

CHAPTER 1

PROBLEM STATEMENT AND RESEARCH GOAL

“I had to keep gritting my teeth to prevent myself from grinding to a halt. My feet were sore, my legs had seized up and my brain felt fatigued beyond words. I felt sick. More than anything I just wanted to stop and walk for a while. I had entered that phase where psychology was everything. Whatever I decided mentally my body would obey. Although it was incredibly difficult to keep on running, the remaining distance was falling and finishing became an ever-increasing reality. I just had to keep going”.

– Mike Stroud

1.1 INTRODUCTION

“WARNING: ADVENTURE RACING IS A SPORT WHERE YOU MAY BE SERIOUSLY INJURED OR DIE”.

This preface to Mann and Schaad’s book *The Complete Guide to Adventure Racing* (2001) would normally be enough to warn most sane and normal people to stay away from this sport. However, a close analysis of most endurance sport disciplines would reveal the same sobering fact – endurance sport is a sport where you may be seriously injured or killed. However, it seems as if a large section of the South African population are neither normal nor sane, whatever that means, since the number of South African endurance athletes are increasing yearly.

One only needs to look at the increase in endurance events as well as the increasing number of participants in events such as the Comrades Marathon, Pick and Pay Cape Argus Cycling Challenge, Pick and Pay 94.7 Cycling Challenge, Pick and Pay OFM Cycling Challenge, Pick and Pay CANSA Cycling Challenge etc. to see this.

Compared to sport disciplines such as rugby or cricket, endurance sport disciplines such as cycling, mountain biking, adventure racing, mountaineering, canoeing/kayaking or marathon running are not very rewarding in monetary terms. In

fact, the majority of participants can expect no monetary reward and their continued participation is an expensive luxury. The physical and mental challenges of endurance sport are extreme and demand a lot of preparation, sometimes months and years of preparation for one event. Once the event starts, the athletes have to overcome extreme challenges to the body as well as their mind just to finish. The levels of pain and discomfort as well as risk of injury or even death would discourage less motivated athletes. Yet, despite all these obstacles, thousands of South Africans are yearly willing to prepare for, pay for and participate in endurance events. The question that begs to be answered is why thousands of non-elite or non-professional athletes are willing to do this.

When one considers all the comforts, conveniences and numerous indulgences that the technological advances of our modern society offers, why do people feel the need to expose themselves to the hardships of endurance sport and are actually willing to pay for this hardship? Some of the most obvious answers are to increase their health or to be in nature. However, these answers seem to be too neat and obvious. It would be much more convenient, comfortable and cheaper to join the closest gym or fitness group. If you really want to be in nature a comfortable way would be to get in your car and visit the closest nature reserve. People are not by nature made to live in comfort. This can be seen by the number of illnesses that plague modern society. People were made with the ability and need to be physically active. Not only do people have the potential and need to be physically active, but they need to test this ability.

People have a need to place themselves in situations of risk, where they must use their own skill and resources to survive and overcome the challenges to achieve success. People need to take risks for what are achievements without risks – mere formalities. However, our modern society offers few opportunities for physical challenges or situations where people need to test themselves physically and mentally. These situations or adventures are what give meaning to people on this level. Of course there are different levels on which individuals can give meaning to their lives and many types of adventures that can lead to fulfillment. However, people still need to have physical adventures where the overcoming of challenges lead to a merger of physical, emotional and spiritual facets. This need for physical adventure and challenges might be what motivates thousands of people in South Africa and millions of people worldwide to participate in endurance sport. Endurance sport provides people with the opportunity to test their physical and mental abilities to see if

they have what it takes to achieve success. This is best illustrated by the following quote by Bob Gries owner of NFL (Williamson, 2003):

*“To venture into the unknown,
To search for your maximum potential,
To achieve the impossible or highly improbable is life’s greatest satisfaction,
It takes intense preparation, total dedication and the risk of failure.
If you have paid the price and give 100%, you’re a WINNER.”*

Therefore, it seems as if participation in endurance sport is an adventure into the unknown where participants venture into the unknown of themselves to discover their own abilities and potential. However, very little research has been done on the psychological dimension of endurance sport (Campen & Roberts, 2001). Very little is known about the motivations for people to start or continue participation in endurance sport. Very little is known about the perceived stressors involved in endurance sport. Very little is known about the strategies that athletes employ to cope with the stressors of endurance events or the strategies that they employ to motivate themselves to cope with the stressors (Campen & Roberts, 2001; Weinberg & Gould, 2003).

The aim of this study is to determine some of the psychological aspects of endurance sport. This study will be an explorative study that focuses on the stressors involved in endurance events, the motivations to start and continue participation in endurance events as well as the motivational and coping strategies employed by endurance athletes during endurance events to overcome the extreme conditions.

1.2 PROBLEM STATEMENT

People seem to have the need to take risks and to fulfil an internal need to overcome enormous physical and mental challenges. This is seen in the growth of extreme/endurance sports such as triathlons, cycling and adventure racing. Endurance sport, as opposed to non-endurance events, has differences not only in the technical aspects of the sport but also in the type of challenges that is involved. In non-endurance sport such as athletics, rugby and soccer events usually take place in front of crowds or spectators. Apart from the stress induced by the athlete on himself, this is a factor that increases the level of stress experienced by the athlete(s). Due to the length and nature of endurance sport and especially extreme endurance sport it

is seldom that the athletes compete in front of spectators. Logically, this should decrease their levels of stress. However, this stress can also help to motivate athletes of non-endurance events (Jones & Hardy, 1990; Cox, 2002; Weinberg & Gould, 2003). Athletes in endurance sport therefore have to employ more self-motivating strategies for longer periods to perform well. One factor that increases endurance athletes' levels of stress is the environment within which they are participating. These environments can and usually are very harsh, such as extreme heat, cold, the distance involved etc. The influence of these factors has been studied extensively from a physiological perspective and is not the aim of this study. The psychological stresses that these factors place on athletes have also been studied, although less extensively than the physiological stresses.

However, the motivational and coping strategies used by endurance athletes specifically in extreme endurance events have not been studied to a great extent (Weinberg & Gould, 2003). Furthermore, very little research has been done on the reasons, the motivation, for individuals to participate in sports events that have the unique set of physical and mental challenges of endurance events. What research that has been done was mostly on elite athletes. However, the motivation for non-elite endurance athletes to participate has been neglected.

The aim of this study is therefore to determine what type of influence environmental conditions or stressors have on non-elite athletes' performance, and the motivational and coping strategies used to control this. A study of the adaptation of endurance athletes to the challenges of endurance sport from the Salutogenic approach would focus on WHY athletes successfully adapt to the challenges as well as HOW they successfully adapt to the challenges of endurance sport. The aim of this study is therefore to determine what type of influence environmental conditions or stressors have on athlete's performance, and the motivational and coping strategies used to control this. An important part of this study would be to focus on the coping and motivational strategies that are used by non-elite athletes to cope with the challenges of endurance races. Furthermore, in this study the focus would also be on the determination of some of the sources of coping strategies and how this motivates individual athletes to seek out challenging situations (endurance sport) that places them in a state of tension. The stressors that create this state of tension will also be identified as well as how the individual's sense of coherence translate these situations into meaningful and coherent life experiences.

1.3 RESEARCH QUESTION

To determine the coping and motivational strategies that endurance athletes use to overcome physical and mental challenges.

1.4 RESEARCH OBJECTIVES

In answering this question, the following aspects of endurance events will be described as it comes forth in the data:

- What are the physical and mental environmental stressors experienced by endurance athletes in endurance events?
- What coping strategies do endurance athletes use to overcome physical and mental challenges associated with endurance events?
- What strategies do endurance athletes use to motivate themselves to overcome physical and mental challenges associated with endurance events?
- What are endurance athletes' attitudes towards and perceptions of challenges encountered in endurance events?
- What are endurance athletes' self-perception of their ability to overcome the challenges of endurance events?

1.5 CONCEPTUALISATION

In this section, a few of the key terms used in this study will be defined.

ENDURANCE EVENTS: Those sport events where the distance, time and the level of aerobic fitness/intensity requirements for successful completion are considerably higher than when compared to other sport events.

EXPERIENCED NON-ELITE ENDURANCE ATHLETES: Experienced non-elite endurance athletes are people who have participated in at least four endurance events (marathons – 21.1km+, cycling – 50km+, mountain biking – 35km+,

canoeing/kayaking – 30km+, backpacking – 30km+, adventure racing – 50km+, Iron Man etc.), two in the last year without being a professional athlete (non-paid).

SALUTOGENIS: A theoretical approach that attempts to identify the reasons why people do not become ill or how healthy systems are able to stay healthy despite similar stressors than systems that do become disrupted.

SENSE OF COHERENCE (SOC): SOC is in essence a life philosophy or an attitude that perceives life and problems or challenges in a positive light. It is furthermore an attitude or belief in the individual's own ability to overcome most problems by means of understanding of problems and the mobilization of the correct coping strategies.

STRESS: The internal psychological tension caused by internal and external stressors that changes or are perceived to change the nature of the present and/or future situation to such an extent that it forces the individual to adapt by means of physiological and psychological responses.

STRESSORS: Are any physical, psychological or environmental factor that changes or are perceived to change the nature of the present and/or future situation to cause internal psychological tension to such an extent that it forces the individual to adapt by means of physiological, psychological or behavioural responses.

COPING STRATEGIES: Those strategies (cognitive, emotional, behavioural and social) that individuals use to successfully adapt to stressors or adversity in their present or future situations and thereby continue to function at the same or better level of functioning/performance than before the adverse or stressful situation.

ACTIVE COPING STRATEGIES: Active coping strategies are conscious, rational learned behavioural, emotional, cognitive or social responses used to minimize the effect of or the sources of stress and anxiety.

MOTIVATION: Motivation is the (conscious or unconscious) internal tension due to several factors (such as drives, needs and learned behaviour) that impels the individual into action and determines the intensity and duration of this action to relieve this tension.

MOTIVATIONAL STRATEGIES: Motivational strategies are those methods and techniques that athletes use before and during endurance races to motivate them to achieve their own objectives.

1.6 CHAPTER OUTLINE

This study consists of nine (9) chapters excluding the list of references and appendix A and B. The nine chapters are the following:

CHAPTER 1: PROBLEM STATEMENT AND RESEARCH GOAL. In this chapter a basic introduction of the study and problem statement is given to familiarise the reader to the background of the study. Included in this are short definitions of the key concepts used throughout the study.

CHAPTER 2: THEORETICAL APPROACH OF STUDY. The aim of this chapter is twofold: Firstly, to give a brief overview of the basic aspects of the Salutogenic perspectives. The second aim is to provide a brief discussion of the application of the Salutogenic Model to endurance sport.

CHAPTER 3: EXTREME CONDITIONS IN ENDURANCE SPORT. This chapter forms part of the literature study and focuses on the extreme conditions found in endurance sport, the relationship between stress, arousal and performance and how extreme conditions influence performance in endurance events.

CHAPTER 4: COPING STRATEGIES. In this chapter coping and coping strategies are defined, theoretical approaches to coping are explored and coping strategies in endurance sport are discussed.

CHAPTER 5: MOTIVATIONAL STRATEGIES. In this chapter motivation and motivational strategies are defined, theoretical approaches to motivation are explored and motivational strategies in endurance sport are discussed.

CHAPTER 6: METHODOLOGY. The aim of this chapter is to discuss the methodology used in this study in detail. This includes the methodology used to gather the data as well as the analysis thereof.

CHAPTER 7: RESULTS. In this chapter the results of the study are discussed in detail. In this chapter the different levels of analysis as well as the graphic representation thereof are given.

CHAPTER 8: DISCUSSION OF RESULTS. This chapter critically discusses the results of the study and compares these with other research findings from similar studies.

CHAPTER 9: LIMITATIONS, RECOMMENDATIONS AND PRACTICAL APPLICATIONS OF RESULTS.

The aim of this chapter is to critically evaluate the limitations of the study. Furthermore, this chapter makes recommendations in terms of future research as well as the practical uses of the study's findings.

CHAPTER 2

THEORETICAL PERSPECTIVES

“When we try to pick up anything by itself we find it is attached to everything in the universe”.

- John Muir (Scrivener, 1990)

2.1 INTRODUCTION

According to Denzin and Lincoln (2000:19) "all research is interpretative; it is guided by a set of beliefs and feelings about the world, and how it should be understood and studied". The beliefs and feelings about the world shape how the researcher sees the world and acts on it. Thus, the theoretical approach the researcher follows has two interlined functions. In the first place it functions as the lenses through which the researcher sees the world. It is the basic ontological point of departure that shapes the way in which the researcher sees and evaluates reality. The second function of a theoretical approach is to shape the way in which the researcher can make this reality known to others. In other words, it answers the epistemological question of what the relationship between the knower and what is to be known is, as well as the methodological question of what methods and strategies can be employed to make reality known to others.

Therefore, the second aim of this chapter is to be an explanatory guide to the reader on how this study is compiled and the literature study was done. This study focuses on two major areas of which the first is the stressors and motivation for participation in endurance sport. The second area is the motivational and coping strategies used by endurance athletes to overcome these stressors during extreme conditions. The latter part of the study is based in the basic assumptions of the Salutogenic theory. The aim of this chapter is twofold: Firstly, to give a brief overview of the basic aspects of the Salutogenic perspectives. The second aim is to provide a brief discussion of the application of the Salutogenic Model to endurance sport.

2.2 SALUTOGENIC THEORY

2.2.1 INTRODUCTION

For many years, the basic theoretical assumption from which psychologists, social workers, medical sociologists and other related medical professionals approached basic research and applied their professions was to identify the source or cause of illness or disease (Antonovsky, 1991; Murray, 1996; Lena & Bengt, 1998; Van Breda, 2001; Kent, 2002; Kent, 2005). This approach is called Pathogenesis (from the Latin; *Patho* means illness or disease and *Genesis* means origin). By finding the source or cause of the illness it could be treated and/or prevented. Therefore, the basic assumption is that people normally function in a status or condition of health until some disorder disrupts the healthy system causing disease. Pathogenic research and practice therefore focus on the identification, cure and prevention or avoidance of disruptions to the healthy system (Murray, 1996; Lena & Bengt, 1998; Van Breda, 2001; Kent, 2002; Kent, 2005). However, in 1978, a medical sociologist called Aaron Antonovsky coined a term Salutogenesis, a basic assumption that approaches the study of health and healthy living from a different angle (Antonovsky, 1991; Murray, 1996; Lena & Bengt, 1998; Van Breda, 2001; Kent, 2002; Kent, 2005). Salutogenesis can also be related to the Latin meaning; where *Salus* is translated to mean health and *genesis* to mean origin. Therefore, Salutogenesis is the study of the origin of health.

2.2.2 SALUTOGENESIS

According to Antonovsky (1991), health should not only be studied from the pathogenic approach where the source of the illness is identified. Salutogenesis attempts to identify the reasons why people do not become ill or how healthy systems are able to stay healthy despite similar stressors than systems that do become disrupted. According to Antonovsky and others (Antonovsky, 1991; Murray, 1996; Lena & Bengt, 1998; Van Breda, 2001; Kent, 2002; Kent, 2005), the Salutogenic approach has six primary assumptions:

- **Health as a continuum:** In contrast to the pathogenic approach, people are not categorised as either healthy or diseased. According to Salutogenesis, people are on a continuum between two poles of ease and disease. People closer to the disease pole would require more psycho-medical interventions but the aim of

Salutogenesis is not to determine why the individual is closer to the disease pole than the ease pole but rather why and how the person is moving towards the ease pole.

- **Broad focus on health:** Whereas Pathogenesis focuses exclusively on the specific disease or illness as well as the specific cure or remedy for that specific disease, Salutogenesis focuses on the broader general factors that would promote the movement towards health in general irrespective of the specific disease experienced by the individual.
- **Health causation:** The basic approach of Salutogenesis is to focus and identify the origins of healthy behaviour and systems. This is in contrast to Pathogenesis that attempts to identify the causes of disease. Therefore, Salutogenesis focuses rather on the reasons why people are and stay healthy rather than on the reasons why people contract diseases.
- **Stressors can be good:** Salutogenesis do not deny the possible negative consequences of stress but posits that stress can also have healthy consequences. This is especially true when the successful overcoming of challenges leads to the development of better self-knowledge, confidence and coping-skills. Stress is an unavoidable part of life and the focus should not be on the avoidance or eradication thereof, but rather on the development of coping mechanisms that will enable the individual to use stress to his or her own advantage.
- **Struggle for adaptation:** The Salutogenic approach recognises and acknowledges the limited success achieved in the struggle against diseases as well as the search for a disease free environment. Although this struggle is in no way unimportant or belittled, Salutogenesis focuses on the overall problem of adaptation as well as sources of successful adaptation. In other words, although the search for a disease free society is important, it is of equal importance to answer the questions why and how people actually adapt to diseased environments and still perform well, as well as to identify the sources of adaptation.
- **Deviant cases:** Salutogenesis posits that humans are by virtue of our own physiological, psychological and social make-up as well as the environment in

which we live a high-risk group. Due to the demands of our society it is no wonder that a disease free society is an utopian dream. However, there are those deviant cases (frequently in the majority) that can and do overcome the various physical and mental demands and challenges of daily life and that actually thrive despite these challenges. Salutogenesis is interested in these “deviant” cases and focuses on the strategies, methods and mechanisms whereby they are able to overcome challenges.

Therefore, Salutogenesis does not attempt to replace the pathogenic approach but rather to develop parallel to it. Salutogenesis is a theoretical approach that focuses on more than just physical health. Salutogenesis, as defined by Antonovsky (1991), is a theoretical approach that focuses on the total holistic system’s ability to be healthy and able to adapt successfully to the demands of an often hostile environment. It therefore is the study of physical, emotional, psychological and social adaptation within a hostile environment.

2.3 SALUTOGENIC THEORY AND ADAPTATION OF ENDURANCE ATHLETES TO THE CHALLENGES OF ENDURANCE SPORT

A study of the adaptation of endurance athletes to the challenges of endurance sport from the Salutogenic approach would focus on why athletes successfully adapt to the challenges as well as how they successfully adapt to the challenges of endurance sport. Another question that should be answered is how their successful participation in endurance sport influences their general well-being and health. An important part of this study would be to focus on the coping and motivational strategies that are used by non-elite athletes to cope with the challenges of endurance races. Furthermore, in this study the focus would also be on the determination of some of the sources of coping strategies and how this motivates individual athletes to seek out challenging situations (endurance sport) that places them in a state of tension. The stressors that create this state of tension will also be identified as well as how the individual’s sense of coherence translate these situations into meaningful and coherent life experiences.

2.4 CONCLUSION

The aim of this chapter was twofold. Firstly, to discuss the basic ontological point of departure that underlies this study and secondly, to briefly explain how this approach would shape this study. The basic theoretical approach that will be used in this study is that of the Salutogenic Model of Health. Salutogenesis and the Salutogenic approach have a philosophy that concepts and research should be done to determine why systems or individuals remain healthy despite an unhealthy environment. This is better understood when it is remembered that most traditional research or Pathogenesis approach concepts and research with a philosophy that to understand health, research should focus on the reasons why systems and individuals become ill. Therefore, the basic approach of this study and the researcher will not be to determine the reasons why endurance athletes cannot cope with the stressors of endurance sport, but rather to determine why endurance athletes want to place themselves in these situations and how they cope with stressful environments. This approach will be used to determine the theories of motivation and coping that will be used in this study as well as the way in which all data will be analysed. In the next chapter endurance sport as well as the conditions related to endurance sport will be discussed.