Motivational processes involved in the recovery of female athletes from injury

by
Kerry Black

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Supervisor:

Ms V.M. Timm

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DECLARATION

I declare that *Motivational processes involved in the recovery of female athletes from injury* is my own work. It is submitted in partial fulfilment of a Master of Arts (Counselling Psychology) degree at the University of Pretoria, Pretoria. It has never been submitted at any other institution. All sources that I have used or quote have been indicated and are acknowledged in a complete reference list.

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Kerry Black   Date

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ABSTRACT

The focus of this study is injured female netball players' motivation when they return to their sport from serious injuries. The purpose of the study is to provide a rich description of the motivation which allows these players to return to their sport and continue in their chosen field.

Motivation is a vital component in injury rehabilitation, as it provides the drive that allows rehabilitation to occur. Two theories of motivation are examined in this study, namely the achievement goal theory of motivation and the theory of intrinsic motivation, extrinsic motivation and amotivation. These theories highlight the argument that motivation occupies a continuum between being internally or externally determined.

A qualitative phenomenological perspective was used to investigate the motivation of injured netball players. This made it possible to explore individual players' experiences of their injury. A semi-structured interview was conducted with each player to allow each player's experiences to be heard. The interviews were then transcribed. Thematic content analysis of the transcribed interviews revealed two main themes: the inevitable return and identity. The analysis showed that, for these netball players, their motivation to return to playing netball was based on an internal drive to regain an inherent part of their identity.

KEY TERMS

Achievement goal theory of motivation, amotivation, athletic identity, extrinsic motivation, female athletes, injury, intrinsic motivation, netball.

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CHAPTER 1

INTRODUCTION

1.1   BACKGROUND

South Africa is a nation that is proud of its sporting culture and ethos of sports participation. In recent years, sport has become an increasingly unifying force that has brought this diverse nation together in celebrating sporting victories such as the 1995 and 2007 Rugby World Cup championship and the 1996 African Nations Cup victory. The nation also shared in its disappointment after sporting defeats such as the 1999 Cricket World Cup tie with Australia. Sport is a thread which helps to develop a unified national pride that could hardly have been imagined in a divided apartheid South Africa. The significant role that sport plays in South Africa has led to the development of initiatives such as "Let Play" which aim at increasing sports participation by the youth of this country. However, sport has unfortunately also always been synonymous with injuries. Sport-related injuries among professionals, amateurs and people who participate in recreational sport are a matter of concern both locally and internationally, as they have a significant social and economic impact on society. Injuries affect the workforce, resulting in forced absenteeism and socioeconomic problems due to increased medical costs (Stevenson, Hamer, Finch, Elliot & Kresnow, 2000).

Female sport does not awaken nearly as much national interest as male sport. Very few female team sports are televised, compared to the plethora of male sports covered in the media, particularly television, everyday. The scope for female athletes to become professional sports women is also severely limited. So, for example, sports such as netball, which is the most widely played female sport in South Africa, is still an amateur sport. It is run by Netball South Africa, a non-profit organisation (Presentation on Netball South Africa to the Sports Portfolio Committee, 2008, August 26). When injuries among these female athletes affect their ability to participate in their sport, their situation is made more difficult by the fact that the status of their sport interferes with their rehabilitation, as they are not supported by as many medical practitioners as are

available for the national (male) cricket, rugby and soccer teams. In order for these female athletes to return to their sport, they therefore require strong motivation.

Motivation as a psychological construct has two functions: firstly, it provides the energy or drive behind our behaviour and, secondly, it directs our behaviour (Woods, 1998). Because motivation provides the drive and direction for human behaviour, it is a critical facet in the optimisation of performance in sport; and it has become an important area of investigation in sports psychology. Motivation has already been widely recognised to be critical to sports participation and excellence, but, thus far, the motivational processes involved in recovering from sports injuries still need to be explored. This chapter introduces the context of the research problem and discusses the research aims, the research design and the theoretical approach which is followed in this study and which provide a context for the research process itself.

1.2 BRIEF DESCRIPTION OF THE RESEARCH QUESTION

This study aims to explore which motivational processes are most frequently used by female netball players when they are recovering from an injury.

1.3 DESCRIPTION OF THE RESEARCH SETTING AND CONTEXT

Netball has a worldwide participation of over 20 million people, playing for more than 70 countries (International Federation of Netball Associations, n.d.). In South Africa, netball is the most popular and most widely played sport among women (Beckmann, Du Randt & Venter, n.d.). Netball has already been studied by numerous researchers due to the high incidence of injuries in the sport (Beckmann et al., n.d.; Hopper, 1986; McGrath & Ozanne-Smith, 1998; Smith, Damodaran, Swaminathan, Campbell & Barnsley, 2005), but the existing research has concentrated on the medical aspects of injuries, rather than on psychological aspects associated with such injuries. This study therefore explores the psychological aspects of netball injuries, which is a hitherto neglected area of research.

In South Africa, netball is played both outdoors and indoors. There are national and provincial teams for each of these variations of the game. The outdoor game is run under the auspices of Netball South Africa in accordance to the International Federation of Netball Associations (International Federation of Netball Association, n.d.). The indoor game is run by the South African Indoor Netball Federation, which falls under the World Indoor Netball Association. Although there are some minor differences between the two variants of the game, the general rules and the way the game is played is consistent. Many players are chosen to represent their province and country at both an indoor and outdoor level.

Netball is a game that relies on rapid acceleration to "break free" from an opponent, sudden and rapid changes in direction, in combination with leaps to receive a pass, intercept a ball or jump for a rebound after attempting to score a goal. These characteristics of the game mean that injuries can be sustained in a number of different ways and can affect many different areas in the body. Research has found that the "ankle and knee were the most frequently injured body parts, with ligament sprains, bruising/contusions, and muscle strains being the most predominant injury types" (Hume & Steele, 2000, p. 409). It has also been found that incorrect landings and collisions are the leading causes of injuries. The most severe and disabling injuries that occur in netball have been reported to be knee injuries (Hopper, 1986).

The researcher has played netball at a provincial level for both outdoor and indoor teams. In addition to playing the game herself, the researcher is also a provincially graded umpire and has umpired at indoor inter-provincial tournaments. In the course of her involvement in the sport as both a player and an umpire, the researcher has witnessed numerous netball players being seriously injured during play. The researcher has been fortunate not to have experienced any serious injuries herself. The motivation and determination of nearly all the injured players to endure the surgery and the rehabilitation process and to return to playing netball has always been an area that has interested the researcher. Thus far, the voices of the many netball players that have been injured and have returned to the sport have been silent in the literature; and this study proposes to give some of these players an opportunity to voice their experiences.

1.4 RESEARCH PROBLEM

This research is relevant to today's competitive sporting environment, where the number of injuries experienced in both the professional and the recreational sport arena is increasing (Heil, 1993a). Sport has moved into an era of professionalism, which implies that injuries can now entail the loss of both a career and the ability to participate in a sport that may have become part of an athlete's identity. Injuries play a major role in the career and life of an athlete. Where recovery is possible, the rehabilitation process can also be financially demanding (Heil, 1993a). In the context of the broader implications of injury (physical, psychological, financial and social), Siegert and Taylor (2004, p. 1) suggest that "the major advances in rehabilitation have been the transition from a largely medical model emphasising pathology and diagnosis, to broader psychosocial and socio-cultural models".

This study explores and attempts to gain an understanding of the broader psychosocial impact of injuries on female athletes, with particular emphasis on the motivational processes that these athletes draw on in the course of their recovery. The research sample was a limited cross-section of the sporting community: female athletes, specifically netball players. The sample was deliberately kept small, as the aim of the study is to gain an in-depth understanding of the individual motivations of these female athletes while they were injured. Although this limited sample did not allow the researcher to generalise her findings to the larger sporting population, it does allow for a greater understanding of the individual motivational processes of female athletes. The study explores the motivational processes that are used by female athletes during their rehabilitation to obtain greater knowledge about motivational processes.

1.5 JUSTIFICATION, AIMS AND OBJECTIVES

The primary aim the research is to explore the experience of the female athletes' motivation whilst injured. The research aims to add to the pool of knowledge regarding motivational processes that may help injured female athletes to recover from injury and

return to the competitive sporting environment, as "motivated patients are believed to perform better in rehabilitation activities, and to make more gains than those patients described as being less enthusiastic for treatment" (Maclean & Pound, 2000, p. 495).

This study explores the links between the existing research, theories and knowledge on motivation, and psychological aspects of sport injuries. The research also explores how the two concepts are related to each other, as very little research has been conducted that explores links between motivational processes and sports injuries. Some of the research that has already been conducted focuses on athletes' motivation to adhere to rehabilitation programmes. It was found that "adherent athletes were more self-motivated, tolerated pain better, perceived that they worked harder at their rehabilitation, and were less bothered by scheduling of sessions and environmental conditions than their non-adherent counterparts" (Spetch & Kolt, 2001, p. 81). Rehabilitation is thought to be linked to the motivation to adhere to the process that an injured athlete demonstrates: the greater the athlete's adherence to the rehabilitation programme, the greater the athlete's chances of a successful recovery from the injury (Maclean & Pound, 2000; Spetch & Kolt, 2001). "The personal factor most consistently associated with adherence appears to be self-motivation while several situational factors have been linked including social support, perceived exertion, convenience of rehabilitation scheduling, and belief in the effectiveness of treatment" (Spetch & Kolt, 2001, p. 82).

The objective of this study is to show what type of motivational processes may be necessary for rehabilitation. There have been numerous quantitative studies that suggest that motivation can be a good predictor of the rehabilitation outcomes (Siegert & Taylor, 2004). Previous research (Podlog & Eklund, 2004; Siegert & Taylor, 2004) suggests that that intrinsic and task-oriented motivation may prove to be the most influential motivational process implemented by an injured athlete. Spetch and Kolt (2001) report that athletes who focus on task-oriented motivation in their sport are more adherent to treatment, while athletes who tend to be more ego-oriented in their sport are less adherent to their rehabilitation programmes. It has been suggested that the use of

intrinsic and task-oriented motivational processes may lead to greater adherence to a rehabilitation programme by athletes.

1.6   THEORECTICAL APPROACH OF THE STUDY

Interpretive research is concerned with trying to understand an individual's internal and subjective experience of the external world. Research using this paradigm attempts to "describe and interpret people's feelings and experiences in human terms rather than through quantification and measurement" (Terre Blanche & Kelly, 2002, p. 123). An interpretive research epistemology relies on the researcher as the primary research instrument. The way that the researcher interacts with and understands the experiences of others allows him or her to grasp the participants' inner subjective world. The interpretive paradigm methodology is best suited to qualitative research techniques, which allow for interaction and interpretation between the researcher and the participants (Terre Blanche & Kelly, 2002).

The interpretive paradigm is suited to the research question in this study, because the study is working towards an in-depth understanding of the individual motivational factors that will allow a rich and detailed understanding of injured female athletes' motivational processes. The interpretive paradigm also allows for the expression of feelings, experiences and the social situation to be included in the research, which should contribute to attaining the social cognitive viewpoint on which the motivational theories are based. This research makes use of the researcher's empathy so that her intuitive understanding of the research participants' context can be developed, understood and interpreted.

Phenomenology is the specific interpretive approach used in this research. Phenomenology is concerned with a detailed examination of individuals' lived experience and how they interpret that experience (Bogdan & Taylor, 1975; Eatough & Smith, 2008). Phenomenological approaches include an array of methods that can be used. The interpretative phenomenological approach uses multiple interpretative reflections to gain a deeper understanding of a particular lived experience or context.

There are many levels of interpretation that can be used within phenomenology as the researcher engages with the participants' personal experiences. The level of interpretation ranges from trying to achieve a rich experiential description of the participants' experience through empathetic understanding, to the researcher's being more critical. In the latter approach, the researcher probes participants' accounts to elicit an alternative account, thereby moving towards a deeper analysis of a participant's experience (Eatough & Smith, 2008). As the researcher moves through the various levels of interpretation, he or she moves towards a more interpretive stance, so that the researcher can acknowledge an understanding which the participants may not be willing or able to acknowledge within their own account of their experience.

Qualitative research has become a valid and acceptable method that is widely used in the social sciences (Attride-Stirling, 2001; Kelly, 2002a). A qualitative framework allows for a more interactive approach which permits a flexible implementation of research methods that are generative and can lead to new understandings. The trustworthiness of qualitative research can be "evaluated in terms of how well it accounts for the phenomenon studied, and in terms of the consequences that flow from the research" (Kelly, 2002b, p. 422). Qualitative research does not conform to the same statistical standards as quantitative research, where statistical methods are used to evaluate the reliability and validity of research. Some methods that are used to evaluate qualitative research include triangulation (checking the researcher's own perspective against multiple perspectives), generalisibility and transferability, communicative validity, and pragmatic proof through action. For the standards to be maintained in qualitative research, it should be possible to replicate the research method and reach an understanding of the interpretive lenses that have been applied in the analysis of the research topic (Kelly, 2002b). The trustworthiness of this study therefore relies on the researcher's accurately documenting the research process in the research report. This will allow the reader to be able to understand the interpretation, as well the methodology used by the researcher.

1.7   OUTLINE OF THE STUDY

This chapter has set out the framework for the exploration of the motivational processes of injured female netball players. The research question focuses on the sport of netball, which is the team sport most widely played by females in South Africa and is a sport in which the incidence of injuries is high (Hopper, 1986).

The literature review in Chapter 2 provides an overview of existing theories relating to motivation and injuries. This lays the groundwork for existing knowledge to be explored with regard to the types of motivational processes involved in the recovery of female netball players from injury.

Chapter 3 discusses the methodology used in the study in detail. The interpretative phenomenological approach is used to obtain an in-depth understanding of the individual experiences of a sample of injured athletes and also allows for the researcher's influence on the results. Thematic analysis is the specific methodology applied to the data collected from the interviews.

Chapter 4 sets out the findings that emerged from the thematic analysis of the injured netball players' accounts of their experiences.

The final chapter, Chapter 5, highlights the conclusions and recommendation of the study.

Having introduced the study, the study can now proceed to the theories on motivation and the psychological aspects of injuries, as outlined in Chapter 2, which explores the existing accepted theories of motivation and injuries.

CHAPTER 2
LITERATURE REVIEW

2.1   INTRODUCTION

Motivation has been studied extensively in psychology, but a great deal more needs to be "learned about the role of psychological factors in the occurrence and recovery from sports injuries" (Brewer, 1998, p. 3). This chapter discusses theories relating to motivation and injuries. An understanding of the theory of both injuries and motivation reveals the potential overlap between these two areas in psychology. The literature review explores the research and theory that has been conducted with regard to the motivational processes that are most frequently used by athletes when recovering from an injury. The literature review also examines the impact of motivation in accelerating the recovery process. The framework used for injuries is then applied to motivational theory to understand the relationship between injuries and motivation. The extent to which the research question is addressed in the literature is also considered.

2.2   MOTIVATION

Motivation as a psychological construct has been thoroughly researched, but, so far, no definitive theory of motivation has emerged or been accepted. Theories of motivation can be divided into three broad groups arising from various attempts to conceptualise motivation, namely, biological approaches, behavioural approaches and personal, social and cognitive approaches (Beck, 2000; Petri, 1996). In each of these groups, there are numerous theories, such as the drive theory, activation theory, incentive motivation, achievement motivation, expectancy-value theory, attribution theory and hedonism, to name but a few.

Motivation theories for understanding sport can be grouped into two broad categories: the achievement goal theory of motivation on the one hand, and the self-determination theory of motivation or hierarchical model of intrinsic and extrinsic motivation on the

other. The common thread that ties together these two theories on motivation is that they are both based on a social cognitive viewpoint (Roberts, 2001). According to the social cognitive perspective, motivation can be defined as the organised pattern of personal goals, emotional arousal and personal agency beliefs that energises people directly and regulates their behaviour. These two theories permit the identification of the motivational factors that are relevant in a sporting context, namely achievement and competition, self-expression and social rewards (Beck, 2000).

The motivational process helps to anticipate and predict both future events and their consequences that are meaningful to individuals. However, motivation is very subjective in its application. It depends largely on people's self-referenced evaluations of the goal they are trying to achieve (Roberts, 2001). This means that everyone follows a very personal and individual motivational process that also has to be self-referenced. The social cognitive view of motivation attempts to be cognisant of these factors based on an individual's self-beliefs, social context and his or her own perceptions of what determines success and competence (Roberts, 2001).

2.2.1 The Achievement Goal Theory of Motivation

The achievement goal theory of motivation focuses on the "individual's motivation to strive for success, which enables the individual to persist even when he or she meets obstacles and perhaps failure" (Woods, 1998, p. 2). This theory is particularly relevant in the sport context, because athletes' performance in the competitive sporting environment is evaluated and the "goal of action is to demonstrate competence and that perceived ability is the distinguishing feature of achievement motivation" (Treasure, 2001, p. 81). Athletes' achievement beliefs are guided by their achievement goals, and those in turn guide their decision-making and behaviour in the achievement context.

The achievement goal theory of motivation also distinguishes between task-oriented and ego-oriented individuals. The situation and the individual athlete's disposition have an effect on whether the person is task- or ego-oriented. Task-oriented people focus mainly on "self-referenced criteria such as personal improvement and learning in order to

improve their competence" (Roberts, 2001, p. 19), whereas ego-oriented individuals tend to use "normative criteria, such as how their ability compares to that of others" (Roberts, 2001, p. 19). Task-oriented individuals' self-referenced criteria imply that they are more likely to persist in the face of failure, to exert effort, to select challenging tasks and to be interested in the task so as to achieve their own criteria relating to competence (Roberts, 2001). By contrast, ego-oriented individuals are more concerned with how their behaviour compares to that of others. Hence, they may exert the least amount of effort possible to realise the goal of their action, which is to be better than the people they are comparing themselves to. Such an ego-orientation may lead to maladaptive achievement behaviours, such as avoiding challenges, reduced persistence in the face of difficulty; not exerting effort; and dropping out if the achievement of the person's desired goals appears to be difficult (Roberts, 2001). Each person's orientation influences his or her interpretation and assessment of and reaction to the setting of an achievement goal, which influences the person's investment of personal resources such as effort, time and talent in an activity (Steinberg, Grieve, & Glass, 2001).

Task-oriented individuals use an undifferentiated concept of ability in which ability is not separated from effort. They evaluate effort and ability in terms of the performance gains and improvements in an activity with regard to their self-development (Pensgaard & Roberts, 2000). Ego-oriented individuals have a differentiated concept of ability, in which effort and ability are seen as separate from each other. The focus of ego-oriented individuals is to show greater ability than others. Superior ability is associated with exerting the minimum amount of effort required for a task (Pensgaard & Roberts, 2000).

A person's orientation is influenced by the perceived motivational climate. The motivational climate can be seen as a person's perception of contextual cues in relation to the achievement goals of the task (Pensgaard & Roberts, 2000; Standage, Duda, & Ntoumanis, 2003). The perceived motivational climate, in addition to an individual's personal goal perspective, plays a significant role in the process of motivation and the types of motivation a person uses. Motivational climates can be divided into mastery climates and performance climates. Mastery climates are associated with task-oriented people: "Mastery climates refer to structures that support hard work, learning,

cooperation, task mastery" (Standage et al., 2003, p. 99). Such climates tend to integrate individuals as a fundamental part of learning. By contrast, performance climates are associated with ego-oriented individuals. Performance climates "focus on interpersonal competition and entail the punishment of mistakes" made by the individual (Standage et al., 2003, p. 99). Although most people are usually exposed to both types of motivational climate, mastery climates have been shown to promote more adaptive achievement patterns that are associated with the adaptive cognitions and beliefs (Ommundsen & Roberts, 1999) that allow for self-development.

Although both ego- and task-orientation play an important role in the motivational strategy that people employ, Fry (2001) has shown that the "key for helping individuals reach their potential lies in helping them become task involved so that the focus is always on their own efforts and improvements in achievement situations rather than their normative standing" (p. 53). This implies that, although an ego-orientation is important in self-evaluation in comparison to others, task-orientation has been proved to be the more powerful motivating factor. It must be remembered that no single athlete can be said to be either exclusively task- or exclusively ego-oriented; instead, the appropriate motivational strategy needs to be adopted for a given context and motivational climate.

TYPES	ACHIEVEMENT GOAL THEORY OF MOTIVATION	
	TASK-ORIENTED	**EGO-ORIENTED**
REFERENCE STYLES	Self-referenced ➢Competence ➢Personal improvements	Normative ➢Comparison of abilities
LOCUS OF CAUSILITY	Internal	External
ASSOCIATED PROCESSES	➢Persistence ➢Selection of challenging tasks ➢Interest in task	➢Reduced persistence ➢Failure to complete challenging tasks if not likely to succeed ➢Avoidance of challenges
CONCEPT OF ABILITY AND EFFORT	Undifferentiated Focus on self-development and improvement	Differentiated ➢Focus on showing greater ability for least amount of effort
MOTIVATIONAL CLIMATE	Mastery Climate	Performance Climate

Figure 1: Achievement goal theory of motivation

2.2.2 Intrinsic Motivation, Extrinsic Motivation and Amotivation

Intrinsic motivation, extrinsic motivation and amotivation have been studied from the perspective of two prominent theories, namely the self-determination theory of motivation and the hierarchical model of intrinsic and extrinsic motivation. When people experience rewards internally, in the form of pleasure, a sense of competence and satisfaction, they are said to be intrinsically motivated (Deci, 1975; Vallerand, 2001; Vallerand & Losier, 1999; Woods, 1998). The rewards in extrinsic motivation are derived from outside the individual, and include tangible benefits such as trophies, social rewards, praise or the avoidance of punishment (Ryan & Deci, 2000; Vallerand & Losier, 1999). Amotivation refers to the relative lack of any form of motivation (Dacey, Baltzell, & Zaichkowsky, 2008).

The self-determination theory of motivation focuses on the degree to which the "motivation toward activities is deemed to be internal and how varying levels of this self-determination influence the selection of actions that render desired motivational outcomes" (Standage et al., 2003, p. 97). The premise of this theory is that rewards are what cause people to repeat behaviour. The self-determination theory posits that motivation is based on a continuum that ranges from intrinsic motivation to extrinsic motivation and finally amotivation.

The hierarchical model builds on the self-determination theory's concepts of intrinsic motivation, extrinsic motivation and amotivation. It highlights the notion that social factors influence motivation. The hierarchical model stresses that motivation occurs on three levels, namely the global (or personality), contextual (or life domain), and situational (or state) levels (Standage et al., 2003; Vallerand & Losier, 1999). The global level of motivation refers to a person's general motivational orientation toward his or her environment and is seen as a more stable form of motivation emanating from the individual's personality (Blanchard, Mask, Vallerand, De la Sablonnière, & Provencher, 2007). The second level of motivation pertains to the contextual level or to a specific life context, such as work, education, leisure, relationships and sport, with

regard to how the motivation is experienced in those situations. The situational level is the motivation that people experience in the present while performing a task. This form of motivation is considered relatively unstable (Kowal & Fortier, 2000). Vallerand and Losier (1999) have suggested a motivational sequence that includes social factors, psychological mediators, types of motivation and behavioural consequences (see Figure 2). Their model emphasises the claim that social factors influence people's perceptions of their psychological mediators and ultimately their motivation and the consequences thereof.

SOCIAL ⟶ **PSYCHOLOGICAL** ⟶ **MOTIVATION** ⟶ **CONSEQUENCES**
FACTORS   **MEDIATORS**

• Success/ Failure
• Competition/ Cooperation
• Coaches' Behaviour
• etc.
	• Perception of
	  - competence
	  - autonomy
	  - relatedness
		• Intrinsic Motivation
		• Extrinsic motivation
		  - identified regulation
		  - introjected regulation
		  - external regulation
		• Amotivation

• Affect • Sportpersonship • Persistence • etc.
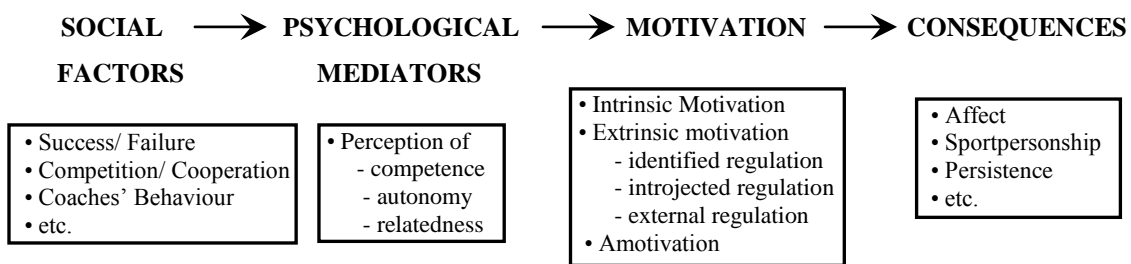
Figure 2: The motivational sequence (Vallerand & Losier, 1999, p. 145)

The intrinsic and extrinsic theory of motivation is concerned not only with social factors such as success, failure, competition and cooperation, but also with how the psychological mediators of autonomy, competence and relatedness mediate how a person will use the type of motivational process (intrinsic, extrinsic or even amotivation) (Alexandris, Tsorbatzoudis, & Grouios, 2002). The innate psychological factors of "autonomy (the belief that one is the origin and regulator of his or her actions), competence (the belief that one can efficaciously interact with the environment), and relatedness (the seeking and development of secure and connected relationships with others in one's social context) underpin motivation" (Standage et al., 2003, p. 97). These psychological factors are important for an individual's personal growth, so that the person can move towards a social situation that satisfies these psychological needs and allows the person to become more intrinsically motivated. The psychological mediating factors supplement the differences in individuals' experiences of motivation, because the relationship between these three elements has an impact on their motivation.

Intrinsic motivation is thought to have three regulatory styles: intrinsic motivation towards knowledge, accomplishment, and experiencing stimulation (Vallerand, 2001; Ryan & Deci, 2000). All three forms of intrinsic motivation are equally effective in promoting people's self-determination and increasing feelings of competency (Siegert & Taylor, 2004). Intrinsic participation in a sport is self-endorsed and not underscored by external rewards.

Extrinsic motivation lies on a continuum of regulatory styles (see Figure 3). The different extrinsic regulatory styles are associated with varying levels of self-determination. The least self-determined form of extrinsic motivation is called external regulation, where a person behaves in a certain way in order to receive a reward or avoid punishment from others (Standage & Treasure, 2002). Introjected regulation is an "incomplete internalization of a regulation that was previously external", but the activity is done due to internal pressure rather than by choice (Vallerand & Losier, 1999, p. 154). Identified regulation suggests a shift towards greater self-determination. The behaviour is initiated autonomously by the individual, but the underlying reason for engagement in the activity is still external to the individual (Standage & Treasure, 2002; Podlog & Eklund, 2007). The most self-determined form of extrinsic motivation is integrated regulation, which refers to a situation in which there is a purposeful "decision to engage in behaviours that are not interesting per se, but nevertheless important, because they help him or her reach personally valued goals" (Vallerand & Losier, 1999, p. 154). Since all the forms of intrinsic and extrinsic motivation lie on a continuum of self-regulation, it is possible for both intrinsic and extrinsic motivation to be present in varying degrees as people strive towards self-determination.

Amotivation is the least self-determined form of motivation and is indicative of a relative absence of motivation or intention. Amotivation can arise when people do not perceive the connection between their behaviour and the subsequent outcomes, feel that they lack competence and believe that the activity is unimportant (Ryan & Deci, 2000; Vallerand & Losier, 1999). A person has no sense of purpose and has no expectation of possibly influencing his or her environment.

	AMOTIVATION	EXTRINSIC MOTIVATION				INTRINSIC MOTIVATION		
REGULATORY STYLES	Non-Regulation	External regulation	Introjection	Identified	Integration	Knowledge	Accomplishment	Experiencing stimulation
LOCUS OF CAUSALITY	Impersonal	External	Somewhat external	Somewhat internal	Internal	Internal		
ASSOCIATED PROCESSES	Lack of: ➢ Competence ➢ Contingency ➢ Intention ➢ Activity value	Presence of external: ➢ Constraints ➢ Rewards ➢ Compliance ➢ Punishment	➢ Focus on approval (i.e. self or others) ➢ Ego involvement ➢ Internal rewards & punishment	➢ Activity valued ➢ Personally important goals ➢ Consciously pursued	➢ Synthesis of identified regulations to self ➢ Awareness ➢ Hierarchical synthesis of goals ➢ Congruence	Inherent: ➢ Pleasure ➢ Competence ➢ Satisfaction		
BEHAVIOUR	Non-self-determined							Self-determined

Figure 3: Self-determination continuum of motivation types

(Adapted from Ryan & Deci, 2000; Standage & Treasure, 2002)

2.3   GOAL-SETTING AND MOTIVATION

A goal is defined as the objective which an individual is trying to achieve and which is usually measured against a specific level of proficiency or must be reached within a specified time limit. The goals that are set, as well as an individual's long-term goal orientation, guides a person and exerts a significant influence on the person's motivation (Cashmore, 2002). Goals are the immediate regulators of human action, while motivation is the energy that directs and regulates human actions.

Goals have been divided into two broad types: subjective and objective goals. Subjective goals are evaluated by an individual's own appraisal and needs, such as to have fun or to do one's best (Weinberg & Gould, 1995). Although subjective goals are important, they are difficult to assess accurately. Consequently, research in this field

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tends to look at objective goals, which focus on reaching a specific standard in an event or task. Setting and attaining goals – be they subjective or objective – allows people to gain control of and set a direction for their future.

Objective goal-setting is not a unitary concept. Three different types of goals have been identified, namely outcome, process and performance goals. Outcome goals relate to competitive outcomes and the social comparisons that are made on the basis of those outcomes (Dudu, 2001). Process goals centre on the "demonstration of behaviours, skills and strategies that are part of the performance process" (Dudu, 2001, p.152). Performance goals are the specific and self-referenced standards that individuals evaluate themselves against and they are usually associated with less anxiety than outcome goals and with superior performance (Weinberg & Gould, 1995). Although goals are important, for goal-setting to be most effective, the process of reaching the goals must be accompanied by feedback showing the degree of progress in relation to the goal (Hall & Kerr, 2001).

Goal-setting and motivation are linked, since goals are described as being the means by which individuals "judge their competence and define successful accomplishment", which are critical factors in the "variations in the motivational processes" (Dudu, 2001, p.129). Goal-setting theories of motivation have been criticised for offering only a limited approach to understanding motivation, and making no attempt to identify the ultimate roots of human action (Hall & Kerr, 2001).

Achievement goals can be defined either as the "purpose for which a person engages in achievement behaviour" or as a "network or integrated pattern of variables that together create an orientation toward achievement tasks" (Elliot & Thrash, 2001, p. 139). The use of achievement goal motivation and intrinsic and extrinsic motivation allow for an understanding of the different ways of processing a goal or an activity. A goal is a representation of what an "individual is trying to accomplish and therefore represents the objective and aim of a specific action" (Hall & Kerr, 2001, p. 186). An analysis of forms of motivation allows us to understand why specific goals are set.

2.4   ATHLETIC IDENTITY

The term identity describes a person's self-understanding, self-objectification and integration of information about the self (Anderson, 2004). Many different identities may arise and become important to an individual, based on self-attributes such as cognition, affect and social roles (Murphy, Petitpas, & Brewer, 1996).

Athletic identity has been defined as the "degree to which an individual identifies with the athlete role" (Brewer, Van Raalte, & Linder, 1993). Athletic identity is one of the multiple identities that a person may have. The multiple identities that a person has are organised into a hierarchy, so that the greater the importance of a particular identity, the more time and effort the person will invest in its enactment, and the more the person's self-esteem depends on it (Anderson, 2004). The athletic identity enables an athlete to identify with the athlete role of that person's sport, but also allows for the identification of similarities with other athletes (Grove, Fish, & Eklund, 2004).

Previous research has explored the impact of athletic identity on emotional and social adjustment difficulties following an injury or an athlete's retirement from a sport (Green & Weinberg, 2001; Grove, Lavallee, & Gordon, 1997). Injuries or retirement are usually experienced as traumatic events and athletes have reported experiencing psychological reactions such as a sense of loss (Green & Weinberg, 2001). An injury or retirement denies an athlete access to a self-defining activity, and this lack of access is experienced as a loss. Grove et al. (1997) have shown that athletes with a strong and exclusive athletic identity are less likely to plan post-athletic opportunities for the period of their lives following their retirement, which may result in greater emotional and social adjustment difficulties than for other athletes.

Athletic identity is not a stable construct, as it may change over time or in response to changed circumstances (Grove et al., 2004). Such findings are consistent with the view that "self-categorization (i.e., labeling oneself as a member of specific social categories)

is a dynamic, fluid, and context-dependent process that reflects changing definitions of the self in relation to a constantly-changing social reality" (Grove et al., 2004, p. 76).

2.5 INJURIES

Injuries are perhaps the ultimate stressors that athletes must face. Recovery from an injury requires both physical healing and mental rehabilitation. Unfortunately, the focus often remains solely on the physical, which can ignore the psychological experience of being injured and the numerous thoughts, feelings and behaviours associated with an injury.

In trying to deal with rehabilitation after an injury in a comprehensive manner, the following four factors need to be addressed: education, goal-setting, mental training and social support (Heil, 1993a). Education is important because it allows the injured person a better understanding of how to proceed with the rehabilitation. Goal-setting defines an outcome that is to be achieved in relation to the injury. Mental training and social support are the "coping resources that the athlete may draw on to remain on the task in the face of adversity" (Heil, 1993b, p. 138). When rehabilitation is studied in terms of these four areas, it is clear that the aim of rehabilitation is to increase the self-efficacy of the athlete, so that the person can counter the sense of helplessness that he or she feels when he or she is injured.

2.5.1 Education

Education is vital in assisting an injured athlete to understand the injury and the process of rehabilitation. Education allows a relationship to develop between the athlete and the psychologist. An open and educating relationship may encourage athletes to invest optimal effort into their recovery because they understand what the rehabilitation involves (Heil, 1993b). This process allows for the "active participation of the athlete, and serves as a foundation for goal setting" (Heil, 1993b, p.142).

The education process forms a foundation for rapport and it enhances understanding of what the injury and the sport mean to the athlete. Such an understanding enables the psychologist and the injured athlete to compile a detailed outline of the recovery process, so that they both understand the rehabilitation process that they will engage in. It is also important that the athlete understands that rehabilitation, both psychological and physical, will not always progress smoothly and that setbacks may occur (Petitpas & Danish, 1995).

Education is the initial step that counters the belief that recovery from an injury is a passive process that an injured athlete "receives" from medical practitioners. Education must challenge the frequent reaction by athletes and those around them who believe that injury recovery is a process of "just waiting" until the athlete has recovered physically. Rehabilitation must be regarded as an opportunity for the athlete to understand his or her bodily limitations, which can be important in preventing further injuries (Heil, 1993b).

2.5.2   Goal-Setting in the Injury Rehabilitation Process

One of the most important aspects of the injury rehabilitation process is setting goals. Having goals and plans during rehabilitation helps to "establish an explicit statement of commitment" (Heil, 1993b, p. 142) to the rehabilitation and also helps to enhance the athlete's attitude and self-confidence. The most important element of any goal that is set is that the goal "acknowledges the suffering of the injury, identifies it as a normal or ordinary behaviour and characterises effective coping as an achievement" (Heil, 1993b, p. 144). The goals that are set should therefore be challenging, but attainable. "The ideal goal should be specific, measurable, achievable, relevant, and time-limited" (Siegert & Taylor, 2004, p. 2).

Goal-setting techniques have many benefits that are useful in helping injured athletes to recover from their injury. The main role of goal-setting is to direct attention and action to the rehabilitation process to mobilise the energy needed to embark on the rehabilitation process and recover from injury (Bunker, Rotella, & Reilly 1985). Goals

also make it possible to encourage persistence and dedication to the rehabilitation, as each individual is responsible for his or her own actions and accomplishments.

Injured athletes must learn how to deal with the severity of the injury and the impact that the injury will have on the athlete's short-term and long-term goals. Although injury is a serious obstacle, an athlete can derive some advantages from the recovery process, which include "goal orientation, [a] proclivity for physical training, strong motivation to return to optimal functioning and good pain tolerance" (Heil, 1993a, p. 73).

2.5.3   Mental Training

The rehabilitation programmes that injured athletes enter are designed to return athletes to their competitive sporting environment. However, their absence from the sport can create various realistic concerns for athletes. Petrie (1993) stresses that an injured athlete must not be pressured to return to play, but should rather return when he or she feels both physically and mentally ready.

Mental training is based on manipulations of behavioural and cognitive processes. The use of mental strategies such as relaxation training, mental imagery, biofeedback and hypnosis have been implemented to help athletes become mentally prepared for their sport. A combination of techniques, together with varied applications to different sports and rehabilitation situations, must be individualised to suit the constraints resulting from the injury concerned and the mindset of the athlete. When an athlete is injured, the "continued use of psychological training methods during the injury recovery helps the athlete maintain the mental skills and provides a sense of continuity with their athletic performance" (Heil, 1993c, p.153). An injury also gives a mentally untrained athlete an opportunity to develop self-regulation skills which are particularly useful to athletes and that athletes need in their continued sports participation.

Mental rehabilitation rehearsal can assist an athlete to anticipate and deal with the challenges of rehabilitation. Such mental rehearsal techniques can be used early in the

rehabilitation process to deal with a particularly difficult rehabilitation course, so that athletes can be mentally prepared. These techniques can also be used when specific problems arise in the rehabilitation process (Heil, 1993c).

Mental training skills are developed during pre-injury sports development or with the assistance of a psychologist after the injury. Mental training helps athletes to feel proactive during their psychologically-based rehabilitation and "maintain fundamental arousal control, attention control and psychomotor skills" (Heil, 1993c, p. 155). Psychological rehabilitation is the process that enables an athlete to maintain a "performance-oriented mind-set and facilitates mental readiness for the return to play" (Heil, 1993c, p. 155).

2.5.4   Social Support

The social support that an athlete receives comes from a variety of sources, including the athlete's coach, team mates, parents, spouse, friends and the medical team. Heil (1993b) cites medical evidence of both the medical and the psychological benefits associated with social support. Social support helps an athlete to deal with the stresses associated with the injury and enhances the prospect of recovery.

Rosenfeld, Richman, and Hardy (1989) have identified six forms of social support for athletes: listening, technical appreciation, technical challenge, emotional support, emotional challenge and shared social reality. Within an injured athlete's support system, there are three distinct social segments, namely the sports team, the sports medicine team and the athlete's parents, spouse and friends. There is no single group that can provide all six forms of social support. The sports team and the sports medicine team provide the more technical forms of social support, such as technical appreciation and technical challenge. Parents, a spouse and friends usually provide the best emotional social support, because of their personal involvement and concern (Heil, 1993b; Petitpas & Danish, 1995).

It is often assumed that social support occurs automatically for an injured athlete, but unfortunately it tends to be "more available immediately after an injury and becomes less frequent during the later stages of recovery" (Weinberg & Gould, 1995, p. 411). The psychologist's role is to help injured athletes to understand and use the support that is already provided by their social support network and also to identify the limitations of that support network.

It has been shown that the anxiety associated with injuries can be reduced by the encouragement and reassurance offered by an athlete's social support network, which also provides opportunities for the safe expression of emotions by an injured athlete (Heil, 1993b; Petrie, 1993; Tracey, 2003). Although social support is beneficial when it is positive and supportive, negative responses from coaches or team mates can also have a negative impact on the psychological recovery of an athlete (Heil, 1993b; Tracey, 2003).

2.6   MOTIVATION AND INJURY

Motivation and injury have not been clearly linked in the literature, although it has been generally implied that motivation plays a role in recovery from injuries (Heil, 1993a). The aim of this study is to explore the motivation that female netball players experience and use while recovering from injury. Because this is what this study focuses on, it is helpful to explore theories of motivation and their relationship to theories relating to injuries. The motivational theories of achievement goal motivation and intrinsic motivation, extrinsic motivation and amotivation are therefore explored in the context of the education, goal-setting, mental training and social support frameworks that underpin injury rehabilitation theory.

2.6.1   Motivation and Education

The collaborative relationship that should be formed in the educational process is meant to help athletes to understand the injury and rehabilitation process and the effort that is required from them in the rehabilitation. Motivation involves harnessing the personal

resources such as the effort, time and talent that a person is willing to invest in order to reach his or her personal or socially valued goal (Roberts, 2001). Using education in the rehabilitation process attempts to activate the individual's motivational processes so that the athlete will be prepared to exert the effort that is required for rehabilitation.

Education on injury rehabilitation should make use of all aspects of motivation. The education process cannot be a unidirectional relationship – it requires active collaborative participation for the athlete to become aware of the requirements of the rehabilitation process. Motivation is thus influenced not only by an athlete's task-oriented and intrinsic motivation, which has an internal locus of causality, but also by the ego-oriented and extrinsic motivation that may be provided by external sources such as psychologists, team mates or family members.

Task-oriented and intrinsic motivation should intersect in such a way that they encourage the injured athlete to explore the knowledge gained in the education process that forms part of the rehabilitation process. The knowledge gained from the education process can be added to the athlete's own self-referenced criteria, such as personal improvement and learning, in order to improve competence. Podlog and Eklund (2007) have found that intrinsic and task-oriented motivation may be developed when an injured athlete perceives the education process as supportive of his or her autonomy. The literature to date suggests that sports people who approach injuries as an opportunity to develop their own education and knowledge tend to improve their chances of recovery and their future longevity in the sport (Heil, 1993b).

Ego-oriented and extrinsic motivation also plays a role in an athlete's willingness to experience the education process. If the education and knowledge that are shared are only concerned with classifying the injured athlete and aiding comparisons with other injured athletes, the only motivational strategy that the athlete could use would be ego-oriented and extrinsic motivation. This kind of motivation encourages athletes to focus on social comparisons and outperforming others so that they can improve their comparative injury situation in relation to others (Roberts, 2001). The psychologist's

support and motivation for injured athletes during their rehabilitation may also be a source of ego-oriented or extrinsic motivation.

2.6.2 Motivation and Goal-Setting

Goal-setting during recovery from injury is a motivational process. The injured person evaluates the steps required to achieve rehabilitation. Achievement goal motivation gives athletes a sense of accomplishment when the rehabilitation goals are reached (Roberts, 2001). The drive to achieve these goals has to come from valuing or wanting something; this drive could represent intrinsic and task-oriented motivation, involves the person's own self-evaluations of his or her goal and is formed due to internal incentives. It could also represent an extrinsic and ego-oriented drive, implying that the goals are based on athletes' comparing themselves against others or focusing on external incentives. Goals are important because "the essence of rehabilitation is goal setting" and "if rehabilitation is to be taken forward, agreed goals and outcomes are essential" (Siegert & Taylor, 2004, p. 2).

Previous research has shown that task-oriented or "intrinsic goals are more powerful motivators than extrinsic or externally imposed goals" (Siegert & Taylor, 2004, p. 5). The goal-setting process needs to come from the individual's own internal incentives and current situation as "extrinsic goals can actually serve to disrupt behaviour that is intrinsically motivated" (Siegert & Taylor, 2004, p.5). Goal-setting is not always a linear process. People are influenced by their past and also by their possible futures. The motivational strategy that people choose depends largely on their own past experiences of successful motivational strategies. The choice of intrinsic motivation and task-oriented goals, as well as extrinsic motivation and ego-oriented motivation, is related to people's past experiences and future expectations.

2.6.3 Motivation and Mental Training

Mental training approaches that "incorporate variety, novelty and a progressive approach to skill learning help maintain interest and motivation" (Heil, 1993c, p. 154).

Typically, mental training involves a psychologist verbally guiding the athlete in the use of mental training approaches and subsequently encouraging the athlete to master these techniques through independent practice.

During mental training, the psychologist uses extrinsic and ego-oriented motivation, allowing social comparisons and providing social support for the injured athlete. The critical phase in mental training is the independent practice by the athlete. Intrinsically motivated or task-oriented athletes tend to display a commitment to independent mental training, as they engage in mental training to feel competent and to achieve self-determination (Deci, 1975). Gardner and Moore (2007, p.145) believe that "commitment is demonstrated when one regularly and consistently demonstrates … the specific behaviours and activities that are likely to result in optimal performance" and thus also recovery from injury.

2.6.4   Motivation and Social Support

Social support affects an athlete's motivation in all contexts. The impact of social support is mediated by "perceptions of competence (interacting effectively with the environment), autonomy (feeling free to choose one's course of action), and relatedness (feeling connected to significant others)" (Vallerand, 2001, p.265). Social support is not a factor that can be separated from the different types of motivation in this study; rather, the impact of the social support needs to be explored.

In the discussion on injuries above, extrinsic and ego-oriented motivators such as social support have been shown to have a positive effect on the rehabilitation process. However, for these extrinsic motivators to be successful, the presence of intrinsic and task-oriented motivators such a personal goals and the belief that the recovery from the injury is possible are also required (Tuckman, 1993). According to Vallerand and Losier (1999), intrinsic motivation has also been shown to have the most positive impact on persistence, which is required when a rehabilitation plan is implemented.

2.7 INTEGRATION OF THE LITERATURE REVIEW AND RESEARCH QUESTION

This study aims to explore which motivational processes are most frequently used by female netball players when they are recovering from an injury. The literature review above has provided a useful theoretical background that focused the exploration of motivational processes in this study and the questions that were explored in the interviews to reveal many different aspects of motivation and injury rehabilitation.

The two theories of motivation, namely the achievement goal theory of motivation (Pensgaard & Roberts, 2000; Treasure, 2001) and the intrinsic, extrinsic and amotivation theory (Ryan & Deci, 2000; Vallerand & Losier, 1999) can be linked to the exploration of the current theories on motivation and injuries. The interviews with the injured female netball players (see Chapter 4) allowed their experiences to be explored, with the theories acting as a backdrop. Various aspects of the participants' injuries and their motivational experiences were explored. The differences between the theories created room to explore individual experiences (the research was guided by primarily by these experiences, rather than by a single theory).

The literature has shown that motivation lies on a continuum and that everyone is motivated in various ways, depending on the context or motivational climate that the person experiences (Ryan & Deci, 2000). The use of particular motivational processes is thus a personal experience; and this supports the contention that a qualitative research paradigm (see Section 1.6), exploring individuals' experiences of their own motivation with regard to their injury, is best suited to the aims of this study.

The literature with regard to injuries has highlighted the importance of education, goal-setting, mental training and social support. This multi-faceted approach highlights the fact that injured athletes need to know how to proceed with their injury, as well as which coping strategies are required. The literature indicates that recovery from injuries is not only a physical recovery process, but also involves a psychological recovery (Heil, 1993b). The exploration of injured netball players' motivation took into account

that recovery from an injury has a psychological component that also needs to be explored.

Thus far, a combined exploration of theories of motivation and injury has not been done. Throughout the exploration of the differing processes of injury rehabilitation in the current study, it was evident that motivation does play a role in an athlete's recovery from an injury. There was no definitive type or regulation style of motivation that could account for the entire rehabilitation process. This emphasises the need to explore the individual motivation of injured netball players.

The literature review has provided a foundation on the basis of which it is possible to acknowledge that there are interfaces between motivation and injuries. This provided the basis for the questions that the participants were asked. These questions explored individual experiences of motivation and the way motivation operated during the athletes' recovery from injury.

2.8   CONCLUSION

In this chapter, research regarding motivation, athletic identity and injuries has been reviewed and theories of motivation and injuries have been examined. The aim of this chapter was to set out the theoretical foundations that support this research.

The two dominant theories of motivation with regard to sport have been examined. The achievement goal theory of motivation identifies two main orientations, namely task and ego-oriented motivation (Steinberg et al., 2001). The theory of intrinsic, extrinsic and amotivation further emphasises that motivation takes many different forms in terms of what regulates people's behaviour (Vallerand, 2001). The one area in which these theories overlap is that motivation lies on a continuum, which implies that nobody relies one specific type of motivation to the exclusion of all others.

Athletic identity was explored to enable greater understanding of athletes' identification with the athletic role and their self-understanding (Anderson, 2004). The importance of

athletes' athletic identity for their self-understanding has vital implications for the impact that an injury can have on an athlete's life.

The theory on injuries also emphasises the importance of a multi-faceted approach covering education, goal-setting, mental training and social support (Heil, 1993a). It suggests that rehabilitation should be approached in a holistic manner that addresses both the physical and psychological needs of the injured athlete.

The exploration of theories of motivation and injuries has revealed areas of overlap between the different theories. A theme that emerges from this exploration is that motivation can be seen as being as an important aspect, in its varying forms, in the injury rehabilitation process (Taylor & May, 1996).

The literature review explored theories that are relevant to the research question. This review was complemented by the subsequent investigation of the injured netball players' own motivations during their rehabilitation (see Chapter 4), which allowed a deeper picture to emerge regarding the motivations that athletes use and which could not be deduced from the literature review.

In the interviews with the participants, several themes emerged from their experiences. These are discussed in the next chapter. The theories that have been discussed above are used to examine the themes that emerged from the interviews to see how the themes compare or shed new light on the concepts of motivation and injury. The literature is used to "confront" the data only after the themes have been extracted and this therefore allows for the experiences of the participants' voices to be heard. The literature review provides a focus for the research and influenced the questions posed in the interviews.

The next chapter deals with the research methodology used in this study.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology refers to how the researcher actively goes about studying the research question. It is driven principally by the theoretical paradigm that the researcher chooses. In this study, the researcher adopted a qualitative approach, the ontology of which is wanting to understand the internal reality of subjective experience (Terre Blanche & Durrheim, 2002). The research methodology was therefore based on an interpretive phenomenological perspective. This chapter starts by looking at the qualitative and phenomenological elements of the research. The participants in the study are then discussed, followed by an overview of the ways in which the data was dealt with. The methods of data collection, transcription procedures and analysis are explained. Finally, the ethical aspects of the research methodology are discussed.

3.2 RESEARCH CONTEXT

The *Mini Oxford Dictionary* defines research as "careful study or investigation to discover facts or information" (1994, p. 488). The research context can only be understood if it is placed within a specific paradigm, as this enhances understanding of how the research was conducted. Paradigms are "worldviews that signal distinctive ontological (view of reality), epistemological (view of knowing and the relationship between knower and to-be-known), methodological (view of mode of inquiry), and axiological (view of what is valuable) positions" (Sandelowski, 2000, p. 247). Thus a paradigm is built on implicit assumptions, accepted definitions, comfortable habits, values defended as truths, and beliefs projected as reality. Paradigms inform the researcher of what is important, legitimate and reasonable, and guides the methodology and epistemology of the research. This aspect of paradigms constitutes both their strength and their weakness. Their strength is that they make action possible, but,

conversely, their weakness lies in the very same characteristic: action is hidden in the unquestioned assumptions of the paradigm (Patton, 1999).

There are three paradigms that guide social science research. The positivist or realist paradigm assumes that a stable reality exists and that definitive knowledge can be identified. The researcher is expected to be an objective and detached observer of reality (Haverkamp & Young, 2007). The constructionist paradigm assumes that reality is socially constructed and consists of many different discourses. The researcher is expected to take the stance of a suspicious observer who deconstructs social versions of reality (Terre Blanche & Durrheim, 2002). The interpretive paradigm, which is the paradigm that guides this research, posits that reality is based on a person's internal subjective experience. Hence, the researcher takes an interactional stance that allows the subjective reality to be interpreted (Haverkamp & Young, 2002).

3.2.1   Qualitative Research

Qualitative research is concerned with building a rich, complex and holistic picture of the lived experience of people's lives. The data in qualitative research is not the kind of numerical data that is produced in quantitative research. Instead, the focus is the depth, richness and texture that is produced through language (Yeh & Inman, 2007). The researcher is no longer a passive observer or reporter of reality, but takes on the role of an interpreter and acknowledges that the researcher influences the knowledge that emerges from the exploration of people's lives (Yeh & Inman, 2007). Qualitative research is thus emic, because it arises from an insider perspective on the participants, and the knowledge that is produced is idiographic, as it is relevant to a very limited number of individuals or groups.

Qualitative research aims to achieve depth and richness in the data that is collected, which implies that true objectivity is not possible. Subjectivity in qualitative research is due to the fact that it is impossible to separate the researcher from the research process. The researcher thus plays a very subjective role in how he or she shapes, influences,

interprets, analyses and selects the theory guiding the research (Yeh & Inman, 2007). Thus the researcher must be aware of his or her own values, biases and assumptions.

Qualitative research does not conform to the statistical measures of reliability and validity, as quantitative research. In qualitative research, the trustworthiness or validity of the research needs to be addressed. Trustworthiness refers to how the account represents the participants' realities of the social phenomena that are under review and are credible to the participants (Creswell & Miller, 2000). Trustworthy qualitative research also acknowledges that the researcher will have an influence on the final account. In qualitative research, trustworthiness does not refer to the data, but rather to the inferences that are drawn from the data. Thus the researcher plays an important role in ensuring the trustworthiness of the research.

Trustworthiness and validity in qualitative research can be ensured in a number of ways. One of the methods employed by researchers is to look for disconfirming evidence in the data. The researcher initially established themes and categories and then searches for evidence that may disconfirm these themes (Creswell & Miller, 2000; Patton, 1999). A further check of the validity of qualitative research is prolonged engagement in the field in which the research is being conducted. This allows access to the participants and enables the researcher to establish a rapport so that the participants feel comfortable disclosing and sharing their experiences (Creswell & Miller, 2000). Another method that is used to ensure validity is providing thick and rich descriptions which give deep and dense accounts that let the readers feel that they have experienced or could experience the events described in the research, making them regard the research as a credible account of the phenomenon that is studied.

The trustworthiness and validity of this research was ensured by the researcher having had a prolonged engagement as a netball player. This allowed the established rapport built as a netball player to be used in the research; by allowing the participants to feel comfortable about sharing their experiences. The experiences that were shared in the interviews were used throughout the results so that the readers could be immersed in the players' experiences.

The purpose of the research has an impact on the type of research that is conducted. Three broad purposes are commonly found in qualitative research. When the purpose of the research is theoretical or construct-oriented, the research has the goal of exploring the development of a theory or a model that expands understanding of specific constructs (Haverkamp & Young, 2007). A theoretical or construct-oriented purpose is often liked with a grounded theory investigation. Action-oriented purposes of research have the goal of effecting a change in response to the identified need of a community that reflects the social values of the researcher (Haverkamp & Young, 2007). Participatory action research is often used in action-oriented research. Practice-oriented research "aims to inform practice by providing rich, elaborate descriptions of specific processes or concerns within a specified context" (Haverkamp & Young, 2007, p. 274). The purpose of this study is practice-oriented, as the research aims to explore the motivation of injured netball players in the hope that it will elicit elaborate rich descriptions of their motivations.

3.2.2 Interpretive Paradigm

The interpretive paradigm falls within a qualitative research approach. This paradigm has a "relativist ontology in which there are as many realities as there are participants" (Morrow, 2007, p. 213). This permits the researcher's reality to be taken into account too. It acknowledges that the researcher and the participants influence reality, which enables an epistemology that is transactional and subjective.

The knowledge that arises from this epistemology makes it possible for meanings to arise through the interaction between people and recognises that reality is influenced by many things (Haverkamp & Young, 2007). The multiple influences on reality are the reason that it cannot be objectively observed, but has to be interpreted by a researcher. The method that is used in this study, which falls within an interpretive paradigm, is the phenomenological research method.

3.2.3 Phenomenological Research

Phenomenology attempts to uncover the concealed meanings in the phenomenon under review that are found in the words of the participants' narratives. These lead to a description of the universal essence of the phenomenon (Maggs-Rapport, 2000). Phenomenology is underpinned mainly by the philosophical writing of Husserl (the descriptive phenomenological tradition) and Heidegger (the interpretive phenomenological tradition) (Lopez & Willis, 2004). The descriptive and interpretive traditions are both encompassed under phenomenology, but different philosophical positions influence the values, knowledge claims and methods that can be used in phenomenological research.

Descriptive phenomenology attempts to reveal knowledge which transcends human experience and has an epistemological focus (Mackey, 2005). Descriptive phenomenological researchers try to achieve a transcendental subjectivity in which researchers set aside the initial bias and experiences that they have with the phenomenon so that everything can be perceived as if it is being perceived for the first time (Creswell, Hanson, Clark Plano, & Morales, 2007). The descriptive tradition also assumes that there are features to any lived experience that are common to people who have that experience; these are called the universal essences. The universal essences represent the true nature of the phenomenon (Lopez &Willis, 2004).

Interpretive phenomenology is the philosophical approach that underpins this study. Interpretive phenomenology has an ontological focus and is concerned with understanding "what it means to be, before looking to examine what can be known about existence, truth and the nature of reality" (Mackey, 2005). The key difference between the interpretive and the descriptive traditions is that researchers do not abandon their own perspective; they look at the phenomenon along with the participants, and these views fuse to form a deeper understanding that is no longer based on just a descriptive process.

In interpretive phenomenology, there are four key concepts that guide the methodology and how researchers see the participants, namely being-in-the-world, fore-structures, time, and space (Mackey, 2005).

Being-in-the-world is the central tenet in interpretive phenomenology, as individuals' realities are invariably influenced by the world in which they live. The knowledge that individuals cannot abstract themselves from that world is also vital (Lopez & Willis, 2004). There are many ways for each individual to be-in-the-world, but the most significant way is to be aware of one's own being, that is, to be capable of inquiring into one's own existence (Spinelli, 1989). Because all individuals are embedded in the world they live in, they are inextricably linked to their social, cultural and political contexts. This means that people are guided by the concept of situated freedom, which means that "individuals are free to make choices, but their freedom is not absolute; it is circumscribed by the specific conditions of their daily lives" (Lopez & Willis, 2004, p. 729).

The second important construct is that of fore-structures. Fore-structures are what is understood or known prior to interpretation (Dreyfus, 1995). Fore-structures are brought into the research situation by both the researcher and the participants. Interpretation is always built on fore-structures. This implies that interpretation is a circular process whereby the fore-structures of understanding are made explicit, which then enables an understanding of the phenomenon and then also encourages a reconsideration of the phenomenon. This makes movement between partial understanding and the more complete whole possible (Mackey, 2005). This process can be understood methodologically as the hermeneutic circle.

Time is one of the fundamental structures of human existence. For this reason, interpretation cannot be achieved unless it is grounded in a consideration of time. Time is interwoven in every aspect of life and the research process, and is critical to understanding being-in-this world, as every individual has to be temporally situated in the world (Polt, 2005). Time is the basis for all our understandings, as time allows us to understand our past, deal with the present and anticipate what is expected in the future.

The final construct is that of space. Spatiality grounds a person in a location. Space allows people to bring something closer to them or to experience it as remote (Dreyfus, 1995). Closeness is not measurable in terms of distance, but can rather be understood to represent what people are concerned or care about. An interpretive phenomenological research perspective aims to understand the spatial situation of a person's world and the closeness and remoteness of situations from a participant's description of the phenomena (Mackey, 2005). This allows the person's spatiality and the research to be linked.

Interpretive phenomenology approaches research from the perspective of trying to understand the participants and their context in terms of their existence. The aim of the research is to explore how the participants make sense of their experiences within the constructs of space and time (Chapman & Smith, 2002). The final research report should express individual experiences, as well as make known what part of the experience is common to the individual participants. The readers of phenomenological research reports should be able to come away knowing that they now have a greater understanding of what it would be like for an individual to experience the phenomenon under review.

3.3   PARTICIPANTS

3.3.1   Sampling Procedures

The aim when selecting a sampling procedure is to select a sample that represents the population – in terms of the research question, the population of injured female netball players. Qualitative sampling strategies are not as rigidly prescribed as quantitative strategies, because the aim of the research is not generalisibility, but rather transferability to other contexts or similar groups (Durrheim, 2002). Sample selection is critical for the outcome of qualitative research, as the sample that is chosen determines the quality and the depth of the themes that are elicited.

In qualitative research, the sample size is usually much smaller than in quantitative research. The qualitative technique of sampling to redundancy is used to determine the ultimate sample size. The sample size is not defined in advance: the interviewing of more participants ceases when no new information or themes can be gained from increasing the sample size (Durrheim, 2002; Morrow, 2007).

Non-probability samples are not selected by the procedures of statistical randomness, but rather for the specific in-depth knowledge that the researcher is trying to obtain. In this study, purposeful sampling was done in line with the aims of the research. The power of purposeful sampling lies in the fact that it enables the selection of information-rich cases that allow for an in-depth exploration of the phenomenon. This makes it possible for the researcher to explore various themes that arise from these information-rich cases (Coyne, 1997).

The specific purposeful sampling strategy used in this study was criterion sampling. In criterion sampling, cases are chosen that typify the criteria that are being researched (Sandelowski, 2000). The criteria of this study were chosen to ensure the selection of a very specific population. The first criterion for inclusion was that a potential participant had to be a female provincial netball player who had been injured to the extent that she could not participate in netball. A further prerequisite for inclusion in the study was that she had to have been injured severely enough to have been or still currently to be out of competition for at least two months.

The criteria that were chosen for this sampling strategy arose from the researcher's personal experience of seeing many players who were injured quite seriously but still played through the pain or only took a minimal amount of time out of the sport. The two-month criterion ensured that the players' injuries were severe enough for them to have been out the sport and not constantly playing with an injury. The criterion of needing to be provincial netball player was added because the researcher wanted to look at netball players who had played at the highest level and at the challenges that they faced in trying to regain their previous level of play after an injury.

3.3.2   Research Participants

The research participants who were chosen to be part of this study were purposefully selected by the researcher. All the participants are netball players that the researcher has played with or against at a provincial level. This gave the researcher information on which players had been seriously injured while playing netball.

Four participants were chosen to participate in this study. All the participants had experienced at least one serious injury that had kept them out of netball. Only one of the participants was still injured at the time when the interviews were conducted. All the other participants had been injured, but had returned to playing netball. The longest disengagement from netball by a participant was two years, but the majority of the participants were out of the sport with their injuries for about a year. Many of the participants had suffered previous injuries that had also kept them out of netball.

The participants selected varied in age. The oldest participant was aged 42, the youngest was 20 years old. All the participants have played netball at a provincial level and they have had been involved in the sport for a long time – from 13 years to 35 years. Three of the participants have played netball provincially at both the indoor and the outdoor, level, while the remaining participant has only played netball provincially at the outdoor level, but still participated in indoor netball.

The sample was chosen because it allowed the varied experiences of these participants' and their histories to be explored. The researcher purposefully chose a variety of ages and experiences so that different experiences could be investigated in this study.

3.4   RESEARCHER'S POSITION

Interpretive phenomenological research assumes that the researcher takes an active part in the research and the interpretations that are made on the basis of the research data. The interpretive phenomenological research also assumes that researcher does not

abandon his or her presuppositions or knowledge, but rather uses that knowledge to guide the research inquiry (Lopez & Willis, 2004).

The trustworthiness of the research is increased if the readers of the research understand the researcher's social position in relation to that of the participants in the study and is aware of the relative privilege and power that the researcher holds, as well as the researcher's worldview (Morrow, 2007). The researcher in this study has played netball from a very early age and has played netball for outdoor and indoor provincial netball teams. This gave her access to many players that she has played both with and against, and that have been injured whilst playing netball. The researcher is also in the position of having gained the trust of fellow netball players, who were therefore willing to participate in this study.

The research question arose due to the experience of seeing numerous players being injured whilst playing netball, but noting that nearly all the players returned to playing netball once they had recovered from their injury. This initial observation guided the development of this research and the researcher's subsequent engagement with the literature.

The knowledge that the researcher has acquired as a player and through the literature review was relevant when the interviews were conducted. The interpretive phenomenological perspective allowed for this knowledge to be used with regard to the motivational and injury theories that the researcher chose to focus on and to determine the questions that were asked in the interviews. This knowledge also influenced the final report of the experiences of the research participants, as it used the researcher's prolonged engagement with the netball context and adds to the trustworthiness of the research.

3.5   DATA

3.5.1   Data Collection Procedure

The participants were informed of the nature of the study and their informed consent was obtained. A semi-structured interview was used to collect the data. The reason for choosing the semi-structured interview format was that it allowed most aspects of motivation to be addressed. Moreover, the semi-structured interview format gave the participants opportunities to add depth to their accounts of their own personal experiences of their injury and their motivations. A single interview was conducted with each of the participants. The purposive sample ensured the inclusion of a cross-section of female netball players that were currently in various stages of the injury rehabilitation process, or had recovered from their injuries.

3.5.2   Transcription Procedure

The interviews were audio-taped and the transcription process was undertaken by the researcher. The transcription process made the researcher more familiar with the data. The transcription process should be "recognized as an interpretative act, where meanings are created, rather than simply a mechanical act of putting spoken sounds on paper" (Braun & Clarke, 2006, p. 88).

Once the transcription of the interviews was completed, the transcribed data was then read through, while the researcher listened to the recording to check that the transcription was an accurate account of the interviews. It also provided a broad overall perspective of the interviews before the data analysis began.

3.5.3   Data Analysis Procedure

Thematic analysis was implemented. This is a technique for identifying, analysing and reporting patterns (themes) within data. Braun and Clarke (2006, p. 81) state that "thematic analysis is not wedded to any pre-existing theoretical framework, and

therefore it can be used within different theoretical frameworks and can be used to do different things within them". Thematic analysis made use of the researcher's experience and influence, which should be accounted for in interpretive phenomenology, in the identification of themes and patterns in the data.

The identification of themes in the data is a vital process in the analysis. A bottom-up approach was used, focusing on the themes that naturally underlie the data, as recommended by Terre Blanche and Kelly (2002). This approach is also called an inductive analysis approach, in which the coding process for the data does not try to fit the data into a pre-existing coding frame or the researcher's analytic preconceptions (Braun & Clarke, 2006). "A theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p.82). The themes that the researcher uncovered reflect the purpose of the research. The aim of the research is to provide a "rich thematic description of your entire data set, so that the reader gets a sense of the predominant or important themes" (Braun & Clarke, 2006, p83).

There are two levels in the determination of theme, either a semantic or a latent level. With a semantic or explicit level, the themes are identified within the explicit or surface meanings of the data, and the researcher is not looking for anything beyond what a participant has said or what has been written (Braun & Clarke, 2006). The latent or interpretive level "starts to identify or examine the underlying ideas, assumptions, and conceptualizations – and ideologies – that are theorized as shaping or informing the semantic content of the data" (Braun & Clarke, 2006, p. 84). In this research, the latent approach is used in the identification of the themes of the data. The latent approach acknowledges that the development of the themes involves interpretive work and that the analysis that is produced is not just a description, but has already been theorised (Braun & Clarke, 2006).

An interpretive phenomenological approach allowed for the researcher's experiences as a netball player to influence and be recognised within this research. During the thematic

analysis the four key concepts of being-in-the-world, fore-structures, time and space were present and were brought into the study by the researcher and the participants.

Being-in-the-world, the researcher is embedded within netball's specific social context, which means that her subjective experiences are inextricably linked to that context. This implies researcher-situated freedom, which means that the researcher is free to make choices, such as which final themes to record as emerging from the interviews, but the freedom of choice regarding these themes is not absolute, as it is circumscribed by the researcher's context (Lopez & Willis, 2004).

The themes that are uncovered are inevitably affected by the fore-structures of the researcher, as it is impossible to avoid the prior awareness that the researcher has in relation to being a netball player. The interpretation made from the fore-structures "allows [for] that which is already understood, to be revealed" (Mackey, 2005, p. 182). This means that the themes that emerge are built on the prior awareness of the researcher.

The concept of time is very central in understanding injured players' experiences. Interpretive phenomenology assumes that all experiences must be grounded in time as it allows for the awareness of our past, present and future to be experienced coherently (Mackey, 2005). Situating the analysis in the players' experiences of time helps to create an understanding of the players' view of reality. Expressing the players' experiences of netball in relation to time grounds the results in the experiences of the injured netball players.

Space in interpretive phenomenology links a person to a location. The experience of location allows the participants to experience netball as something that they are either brought closer to because it is something that they care about or experience as further away (Mackey, 2005). The aim of the analysis is to describe, through the themes and the results, the experiences of injured netball players with regard to being close to netball or experiencing netball as something that is remote to them. This is achieved by

recording the experiences of these players among the results. These assumptions serve as a backdrop to the steps in the analysis.

The steps in the thematic analysis of the data are described in more detail below to show the process followed in the analysis.

3.5.3.1 Step 1: Familiarity with the data

The researcher conducted the interviews for this study. This facilitated the initial development of some preliminary analytic thinking regarding the data. The process of transcription by the researcher also enhanced her thorough understanding of the data. The critical process that needs to occur in this step is "immersion [which] usually involves 'repeated reading' of the data, and reading the data in an active way – searching for meanings, patterns" (Braun & Clarke, 2006, p. 87). The goal of this process was to formulate an initial list of ideas about the data.

3.5.3.2 Step 2: Generating the initial codes

This step of the process involves producing the initial codes for the data. Coding is the process whereby "raw data is systematically transformed and aggregated into units" (Holsti, 1969, p. 94). The codes refer to the most basic segment, or element, of the raw data or information on the phenomenon that can be assessed in a meaningful way. The process of coding is part of analysis, as the researcher organises the data into meaningful groups, but the eventual themes are broader than the codes that are initially established (Braun & Clarke, 2006). The aim in the coding process is to be as thorough as possible. The coded data is not limited to just one theme, but may be recoded into as many themes as may be relevant.

3.5.3.3 Step 3: Searching for themes

This step in the analysis is concerned with the introduction of initial themes. The coded data needs to be sorted into overarching themes that include sub-themes. The process of

organising the data into the initial candidate themes makes it possible to summarise the coded data; however, the themes are more abstract and reveal what is happening in the data (Attride-Stirling, 2001). This step in the analysis ends when the researcher has gathered "a collection of candidate themes, and sub-themes, and all extracts of data that have been coded in relation to them" (Braun & Clarke, 2006, p. 90). The sense of the significance of individual themes should start to be established at this point in the analysis. The use of thematic maps aids in visually organising the data so that the candidate themes and sub-themes are easier to conceptualise (Attride-Stirling, 2001; Braun & Clarke, 2006).

3.5.3.4 Step 4: Reviewing the themes

Reviewing the initial candidate themes helps to refine those themes. Where there is not enough evidence for a distinct theme, two themes are merged into a single combined theme. A theme may also need to be split into two separate themes. The reviewing phase evolves in two stages. In this study, the first stage involved rereading the coded data for each theme to assess whether or not they form a coherent pattern. If there is no coherent pattern, the themes may be problematic or some of the coded data may not fit within that theme. This implies that the themes need to be reworked, new themes need to be created or some of the coded data may need to be excluded from the analysis (Braun & Clarke, 2006).

Once the themes have accurately captured the fundamental nature of the coded data, Stage 2 of the reviewing process, which involves reviewing the entire data set, begins. In this study, at this level, the validity of individual themes was considered in relation to the data set. In addition, the researcher examined whether the themes accurately represented the meanings evident in the data set as a whole. In this phase, the entire data set is usually reread for two purposes: the first is to "ascertain whether the themes 'work' in relation to the data set, and the second is to code any additional data within themes that have been missed in earlier coding stages" (Braun & Clarke, 2006). When this step has been completed, there is an understanding of what the themes are, how the themes fit together, and how they account for the data overall.

3.5.3.5 Step 5: Defining and naming the themes

The themes that are identified need to be defined and named so that they represent an understanding of what each theme is about and what aspects of the data each theme captures. Within the defining and naming process, sub-themes that help in understanding and defining the themes also need to be identified and named (Braun & Clarke, 2006). The final names for the themes that are used in the report also need to be considered. The names should be concise and punchy and should immediately give the reader a sense of what the theme is about.

3.6   ETHICS

The ethical considerations for this study were guided by the three ethical principles of autonomy, non-maleficence (that no harm should befall the participants) and beneficence (that the research should be of some benefit either to the participants or to society at large) (Durrheim & Wassenaar, 2002). The participants of this study received a clear explanation of the nature of the research that was being conducted; this enabled the participants to make an informed decision as to whether or not they wished to participate in this research. Participation was voluntary, but if they wanted to participate, they needed to fill in an informed consent form showing that they understood the nature of the research, and they had chosen to take part in this research. Participants could choose to remove themselves from the study voluntarily if they no longer wished to participate in the research at any time. The anonymity of the participants' responses was guaranteed, as no identifying personal information was used for this study. The research participants were all over the age of 18 years, so no consent from parents or legal guardians was required.

3.7   RELEVANCE

This study is relevant, because, although it is not a broad study in terms of its generalisibility, the study will add depth to the understanding of psychology of female

netball players' motivation. This is the main aim of this research and should add to the limited psychological research that has been conducted on the psychology of female netball players.

The insights gained into the motivations of the injured netball players will also add to the numerous research studies that have been conducted on the injuries that female netball players suffer (Hopper, 1986; Hume & Steele, 2000; McGrath & Ozanne-Smith, 1998; Smith et al., 2005). There is a need to link the psychological aspects to the medical and physical aspects of rehabilitation to enhance the chances of success in a person's rehabilitation from an injury. Motivation has been shown to play a very important part in athletes' compliance with their injury rehabilitation programmes (Taylor & May, 1996). Thus the understanding gained in this study should be relevant to further research that could be conducted on rehabilitation compliance and motivation.

3.8   CONCLUSION

This chapter has highlighted the paradigms guiding this study. Interpretive phenomenology guided the research process with regard to data analysis and the knowledge claims that can be made on the basis of this research. The interpretive phenomenological perspective allowed injured netball players experiences' to be heard while still permitting the knowledge that the researcher has to be used to guide the questions that were explored in the interviews.

The researcher's knowledge was used in the purposive criterion sampling strategy and the selection of the sample that was used in this research. The sample includes a player that is currently injured, as well as players who have recovered from their injuries and have returned to play. There was also a mixture of players that play provincial indoor or outdoor netball or both forms of netball.

The data collected in the interviews was analysed using thematic analysis. Thematic analysis is useful with an interpretive phenomenological perspective, which

acknowledges the researcher's influence on the analysis of the data. Thematic analysis requires a researcher to become familiar with the data, so that patterns, codes and themes can emerge. The themes of the data lead to an understanding of the motivations that female netball players use when they are injured.

The next chapter presents the results that were obtained from the interviews and the data that emerged from the thematic analysis.

CHAPTER 4
RESULTS

4.1   INTRODUCTION

The presentation of the results of this research in this chapter lets the voices of the research participants be heard with regard to the research question. Thematic analysis revealed two central themes that formed two networks, namely the return to netball as inevitable and identity. These thematic networks are explored individually in the context of the transcript of the data as a whole. Finally, the exploration of the two thematic networks is integrated to interpret the patterns that emerged in each of the thematic networks in relation to the research questions.

4.2   RESEARCH QUESTION

The research question explored in this chapter is which motivational processes are most frequently used by female netball players when recovering from an injury. The research is discussed using the thematic networks that emerged from the data. The themes that emerged in these two thematic networks are discussed below.

4.3   THE RETURN TO NETBALL IS INEVITABLE

The interviews with the netball players highlighted that there is a strong motivational drive for all the netball players to return to playing netball after they have been injured. The injured netball players' sense that their return was inevitable suggests that their return to netball was a function of both the players' internal motivation and external factors supporting their return. The literature relating to motivation suggests the importance of self-referenced criteria such as personal goal accomplishment (Roberts, 2001) and this did indeed emerge as one of the central motivations for returning to netball that the participants mentioned. This motivation was balanced by external mediators such as social support from family, friends and the medical community, as

Rosenfeld et al. (1989) suggest. The thematic network (Figure 4) illustrates the tensions between the motivations of the injured netball players. Each of the sub-themes is explored in this chapter to enhance understanding of this tension.
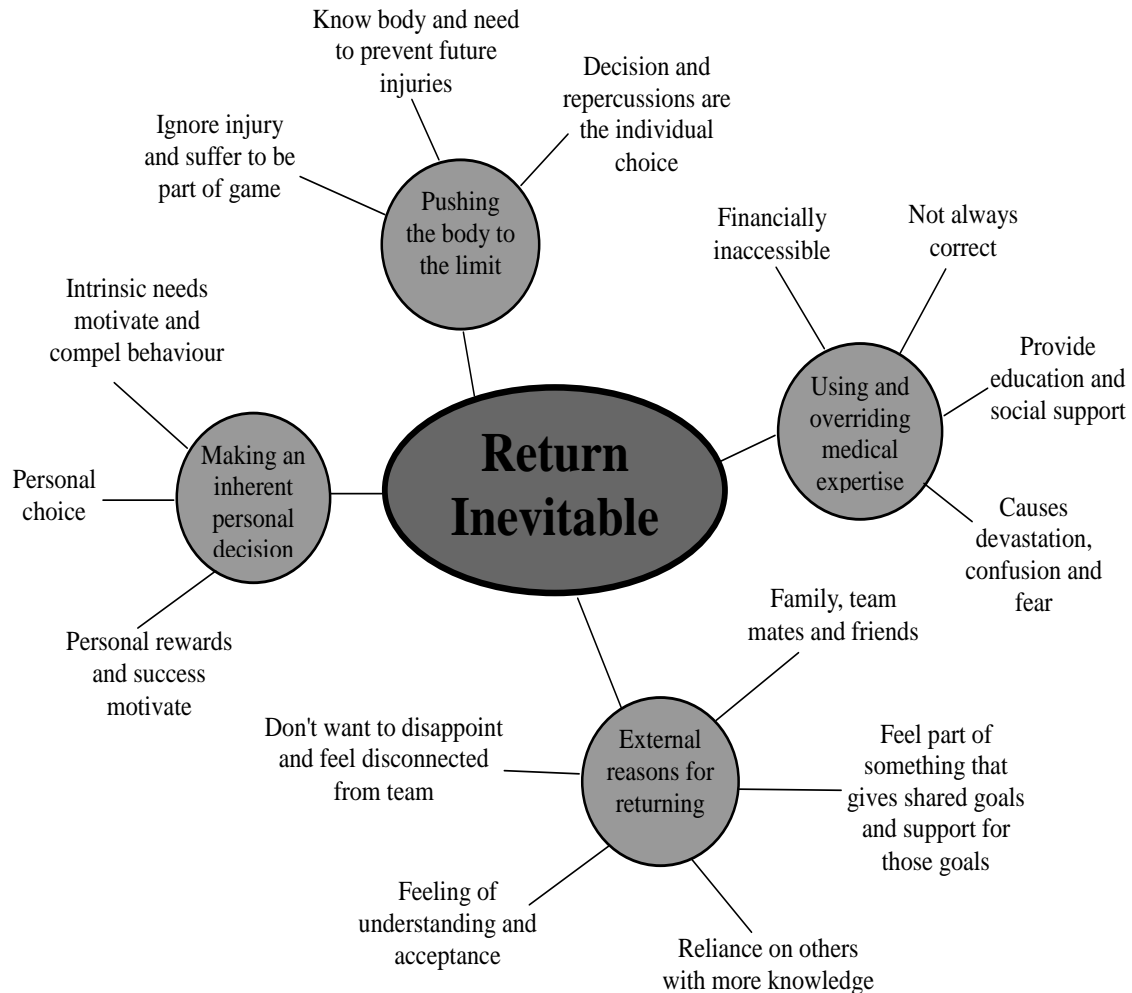
Figure 4: Thematic network of the inevitable return to netball

4.3.1   Pushing the Body to the Limit

The sub-theme of athletes' being able to push their bodies to the limit explores more internal forms of motivation, such as intrinsic motivation (Vallerand, 2001) and task-

oriented motivation (Pensgaard & Roberts, 2000). In this context, motivation is considered to be highly self-determined by each individual, as only the athletes themselves can decide how far they are prepared to push their bodies. Their own internal understanding of their body and its limits allows players to take ownership of their motivation in returning to netball.

The motivation to return to play relates not only to coming back from an injury but also to the injured player's decision to continue playing while injured. There seems to be an innate need for players to play at a higher level which allows players to ignore their injuries and remain part of the game. Their intrinsic motivation to accomplish their goals, which is the "process of trying to reach new personal objectives" (Vallerand & Losier, 1999, p. 153), such as competing in a final, accounts for injured players' determination to continue playing despite their being injured. One of the participants commented as follows:

Participant B: "If it was a normal league game I'd have probably gone off and said, 'you know what, next week is fine', but you know if you are there, and we had worked so hard to get there to the finals, which is such a big one. ... what is the use in saying, 'no, well, I'm injured; I'm going to leave now'."

Task-oriented motivation implies an internal locus of causality and is associated with persistence and the selection of challenging tasks (Roberts, 2001). This type of motivation has an effect on an injured player's decision to continue to play and to endure the pain, which is to be understood as something that is important for the individual player's self-referenced understanding of her own expectations of herself as a netball player. One participant noted:

Participant B: "I mean that injury will not keep me away. There is no way, I'll strap it, I'll take a painkiller, but I'll be back here again. [...] [I] carried on playing ...it was obviously sore but nothing would stop me from playing."

In the injured netball players' accounts of their experiences, there was a strong sense that the netball players know their own bodies well. The players know what their bodies are able to endure, and therefore they also know when they will be ready to return. Thus, although there are many doctors who are medical experts on injuries, these players believe that ultimately it is the players' knowledge of their own bodies and their injury that will determine if and when a player will return to the game. One participant relates the following experience:

Participant C: "I had to go and get told that you are never playing again. Which was ridiculous! I know my body, and I knew that, yes, I had to take time off, but I knew it wasn't the end."

Given the players' knowledge that the netball players themselves make the final decision as to whether or not to play with injuries and as to whether they will return to the game, it follows that these netball players understand and accept that they are responsible for their decisions and the repercussions of those decisions. This finding can be related to the notion that these decisions are motivated by internal mechanisms such as intrinsic motivation and task-oriented motivation. This implies that the decisions that the netball players make are self-referenced and self-determined (Ryan & Deci, 2000). One participant put it this way:

Participant C: "I push myself extremely hard, which is probably why I think that an injury never really affected [my performance], never really caused an issue or stopped me going in hard for a ball because I had to give a hundred percent."

The findings relating to netball players' pushing their bodies to the limit highlight the internal nature of the decisions that the players make and their determination both to play with injuries and to return from an injury.

4.3.2   Using and Overriding Medical Expertise

The literature suggests that medical experts are supposed to provide a supportive and educative mechanism to assist injured athletes (Heil, 1993b). However, the interviews in this study showed that the injured netball players' experience of medical experts was ambivalent – sometimes they avoided medical intervention, but at other times they welcomed and used medical advice and support. When players avoid the supportive and educative mechanism that medical assistance can offer for their recovery, this means that the players have to rely only on themselves during their rehabilitation. However, when players feel that a medical team's knowledge and support is consistent with the goals of the injured player who wishes to return to the game, players are more likely to turn to the medical experts for social and expert support and education.

Players may avoid seeking medical assistance for financial reasons – medical costs may make such assistance inaccessible to players who are not covered by medical aid. The often exorbitant cost of medical intervention and support may result in situations in which netball players who might have received support from medical experts were forced to rely on themselves and had to educate themselves and motivate their own rehabilitation from injury, because medical support was financially inaccessible or limited, as the following comments show:

Participant B: "I wasn't in a position where I could go to the doctor and spend thousands of dollars, um, thousands of rands on physiotherapy and all that. So I'd rather sit with the pain, play my game and take over the counter medications, and put my boot on, and that's it. You can't go and spend thousands of rands on that if you don't have it. … if you don't have medical aid it's a different story. I think if you have, your choices are so much easier."

Participant A: "Financially, I don't have a medical aid. It's tough. I haven't gone for an MRI which I think I should go and get."

The lack of financial resources which makes medical assistance inaccessible plays a role in the netball players' becoming more self-reliant during their rehabilitation. Pensgaard and Roberts (2000) have highlighted the need to be able to reference their rehabilitation achievements internally against their own personal improvements. However, this choice precludes them from accessing the knowledge and information that members of the medical community may have and that could help them to compare their own progress to how other athletes with similar injuries have proceeded.

Some of the injured players who participated in this study felt that the medical experts they consulted were not always correct in their assessment of the players' injuries. The experience of repeated misdiagnoses and being given an incorrect prognosis has led these players to have very little faith in the education and knowledge that they have received from medical experts. An incorrect diagnosis and prognosis do not provide athletes with an opportunity to understand the injury and the rehabilitation process; this according to Heil (1993a) could prevent them from investing the optimal effort in their recovery. The following expresses this idea:

Participant C: "[I] had been for x-rays, they hadn't picked anything up, ... then I went for further tests, but they just did physio on me which didn't seem to work. ... [The chiropractor] claimed that it was there from birth what they saw on the x-ray ... [and] he said that I could play netball. ... My next chiro relooked at the injury and x-ray and said that I should not be playing netball."

When medical experts do provide the education and the social support that an injured netball player requires, the player feels supported and realises that the rehabilitation is not a passive process. Petitpas and Danish (1995) states that it helps the injured player to acknowledge that rehabilitation is not always a smooth experience, that there will be challenges and that setbacks are likely to occur. This then opens up space for external forms of motivation such as extrinsic motivation towards identification to be used, for example, when the athlete decides to engage in rehabilitation exercises which are not interesting, but which are important because they allow her to reach her goal of

returning to netball (Vallerand & Losier, 1999). Two of the participants said the following in this regard:

Participant A: "You go to the physio and you think, ag, what are they gonna give [you] if you have never had injuries, which I never had before, never, obviously now the last three years, you will be surprised, the exercises that they can actually give you for the foot."

Participant D: "[The physiotherapist] gave me exercises to do, and like I must do them a certain number of times. And I would do double the exercises because I really wanted to go back! And I asked her if it was ok [to go back to netball] ... she had had some exercise that I could do and whatever, the first couple of times I failed, but she said let's wait a couple of weeks and then we did them again, then she said well that looks better so ...she said try one game."

Players also associate the medical community with the fear that players may be told that the injury they have sustained is too serious and that an injured player will never be able to play again. According to Standage et al. (2003), by informing a player that she will never be able to play again, the medical expert takes away the injured player's autonomy to be the originator and regulator of her own actions. One participant reports how devastating being given such news was to her:

Participant C: "Dr X, was, he was like I'll never be able to play netball again. ...It was devastation, absolutely, eventually my mom stopped me going to watch everyone play because I would cry for hours, [it was] just completely ...heartbreaking."

This kind of experience stands in stark contrast to how injured netball players experienced medical practitioners who supported their goal of returning to netball. The medical community needs to recognise how important it is for them to acknowledge and support the athlete's goal of returning to netball. When the practitioner who provides medical support to athletes appreciates that the goal of returning to netball (or another sport) is intrinsically motivated, the social support that the practitioner can provide is

more consistent with the player's internal needs and more supportive of the player's autonomy (Vallerand & Losier, 1999), making the medical team a valuable source of social support for an injured player. One participant cited the following example of such a supportive relationship:

Participant D: *"I think, it felt like to me that she [the physiotherapist] understood that I needed to go back to my sport … and she felt that maybe if she could help me go back to my sport it will do good. And she did. I think what she realised is that she's going to get more out of me, kind of, you know, get me through, get better a lot sooner than she was hoping for by telling me, no, you can come back if you can do this and this and it worked."*

The participants' responses regarding the medical community show a strong ambivalence about using medical services to help injured players to return from their injuries. Players may opt to avoid seeking medical assistance and support because it is financially too costly and diagnoses are not always correct; but, conversely, players may fear that the diagnosis is correct but that they will be told that the injury spells the end of the netball player's participation in the sport. The medical team which is meant to be an external support mechanism is then replaced by players' self-reliance, driven by financial necessity and/or a fear that the injury could mean the end of the players' engagement in their sport. However, the medical community can also make a positive contribution – if medical practitioners recognise a player's need to return to netball and her autonomy, they become a valuable source of knowledge and social support that can be invaluable to an injured player.

4.3.3   External Reasons for Returning

The external reasons for the netball players' return to the sport that emerged from the interviews are in line with the more external forms of motivation recorded in the literature, such as extrinsic and ego-oriented motivation. Although they form a source of external motivation for the netball players, there is still a strong sense that the influence of external factors (such as family, friends and team mates) is mediated by more internal

rewards, such as feelings of acceptance and belonging that result from playing netball. Extrinsic motivation, with regulatory styles of integration and identification, lead to the external reasons for a return to the sport being experienced internally (Vallerand & Lossier, 1999).

From the interviews, it was clear that family, friends and team mates are a very strong motivating force in encouraging the injured netball players to return to the game after their rehabilitation. These people provide emotional support for an injured player, because they have a personal involvement with and show concern for the player (Petitpas & Danish, 1995). There almost seems to be a progression in that the team mates that an athlete plays with become the netball player's very close friends, due to the social support they provide while playing together. Thus the sporting connection develops into friendship:

Participant C: "Look, netball is a very team sport which, especially playing at Wits, now my friends are all from Wits, that's my main core group, great girls, and ja, and I think the reason why I also [stuck] it out was because of those girls."

Playing in a team that consists of friends seems to make the experience of playing netball a more internally rewarding activity. Players return to netball not just because of the success that they experience with the team, but also because the team becomes a place where they experience what Standage et al. (2003) calls a mastery climate, which rewards the individual's hard work and provides enjoyment while playing for the team. This motivational climate is associated with task-oriented motivation. The following comments are related to the enjoyment that playing for a team provides:

Participant D: "You just go wild with your friends on the netball court. That is what netball is about at the moment. And it's fun! It's not always about winning! It's about having fun and laughing on the court, that is the main thing."

Participant D: "People do make the difference, ... I mean it does. You know the people that you have fun with, the people that's good to play with. ... yes we do play

tough games and we do sometimes get serious about games but it's not always about winning."

Thus playing in a netball team with team mates that have become friends gives an injured player a goal for her rehabilitation, namely regaining the feeling of being part of something that makes her feel supported and of sharing the team's goals. Extrinsic motivation toward identification and integration with her team mates motivates the player's rehabilitation and makes use of the social support available to her (Vallerand, 2001). As one participant put it:

Participant D: "You can go there and support them, laugh with them, it's not the same as being on the court and you're the one that they laugh at ... or laughing with you. ... You want it! 'Cause it feels like, it's not that it goes away, or they forget you or anything like that, they'll never forget you, they are still there but it's completely, completely different."

Because netball is a team sport, its rules and objectives make it necessary for team mates to rely on each other. Playing in a team allows netball players to develop a sense that they need to rely on and trust their team mates:

Participant C: "There [are] no glory people on the netball court, because…you only have three seconds with the ball. So you have to rely on people and it comes down to trust and that's why I think your friendships are tighter in a game like netball because [of] trust, from everything like passing, throwing, everything, you have to believe that your team mates will do it, if you don't, you need to find another team."

Participant D: "[I] rely on the people on the other side of the court, to actually, you know, they aren't staring there at someone else, they actually are looking at you and seeing what you are doing and helping you."

The participants reported that their ability to rely on and trust in the support of their team mates, but also friends, family and medical practitioners, all added to their experience that they were understood and that their decision to return to the sport was acceptable and supported. This allowed them to feel that their return did not have to be only internally motivated, but that their rehabilitation would be supported and aided by these important people in their lives who provide them with social and other forms of support. This support allows them to use more internal forms of extrinsic motivation; identification and integration, as well as the injured players' intrinsic motivation (Podlog & Eklund, 2007). Throughout her rehabilitation she still uses the personally valued goal of returning to netball to aid her motivation. One player said:

Participant D: "[Team mates, family and physiotherapist] who were supporting going back, [those are] the people that you want to be around, you don't want to be around people that say no and maybe it's not a good idea to go back, well that's your idea. You don't want to be around people like that, you don't necessarily spend time with them, because you don't want to hear those things, you know, these very negative kinds of thing and your thinking I want to go back, I will go back, I'm sorry for what you have to say but I will go back."

The injured players' need to feel that they are not disconnected from the support that they can receive from their team mates and that helps to drive the players to overcome their injury and return to playing with their team. Players also need to feel that they will not disappoint their team mates and it is the support that they receive from their fellow team mates that often allows them to overcome their fear of disappointment and to feel the sense of belonging which makes returning from an injury a bit easier. One participant related the following experience:

Participant C: "I must tell you, that first day back on court, I was terrified! I played like crap and I thought what am I doing, this is so, the only reason that I carried on was because of the girls, so it's an inner thing, but the only reason that I did like stick it out at the end of the day was because of my team mates, who were just so ecstatic that I was back in the team with them."

This injured player's experience highlights the importance of social support during the rehabilitation and initial return to netball. This supports the injury theories that acknowledge that social support is needed throughout the rehabilitation process (Heil, 1993b).

External reasons that affect injured netball players' return to playing netball include their feeling very connected to the friends and team mates, which encourages injured players to pursue the goal of once again feeling a part of a team to which they belong and in which they feel accepted. Such external factors help players to feel that they are pursuing a goal that is supported by their team mates and that matches their internal need to regain the acceptance and belonging that they feel when they are playing in their team.

4.3.4   Making an Inherent Personal Decision

The inherent personal decision that the injured netball player makes to return to netball is in line with intrinsic and task-oriented motivation. This implies that the reason for a player's return is related mainly to the self-referenced and self-determined needs of the player.

Being able to reach the level of achievement or emotional experience that the player wants to attain becomes part of the set of personal rewards and successes that help to drive the return to netball when a player is injured. According to Vallerand (2001), the player's intrinsic motivation towards accomplishment means that a player pursues the accomplishment of reaching personally valued goals and of out-doing herself. The pleasant emotional sensation that the player derives from playing netball is consistent with what Vallerand and Losier, (1999) have named intrinsic motivation with regulatory style of stimulation. This last statement is demonstrated by comments such as the following:

Participant C: "I have to give a hundred percent. If I, that is where the feeling comes from, I walk off the court knowing that I played my best, I had a great game, it's the most incredible feeling ever! Even if we lost, if I come off knowing that I could have done more, that really grates me which makes me go back and play the next game and do even better at the next game."

The achievement of playing and succeeding plays a role in a player's motivation, but there is an underlying theme that it is a personal choice that allows the injured player to decide whether she will play with an injury or when she will decide to return from her injury. This allows the player self-determination in the decision that she makes about her life and her body. According to Standage et al. (2003) this is related to the individual's psychological mediator of competence, which shows that she can interact effectively with the netball environment even if she is injured. The following passionate observation exemplifies this finding:

Participant B: "It's Gauteng. You know if you make it there, there was no way I was going to sit outside and say that I'm not going to play these last games. You have played the whole season to get there and if you injure yourself there is no way that I'm sitting out."

Rehabilitation from an injury involves more than just physical recovery: it requires an internal mental decision that allows the player to go through the rehabilitation. Bunker et al. (1985) states that the injured player needs to set explicit goals during her rehabilitation which give her the energy she needs to embark on the rehabilitation process and to recover from injury. The goals that the participants set were self-referenced and acknowledged that returning to netball was an inherent need that they had to satisfy:

Participant D: "My ultimate goal was getting back as soon as possible, but after the first year I had complications, so after my first year I had to go back, so ok I realised, ok, it's going to take a little bit longer than I expected, but the goal was

always [there], the goal was never dropped, as soon as possible, as soon as my body would allow me to I'll be back because my goal was never dropped."

The nature of the choices that an injured player makes with regard to a number of decisions (such as playing with an injury or making a commitment to return) allows external factors (such as achievement) to be linked to the player's own internal motivation to return and the internal rewards that they obtain from their decisions. This permits the injured player to control her choices and behaviour. This highlights the player's need for autonomy and competence, which are supported by task-oriented and intrinsic motivations (Roberts, 2001; Vallerand, 2001).

4.3.5   Summary of the Theme that a Return to Netball is Inevitable

The exploration of the theme that injured netball players regard their return to netball as inevitable shows that, for the participants, there is a relationship between internal (intrinsic and task-oriented) motivation and external (extrinsic and ego-oriented) motivation. Not only was there a relationship between these two forms of motivation, but in all the sub-themes, even in those that were expected to be related mainly to external kinds of motivation, there was evidence of an underlying internal motivation that supported the players' need for autonomy, relatedness and competence (Standage et al., 2003), which drives their return to netball.

Thus, internal motivation appears to be critical in all the decisions that the injured players made on various levels, from being aware of their bodies' limitations, to their decision to play through pain. The injured players often also take responsibility for their own rehabilitation from their injury by deciding not to seek medical support when the medical practitioners that they encounter do not support the players' internal need to return to playing netball. The motivation to return comes from the players' need to be autonomous in their decisions and to experience social support that promote their autonomy (Vallerand & Losier, 1999). The injured players seem to have taken ownership of their injury, their bodies and the decisions that they make regarding their bodies in relation to their own internal need to return to netball.

External motivating factors do assist in the return to netball, especially team mates, friends and family. They help the injured player feel she is not entirely alone in her decision to return after her injury. What appears to be the most important aspect in the external reasons that motivate the players' return to netball is that they allow the players to feel that they are still part of team, which they associate with understanding and acceptance of the shared goal of being able to play for the team. The findings show that, even though external support was important, players sometimes made a conscious decision to surround themselves only with people that will support and add to their own internal decision to return to playing netball. So, although the sources of external motivation are beyond an injured player's absolute control, there is an underlying internal motivation that controls the external support that is received so that it is in line with their internal decision to return.

Throughout the exploration of the theme of an inevitable return to netball runs the thread of the inherently personal decisions that a player makes with regard to her injury. This seems to be evident in all the sub-themes that have been discussed relating to this theme. The literature review suggested that there would be an interplay between the internal and external forms of motivation, but the experiences of the injured netball players reveals that internal motivations play a more important role in the players' return to netball.

4.4   IDENTITY

The analysis of the transcript of the interviews indicated that playing netball has become an integral part of the identities of the netball players who participated in this study. The players reported that they experienced their injury as a disruption of how they understand and express themselves, in line with what Green and Weinberg (2001) also describe. Their motivation to return to the netball court is not driven just by their wanting to play netball, but by their desire to regain a part of their identity that has been lost. This thematic network (Figure 5) highlights a more internal drive to regain the

identity that has been lost through the injury. Each of the sub-themes is explored so that the motivation to regain the lost part of the players' identity can be understood.
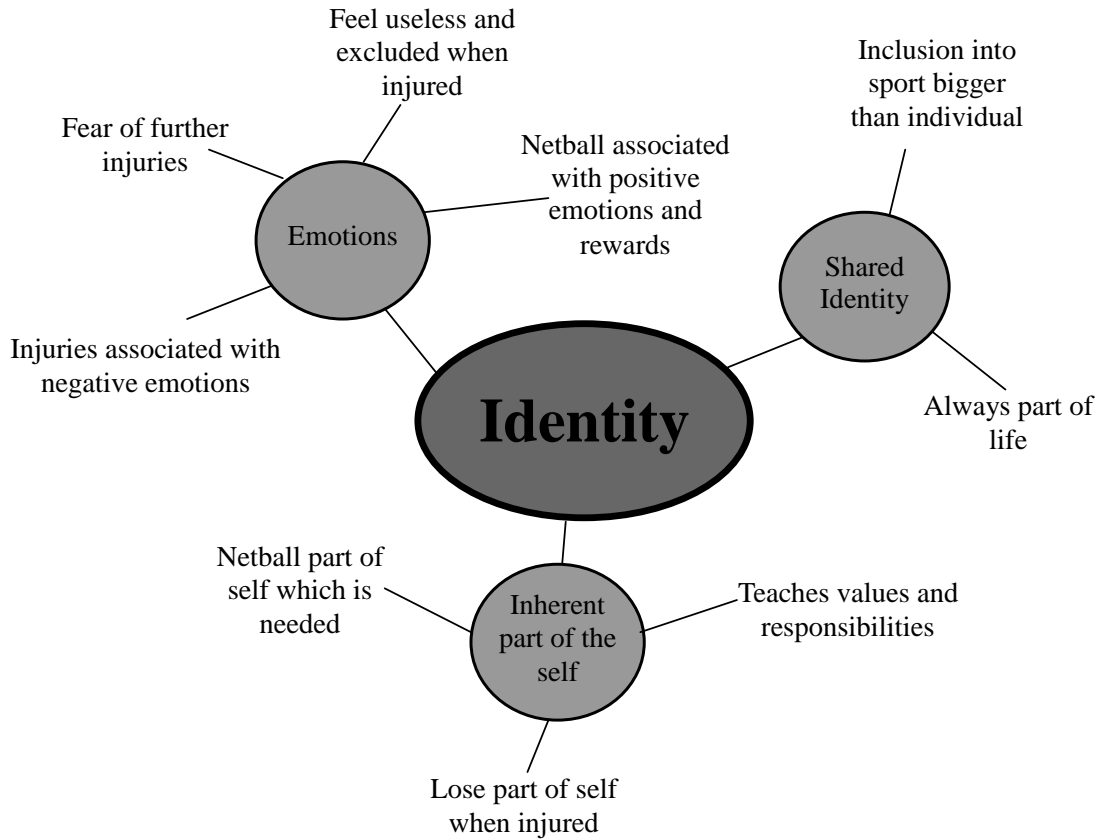
Figure 5: Thematic network of the player's identity with regard to netball

4.4.1 Emotions

The combination of the loss of the ability to play netball (albeit temporarily) and an injury leads players to experience a variety of emotions that are linked to the injured player's identity (Grove et al., 1997). Players associate playing netball with positive emotions, while injuries are accompanied by a range of negative emotions (Heil, 1993b), which may include frustration, disappointment, irritation and even a sense of devastation. No player wants to experience these emotions or even to associate them with herself, but it seems almost inevitable that a player will feel these emotions

because, as the players put it, there is a part of them that is missing. The injured netball players have to adjust to the change in their athletic identity when they are not able to play netball (Green & Weinberg, 2001). The following quote expresses the negative emotions that the player is experiencing:

Participant B: "Can I just play, please? You know, I just want to be here, you know, I think if you really have an injury that it's physically impossible for me to play, then it's actually heartbreaking. You feel bad inside."

An injury almost makes players feel that they cannot understand themselves anymore because they have never experienced netball as something that could cause negative emotions. Prior to their being injured, they have always associated netball with the release of the negative emotions that they experience elsewhere in their life. Brewer et al. (1993) highlighted that players often have to struggle to expand their athletic identity to include these negative emotions, because these emotions are not part of the athletic role with which they have identified. These quotes express the positive emotions that netball holds as well as the difficulty the player has in accepting the experience of being injured:

Participant D: "You let off your frustration, its fun, it's just that, you know, you relax, you come from work and that is where you go and relax and that is where you go and have your fun."

Participant D: "I will go crazy if I don't go back! I don't think it's the body. I think it's the mind. That you are going to go super crazy if you don't go back now."

When an injury deprives players of the opportunity to play netball as an outlet to release their emotions, this may make injured players feel that they do not really understand how to deal with the build-up of the additional negative emotions that they now have to deal with due to the injury. The following quote illustrates the negative emotions and frustration related to the injury:

Participant C: "I was numb; there is no feeling to really express it! I must be honest, it was, like, sort of the most crap way of saying this to me, and I was like numb. I must be honest, ja, no emotion actually expresses what its like and when you play it's just like, you're devastated that you are not on the court and you just wanna run and there is so much that you want to do, but you just can't do it."

The participants reported that experiencing these negative emotions makes them afraid of suffering further injuries, because they do not like the emotional consequences and disconnection from their athletic identity. Green and Weinberg (2001) have highlighted that there is a part of them that can deal with the frustration and irritation of not being able to play, as long as they do not have to experience the permanent loss of their athletic identity of being a netball player. This fear is evident from one participant's comment:

Participant A: "I'm scared hey; I don't want to go now and mess it up again and be out for another three months. I'll take the time out."

The fear of further injuries is associated with not wanting to feel disconnected, useless and excluded from their team when they are injured. There is a need for these players to regain the shared social reality and technical challenge that their team mates' social support provides (Rosenfeld et al., 1989). Feeling disconnected and excluded are very negative emotions for an injured player to experience and these emotions may drive players to engage in their rehabilitation more so that they do not have to experience these negative emotions as a part of them. They believe that by returning to netball they will be able to avoid feeling excluded from the positive emotions that they associate with playing netball and that have become part of their own expectations and experience of netball. One participant explains her experience as follows:

Participant D: "It's completely different because you are not part… you are not part of the team that felt the aggression of the other team, felt the happiness of beating them badly, you know, you didn't feel it, you saw it but you didn't feel it, it's not the same."

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Netball appears to provide a positive emotional experience for the netball players. The players' intrinsic motivation to experience stimulation refers to the players' "engaging in sport for the pleasant sensations derived from the activity itself" (Vallerand & Losier, 1999, p. 154). An injured player is motivated to return to netball because playing the game allows her to experience positive emotions and personal rewards. The intrinsic motivation to experience this kind of positive stimulus helps to motivate players to return to netball, because it is almost vital to the players to regain the positive experience that netball promises:

Participant D: "It's a place of happiness… that is what netball is for me in my life. It's a place of happiness."

The return to the positive experience of netball becomes something that the netball players internally strive towards and this aspiration enhances players' self-determination in their rehabilitation. One participant indicated how strong this drive is when she said:

Participant C: "It's like a drug, if I put it that way, it gives you an absolute high and firstly exercise does release endorphins anyway, but nothing beats it; it's the best feeling ever."

While playing, netball players use task-oriented motivation in relation to the goals that they set. The goal for players is to meet their self-referenced criteria, so they compare how they are playing to the effort that they have put into the game. Thus it is not the outcome that is the most important (Fry, 2001).

Participant C: "I have to give a hundred percent. If I, that is where the feeling comes from, I walk off the court knowing that I have played my best, I had a great game. It's just the most awesome, incredible feeling ever! Even if we lost, if I come off knowing that I could have done more, that really grates me, which makes me go back and play the next game and do even better[in] the next game."

The task-oriented and intrinsic motivation that a player derives from netball is felt internally, through the player's experience of playing netball. The motivation to regain those personal inherent rewards drives an injured player's rehabilitation:

Participant C: "Varsity is over, school is over and it is what you make of it now. Rewards come from what you make of life. And I feel, my rewards come from playing netball even if it's a terrible game, whatever, I love it!"

The emotional, cognitive and social experience of netball is tied to the athletic identity of being a netball player (Murphy et al., 1996). The positive place that netball holds in a player's life drives the player's rehabilitation, as she no longer wants to experience the negative emotions associated with being injured. Players' intrinsic motivation to experience stimulation (Vallerand & Losier, 1999) and task-orientation (Roberts, 2001) is driven by players' internal need to be self-determined with regard to their rehabilitation and no longer to experience the negative emotions associated with being injured, and with regard to regaining the positive emotions associated with playing netball. The positive place that netball holds for players becomes integral to their understanding of their netball identity.

4.4.2 Shared Identity

An injured netball player has access to a shared larger identity of being a netball player and belonging to a team. Each netball player's athletic identity enables her to identify similarities with fellow netball players (Grove et al., 2004), which in turn allows the player to feel a shared sense of belonging and purpose. When a player is injured, there appears to be an internal drive to regain access to this shared athletic identity of being a netball player.

Playing netball for a number of years has given the netball players who participated in the study a sense of belonging and inclusion in the sport of netball and its athletic identity. These players take ownership of a shared netball identity which makes them

more than just an individual. The argument that "self-perceptions are largely influenced by the particular dimension of self-identity, which is salient within a given situation" (Ryska, 2002, p. 110) can be applied to a player's athletic identity as a netball player. The players who participated in this study reported that they had access to salient prior experiences of returning from an injury, as well as their fellow netball players' rehabilitation experiences, with which they could identify. This gave the players a self-perception that suggested to them that they are capable of returning to their sport even after they have been injured. One participant commented as follows:

Participant D: "[You become more] than just a netball player. You are a type of person, you, you can actually, I've been through it, I've done it, I can do it again if it does happen."

The rewards of being part of a sport (in this case, netball) that is larger than the individual motivates players to pursue the goals of returning to netball and regaining their athletic identity, because their identification with a specific athletic identity (a netball player) develops to the exclusion of other possible self-identities (Anderson, 2004; Ryska 2002). This exclusive athletic identity becomes inherent in who they are and in how they understand themselves as people. According to Ryska (2002), the motivation of these players to play netball can therefore be argued to be an intrinsic or task-oriented motivation that is self-referenced and influenced by their adoption of their exclusive athletic identity. This finding is supported by comments such as the following:

Participant B: "I've seen people that get irritated at the place that they are playing but they don't leave the sport, they'll just leave the venue and go somewhere else. It is definitely about the sport, not about the people."

The shared identity of being a netball player requires netball always to be a part of the netball player's life and identity. When a player is injured, there seems to be an almost unquestioned resolve to regain netball as a part of her life and identity. This resolve seems to be motivated by the player's need to regain the feelings of pleasure,

competence and satisfaction that arise from participating in a sport which gives them an intrinsic motivation (Ryan & Deci, 2002). Repeated injuries will not stop a player from attempting to complete her rehabilitation from injury. Brewer et al. (2003) has noted that players complete the repeated rehabilitation programmes because such programmes allow them to regain their athletic identity, which is the priority in their rehabilitation. One player expressed her acceptance of the possibility of repeated injuries and her commitment to returning to the game as follows:

Participant D: "[You will always be a netball player], it will always be, and if the future holds for it to happen again then I go back, and I go back and I just go back, that's the end of the story. It's just one of those things."

There is also a sense that this shared identity becomes so integrated in who these netball players are as people that they cannot distinguish where their own individual identity ends and where the shared athletic identity begins. It seems that the shared athletic identity becomes an almost consuming part of their personal identity and life and the role that they undertake. The netball players who were interviewed in this study have all adopted a strong athletic identity, which means that they have built their self-schemata around their role of being netball players (Daniels, Sincharoen & Leaper, 2005).

An injury threatens the player and her athletic identity on so many levels that it seems to be critical that any injury be overcome so that it will not destroy the player's life and identity – as one player put it:

Participant B: "I have my mindset, which is that Monday Tuesday I have netball. If I, um, if something is in my way of being there, it is very disappointing to me, you know, even if work or you know, even if you come with an injury, anything keeping me away from this sport, it is very disappointing because that is your life basically. That is what keeps you going."

Green and Weinberg (2001) have noted that an injury makes the player experience the loss of pursuing the self-defining activity of playing netball. The shared netball identity

is something that has become an integral and unquestioned part of the netball players who participated in this study. The injuries that they have suffered do not affect just their being able to play netball but also how they see and know themselves. The injured netball players believe that they cannot gain access to this shared identity when they are injured and there is an inherent drive through their intrinsic and task-oriented motivation to complete the rehabilitative process and re-engage their shared identity and identification with fellow players as soon as possible.

4.4.3   Inherent Part of the Self

Netball seems to permeate the netball players' very understanding of themselves. This can be understood as being the result of the strong athletic identity that they have developed whilst playing netball (Ryska, 2002). Their self-understanding in many situations is mediated by the part of them that is a netball player. Thus they may experience an injury almost as an attack on an inherent part of their identity. The very internal nature of experiencing an injury implies that their motivation to return to the sport also resides in their self-determination to regain their full athletic identity (Deci, 1975).

The motivation to return to playing is connected to the experience that the injured players have of losing a part of their athletic identity (Green & Weinberg, 2001). Not having a part of herself that was previously there is a frightening experience that causes an injured player to evaluate the role that netball plays in her life:

Participant D: "You are losing something! I think you are. But it's a big part of your life, if I have to think about giving up netball, I'm like what am I going to do with myself? What am I going to do with myself?"

Not being allowed the netball part of their identity makes injured players mourn the loss of that part of their identity (Green & Weinberg, 2001). One participant described this sense of loss and sorrow like this:

Participant D: "I was crying my eyes out…. I mean, it sounds stupid, people don't know, don't feel it, it sounds stupid. I know it does, but they don't understand what you feel like. … A big part of me that is going to be lost! Twenty years aren't just fun and there [are] going to be lots more years, lots more years, I can tell you that, it's not going to stop."

The anticipation of a loss of the self is indescribable to anyone but the person who is experiencing it. The fact that this experience of the loss is so personal means that the motivation for undertaking the rehabilitation process is something that needs to come from within the person, as she is the only one who can begin to understand the implications of no longer having that part of her identity. Vallerand (2001) has noted the motivation to return to netball after an injury is something these players can only find in themselves through their intrinsic or task-oriented motivation, as it is self-referenced and supports their need for autonomy.

Netball becomes a part of the player's self because it influences the values that are important in the relationships that a player has with other people. The lessons that are learned in netball, such as reliance and trust, are applied in almost every sphere of life:

Participant C: "You have to rely on people and it comes down to trust and that's why I think your friendships are tighter in a game like netball because of trust."

An injury does not remove these values from the self – indeed, these values are used to drive the recovery from an injury, as the injured player needs to trust and rely not only on herself but also on the people that can support her recovery. This value allows players to make use of their intrinsic motivation, but also to use the extrinsic motivation that is available to them through the friendships that they have made while playing netball (Woods, 1998). Players need extrinsic motivation that makes them feel competent during their recovery and that they are determining the recovery process themselves. This kind of motivation makes players feel supported and not undermined in terms of their values.

A further value that seems to have become integrated into the identity of the players who participated in this study is responsibility. Playing in a netball team, every player knows her position on the court and the specific role that each position fulfils (International Federation of Netball Associations, n.d) – as one participant explained:

Participant C: "Because you can't be a hero on the court, you can't! Yes, you can be a great player, but…you are only a very small part of that game, you have to fit in with the rest because otherwise it's not going to work."

According to Heil (1993a) knowing her role and responsibility within the context of netball allows a player to transfer her values and experience to the recovery process, in that she can understand that an injured player needs to play a role in her rehabilitation. This experience and value helps the injured player to understand that rehabilitation is a process that she will undergo and that she will need to take responsibility for playing her part in the process. The injured netball players who participated in this study all seemed to have taken responsibility for their rehabilitation and did not rely only on the medical practitioners to run the process. Vallerand and Losier (1999) have acknowledged that the players' motivation to return to the sport arose from their own intrinsic motivation, guided by their knowledge about what will allow them to engage in the rehabilitation process and achieve the satisfaction that they can gain from knowing more about their bodies and their rehabilitation, which in turn allows them to feel more competent. One participant indicated her responsibility and role in her rehabilitation by pushing beyond requirements stipulated by the medical team:

Participant D: "They gave me exercises to do, like I must do them at a certain time and I would do double the exercise because I really wanted to go back. …I will do that exercise because I will play netball next week! And you set your mindset, if you set your mindset you can do anything you want."

There is a carry-over effect from the psychological tools that are used while playing that makes these skills available to the player in the rehabilitation process. The ability to set goals while playing netball and during the rehabilitation process uses resources that

have been developed and internalised while playing. Setting objective and subjective goals during netball helps a player to set goals during her rehabilitation too. The subjective goals of the rehabilitation can be assessed against the player's own appraisal of her needs during her recovery, while her subjective goals are the specific objective standards that she is trying to achieve (Weinberg & Gould, 1995). This contention is supported by the following remark by one of the participants:

Participant C: "Setting the goals in netball definitely helped me [to] set the goals in my rehab, saying, jees, next month I'm going to be able to balance on my one leg and whatever, and I did it. Then, great, next month I'm going to do this and that, because ...the end goal was netball and I wasn't going to give up on that end goal, so that's what got me there."

Anderson (2004) claims the potential loss of a part of their identity and self highlights the importance that these players' netball identity has for them and relates to the time and effort they will invest in their identity as well as in their rehabilitation to regain their identity. When players' motivation to move through their rehabilitation programme supports their autonomy, it allows the players to regulate their identity. Netball becomes a part of their identity that they need and the injury becomes an obstacle that has to be overcome so that they can again experience a whole and coherent sense of self:

Participant C: "I think that it was three months that I was [unable to ever play netball again], before I found the new chiro, and sorry, how can I not play netball ever again! And eventually it was, you know what this is crap, I need to find someone and the minute that I meet Dr Y, my whole outlook changed about life and I was absolutely fine again, no issue, so it was a three month patch where nothing made sense, because I was fine"

The players' motivation to return from an injury comes from a need to understand who they are again. Their entire identity makes no sense unless they have their netball identity. Netball has become a vital part of the multiple identities that the players have.

The importance of their netball identity is highlighted by the confusion that the players experience and their lack of understanding of themselves when they do not have their netball identity:

Participant C: "It's what makes me; I'm C who plays netball! ...Without netball, I'm not the C that I know and that I want to be and that I want people to know."

Brewer et al. (1993) have claimed that the influence of netball extends past teaching inherent values and responsibilities to becoming an encompassing part of the players' identity. Netball has thus becomes an integral part of these netball players' understanding of who they are. An injury threatens part of their understanding of who they are. Also, without the physical outlet of netball, their identity does not make sense in other areas of their life. Netball has permeated into the netball players' very understanding of themselves.

4.4.4   Summary of the identity thematic network

The exploration of the netball players' identity shows that an injury has a very profound effect on how an injured netball player understands herself. Identity is a very personal understanding of who a person is and the decisions that the person makes depend on that understanding.

Netball gives players a positive emotional experience as long as they are able to play netball. That positive experience has become synonymous with what the netball players gain by allowing netball to become a part of their identity. However, an injury threatens that experience, as it is associated with very negative emotions that players try to avoid (Heil, 1993b). The motivation to return to netball comes from an internal need for netball once again to provide the positive emotional rewards that it did before the injury. The motivation that players experience is task-oriented and intrinsic, as it allows them to regain their identity and self-determination, which underpins their sense of autonomy (Vallerand & Losier, 1999).

The experience of being part of netball has allowed the netball players who participated in this study to access a larger shared identity which links an inherent part of them to a netball identity. Their access to a sport which is bigger than an individual allows these players to experience and integrate values and responsibilities into who they are as a person. This process helps players to integrate and identify with their roles and to recognise similarities with fellow athletes with the same athletic identity (Grove et al., 2004). Netball players need to have access to their shared netball identity – this means that when a netball player is injured, she experiences the injury as a personal loss and as a disconnection from her understanding of who she is (Green & Weinberg, 2001).

An injury creates a barrier to the inherent understanding that a netball player has of herself. The motivation to go through the rehabilitation process comes from the intrinsic need of the injured player to regain the part of herself that has been taken away by the injury. These netball players' identities have become so intertwined with netball that if they do not have access to that part of them, their whole identity does not seem to make sense. Their motivation for engaging in the rehabilitation process is to regain their internal understanding of who they are, which can only be achieved by the motivation processes of intrinsic motivation and task-oriented motivation which are internally determined (Roberts, 2001; Vallerand, 2001).

The motivation to return to netball once they have been injured is not only an internal need for the players, but is underpinned by a vital undertaking to understand who they are in relation to the world. Their identity is so strongly linked to netball that there is no option but to return once they have been injured, because it is who they are.

4.5 INTERPRETATION OF THE THEMATIC NETWORKS IN VIEW OF THE RESEARCH QUESTION

This study explores the motivational processes that are most frequently used by netball players when recovering from an injury. The exploration of the themes that emerged in the data revealed that recovery from an injury is a self-determined and self-referenced

process that makes use of task-oriented and intrinsic motivation (Roberts, 2001; Ryan & Deci, 2000).

The theme of the inevitability of the players' return to netball supports the ideas of Standage et al. (2003) in that although one would expect external factors be central to their motivation to engage in the rehabilitation process, the driving motivational processes are related primarily to the individual netball players' internal need to return to playing netball and regain their sense of autonomy, relatedness and competence. Even though external forms of motivation were present in the players' experiences, they were mediated by what Vallerand and Losier (1999) refer to as the more self-determined and internal forms of extrinsic motivation, and the need to return to playing their sport.

The internal nature of the netball players' motivation to return to netball can be more clearly understood when it is related to the second theme that emerged, that of netball's becoming an inherent part of the players' athletic identity (Anderson, 2004; Brewer et al., 1993). Returning to playing netball is therefore not so much something the players need to do because it is a sport that they want to play – returning to the sport signifies that they have regained their whole identity. They experience injury as a loss of a part of their identity (Green & Weinberg, 2001).

The motivation to regain a part of their identity when injured can only be understood from the internal forms of motivation (task-oriented and intrinsic motivation), as the external forms of motivation do not fully explain the need for netball that these players feel and the impact of netball on who they are. Vallerand (2001) has noted that the motivation to regain their identity enables an injured player to feel self-determined and autonomous.

A common motif in the thematic networks of both the inevitability of returning to netball and identity was the internal effect that netball has on their decision to return and their sense that netball is a part of themselves. The internal nature of their understanding of their injury and their return motivates them intrinsically. This supports Deci (1975)

ideas that the reason for their return is not limited to an external comparison between themselves and other injured players, but is self-referenced against the players' desire to regain a part of their identity which allows them to experience pleasure and satisfaction.

The research question aimed to explore the motivational processes that were most frequently used by the injured netball players. The exploration revealed that the internal forms of motivation, such as intrinsic and task-oriented motivation (Pensgaard & Roberts, 2000; Vallerand, 2001), were the ones that the injured netball players used most, while the external forms of motivation played a relatively small role in the injured netball players' return to netball and were even at times mediated by the players' internal need to regain their netball identity.

The exploration of these thematic networks and the research question has enhanced understanding of the effect that an injury has on netball players. The examination of research question shows that the principal motivations that drive injured players to return to the sport are intrinsic and task-oriented, relating to the decision to return to the sport in order to regain their inherent identity.

4.6   CONCLUSION

This chapter has explored the experiences of four injured netball players in relation to the research question with the aim of identifying the types of motivation the players relied on while recovering from injury. Two main themes emerged from the interviews with netball players, namely the inevitability of their return to the sport and their identity.

The exploration of the inevitability of their return to netball shows that the players were motivated principally by their internal motivations to return to playing netball. The players have to take responsibility for the decisions that they make with regard to their body and their decisions to avoid or make use of the expertise available in the medical community. This allows them to use extrinsic motivation towards identification and integration, which have an internal locus of causality that supports their need for

autonomy, relatedness and competence (Vallerand & Losier, 1999). The external reasons that may help to motivate injured players are also mediated by the inherent personal decisions that the players make on the basis of their sense that there is no other option but to return to playing netball. These decisions allow players to feel self-determined in their rehabilitation.

The second theme that was explored was that of identity. This theme again highlighted the internal nature of the injured players' motivation to return. The linkage between netball and positive emotions helped to reinforce the players' ownership of an athletic identity relating to netball. This theme supports Siegert & Taylors (2004) claim that the players used intrinsic motivation in the form of experiencing stimulation to motivate their rehabilitation: they wanted to experience the positive emotions that netball elicits in them again and to regain their athletic identity of being a netball player.

The players' adoption of an athletic identity allows them to identify with fellow players and the roles expected of them (Grove et al., 2004). This allows them access to a larger shared identity that is supported by all the people who play netball. This shared identity complements the personal identity that a netball player achieves through playing netball. The result is that netball becomes a part of the player that is entrenched in how she understands and knows herself. The motivation to return to netball is based on the players' own internal need to regain a part of themselves that is lost during the injury (Green & Weinberg, 2001).

Finally, the exploration of the netball players' experiences showed how the netball players' experiences accounted for issues raised by the research question. The motivational processes most frequently experienced as driving the injured players' return to netball was intrinsic and task-oriented motivation (Standage et al., 2003). The inherent nature of the player's decision to return to the sport and their ownership of netball as part of their identity was the overriding factor that seemed to drive the players' motivation to return. These factors allowed the players to feel self-determined and aided the injured players' sense of autonomy, relatedness and competence.

The final chapter deals with the conclusions that can be drawn on the basis of this research in relation to both the literature and the findings regarding the netball players' experiences.

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

5.1   INTRODUCTION

In this concluding chapter, the findings of this research are reviewed and the conclusions reached on the basis of the literature review, the interviews and the data analysis are summarised. These results are integrated. Finally, the strengths and weaknesses of the study are discussed in this chapter. On the basis of the findings, a number of recommendations are made with regard to possible further research on injured female athletes.

5.2   CONCLUSIONS FROM THE LITERATURE REVIEW

Two theories of motivation were explored in the literature review in this study, namely the achievement goal theory of motivation and the theory of intrinsic motivation, extrinsic motivation and amotivation (Deci, 1975; Roberts, 2001; Steinberg et al., 2001, Vallerand, 2001). The literature review showed that there are various motivational strategies within these two types of motivation.

Although there are different motivational strategies, they can be broadly divided into those strategies that are internally regulated and those that are externally regulated. Internal regulation is used for all types of intrinsic motivation and the internal forms of extrinsic motivation, including integration and identified extrinsic motivation (Vallerand & Losier, 1999). Task-oriented achievement motivation is also internally regulated (Roberts, 2001). External motivation accounts for ego-oriented achievement motivation and external regulation and introjected extrinsic motivation. All these motivational strategies, be they internally or externally regulated, lie on a continuum that is mediated by the person's context. The literature argues that no individual uses one type of motivation exclusively and that people use different strategies in different contexts (Standage & Treasure, 2002).

The literature with regard to injuries reveals the option of a multi-faceted approach to injury and rehabilitation, with the emphasis on education, goal-setting, mental training and social support (Heil, 1993b). Such an approach accounts for the physical as well as the psychological recovery that an injured athlete needs to engage in.

In the literature on injuries that was reviewed, it was assumed that motivation plays an important part in the recovery process (Taylor & May, 1996). Although it is implied that motivation plays a role, there was no indication in the literature of the specific types of motivation that are needed to return to a sport after an injury. This is a gap in the literature which this study has attempted to fill to some extent, since the focus of this research is an exploration of injured female athletes' motivational processes when recovering from an injury.

5.3   CONCLUSIONS FROM THE INTERVIEWS AND DATA ANALYSIS

The exploration of four injured netball players' experiences enhanced an in-depth understanding of their personal experiences of their injury and their motivation to return. Two themes emerged from the research: the inevitability of their return to netball despite injury and the integral part that netball has come to play in these players' identities.

Both these themes emphasise the internal drive of these players to return to netball and to regain a part of their identity. The desire to regain their identity seems to mediate the inevitability of their return to netball, because it explains the ownership of netball as a part of the individual netball players. The theme of the players inevitable return netball supports Standage et al. (2003) claims that their return is mediated by their athletic identity, which allows them to feel autonomous, related and competent.

Recognising the inherent nature of identity allowed motivation to be understood as a process that has to originate from an internally regulated motivational process. External forms of motivation are mediated by the players' internal need to return to netball. This

implies that the external forms of motivation which the players used have been filtered to allow only congruent forms of more internally regulated extrinsic motivation (identified and integration) which support of their internal goals (Vallerand & Losier, 1999). If external motivation is not compatible with the players' internal goal of return, the injured netball players rely on their own internal motivation to return.

The experiences that the injured netball players reported allowed the research question to be explored and showed the importance of intrinsic and task-oriented motivation. Internal motivation drove the injured netball players' return to netball and mediated the external forms of motivation that they used to aid their return.

5.4 INTEGRATION OF THE CONCLUSIONS OF THE LITERATURE REVIEW AND THE FINDINGS BASED ON THE INTERVIEWS

The literature review provided a theoretical understanding of the different motivational processes and the theory regarding injuries. The interviews, by contrast, allowed the injured netball players' voices to be integrated with the results of the literature review, enabling some interplay between the theory and the experiences that the netball players reported.

The literature on motivation conceptualised motivation as lying on a continuum between internal and external forms of motivation (Fry, 2001). Although there was an assumption that motivation did play a role in recovering from injuries, which form of motivation was used predominately by an injured athlete was not covered. The literature highlighted various types of motivation and the process of injury recovery, which allowed the researcher to develop the questions that were asked in the interviews (see Appendix A).

The interviews elicited the voices of the participants regarding their experiences to guide the process through an exploration of their motivation(s). The results supported the contention in the literature that there are internal and external forms of motivation; the dominant form of motivation that these players used was internal. Motivation does

indeed lie on a continuum, but the injured players only made use of those forms of external motivation that were congruent with their internal needs to regain their ability to play netball and to regain part of their identity. The results highlight the importance of the internal forms of motivation for these injured netball players.

Both the literature review and the results based on the interviews played a valuable role in exploring the research question and allowed the knowledge of the different motivational types to be linked to the understanding that was gained from listening to the injured players' accounts of their experiences.

5.5   THE STRENGHS AND WEAKNESSES OF THIS STUDY

The main strength of this study lies in the interpretive phenomenological approach that was used. It allowed participants' voices to be heard, but also acknowledged the influence of the researcher, who is also a netball player. This made a thick description of these injured players' experiences possible which was not unduly influenced by theoretical constructs of what motivation is meant to be.

A further strength that was used and allowed for by this methodology was that the researcher could access her own knowledge and the shared identity of being a netball player, both during the interviews and also in her analysis of themes.

The strengths of this study also led to one of its weaknesses: the depth that could be achieved in exploring these players' experiences (a strength) could only be achieved with a very limited sample (a weakness). The limited sample means that the research findings cannot be generalised to the entire population of female netball players.

A further factor that needs to be considered a weakness is that the sample that was chosen was very specific. It only included netball players who have played at a provincial level. This means that these experiences would only be true of an even smaller portion of the female netball-playing population, due to the limited number of players who are able to reach that level.

5.6 RECOMMENDATIONS FOR FURTHER RESEARCH

Limited research has been conducted on females' experiences with regard to injuries. Further research looking at these experiences would be very valuable to see if the same internal motivation comes through as strongly in other female sports such as hockey, basketball and athletics.

A quantitative enquiry with the constructs of internal motivation, external motivation, identity and the inevitable return to netball may be a valuable study to conduct to see if the themes that have been identified in this study would be generalisable across a more representative sample of netball players. This would also allow for comparing the findings in this study with those netball players who were excluded from this study.

In further studies, it would also be of interest to determine how female and male netball players' experiences of their injuries differ, exploring whether there is a shared netball identity that becomes integrated across genders or whether netball is more integral to females' athletic identity, as it has predominately been seen as a female sport.

5.7 CONCLUDING REMARKS

In this study, the motivational processes used by injured netball players was explored. The exploration of both the literature and four players' experiences has shown the importance of the internal forms of motivation, namely the intrinsic motivation and task-oriented achievement motivation, in relation to recovery from injury.

Two main themes were identified that allowed the netball players' experiences of injury and recovery from injury to be understood: the identity and inevitable return to netball themes. These themes that emerged from the players' experiences supported the importance of the internal motivational processes identified in the literature. They revealed that, although motivation does exist on a continuum, the literature does not

fully appreciate how integral netball has become to these players' athletic identity and sense of self (Brewer et al., 1993).

The qualitative nature of this research allowed the netball players' experiences of their injury and their recovery to guide the way that the results that emerged from this research were recorded. In particular, it revealed the importance of netball as a part of these players' identities. The theories regarding motivation only assume that motivation is either internal or external; there was no previous recognition of the fact that these players' inherent athletic identity is the reason for their internal motivation. This research has allowed the voices of these players to be heard regarding this netball athletic identity so that its role in their return from an injury can be more clearly understood.

Recommendations for further research that could further enhance understanding of injured female athletes were also considered.

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APPENDIX A: INTERVIEW SCHEDULE

1. Would you please me give me a few details, like your name and age?
2. How long have you been playing your sport?
3. What was the highest level that you have played your sport at?
4. Please tell me a bit more about the injury you sustained?
5. How long has it kept you out of the sport?

    5.1 Are you still out of the sport?

    5.2 When did you return to your sport?

6. When you were out of the sport? Would you tell me about what made you / is making you go though the rehabilitation process?
7. Did you receive any education on the nature of your injury?
8. What effects did the education process have on your rehabilitation from your injury?
9. Did you make use of any mental training strategies, such as imagery or relaxation, to help you though your injury and would you mind telling me a bit about them?
10. Could you tell me a bit about the goal(s) that you set during your rehabilitation?

10.1 How important were those goals in helping you with your rehabilitation?

11. Did / Does the rehabilitation process require a lot of effort on your part to drive you towards participating in your sport again?
12. How did your family / friends / team mates support you during your rehabilitation process?
13. Was that support and motivation important to you in being able to return to your sport?
14. What was the main reason you felt returning to your sport after your injury?

APPENDIX B: RESEARCH CONSENT FORM
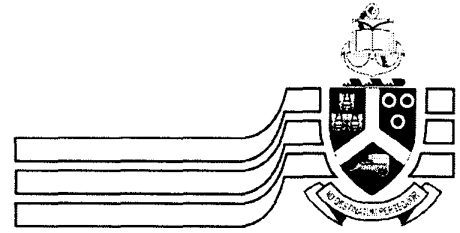
University of Pretoria
Pretoria, 0002
Republic of South Africa
Tel: 012-420 2329   Fax: 012-420 2404
www.up.ac.za
Faculty Humanities
Department Psychology

Research Consent Form

Motivational processes involved in the recovery of female athletes from injury

I, _____ understand that I am being asked to participate in a research study focusing on the relationship between the motivational processes in female sports persons' that have sustained a serious injury and to establish what motivational processes are most frequently used whilst recovering from the injury.

The study is being conducted by Kerry Black, who is a Master's student in Counselling Psychology at the University of Pretoria, under the supervision of Victoria M. Timm. Kerry Black's contact details are 082 966 3150, if there are any queries or concerns regarding the study at hand.

I am aware that the results of the project, including personal details regarding my age, date of birth, name and any other details that could possibly identify me will be anonymously processed into the final report of the Master's dissertation as undertaken by Kerry Black for her MA Psychology degree. I understand that the information obtained in the interviews will be kept confidential in the same way as all other information. I am also aware that data obtained in the interview will be stored for 15

years from the conclusion of the project, as per the storage guidelines of the University of Pretoria.

I am also aware that I will receive no payment or compensation for participating in the study. I may at any stage, without prejudice, withdraw my consent and participation in the study. I have had sufficient opportunity to ask questions and (of my own free will) declare that I agree to participate in the project.

I agree to participate in this study.

Participant's name: _____ (Please print)

Participant's signature: _____

Witness: _____   Signature: _____

Researcher's name: _____   Signature: _____

Date: _____