psychometric instruments

1.6.4 Role of the researcher

The researcher will play the role of researcher and psychometrist with the aim of investigating stress, burnout and salutogenic personality constructs amongst community service doctors in KwaZulu-Natal hospitals.

1.6.5 The validity of the research project

According to Mouton and Marais (1993, p. 7), social sciences research is a collaborative human activity in which social reality is studied objectively with the aim of gaining a valid understanding of it.

In this research design, the internal validity on a contextual level is ensured through the cross-referencing of topics involved, the use of valid instruments to measure the stress construct, burnout phenomenon and salutogenic personality constructs. The use of the models, theories and measuring instruments will be selected in a representative manner.

1.6.6 The reliability of the research project

Reliability requires that the application of a valid measuring instrument to different groups under different sets of circumstances should lead to the same observation (Mouton & Marais, 1993, p. 79). To maintain reliability, the research will employ measuring instruments that are themselves valid and reliable. Furthermore, the research will be conducted in a specific socio-political system (KwaZulu-Natal Department of Health) at a specific time (within a month) to ensure the reliability of the research context.

1.7 RESEARCH METHOD

In an attempt to obtain scientific and objective findings, the research method will assume the following sequence:

1.7.1 Phase 1: Literature review

Step 1: Literature review of the stress phenomenon. This involves an analysis and integration of the existing literature on stress, with special focus on the aetiology, symptoms, outcomes and management interventions of stress in general and in the medical profession.

Step 2: Literature review of the burnout phenomenon. This involves the conceptualisation of burnout, with emphasis on the behavioural dimensions, aetiology, symptoms, outcomes and management of the phenomenon in general and in the medical profession.

Step 3: Literature review of salutogenic functioning. This involves the presentation and integration of the existing literature on salutogenic functioning, together with the selection and discussion of salutogenic constructs to be used for the study. This will be followed by a discussion of coping theory. Salutogenic constructs will then be discussed in terms of how they act as coping mechanisms in stress and burnout.

Step 4: Integration of step 1, step 2 and step 3. Here the focus will be on integrating the above literature to ascertain the theoretical link between stress, burnout and salutogenic functioning. This will include an assessment of whether salutogenic personality constructs have the ability to differentiate between copers and noncopers.

1.7.2 Phase 2: Empirical study

Step 1: Selecting the population and sample. Here motivation will be given as to how the sample will be selected from the population.

Step 2: Compilation and motivation of the measuring instruments. This involves details on how the quantitative measuring instruments will be selected. Background on each quantitative instrument, including its relevance to the aims of this will be discussed.

Step 3: Data Collection. Here there will be discussion of how the data will be collected from the sample.

Step 4: Statistical processing of data will be undertaken. Here there will be discussion of the procedures and statistical techniques employed in the study.

Step 5: This involves the formulation of hypotheses and central theses.

Step 6: Here the results will be reported and interpreted.

Step 7: Conclusions of the research will be formulated.

Step 8: Limitations of the research will be discussed.

Step 9: Formulation of the recommendations will be made with reference to the literature and empirical objectives of the research.

1.8 CHAPTER DIVISION

The chapters of the research will be presented as follows

Chapter 2: Stress

Chapter 3: Burnout

Chapter 4: Salutogenic functioning

Chapter 5: Empirical study

Chapter 6: Results

Chapter 7: Conclusions, limitations and recommendations

1.9 CHAPTER SUMMARY

In the first part of this chapter, a background to the research problem was formulated and a motivation for the importance and relevance of this research was given. This was followed by details of the research questions, literature and empirical aims of this research. The foundations for the research design and research method followed the paradigm perspective. The chapter ended with a brief format of chapter flow for this dissertation.

▪ REMARK

Chapter one was successful in its aim of introducing the research to the reader.

The next chapter will look at the stress phenomenon.