

The Development and Implementation of a Mental Toughness Training Programme for Young Cricketers

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By

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ABSTRACT

Modern research being conducted on Mental Toughness is now shifting away from efforts aimed at developing definitions for the construct and instead moving toward efforts at understanding its development. This particular research study focuses on the development and implementation of a Mental Toughness programme designed specifically for, and tailored exclusively to, the needs of schoolboy cricket at Kingswood College in Grahamstown, Eastern Cape. The programme development was an intricate process and the research procedure was guided by the Organisational Development Process model.

Data from a focus group as well as various individual interviews were integrated with currently existing Mental Toughness literature and theory to devise this particular Mental Toughness programme. The programme entails educating the athletes on six specific mental skills and incorporates elements of practical application as well as awareness of the importance and influence of Mental Toughness and mental training in a sporting sphere.

The programme took the form of mental skills workshops held over a three week period. An analysis was conducted post-programme to document the experience of the athletes as a result of exposure to the programme. Results drawn from the array of analysis procedures were used to help identify the level of success of the Mental Toughness intervention as well as help validate current Mental Toughness models. In addition to highlighting the benefits as a result of the programme experience, various recommendations were drawn in order to shed light on the programme limitations and assist future researchers with understanding the intricacies behind better and more efficient programme implementation.

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CHAPTER ONE

INTRODUCTION

1.1 THE RATIONALE BEHIND THE STUDY

In today's sporting world, it is rare to see athletes simply competing in a sporting event for pure pleasure, relaxation and innocent recreation. Rare too is the phrase "it does not matter whether we win or lose" – a mantra which is considered increasingly old fashioned. The world in which we live today is seemingly more obsessed with success and with the desire and drive to win. Perhaps it is the thought of being the best, the thought of being the most powerful or the most intelligent that is captivating and encompasses our drive for success. As Etnier (2009) suggests: "Only the winners of the competition get the trophies, the pat on the back from their supporters, the opportunities to have sponsors, the television coverage and the glory" (2009, p. 70). In almost every endeavour that humankind embarks on there exists the drive to be at the top, and in sport, things are no different. "It has been suggested that a sporting contest is defined by the pursuit of a victor" (Sheard, 2008, p. 1) and although sport may provide various other benefits to the participant, the essence of a sporting challenge lies in the search for a winner. "Sport is no longer a pastime, run and organised by amateurs" (Golby & Sheard, 2004, p. 933), instead we are seeing the very nature of sport and the rationale for taking part in sport evolve rapidly.

This 'evolution' of the sporting world affects the individuals who compete in these sporting endeavours in various ways. Performance standards have increased drastically within elite sport (Bull, 2006) and the demands of the elite sporting environment places the athlete into highly stressful situations both physically and psychologically (Hanton, Evans & Neil, 2003). "Such environments provide considerable stressors for the modern day performer due to greater media attention and increased sponsorship involvement, emphasising the importance of expanding the understanding of how individuals respond in stressful situations" (Hanton et al., 2003, p. 167). Sport at the highest level is heavily characterised by a demand to excel at superior levels and perform under conditions that are considered extremely demanding and testing (Jones, Hanton, & Connaughton, 2007, p. 243). For this reason, psychological attributes as well as mental skills such as self confidence and the ability to cope, two characters intrinsically imbedded in the Mental Toughness construct, are becoming commonly accepted as major contributors to overcoming adversity and achieving performance success.

An additional form of pressure that athletes come into contact with stems from the desire for success and achieving a 'win'. Achieving the gold medal at the end of a race, for example,

becomes the sole focus of the media, the public, the coaches and even the athletes (Jennings 1993). Athletes' lives change drastically after they experience their first significant win: they experience additional demands and heightened expectations, and their free time becomes scarce with outside pressure from the media, sponsors, fans and the public, all wanting to be involved in their lives in some way (Kreiner-Phillips & Orlick, 1993). In light of this, adversity has been identified as an unavoidable factor present in sporting achievement and "success requires adversity as much as it requires triumph over adversity" (Middleton, Marsh, Martin, Richards & Perry, 2004b, p. 1). It is increasingly apparent that athletes now need to find ways of achieving success in the face of a new kind of adversity.

Adversity can present itself in many forms whether it be overcoming and recovering from an injury, dealing with the difficulties of persevering through an intense training programme or even 'brushing off' criticisms before entering a championship-deciding game. Kuehl, Kuehl, and Tefertiller (2005) consider Mental Toughness to be the mindset that athletes incorporate in order to meet a challenge and overcome the obstacles that prevent them from reaching success. In the modern sporting sphere, there is immense involvement by corporate entities with big corporations spending exorbitant amounts of money on sporting teams as well as on individuals in the form of endorsement deals and other means of sponsorship. This new type of adversity - financial adversity - that athletes are exposed to means they are under great pressure to perform to standards dictated by the 'powers' that influence the sporting world. This, in turn, adds a new type of pressure that the athlete is required to surmount, over and above the usual competitive emotions that they will inevitably experience.

1.2 CONTEXTUALISING THE STUDY

Sheard (2008), in his book *The Achievement Mindset: Understanding Mental Toughness*, presents some critical questions that modern day athletes should consider. He asks the following: What separates an athlete thriving on elite competition from one who disintegrates under pressure? Why is it that some athletes are able to succeed in the face of adversity while others cannot? Why can some athletes resist and disregard negative effect in competition while others let it influence and weaken their competitive performance? What is it that allows athletes to rebound after defeat and personal failure? Many suggest that the answers to these questions lie in the successful development, implementation and continuous maintenance of the concept of Mental Toughness. Top sportspeople today realise that winning goes far beyond just technique and further includes a new dimension known as the 'psychology of winning' which incorporates

a magnitude of different mental ingredients such as context specific mental skills found in tailor-made Mental Toughness programmes.

According to Lazarus (as cited in Lundqvist, 2006), when athletes encounter stressful situations or are faced with adversity during their competitive endeavours, the outcome in terms of positive or negative emotional responses and the resultant effects on the athlete's performance will be largely influenced by their ability to successfully manage the internal and external demands perceived. This refers to the ability of the athlete to go beyond pure physical talent, skill and ability and tap into the mental side of performance enhancement and optimisation. Too many players overlook mental elements when faced with difficulty in performances because these types of adjustments cannot be seen and are therefore taken for granted (Kuehl et al. 2005). Whenever athletes are faced with situations that require an enhanced level of performance, the immediate reaction is generally to make an adjustment to all levels and phases of their physical training routine long before the mental aspect of performance is even considered. Every athletic contest is a contest of control, control of the delicate mind and body connection (Loehr, 1982), yet athletes consistently and persistently continue to train harder and harder physically at the expense of mental training.

Noakes (2006), in his paper titled *Physiological models to understand exercise fatigue and the adaptations that predict or enhance athletic performance*, presents what is known as the psychological/motivational model. This model emphasises that "the ability to sustain exercise performance results from a conscious effort" (2006, p. 141) and that "exercise performance is regulated at a subconscious level" (2006, p. 141). Both the terms 'conscious' and 'subconscious' refer to states of the mind and Noakes (2006) suggests that sustaining and regulating exercise performance stems from inside the mind. One must question that if the mind has such a powerful influence over the reaction, movements, maintenance and responses of our physical body, why then are athletes not training the mental side of performance more regularly and intensely?

According to Noakes' findings, athletes that are able to engage in the mental side of training and performing have a greater advantage to those who are unable to. The biology of the human body is designed to regulate its very existence and this regulation stems directly from the central control system, the brain and the mind. Regardless of the physical attributes that athletes may possess, the 'tougher' athlete will most often prevail and the determining factor between success and failure is "often more easily, and perhaps more appropriately, attributable to psychological factors" (Golby & Sheard, 2003a, p. 455). The determining factor between a good athlete and a great athlete can come down to the quality and extent of their psychological preparation and how

well these athletes apply their skills during high pressure game situations (Kruger, 2008). It has now become crucial for athletes, should they want to succeed, to obtain the ability to cope with the psychological stress that accompanies not only elite sports participation but sports participation in general. Gucciardi, Gordon, and Dimmock (2009) use the concept 'Mental Toughness' as an umbrella term for athletes who are considered to possess superior mental characteristics and they believe that it is the mental game that will differentiate the performers. Concurring with this statement, Gucciardi, Gordon, and Dimmock (2008, p. 262) stress that "Mental Toughness sets apart good and great athletes when physical, technical and tactical skills are equal".

It is important to note, however, that developing and improving one's mental side of performance by no means negates or trivialises the important role of developing and maintaining physical or technical abilities (Bull, 2006). The point being stressed here is that an athlete who has physical talent, skill and ability can become an even greater athlete and increase their chances of a more successful performance and sporting career if they begin to train mentally. An athlete who does not share equal physical ability as other athletes and who is perhaps considered slightly weaker in this regard may even become a better athlete if they learn to engage in Mental Toughness development, improvement and maintenance. In sport, athletes often refer to the term fitness or a state of being fit and there are many different definitions and meanings associated with the term 'fitness'. Generally speaking, an athlete who is considered fit would be one who is in a desired physical condition suitable for performing at the highest level possible for their particular role in a specific sporting environment. In modern day sporting contests athletes need to concentrate their efforts on becoming mentally fit and essentially getting themselves to a state of optimal mental fitness. "Coaches and athletes are becoming aware of the fact that in today's world, competition is tough, even though athletes are physically fit, yet the margin for victory is slim" (Bhambri, Dhillon, & Sahni, 2005). Because talent alone does not translate into success and there have been situations where highly talented athletes have experienced 'burn out' because of a breakdown in Mental Toughness and the less talented athletes have succeeded at professional levels because of their mental strength (Kuehl et al., 2005).

Coaches, as well as the athletes themselves, are slowly starting to realise that in order for them to get ahead of the competition an added resource is needed and that is to train mentally. "Competitive sports is 85-90% a mental game, but unfortunately, many times the physical aspect of the game is magnified at the expense of the other" (Bhambri et al., 2005, p. 65). The premise of this research is that if athletes and coaches can combine the two elements of mental training and technical training then they will establish a consistent peak performance every time they

compete (Bhambri et al., 2005). Therefore, developing and furthermore maintaining Mental Toughness is imperative in today's sporting world and the difference between success and failure may be determined by this sole factor.

1.3 AIMS AND RESEARCH QUESTION

The main goal of this research is to offer insights into developing a tailor-made Mental Toughness programme for Kingswood College 1st XI cricket team and to furthermore track the progress of implementing this programme with the team. This goal is achieved by answering the following question:

How will the development and implementation of a Mental Toughness programme, tailored exclusively to the needs of Kingswood College 1st XI cricket team members, assist in adding significant theory to the current body of knowledge regarding successful Mental Toughness intervention programmes?

In addition to answering the abovementioned research question, this research includes a two-fold subsidiary aim. Firstly, this programme is being developed and executed in order to help the cricketers of Kingswood College 1st XI develop levels of Mental Toughness within their own and the team's cricketing performances. In addition to this, the researcher aims to evaluate the experience obtained by the cricketers throughout the programme development and its implementation. The rationale for the inclusion of the latter aim is to gather information on the development and implementation procedure in order to make a significant contribution to the field regarding programme implementation of this nature.

This research endeavour forms part of a broader research project on Mental Toughness conducted at a Doctoral level and thus the information gathered and the conclusions drawn throughout this research process will form part of that particular project. In addition to contributing towards a Mental Toughness project aimed at examining the development of Mental Toughness with young athletes, including an examination of the psychometric properties of various Mental Toughness measures and the development of norms conducted at a PhD level, this masters project ran in conjunction with an honours project. It must be noted however that although this research endeavour is contributing towards Doctoral research and furthermore ran in union with an honours project, it was still a separate research project in its entirety. Athletes who participated in this study were fully informed that information gathered throughout the research process would be used in further research projects.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

In this Chapter, the researcher synthesises and discusses central literature that contextualises this research and forms the basis of the study. In this section, the evolution and development of the Mental Toughness construct is explored with a focus on key definitions of the term as well as theory on how it is measured. Additionally, this chapter considers the mental skills training and psychological skills training inherent in Mental Toughness and specific reference is made to Bull, Shambrook, & Brooks (2005) model of Mental Toughness and Bull's (2006) mental toughness tips in relation to Mental Toughness literature.

Until recently, enquiries into the phenomenon of Mental Toughness were inundated with the commonly-held notion that Mental Toughness was a 'big cliché' within the sporting world (Looney, 1998). Numerous researchers (Gordon & Sridhar, 2005; Jones, Hanton, & Connaughton, 2002; Nicholls, Polman, Levy, & Backhouse, 2008; and Thelwell & Weston, 2005) have pondered over how broadly applied the term Mental Toughness is, coupled with it being one of the least understood phrases in sport. The situation today is somewhat different. The concept of Mental Toughness is no longer new, and for some time now there have existed many applied texts devoted solely to the development and conceptualisation of Mental Toughness (Crust, 2008). Although Mental Toughness was once considered a vaguely understood phenomenon, recent academic endeavours attempting to improve its conceptualisation have obtained a sense of scientific rigour (Gucciardi et al., 2009) owing to the efforts of various researchers (Bull, Shambrook, James & Brooks, 2005; Jones et al., 2002; and Gucciardi et al., 2008).

The increased flow of academic interest in the Mental Toughness phenomenon clearly indicates the significance and importance that sport psychologists, coaches and athletes themselves place on Mental Toughness (Crust, 2008). The influence that psychological factors have on athletic performance is becoming increasingly important and prominent today, so much so that coaches, athletes and sport administrators recognise that success cannot be guaranteed by raw physical talent alone (Gucciardi et al., 2008). Although this view is endorsed by various researchers, within a South African context there is still a concerning lack of belief in the influence of psychological intervention and the impact it has on performance. Researchers conducting studies using Mental Toughness and psychological intervention frameworks are still trying to capture

the faith of a somewhat stubborn audience. Many researchers have attributed Mental Toughness as being a significant influencing factor contributing to successful performance and performance excellence (Bull et al., 2005; Connaughton, Wadey, Hanton & Jones, 2007; Crust, 2008; Crust & Azadi, 2009; Fourie and Potgieter, 2001; Gould, Dieffenbach & Moffett, 2002; Gucciardi et al., 2008; Kuan & Roy, 2007; Loehr, 1982; Middleton, Marsh, Martin, Richards & Perry, 2004a; Nicholls et al., 2008) as well as Mental Toughness acting as a performance enhancer (Golby & Sheard, 2003a; Golby & Sheard, 2003b; and Gould et al., 2002).

2.2 EVOLUTION OF THE MENTAL TOUGHNESS CONSTRUCT

Literature from the 1950s to present day has included diverse definitions and explanations of Mental Toughness, all of which are largely associated with positive psychological characteristics and the use of mental skills in performance (Connaughton et al., 2007). Due to these diverse definitions and explanations of the concept “no clear or broadly accepted definition emerged until 2002” (Connaughton et al., 2007, p. 193) and despite a broad and global acceptance of the term, there is still no universal definition of what Mental Toughness entails with specific reference to a sporting sphere. The assortment of definitions that have saturated the sporting world only served to confuse the understanding of Mental Toughness, particularly as the majority of the definitions generated were based on investigators’ opinions rather than on any scientifically rigorous examination (Connaughton et al., 2007, p. 193). Thus, rather than advance the concept, this served to instead undermine it.

This chapter is designed to interrogate some of these findings and unpack select influential research endeavours. Providing an insight into what theorists consider Mental Toughness to entail offers a reference point for discussing the degree to which Mental Toughness has been achieved as a result of the psychological intervention implemented during this research report. The Mental Toughness construct has evolved immensely over the years. As researchers have presented their various findings we have seen the term Mental Toughness pass through many significant phases and it is evident that the concept has been subjected to mass evolution. History shows the concept progressing from a phrase which was once believed to capture no value, to a phrase that was widely used but vaguely understood, to a phrase that soon developed greater conceptualisation and a better understanding, to a phrase where Mental Toughness was depicted as a determinant of successful performance and finally to a phrase where, not only the sporting sphere but also other domains, are acknowledging that this construct requires development, implementation and maintenance.

According to Connaughton et al. (2007, p. 193) research conducted on Mental Toughness can be categorised into four dimensions: Mental Toughness as a personality trait, Mental Toughness as an important contributor toward success, Mental Toughness as a defence mechanism against adversity and finally mental skill development designed to enhance performance by increasing Mental Toughness. The researchers of this study regard Mental Toughness as a construct capable of being taught, learnt and further developed and maintained. A working definition from Connaughton et al.'s (2007) understanding of mental Toughness will therefore be presented in more detail in the following section.

2.3 DEFINING MENTAL TOUGHNESS

Throughout the history of the research conducted on Mental Toughness various researchers, theorists and authors have presented their definitions and findings on the construct. If one were to look through the preceding years we would see a variety of differing definitions, opinions, views and beliefs about the construct and what it entails. Before being able to understand the development of Mental Toughness and the intricacies of the Mental Toughness development process, it is crucial to understand how theorists and authors of the past have described and portrayed the concept of Mental Toughness.

In 1978, Paul Dennis conducted a study titled *Mental Toughness and Performance Success and Failure* which set out to determine an athlete's level of Mental Toughness (Fourie & Potgieter, 2001). This study examined the interactive effects of Mental Toughness and success and failure instructions upon subsequent performance (Dennis, 1978). In this study, a Motivational Rating Scale was administered to 238 undergraduate physical education participants and the underlying rationale was that if this supposed personality trait did contribute towards performance excellence, then individuals at two extremes should respond differently under failure conditions (Dennis, 1978).

According to Dennis (1978) the results showed that the interaction between Mental Toughness and success or failure was not significant. He concluded that the validity and reliability of the Motivational Rating Scale was unknown and, in addition to this, he presented other limitations for his study which concerned the supposed personality trait of Mental Toughness. Dennis (1978) questioned whether Mental Toughness was in fact a valid personality construct and furthermore acknowledged that his sample range of physical education undergraduate students might have already been predominantly 'Mentally tough' and that the minimal performance differences could have been expected (Dennis, 1978). The results from this research suggested

that the Mental Toughness construct, within the context of success or failure, lacked validity. Contrary to what recent studies on Mental Toughness are stating, Dennis (1978, p. 386) concluded that “in the view of the fact that conditions of success and failure did not produce a differential response in performance for groups high and low in Mental Toughness, it would be erroneous to suggest to physical educators and coaches that Mental Toughness is an important personality attribute underlying behaviour in athletes”. Post-1978 the theme and nature of the Mental Toughness construct started to change significantly. The seemingly under-defined and non-influential construct began to consume the research sphere among various sport psychologists and the development of defining the Mental Toughness construct therefore began.

Up until the current programme of research into Mental Toughness at Rhodes University, Fourie and Potgieter (2001) were the only researchers to have conducted a study on Mental Toughness within South Africa. The aim of Fourie and Potgieter’s study was to identify the elements of Mental Toughness as perceived by expert coaches as well as elite athletes. The study investigated the components of Mental Toughness as reported by 131 expert coaches, with ages ranging from between 22 and 85, and 160 elite athletes, with ages ranging from 14 to 35, from 31 different sporting disciplines. Fourie & Potgieter (2001, p. 67) presented their results in descending order from the highest order themes through to the respective lower order themes which included the following:

motivation level, coping skills, confidence maintenance, cognitive skill, discipline and goal directedness, competitiveness, possession of prerequisite physical and mental requirements, team unity, preparation skills, psychological hardiness, religious convictions and ethics.

In addition to defining these elements of Mental Toughness, Fourie and Potgieter (2001) further provided recommendations for setting foundations upon which Mental Toughness can be developed. This particular consideration will be discussed further in section devoted to Mental Toughness development.

In 2002 Jones et al. embarked on a study titled *What Is This Thing Called Mental Toughness: An Investigation of Elite Sport Performers*. Prior to 2002, the research being done on Mental Toughness was characterised by a lack of conceptual clarity and little consensus surrounding the definition of Mental Toughness. Jones et al. (2002) therefore set out to rectify these insignificancies by addressing specific issues such as how one can more accurately define Mental Toughness. More specifically, these authors aimed to identify the essential attributes required to be a mentally tough performer (Jones et al., 2002).

The result of their study was the following definition of Mental Toughness (Jones et al., 2002, p. 209);

Having the natural or developed psychological edge that enables you to: generally, cope better than your opponents with the many demands (competition, training, and lifestyle) that sport places on a performer. Specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure.

In addition to this work, Clough et al. (2002) wrote a chapter titled *Mental Toughness: the concept and its measurement* presented in Cockerill's (2002) book *Solutions in Sport Psychology*. Here, a team of sport psychologists attempted to clarify the Mental Toughness concept and their defining process involved two separate categories which included: obtaining the views of practitioners, players and coaches; and furthermore a review of available academic research findings. The starting point for Clough et al. (2002) and their research team was to speak to athletes about Mental Toughness and conduct a search of articles and media interviews for comments about the phenomenon of Mental Toughness. They believed that Mental Toughness consisted of specific and recognised sport psychology interventions such as focusing and visualisation, alongside specific personality characteristics including persistence, resilience, confidence and discipline.

Clough et al. touched on Loehr's (1994) consideration of Mental Toughness by presenting four key emotional markers considered to accommodate Mental Toughness. These are: "flexibility and the ability to remain balanced and avoid becoming defensive when put under unexpected pressure, responsiveness and the ability to remain focused under pressure, strength and having a powerful fighting spirit and, resiliency and having the ability to bounce back from disappointments, mistakes and missed opportunities" (Clough et al., 2002, p. 34). Clough et al. (2002, p. 38), by collating research and the views and opinions of athletes, coaches and sport psychologists, were able to present what they believe to be a more comprehensive definition of Mental Toughness compared to those already produced. They found that:

Mentally tough individuals tend to be sociable and outgoing; as they are able to remain calm and relaxed, they are competitive in many situations and have lower anxiety levels than others. With a high sense of self-belief and an unshakeable faith that they control their own destiny, these individuals can remain relatively unaffected by competition or adversity.

In their conclusions, Clough et al (2002) state that "the desire of coaches and athletes to produce mentally tough players is likely to result in a wide range of psychological interventions, but unless an agreed definition of Mental Toughness is available, the efficiency of those

interventions cannot be accessed” (Clough et al., 2002, p. 41). This point further emphasises the earlier concern regarding the lack of a universal Mental Toughness definition and furthermore begs the question of how future athletes will be able to determine the extent to which they have developed their level of Mental Toughness performance. The lack of an integrated Mental Toughness definition and the absence of a universal classification were taken into heavy consideration when designing the methodology for this particular study. The ways in which this concern influenced the research conducted in this study, and the manner by which it was handled, will be outlined in the methodology chapter of this review. In addition to this, recommendations regarding this particular aspect and future research in the area are considered in the conclusion of the report.

2005 marked the first Mental Toughness study to be done with a focus on international cricket, a study presented by Bull et al., (2005). This research set out to achieve two major goals, the first targeting a better understanding of Mental Toughness within a cricketing context and the second targeting an investigation into how existing mentally tough cricketers develop this superior mental state of mind (Bull et al., 2005). Jones et al., (2002) faced criticism of classifying successful as well as elite athletes as being inherently mentally tough. Bull et al. (2005) therefore attempted to avoid such criticism and thus identified 15 of the most mentally tough England cricketers that emerged from the 1980s and the 1990s using the opinions of 101 cricket coaches and asked them to rank their top 10 cricketers of this era. Each individual participant within this study was subjected to the same interview schedule and each interview was recorded for means of analysis and further transcribed verbatim after the interview process (Bull et al., 2005). With regard to the development of the interview schedule, the researchers enrolled the use of a focus group to discuss the contents of the schedule and to produce the initial protocol (Bull et al., 2005). This initial protocol was then circulated amongst the researchers for additional criticism and scrutiny, after which a final protocol was generated (Bull et al., 2005). This final protocol included the following broad categories (Bull et al., 2005, p. 214):

Personal views about the winning mind and Mental Toughness; personal theories relating to how each player acquired his winning mind; the role of the winning mind as it relates to pressure in developing through the ranks of cricket; reflections on specific personal demonstrations of the winning mind in action; the role of nets/training in influencing winning-mind development; and advice to young English cricket players on how to develop Mental Toughness.

The transcribed interviews were then analysed by way of a discussion and presentation of direct quotes followed by the researchers identifying specific codes and themes within the transcribed data (Bull et al., 2005). The researchers generated a list of 10 specific categories incorporating a

total of 45 themes (Bull et al., 2005). After the development of these 10 categories, the researchers (along with a moderator) underwent an interrogation of the categories which aimed to “clarify, debate, and defend the complexities of the list of categories and emerging themes based on the personal experiences and observations of the data in action by the research team in their role as sport psychology consultants in cricket” (Bull et al., 2005, p. 215). This focus group interrogation was transcribed verbatim and the output from the focus group resulted in the agreement of the final set of themes (Bull et al., 2005).

From the transcribed interviews 733 direct quotes were considered important with regard to the development, characteristics and attributes of Mental Toughness. The researchers presented their results by means of three groups: general dimensions, global themes and structural category locations. The general dimensions included developmental factors, personal responsibility, dedication and commitment, belief and coping with pressure while the structural category locations included environmental influences, tough character and tough attitudes (Bull et al., 2005). Under each general dimension the researchers presented various global themes that were identified in the data collected. The researchers concluded that their findings and their development of the framework lay the groundwork for disseminating an understanding of Mental Toughness within English cricket however, despite this success, the researchers acknowledged that further research is warranted to build upon the positive recent steps presented in sport psychology literature in order for sport psychology consultants to have a greater impact in the essential area of performance psychology (Bull et al., 2005, p. 227).

It must be noted that Connaughton and Hanton (2009) heavily criticised Bull et al. for alluding, on many occasions during their study, to the term ‘winning mind’ in place of the term Mental Toughness. Connaughton and Hanton (2009) opted for this alternative reference because they believed that success and Mental Toughness were not analogies for one another and although a successful athlete may be considered mentally tough, an athlete who is unsuccessful cannot by default be labelled as not being mentally tough. Although Connaughton and Hanton (2009) seem to stand on firm ground with regard to their criticism of Bull et al.’s (2005) terminology, Bull et al., (2005) are justified to use their term in the sense that they generated a specific list of mentally tough athletes derived from a rigorous and purposeful sampling method. There may also have been a misunderstanding about the meaning behind Bull et al.’s (2005) term ‘winning mind’. Rather than referring to ‘the mind of a successful athlete’ Bull et al. (2005) were referring to an attitude or mindset that athletes adopted where they strive to reach their optimal performance or peak potential, whether successful or not. Thus, their outlook and action plan is characterised and motivated by the drive and determination to win. Based on what one

understands about the term Mental Toughness up to this point, the use of such a term as 'winning mind' is closely correlated to the term Mental Toughness and therefore should be considered valid terminology. A model for Mental Toughness presented by Bull (2006) will be described in more detail later in this review.

The focus on single sport research was popularised in 2005 with Thelwell et al., (2005), in their work: *Defining and Understanding Mental Toughness within Soccer*. These authors noted that their research within soccer was in response to Jones et al.'s. (2002) request for single sport research efforts within the domain of Mental Toughness. These researchers therefore embarked on two studies: the first being an investigation into Mental Toughness examining the characteristics of mentally tough soccer players, and the second being a confirmation of the definition and the importance of attributes for mentally tough soccer players (Thelwell et al., 2005). The participants were exposed to semi-structured interviews encompassing five specific areas involving: demographic details, Mental Toughness definitions within the context of professional soccer, comparisons between participant definitions and definitions forwarded by Jones et al. (2001), areas of modification on individually-prescribed definitions, participant perceptions regarding the attribute make up of mentally tough soccer players and finally areas of general commentary (Thelwell et al., 2005). Following this the researchers, initially independently and then later collectively, agreed upon a definition for Mental Toughness stemming from the information collated from the interviewees' perceptions prior to their exposure to the definition offered by Jones et al. (2001). This refined definition of Mental Toughness was then relayed back to the participants in order to confirm accuracy of the attributes collected through the interview process (Thelwell et al., 2005). From the initial study the following definition was provided (Thelwell et al., 2005, p. 328):

Mental Toughness is having the natural or developed psychological edge that enables you to; always cope better than your opponents with the many demands (competition, training, lifestyle) that soccer places on the performer and specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure.

The researchers therefore concluded that the definition generated through this study was remarkably similar to that generated by Jones et al. (2002). They did, however, note some crucial changes to the definition which included a strong belief by the soccer players that a change from '*generally coping*' to '*always coping*' is more accurate when identifying and defining Mental Toughness within the soccer context (Thelwell et al., 2005).

The following figure (Thelwell et al., 2005, p. 329) depicts the attributes of Mental Toughness that were generated during this study:

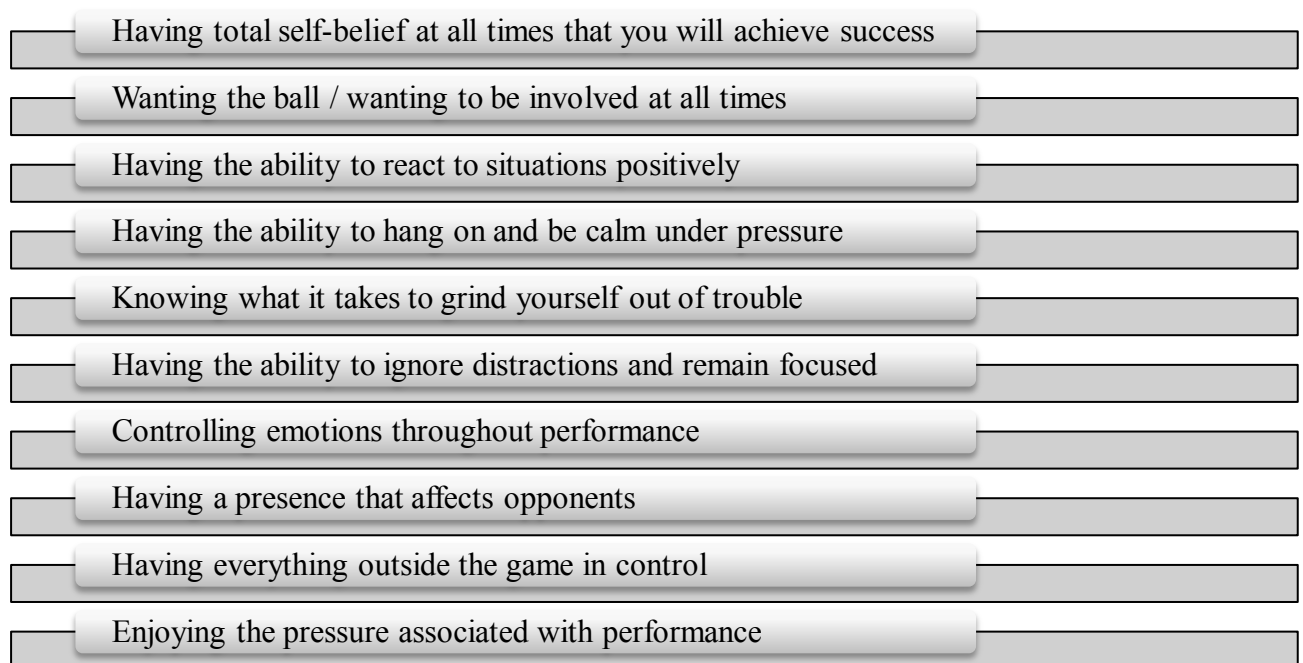


Figure 1: Thelwell et al. (2005) Mental Toughness Attributes

This study served as a confirmation of the definition generated previously and the perceived importance of attributes for mentally tough soccer players. The researchers conducted interviews regarding the degree to which they agreed with the generated definition of Mental Toughness and the interviewees expressed their agreement or disagreement on a Likert scale ranging from 1 representing 'totally agree' to 10 representing 'totally disagree' (Thelwell et al., 2005). As a result of these two studies, the researchers acknowledged the success of their research in producing similar Mental Toughness attributes to those presented by Jones et al. (2001). However, the researchers acknowledged that future researchers need to step out of the scope of concentrating solely on the players and begin concentrating efforts on understanding perceptions of Mental Toughness from the views of coaches and managers too (Thelwell et al., 2005). Additional significance of this study was that it presented one of the first justifications behind the development and implementation of Mental Toughness programmes with Thelwell et al. (2005) expressing the view that there was a strong and important need for platforms and frameworks to be put in place for developing Mental Toughness (Thelwell et al., 2005).

That same year (2005), Gordon and Sridhar conducted a study aimed at identifying and developing Mental Toughness in elite cricket. The aim of this study was to develop an understanding of Mental Toughness within the context of Indian cricket coupled with an attempt

to determine specific Mental Toughness attributes (Gordon & Sridhar, 2005). Surveys were used to identify which cricketers were considered mentally tough by expert Indian commentators, coaches, administrators, present and former players and the top 14 were subjected to in-depth interviews (Gordon & Sridhar, 2005). The second phase of the study incorporated implementing and evaluating a Mental Toughness training programme (Gordon & Sridhar, 2005). During the initial phase of the data collection process interviewees were requested to present attributes and behaviours they believed mentally tough cricketers possess and furthermore describe briefly how best they could be developed. During the second phase of this data collection process 30 national cricketers under the age of 22 years attended a seven series presentation and workshop on the Mental Toughness attributes identified which included: motivation, commitment, resilience, self-belief and optimism, positive perfectionism, focus, handling pressure and sport intelligence (Gordon & Sridhar, 2005).

Content analysis was conducted on the data collected and revealed “seven higher order categories or responses that collectively represented the key attributes of mentally tough Indian cricketers as described by expert commentators (Gordon & Sridhar, 2005, p. 2). In conclusion, Gordon and Sridhar (2005) facilitated a study to present culture specific insights regarding development and identification of Mental Toughness and the seven key attributes identified by the experts contributed to the development of a programme designed for the elite genre of players (Gordon & Sridhar, 2005). Gordon and Sridhar (2005, p. 3) did however state that “further research is required to refine a cricket Mental Toughness inventory that can be used both to identify and develop Mental Toughness among females as well as males”.

Without considering the studies conducted by Thelwell et al. (2005), Bull et al. (2005) and Gucciardi et al. (2008) with their work *Towards an Understanding of Mental Toughness in Australian Football*, most of the research conducted in the preceding years incorporated a multitude of sporting disciplines, including the only study to be conducted on Mental Toughness in South Africa (Fourie and Potgieter, 2001). Furthermore, with the exception of Gucciardi et al. (2008), previous research has failed to account for specific Mental Toughness characteristics and what these characteristics enable an athlete to do (Gucciardi et al., 2008). This research left a remarkable imprint on the Mental Toughness phenomenon and assisted the development and conceptualisation of the construct. The aim of the study was to gather and generate a more holistic understanding of Mental Toughness within the specific context of Australian Football using the underlying principles of Kelly’s (1955) Personal Construct Psychology (Gucciardi et al., 2008). The interview schedule that was used for this study was a PCP (Personal Construct Psychology) based schedule which utilised open-ended questions to gather data (Gucciardi et al.,

2008). With regard to the data analysis procedure, the researchers used guidelines from the grounded theory methodology presented by Strauss and Corbin (1998). As part of the analysis procedure the participants were required to do the following. After receiving an email containing information regarding the Mental Toughness attributes, along with specific situations requiring Mental Toughness gathered from the transcribed interviews, the participants were requested to list the contrasting pole for each Mental Toughness attribute, rank the attributes in descending order of importance and lastly, list all the situations that each specific attribute applied to (Gucciardi et al., 2008). The study resulted in eleven key attributes being generated several of which are consistent with previous research. These include: *self-belief* (Bull et al., 2005; Fourie and Potgieter, 2001; Loehr, 1986; Middleton et al., 2004; and Thelwell et al., 2005), *motivation* (Bull et al., 2005; Fourie and Potgieter, 2001; Jones et al., 2002; Middleton et al., 2004), *tough attitude* (Bull et al., 2005; Fourie and Potgieter, 2001; Gould et al., 2002; Middleton et al., 2004; and Thelwell et al., 2005) *concentration and focus* (Fourie and Potgieter, 2001; Jones et al., 2002; Loehr, 1986; Middleton et al., 2004), *resilience* (Bull et al., 2005; Fourie and Potgieter, 2001; Gordon and Sridhar, 2005; Gould et al., 2002; Jones et al., 2002) and *handling pressure* (Gordon and Sridhar, 2005; Jones et al., 2002; Middleton et al., 2004 and Thelwell et al., 2005).

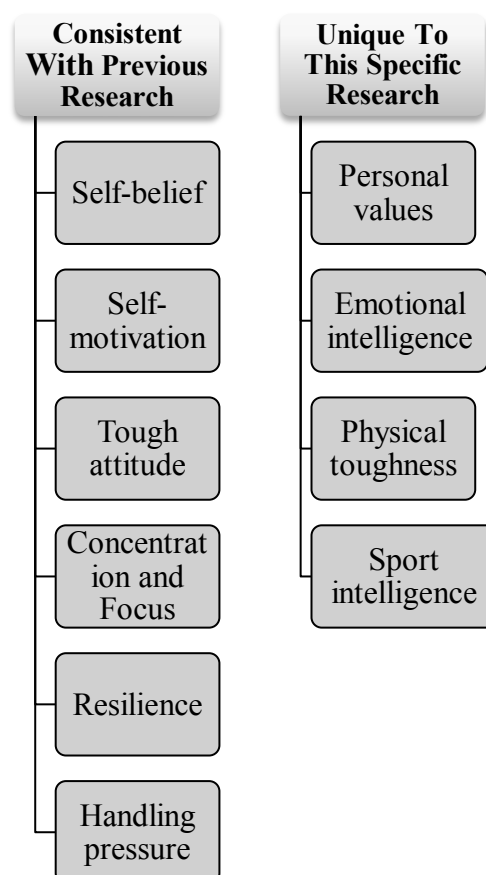


Figure 2: Gucciardi et al. (2008) Mental Toughness Attributes

As a result of their findings, Gucciardi et al. (2008, p. 278) generated the following definition for Mental Toughness:

Mental Toughness in Australian Football is a collection of values, attitudes, behaviours and emotions that enable you to persevere and overcome any obstacle, adversity, or pressure experienced, but also to maintain concentration and motivation when things are going well to consistently achieve your goals.

Gucciardi et al. (2008) discuss their definition in comparison to the definitions provided by Middleton et al. (2004) and Jones et al. (2001). The definition provided by Gucciardi et al. (2008) presents the view that Mental Toughness incorporates an array of different human characteristics such as values, attitudes, behaviours and emotions (Gucciardi et al., 2008). The definitions presented by Jones et al. (2001) and Middleton et al. (2004) Gucciardi et al. (2008) “include only specific components of various characteristics at the expense of others, thereby suggesting that Mental Toughness is limited to such characteristics” (Gucciardi et al., 2008, p. 278). Gucciardi et al. (2008, p. 278) therefore believe that their definition offers an attempt to incorporate the “multi-dimensional nature of the construct”.

These authors suggest that their definition “highlights the importance of Mental Toughness across all situations, which in the present study includes both positively and negatively construed pressures and challenges” (Gucciardi et al., 2008, p. 278). This comment was in response to their belief that previous definitions were defined and generated within the presence of adversity only (Gucciardi et al., 2008). Gucciardi et al.’s. (2008) major argument for their definition as a superior definition to others was that defining Mental Toughness in their sense would allow Mental Toughness to be conceptualised “as a buffer against adversity but also as a collection of interrelated protective and enabling factors that promote and maintain adaptation to other positive (yet perceived challenging) situations” (Gucciardi et al., 2008, p. 278).

In their report, Gucciardi et al. (2008, p. 269-273) presented the following characteristics for Mental Toughness in ascending order from most important along with their contrasting attributes. They believed that an effective way to understand the meaning behind a specific construct was to understand it within the context of what it is not.

These characteristics are represented in Table 1 that follows.

Table 1

Mental Toughness characteristics with their contrasting characteristics (adapted from Gucciardi et al., 2008, p. 269-273).

Mental Toughness Characteristic	Contrasting Characteristic
Self-belief	Self Doubt
Work Ethic	Being Lazy
Determination	Lack of Desire
Perseverance	Giving up / Quitting
Goals	Lack of Direction / Vision
Meticulous Preparation	Lack of Preparation / Planning
Time Management	Disorganised / No Self Drive
Inspiration	Uninspiring / Insipid / Not Being Selfless
Personal Values	Poor Integrity and Personal Philosophy
Honesty	Dishonest / Delusional / Lacking Credibility
Pride in Performance	Careless / Lacking Self Respect
Accountability	Selfish / Blames External Sources
Self Motivated	Lazy and Unmotivated / Extrinsically Motivated
Competitive Desire	Self Doubt / Nervousness
Team Success	Individually Orientated / Highly Selfish
Vision	Insular / One Dimensional / Lacking Perspective
Tough Attitude	Weak Attitude / Lazy / Inconsistent / Easily Intimidated
Discipline	Undisciplined / Lacking Self Drive
Commitment	Uncommitted / Evasive / Unreliable
Positivity	Negativity / Pessimism
Professionalism	Unprofessional Attitude / Carelessness
Sacrifices	Selfish / Lack Commitment
Concentration and Focus	Easily Distracted and Unfocused
Resilience	Fragile Mindset / Not fighting Adversity
Handling Pressure	Choking Under Pressure
Override Negative Thoughts	Succumbing to Negative Thoughts
Emotional Intelligence	Immature Emotional Make-up
Self Awareness	Lack of Awareness / Ignorant to the Truth
Sport Intelligence	Lack of Sport Knowledge and Understanding
Team Role Responsibility	Selfish / Irresponsible / Self Centered
Understanding the Game	Lacking Understanding and Knowledge
Physical Toughness	Easily Intimidated / Avoids Demanding Situations

To conclude the study presented by Gucciardi et al. (2008) it is apparent that there are in fact some universal characteristics for Mental Toughness (Gucciardi et al., 2008). With this being said, however, the study did present some unique attributes for Mental Toughness which are testament to the fact that for future strides to be taken within the phenomenon of understanding

Mental Toughness, additional sport-specific studies need to be conducted (Gucciardi et al., 2008). The historical background of definitions of Mental Toughness offered in this review are summarised in Appendix H for ease of reference.

2.4 MEASURING MENTAL TOUGHNESS

In addition to the attempts at defining Mental Toughness various endeavours have been aimed at developing measurements of the concept too. In 1986 Loehr developed the Psychological Performance Inventory (PPI) and since then various researchers have utilised the measurement in their studies. The PPI has, however, been subjected to criticism regarding its proposed weak psychometric properties and for lacking an adequate conceptual grounding (Connaughton & Hanton, 2009; Crust, 2007, Crust, 2008; Gucciardi & Gordon, 2009; and Middleton et al., 2004b) and this particular issue will be unpacked in greater detail now.

The year of 2004 saw great strides with regard to the Mental Toughness construct. Here, consideration will be given to the influential work done by Middleton et al. (2004). The first study considered is titled *Mental Toughness: Is the Mental Toughness Test Enough?* The aim of this study was to evaluate the construct validity of responses to Loehr's (1986) Psychological Performance Inventory (PPI) (Middleton et al. 2004c). The PPI is a 42-item self report instrument developed to measure reflecting Mental Toughness factors. Seven factors were presented by means of six questions each and these factors included: self confidence, negative energy, attention control, visual and imagery control, motivation level, positive energy and attitude control (Middleton et al. 2004c). All the presented questions in the PPI were answered by means of a 6 point Likert scale ranging from 1 representing false to 6 representing true (Middleton et al. 2004c). The main purpose of developing the PPI was to identify the inherent Mental Toughness factors and in this study Middleton et al. (2004) believed that the factors were proven to have face validity and to further be conceptually compelling (Middleton et al. 2004c). An alternative restructured five-factor solution was then considered and the researchers found a better fit to the data than the PPI (Middleton et al. 2004c). Despite the new approved alternative model fitting the data more appropriately its conceptual underpinning and validity were not as strong as the PPI (Middleton et al. 2004c).

Golby and Sheard (2004) conducted the following two research efforts: *A Cognitive-Behavioural Analysis of Mental Toughness in National Rugby League Football Teams* and *Mental Toughness and Hardiness at Different Levels of Rugby League*. The intricacies and results of these two studies are beyond the scope of this research endeavour; however there is some doubt that needs

to be expressed regarding the measurement technique utilised for measuring Mental Toughness. Despite the PPI being the most commonly used measure for Mental Toughness and despite Middleton et al. (2004c) believing the PPI factors to have face validity, it has been highly challenged by various authors. Murphy and Tamen (1998), for example, criticised the measure of lacking validity and reliability data supporting its application and therefore questioned its usefulness as a suitable, accurate and effective measurement of Mental Toughness. Golby, Sheard and Lavellee (2003) embarked on an investigation into the differences between elite rugby teams and utilised the PPI as a measure for Mental Toughness. Their study revealed no significant results including no differences in any one of the factors assessing Mental Toughness which led them to believe that the psychometric properties of the PPI scale were not very robust. As reflected on earlier, Middleton et al. (2004) administered the PPI on elite high school athletes in an attempt to evaluate the psychometric properties of the Mental Toughness measure and concluded, based on their results, that the PPI was in fact a poor model fit. This is why the PPI-A (Golby, Sheard, & Van Wersch, 2007) was used for this particular research endeavour instead of the PPI. The PPI-A (Golby et al., 2007) is a 14-item self report inventory that has been developed and adapted from the original PPI. The PPI-A (Golby et al., 2007) has a higher level of validity and reliability to the PPI and therefore is considered a more accurate measure of Mental Toughness (Golby et al., 2007).

Following the PPI, a number of alternate measures have been developed drawing focus from various different models. The Mental Toughness Questionnaire 48 (MTQ48) for example was developed by Clough et al. (2002). The final section of Clough et al.'s (2002) chapter *Mental Toughness: the concept and its measurement* touched on an earlier consideration of the development of a measure of Mental Toughness. The incentive for such a consideration lay in the fact that simply having a definition for Mental Toughness was not enough, and that the Mental Toughness phenomenon would present itself more significantly should the concept incorporate practical application (Clough et al., 2002). A 48 item Mental Toughness questionnaire (MTQ48) was therefore generated providing an overall score for Mental Toughness and scores on four subscales including challenge, commitment, confidence and control. An 18-item (MT18) was additionally developed and utilised to allow increased accessibility for the sports people (Clough et al., 2002).

A second study presented by Middleton et al. (2004) was titled *Developing the Mental Toughness Inventory (MTI)* and the purpose of their study was to introduce the Mental Toughness Inventory (MTI). At the beginning of their study Middleton et al. stated that despite the existence of the widespread agreement regarding the importance, influence and benefits

Mental Toughness presents, there still exists a substantial dearth of high quality research (Middleton et al, 2004a). Middleton et al. utilised a 117-item self report MTI instrument aimed at measuring: self efficacy, task value, potential, task familiarity, personal bests, stress minimisation, mental self concept, positivity, perseverance, positive comparison, task specific attention, goal commitment and global Mental Toughness. A confirmatory factor analysis (CFA) was used to test the psychometric properties of the MTI (Middleton et al., 2004a). The conclusion of this study was that the MTI is a valid and reliable measure of Mental Toughness and the researchers confirmed that the MTI has direct relevance and benefit in research contexts (Middleton et al., 2004).

The final study by Middleton et al. (2004b) considered is titled *Making the Leap from Good to Great: Comparisons between Sub-Elite and Elite athletes on Mental Toughness*. In the previous study conducted by Middleton et al. (2004a), the MTI was validated and the purpose of their next study therefore was to utilise the recently validated MTI to determine how Mental Toughness varies across age, gender and between elite and sub-elite athletes (Middleton et al., 2004b). More specifically, this study was an investigation into the differences in Mental Toughness between elite versus sub-elite athletes, older versus younger athletes and male versus female athletes (Middleton et al., 2004b). The results of this study revealed some interesting and significant results. Mental Toughness proved to be more prominent in older athletes, male athletes and sub-elite athletes (Middleton et al., 2004b). Furthermore, Mental Toughness was shown to decrease in both sub-elite and elite athlete from the age of 12 to 16 and continue right into adulthood for sub-elite athletes before making significant improvements (Middleton et al., 2004b). The development of effective programmes designed specifically to help athletes learn, develop and maintain Mental Toughness may assist with improving this decreasing rate. A subsidiary result of this research endeavor was to further validate the MTI as a suitable test for Mental Toughness and Middleton et al. (2004b) regarded the MTI as highly valid and reliable test of Mental Toughness (Middleton et al., 2004b).

In 2009 Gucciardi et al. (2009b) embarked on a study titled *Development and preliminary validation of a Mental Toughness inventory for Australian football*. The objective of this study was to investigate the development along with the evaluation of the Australian Mental Toughness Inventory (AfMTI). With regard to the methodology of this research endeavour “confirmatory and exploratory factor analyses (CFA and EFA respectively) were employed to explore the factor structure of a pool of items designed to capture the key components of Mental Toughness in Australian football” (Gucciardi et al. 2009b, p. 201). This research project was split into two experiments with the first one “considering correlations between the four-factor

inventory and flow, resilience, and social desirability” (Gucciardi et al. 2009b, p. 201) along with the validity of the inventory being assessed, while the second experiment examined multisource ratings from sources such as self, parent and coach of the AfMTI (Gucciardi et al. 2009b). The conclusion of this study consisted of Gucciardi et al. (2009b) stating that “preliminary data on the factor structure, internal reliability, and construct validity of the AfMTI were encouraging” (Gucciardi et al. 2009b). However “the factor structure, reliability, and validity of the AfMTI must be verified through further psychometric examinations before it can be considered a useful tool for measuring Mental Toughness in Australian football (Gucciardi et al. 2009b, p. 201).

Overall, research and theory on measuring Mental Toughness suggests that there is still no fully sound measure of the concept and that further work is required in this regard. It is highly recommended, therefore, that further research be done to rectify the absence of a universally accepted, reliable and valid measure of the multifaceted concept of Mental Toughness. Lacking a suitable measure of Mental Toughness does propose possible hindrances for this research endeavour as concerns surround the manner by which one can evaluate the level of Mental Toughness achieved as a result of the Mental Toughness development programme. This provides rationale for the inclusion of the review of the historical development of Mental Toughness. The characteristics presented in this review will be used as reference points to assist in identifying the extent to which recipients of this psychological intervention have developed their Mental Toughness.

2.5 MENTAL TOUGHNESS DEVELOPMENT AND THE FACTORS AFFECTING THIS

If one were to consult a moderate or sub-standard athlete, it is likely that they will associate the term Mental Toughness with elite sportspeople and those considered professionals occupying superior mental strength. However, within the realm of sport psychology and sporting professionals it is believed that specific psychological skills and mental skills can in fact be taught and further developed, ultimately meaning that a construct, previously believed to be possessed by elites only, is now obtainable by all levels of athletes at all levels of sport participation. It is not a lack in knowledge regarding the psychological skills involved or required in superior sports performance that is the problem, but more so the lack of knowledge surrounding the methods available to enhance such skills and the success rate of psychological performance interventions. Teaching and developing Mental Toughness has many benefits. By increasing knowledge of the methods available to develop one’s Mental Toughness, athletes can begin laying groundwork for enhancing performance and increasing the chances of success.

According to Davis & Sime (2005, p. 364) “achieving elite sport performance depends not only on perfecting the biomechanical efficiency of required movements but also on the efficient utilisation of cognitive resources”. However, despite this consideration, the majority of coaches will spend ample time developing physical talents and skills of their athletes’ and although some athletes understand the importance of having certain mental skills they often lack sufficient knowledge within these areas and are in many cases left wondering how exactly they can further develop these particular aspects and which methods are most appropriate for their particular sport. There exists an interesting link between anxiety and performance and psychological interventions such as Mental Toughness training may be the answer to nullifying the negative aspects of such a link. In Clough et al.’s. (2002) definition of Mental Toughness they refer to mentally tough athletes as having lower anxiety than those not considered to be mentally tough. When athletes, whether amateur or professional, experience heightened levels of anxiety their performance becomes less than optimal. Processing Efficiency Theory (PET) provides a good explanation of how increased anxiety levels affect athlete’s attention and subsequent motor performance (Davis & Sime, 2005). “This theory asserts that attentional capacity is limited; therefore, the increased negative cognition associated with high anxiety conditions consumes processing resources available to working memory, leading to reductions in performance of high working memory tasks—unless the individual is somehow able to muster greater mental effort” (Davis & Sime, 2005, p. 366). Williams, Vickers, and Rodrigues (as cited in Davis & Sime, 2005) confirmed that increased anxiety levels cause major reductions in performances of tasks that require high working memory loads and furthermore Murray and Janelle (as cited in Davis & Sime, 2005) determined that increased levels of anxiety result in an increased visual search rate during competition and therefore results in being detrimental to performance (Davis & Sime, 2005).

A common question among sport psychologists today and even more so among Mental Toughness theorists, is whether champions and elite performers have inherited the dominant psychological characteristics critical for success or whether this Mental Toughness can be acquired through training and experience (Crust, 2009). “Recent research has attempted to explore the concept of Mental Toughness in sport more thoroughly and it appears that, while some people are naturally more tough-minded than others, people can be toughened up with the correct approach to training” (Crust, 2009, p. 1). Alderman (1974) suggested that athletes are, in addition to being taught to be physically tough, are being taught to be mentally tough as well. “Many specific mental skills training programmes have been designed to develop Mental

Toughness in performance, as it was believed Mental Toughness was not an inherited gift but the fruits of learning which was acquired through hard work, understanding, and practice (Connaughton et al., 2007, p. 196). Various researchers have concentrated efforts on linking Mental Toughness with successful performance while others have taken a stance of associating a lack of Mental Toughness with the qualities of unsuccessful performers. Connaughton et al. (2007) proposed that characteristics like fear, insecurity and a lack of control contributed to unsuccessful performances and were associated with mentally weak players while Goldberg (1992) indicated that characteristics such as feeling powerless and being out of control are contrary to being mentally tough (Connaughton et al. 2007). However, while all these research endeavours presented 'findings' on Mental Toughness, they were based on personal belief and experience and the participants in these studies were never subjected to scientific examination in order for the conclusions to be reached.

Sport Psychology has become a multi-disciplined and broadly acclaimed inter-disciplinary field of work that has evolved over the years (Murphy, 2005; Vealey, 2007). "Today sport psychology encompasses professional and active research communities that are committed to enhancing the performance and well-being of athletes through a variety of psychological interventions" (Murphy, 2005, p. 1). Sport psychology has been characterised by the search for answers as to how the mind and the body interact in a successful manner in order to produce a desired sporting performance (Murphy, 2005). However, the reaction to sport psychology interventions has not always been positive and many sporting athletes today remain sceptical about the effectiveness of such programmes. The scepticism in the past has led to the under-use of these interventions by athletes and the sphere of sport psychology has therefore been facing the challenge of changing the perception of sport psychology's influence. Lately the public interest is starting to mount as the somewhat previously stubborn audience are slowly beginning to understand the construct of Mental Toughness more comprehensively and are starting to fully understand the positive influences it provides (Donohue et al., 2004).

An additional resistance to sport psychology intervention comes in the form of athletes becoming averse to consulting these specialists. This reluctance is due to the belief that such psychological assistance is deemed appropriate only for athletes with severe psychological disturbances and furthermore, male athletes predominantly, most often refrain from consulting sport psychologists because of their fear of appearing weak or in need of psychological help (Covassin et al., 2004). It is important to note, however, that well-functioning athletes also engage in psychological assistance such as Mental Toughness programmes in order to help them improve, develop and maintain means to superior performances. This form of intervention

therefore is not directed solely at athletes experiencing competitive difficulties. Despite the interest shown by some elite athletes in psychological interventions there still exists a mass belief amongst athletes of the past that psychological interventions are ineffective (Covassin et al. 2004). This point therefore makes this research project particularly important and significant given the over-arching scepticism. The aim is to contribute to providing athletes with information about sport psychology and its benefits, along with demonstrating the effectiveness of psychological interventions such as Mental Toughness programmes to help improve the perception of these interventions. “In understanding sport psychology, and realising that sport psychology consultation may offer personal benefits, the athlete is potentially less likely to avoid, or resist, sport psychology consultation because of stereotypical beliefs that sport psychology is ineffective or limited to individuals who evidence psychopathology” (Covassin et al., 2004, p. 191). In addition to the abovementioned factors, facilitators of psychological interventions such as Mental Toughness programmes need to consider various methods and motivational techniques to be implemented before commencing with the intervention. These pre-programme foundations will vary between interventions and the targeted audiences and the specific procedures undertaken for this research endeavour are outlined in the methodology section.

2.6 MENTAL SKILLS TRAINING AND PSYCHOLOGICAL SKILLS TRAINING

Thomas and Fogarty (1997) state that athletes wanting to improve their athletic performance need to develop specific skills demanded for their particular sporting context. “For generations, scientists, coaches, and athletes have sought training systems which are effective in the long term, offer an optimal approach to athletic development, and enable the athlete or team to peak their ability at precisely chosen times” (Stebbing, 2009, p. 2). There are specific mental training interventions that have been designed to equip athletes with foundations for building their Mental Toughness and therefore reaching their maximum sporting performance potential. Two interventions reviewed here include Mental Skills Training (MST) and Psychological Skills Training (PST). Mental Skills Training and Psychological Skills Training are psychological interventions designed to help athletes improve, develop and maintain levels of particular mental skills needed in sport.

Throughout the literature designated to discussing methods for improving athletic performance, various references have been made to these two terms and although the two interventions are designed to elicit similar results they differ in their methods and foundations upon which the teaching of these mental skills is implemented. It must be noted that from this point on, reference

to ‘mental training’ will be made instead of referring to psychological skills training and mental skills training. When the necessity arises the two concepts will be unpacked as individual entities however, for this segment of the review, ‘mental training’ will represent both forms of mental skills training interventions.

The main objective behind mental skills training is to help athletes, of any level within any sporting discipline, develop their mental skills in order to assist them achieve success in performance and personal well being (Vealey, 2007). Mental training involves the process of training specific mental skills required to strengthen and condition the mind in pursuit of an athlete’s performance potential (Vealey, 2007). By learning to train mentally athletes will essentially be gaining a “degree of control in coordinating effective movement through various psychological states of performance” (Behncke, 2004, p. 1) and having the ability to control mental and emotional states has various benefits. In addition to assisting task performance and creating psychological foundations for improving confidence and well being (Behncke, 2004), developing one’s mental strength will allow athletes to develop momentum for performing successfully more consistently (Stuart, 2010). Through mental training athletes will become aware of the power of their minds and as they learn to control and create their own sporting experience they will soon improve their Mental Toughness and be better equipped to deal appropriately with the emotions associated with winning and losing within sport.

More specifically, mental training programmes are a “cluster of stress management and cognitive-behavioural techniques (typically including relaxation training, imagery, goal setting, concentration training, and cognitive self management) applied to competitive athletes” (Hays, 1995, p. 35). Edwards and Steyn (2008) states that mental training is just as important as physical training and that these programmes are designed and implemented to develop and train an array of psychological skills to assist in achieving superior performance. Sheard and Golby (2006, p. 150) add that “well planned PST programmes are an opportunity to nurture positively young athletes’ personal development in competitive sport and to facilitate their growth in other areas of their life by generalising the use of mental skills training for young people”.

There has, in fact, been a substantial increase in international awareness of the use of mental training for young athletes and within the last twenty years, a selection of different intervention techniques have been presented in order to aid athletes in developing mental skills to enhance their performances (Sheard & Golby, 2006). A variety of research in applied sport psychology within the last ten years has focused on psychological skills of athletes, whereas research conducted before this was often characterised by a specific focus on personality characteristics

that differentiated a successful athlete from an unsuccessful one. This differentiation however is now viewed in terms of certain psychological skills that athletes have learnt to develop and are now implementing. “As well as describing the psychological skills of successful athletes, much of the recent research in applied sport psychology has been directed on an attempt to train these skills (Thomas & Fogarty, 1997, p. 4). These authors (1997) further state that “cognitive interventions that are tailored to particular sports can be effective in improving psychological skills and actual performance measures” (Thomas & Fogarty, 1997, p. 16). In addition to this, Gucciardi et al. (2009) present findings that support the effectiveness of psychological skills training programmes and stress that these training programmes reported positive changes in subjected ratings of Mental Toughness.

Ericsson and Charness (as cited in Thomas and Fogarty, 1997) prove that expert performance is achieved by complex cognitive structures and skills developed over extended periods of time. Thomas and Fogarty (1997) propose that particular techniques such as goal setting, performance evaluation, improved concentration techniques, methods for focusing after distractions, better control over thoughts and emotions and improved use of imagery techniques are all present in successful athletes in the modern elite sporting scene. McCaffrey and Orlick (1989) conducted a study presenting a number of psychological skills that differentiate elite performers from the average performer. They stated that the elite athlete sets clearly and precisely defined and planned goals, adopted a more systematic approach in planning practice sessions, implemented regular self regulation systems for evaluating performance, acknowledge the need to handle distractions, utilise the skill of imagery techniques and were highly committed to achieving excellence in performance.

Research conducted by Tremayne and Tremayne (2004) looks at the Swedish and Australian school systems in order to understand how the teaching of goal setting, stress management and relaxation techniques have been successfully implemented in these contexts. These methods have been proven to advance one’s “physical fitness, self confidence and self esteem” (Sheard & Golby, 2006, p. 150), all of which are very important in the development of Mental Toughness. The combination of various psychological skills intervention techniques can result in effective performance outcomes; something that has been demonstrated in intervention skill packages such as goal setting (Wanlin, Hyrcaito, Martin, & Mahon, 1997), mental imagery and relaxation (Zhang, Ma, Orlick, & Zitzelsberger, 1992), self talk, goal setting, focusing and visualisation (Fournier, Calmels, Durand-Bush & Salmela, 2005).

2.7 CONSIDERATIONS FOR MENTAL TOUGHNESS PROGRAMME DEVELOPMENT

One must not misconceptualise the use of mental training programmes. It is often thought that these programmes are designed for athletes struggling with reaching their optimal performance or for elite athletes only. Mental training has been designed and promoted for all athletes and the transferability of the skills learnt to all contexts is what makes it a very attractive training technique. In fact, involvement in mental training has shown to have an impact on aspects outside of improved performance and not only on increasing chances of performance optimisation. This impact suggests that there exists a relationship between psychological skills and well being and that a healthy state of well being may be required for the successful implementation and adoption of psychological skills training (Edwards and Steyn, 2008). One must note however that mental training is by no means a quick fix or solution to any problem; it requires ample time, precise planning and dedication along with the desire to learn, acquire new skills and practice. The central theme behind mental training is that specific skills are learnt and developed and just as athletes would constantly train physically, they now incorporate constant training of this kind into their training routines and therefore improve on these skills

A well-known quote “*Mens sano in corpora sano*” directly translated means “a healthy mind in a healthy body” and alludes to the fact that there is a positive connection between a healthy body and a healthy mind. The state of one’s physical condition can affect the state of their mental condition and vice versa. Exercise performed on a regular basis has significant effects not only on aspects such as athlete’s cardiovascular systems but also on the athlete’s mood and sense of well being (Hays, 1995). Exercise has been correlated to a decline in depression states as well as the amelioration of anxiety and furthermore assists in improving aspects such as self esteem, socialisation, self-belief and confidence, all of which relate to improvements in the mental and emotional side of functioning (Hays, 1995). Most athletes understand the importance of training physically, without the physical training the athlete would simply have no place in their sporting arena. There seems to be a two way relationship between physical training and mental training. Improving one’s physical training will assist athletes in developing such psychological/mental aspects like self-belief and confidence as they become better at their sport and can compete at higher levels. This in turn motivates them more and empowers them with a greater drive to succeed, therefore improving their Mental Toughness.

Mental training relies heavily on athletes having a sense of self mastery as this self mastery in turn serves to motivate continuous efforts in attempting to increase performance (Behncke, 2004). Self mastery in this sense is generated through information and knowledge and this

knowledge is bestowed upon the athlete through their involvement in psychological interventions such as Mental and Psychological Skills Training. In other words, through mental training of this kind, knowledge and information regarding the development, improvement and maintenance of specific mental skills required in sport is passed onto the athlete who essentially collates this information into their training routines. This development leads to self mastery which as mentioned earlier, motivates the athlete to continue trying to establish greater performance efforts.

Vealey (2007) presents a model of mental skills based on the premise of psychological areas he deems closely related to successful performance and well being. This model is based on four sets of skills namely foundational skills, performance skills, personal development skills and team skills. The foundational skills are the bottom line basic intrapersonal resources required for success and they include: achievement drive, self awareness, productive thinking and self confidence (Vealey, 2007). These foundational skills are analogous to many concepts presented by various other authors such as Middleton et al. (2004), Jones et al. (2002) and Bull et al. (2005). Performance skills such as perceptual cognitive skills, attentional focus and energy management are all skills necessary for the execution of skills during sporting performance (Vealey, 2007). These types of skills are also found in the mental toughness literature where Bull et al. (2005) speaks about *tough thinking*, where Middleton et al. (2004) speaks about *task specific attention* and where various authors speak about *focus* such as Jones et al. (2002) and Loehr (1982).

The third set of skills falls under the category of personal development skills which specifically represents “significant maturational markers of personal development and that allow for high-level psychological functioning through clarity of self concept, feelings of well being, and a sense of relatedness to others” (Vealey, 2007, p. 290). Vealey (2007) expresses that two personal development skills are particularly important for mental training in sport which include: identity development and interpersonal competence. Identity development involves knowing one’s true identity allowing you to experience psychological well being and healthy emotional states such as self worth (Vealey, 2007). Interpersonal competence is having competence or proficiency in interacting by implementing effective communications skills (Vealey, 2007). The fourth set of skills falls under team skills which are “collective qualities of the team that are instrumental to an effective team environment and overall team success” (Vealey, 2007, p. 291). Team confidence, team cohesion, communication and leadership are all central to building team skills needed for the overall foundation of mental skills presented by Vealey (2007). It would be highly beneficial for a Mental Toughness programme facilitator to consider the four skills

presented by Vealey (2007) when erecting specific programmes. Although the skills are relatively intricate and dynamic they are imperative to developing one's Mental Toughness successfully. If the Mental Toughness facilitator can understand underlying frameworks such as foundational skills, performance skills, personal development skills and team skills then the intricacies of specific programmes can be designed around these underlying frameworks. The skills lay effective foundations around which specific mental skills training education and routine generation can occur.

In order to fully engage in increasing and improving one's Mental Toughness the athlete must make a conscious decision to increase their opportunities for success (Kuehl, Kuehl, & Tefetiller, 2005). This conscious decision must be orientated towards an open mind to amalgamate mental skills training into daily training and performance routines. In addition to seeing improvements in the specific mental skills that are included in Mental Toughness programmes, which in turn will help improve Mental Toughness, athletes engaging in mental skills training will also see improvements in areas such as awareness levels, dynamic balance, focus and flow, quality in action, relaxed performance, trust, decreased judgement and doubts (Jennings, 1993). According to Hays (1995), "Programmes are based on the assumption that aspects of thoughts and feelings can inhibit optimal performance, and likewise, that certain mental skills, used effectively, can enhance optimal performance".

According to Greenspan and Feltz 1989 (as cited in Hays, 1995, p. 35), "considerable research, especially with competitive athletes, suggests that educational psychological skills interventions improve competitive performance". PST differs to MST in that PST offers a framework of phases in which it operates and within the psychological skills training framework there are three phases to such an intervention. These phases include: an education phase, an acquisition phase and a practice phase. The Mental Toughness programme developed as a result of this research endeavour was influenced and structured from the phases of PST programmes unpacked below.

- **Education Phase**

It is surprising how many athletes are unfamiliar with the influence that psychological skills training can have on their performance and therefore the first phase of any PST training programme begins with an educational phase. The initial step in any PST training programme should revolve around presenting the importance of developing psychological skills and to furthermore show the athletes why it is important to develop such skills and help them understand the benefits of training mentally in addition to training physically. During this

educational phase it is important to help the athletes understand that increasing the awareness of the role of mental skills will open up doors for greater performance potential.

- **Acquisition Phase**

“The acquisition phase focuses on strategies and techniques for learning the various psychological skills” (Weinberg, & Gould, 2007, p. 257). This is the phase in which the specific skill is learnt by the athlete. Up to this point the athletes would have acquired specific theory about the skill and will now be exposed to practical application regarding each psychological skill. Therefore the researcher will expose the athletes to various exercises designed to help the athletes understand how psychological skills can be incorporated into their performance routines. This differs to the practice phase in that the acquisition phase will incorporate the PST facilitator exposing the athlete to exercises showing practical application of the skills being taught, but still within the boundaries of a learning environment. In other words, they will be shown how the theory is applicable to their particular sport. The practice phase will include the athlete physically applying the skills and the lessons learnt to their performance at the sporting practice sessions.

- **Practice Phase**

This phase incorporates three sub phases which include: automating skills through learning, teaching athletes to systematically integrate psychological skills into their performance situations and to stimulate skills that athletes will want to apply in actual competition (Weinberg & Gould, 2007). As mentioned earlier, this phase includes the athlete physically applying the lessons learnt and theory gained about individual skills to their sporting performance during their practice sessions.

Furthermore, there are additional factors that need to be incorporated and considered, along with Mental Skills Training and Psychological Skills Training which will form a Mental Toughness programme. Crust (2008) presents how important it is to ensure the correct motivational climate is created in order to successfully develop Mental Toughness in athletes. In addition to this, Connaughton et al. (2007) stress the importance of ensuring enjoyment and mastery when developing Mental Toughness and further state that as athletes get older, the climate in which they train and perform should become increasingly more competitive. Adding to the aforementioned factors influencing the potential success of developing Mental Toughness, Bull et al. (2005) stated that elements such as parental influence also have its place and they touch on elements such as childhood background and how these young athletes have been taught to deal

with specific circumstantial issues such as adversity and setbacks. In addition to these considerations, Bull (2006) emphasises the importance of including a winning environment into the routine of athletes. This winning environment plays a crucial role in developing one's Mental Toughness and the specifics of such an environment are considered closely in a separate section dedicated to Bull's (2006) work further on in this report. All these factors coupled with the inclusion of the specific contents of psychological interventions make up what is considered a Mental Toughness programme in this research.

Earlier in this review consideration was given to research efforts conducted by Fourie and Potgieter (2001) and from the data collected and the results drawn and analysed, they concluded that the following should be considered in order to assist athletes in achieving and displaying Mental Toughness. Through thorough and meticulous training methods, athletes can ensure they obtain a positive maintenance of their motivation levels, coping skills, confidence, cognitive skill and discipline and goal directedness (Fourie & Potgieter, 2001). Only through the appropriate dedication, time and preparation skills can athletes achieve the pre-requisite physical and mental requirements. In closing Fourie & Potgieter briefly state that athletes should develop the necessary psychological hardiness: they should possess strong ethical and/or religious convictions and for team sports the concept of team unity should be strongly emphasised (Fourie & Potgieter, 2001). Sportspeople and coaches are now constantly in a search for the 'winning edge' and are looking toward sport psychologists for that added mental advantage. Specifically, they are seeking techniques and procedures that will help make 'good' athletes 'great' (Bhambri et al., 2005). Mental Toughness training programmes incorporating elements of MST and PST may help reduce levels of anxiety as these interventions are designed to empower the athlete more and equip them with mental skills that will help them be more in control of their competitive performance. Athletes who know they have more control over their performance are less likely to fall into anxiety traps and it is therefore evident that such mental training will slowly begin differentiating athletes who train in this manner and those who do not.

2.8 DEVELOPING MENTAL TOUGHNESS: A REVIEW

James Loehr is considered one of the most influential pioneering Mental Toughness authors of all time, as he attempted to define the construct throughout the 1980s and the 1990s. Loehr is a firm believer in the idea that Mental Toughness is learned and is in fact an acquired skill rather than an inherited gift. Acquiring Mental Toughness requires the same process as acquiring physical skills, which includes hard work, understanding and practice (Loehr, 1982). The researchers of this particular project take the same stance as Loehr and his influential work must

therefore be covered in greater detail to account for significant theoretical underpinnings to this study.

Loehr (1982) stated that those athletes who are considered mentally tough have learnt, or developed, two very important skills: the first incorporating the ability to increase flow of positive energy when faced with adverse circumstances or crisis; and secondly, to think in a manner that promotes the right type of attitude required to solve problems or deal with pressure, mistakes, or competitive environments. In addition to this, Loehr (1982) stresses that personality style has little bearing on Mental Toughness and characteristics or personality traits such as being an introvert or an extrovert, being quiet, boastful, dynamic or reserved has minimal influence on successful performance. “You need not move out of your own normal and comfortable personality style to achieve a high degree of Mental Toughness” (Loehr, 1982, p. 11). Loehr (1982) presents a constellation of mental skills which he believes are learned by athletes and are furthermore characteristic of mentally tough competitors. They include athletes being: self motivated and self directed, positive but realistic, in control of emotions, calm and relaxed under pressure, highly energetic and prepared for action, determined, mentally alert and focused, self confident and fully responsible (Loehr, 1982, p. 11).

After conducting interviews and discussions with top class athletes over a ten year period, Loehr (1982) devised a four step formula for success. Each step of the four step formula follows on from one another. In other words, each step exists due to the presence of the previous step. Step one encompasses self discipline and is characterised by doing whatever is required and making the necessary sacrifices in order to get the job done in the best way possible (Loehr, 1982). Step two is self control which Loehr believes follows on directly from self discipline, stating: “As you discipline yourself, you experience steady increases in self control, control of what you do, what you think, and how to react” (Loehr, 1982, p. 16). As with the previous step, self confidence, which is step three, follows on from self control. Being in control and knowing that you are in control leads to greater levels of self confidence. Step four is simply the “manifestation of your talents and skill as an athlete” (Loehr, 1982, p. 16) and is characterised as self realisation. Being disciplined in your sport allows athletes to build strong foundations which in turn give the athlete control. Knowing that you are in control improves and gratifies one’s confidence leading you to begin “opening doors to your fullest potential” (Loehr, 1982, p. 17).

In addition to the four step formula for success Loehr presents the Athletic Excellence Training (AET) system devised specifically to help athletes achieve control over what Loehr termed The Ideal Performance State (IPS). After analysing hundreds of reports from top class athletes,

twelve distinct categories were presented by Loehr (1982) representing the ideal internal climate for performing optimally. These included being physically relaxed, being mentally calm, having low anxiety, being energised, being optimistic, ensuring enjoyment, experiencing a sense of effortless expenditure, being automatic, being alert, being mentally focused, being self confident and being in control (Loehr, 1982, p. 27). However, despite knowledge of this IPS, even top athletes are frequently aware of the existence of such a state and how it actually works (Loehr, 1982). Concerns were raised as to how athletes would train something they were unaware of and did not understand but Loehr (1982) believed that “what happens with mental skills is similar to what happens with physical skills” (Loehr, 1982, p. 85).

Most of the time athletes can and will perform physical skills, but they can rarely tell you how they did it as the control they have acquired over their movements is unconscious and has become naturally automatic (Loehr, 1982). “Hours and hours of practice and play have resulted in a highly complicated and efficient series of movements that can be executed without any conscious intervention” (Loehr, 1982, p. 86). The same principle applies to mental skills and the athletes considered mentally tough are the ones who train themselves until they obtain an unconscious grip or control over their IPS. Once this is achieved, these athletes can switch this IPS on and off when needed. Loehr (1982, p. 103) presents the following roadmap to Mental Toughness and athlete excellence.

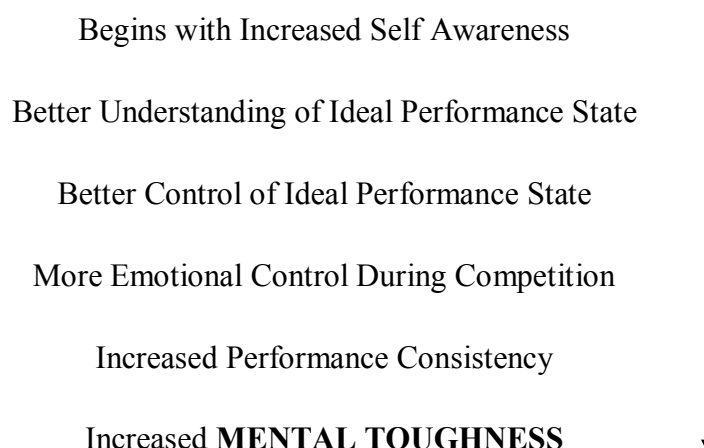


Figure 3: Loehr’s (1982) Roadmap to Mental Toughness

In addition to the above model, Loehr (1982) offers what he terms a Mental Toughness Formula. This formula is premised on discerning between elements that athletes can control and those that they cannot. In any sporting environment there are elements that are beyond the control of the athlete, such as weather conditions, equipment and facility quality, official or referee influence, attitudes and behaviours of opponents. Loehr (1982) questions how athletes can stay in control

of their sporting performance in the face of elements that are uncontrollable and he suggests that the key to succeeding in such situations is staying in control by controlling emotional responses to those events. In essence it boils down to the mental decision and the attitude the athlete decides to adopt when faced with uncontrollable adverse conditions. Winning is an element that cannot be controlled, however athletes can control the chance they have of winning by training appropriately, sufficiently and efficiently by adopting the right attitudes, applying the correct knowledge and by remaining focused, determined and motivated. Therefore, athletes need to concentrate on controlling elements that they have the direct ability to control and thereafter control emotional responses to situations that they cannot. As part of Loehr's (1982, p. 186) formula for Mental Toughness, the following four concepts are considered. He stated that if athletes can respond 'yes' to these statements, then they are winning in the Mental Toughness battle.

1. I gave 100% of my best effort
2. I kept my energy and attitude positive during competition
3. I projected a strong and powerful physical presence during competition
4. I offered no excuses

Figure 4: Loehr's (1982) Mental Toughness Formula

In addition to the work of Mental Toughness pioneer, Loehr, various other developers of Mental Toughness are considered significant in the development of this concept. Scarnati (2000) believes that developing Mental Toughness is routed in having enormous self discipline and will power and that "you must concentrate and concurrently focus the conscious mind, while at the time controlling visceral emotions" (Scarnati, 2000, p. 174). He further states that developing Mental Toughness takes time, training and practice, much like with physical skills as Loehr (1986) had recognised earlier. Furthermore, in order to improve the chances of successfully developing your Mental Toughness, Scarnati (2000) states that it is important to understand yourself thoroughly, understand your weaknesses and strengths as well as your capabilities and limitations. It comes down to the extent to which you understand yourself as an athlete. Scarnati (2000) presents various essential components for developing Mental Toughness which will be discussed in greater detail now.

Tips for developing Mental Toughness begin with developing a sense of competency with Scarnati believing that competent leaders understand themselves and can therefore deal with stressful situations more appropriately and successfully. Additionally, Scarnati (2000, p. 174) advises doing the right thing rather than trying "to be everything to everybody" as he refers to

this as being a failure. Therefore Scarnati (2000) advises doing what is right, not what you think will ingratiate you with others and earn you the status of a leader. This ‘people pleasing’ mentality is an important consideration in my research as a school environment often fosters this, particularly in teenage students with either their peers or with their superiors. The next tip is to fully and comprehensively understand your own value system and principles. Those who are mentally tough tend to remain composed and deal with resisting potential pressures and ensuring quality work is achieved. Furthermore, Scarnati (2000) believes that to develop Mental Toughness successfully one needs to adopt a positive sense of self worth and self confidence as well as develop skills to remain persistent when facing adversity. Scarnati (2000, p. 175) believes in conquering emotions with rational thinking and furthermore believes that “emotional maturity is a covert offensive weapon necessary for Mental Toughness”. In addition to the aforementioned tips Scarnati (2000) emphasises the need to develop career goals as this helps understand the path that needs to be walked in order to achieve future success. Finally he advocates incorporating the ability and strength to say no when it is necessary and to not let others mentally cripple you.

In 2007, researchers Connaughton et al. embarked on a study aimed at the development of Mental Toughness as well as an investigation into whether Mental Toughness requires an element of maintenance. The questions used within the interview schedule were aimed at gathering information surrounding what “individuals, incidents or strategies were perceived to help develop, and perhaps used to maintain, Mental Toughness” (Connaughton et al., 2007, p. 85). More specifically, the interview schedule comprised of six sections. Section one presented the interview process, the participants rights, how the information from the interview would be utilised, how confidentiality would be maximised and ensured, and the aims and objectives of the study (Connaughton et al., 2007), while the subsequent three sections “encapsulated the participants’ respective careers into early, middle, and later years” (Connaughton et al., 2007, p. 85). Section five was characterised by the aim to identify whether Mental Toughness needed maintenance and, if so, the perceived underlying mechanisms responsible (Connaughton et al., 2007) while section six concluded the interview and invited the participants to raise any concerns, opinions and comments (Connaughton et al., 2007). The study generated the following results, depicted in the figure that follows. Participants believed that the early years of one’s career set the foundations for three Mental Toughness attributes whilst the middle years of one’s career cultivated a further six attributes attached to what they believed constituted a mentally tough performer (Connaughton et al., 2007). The later years of one’s career represented the phase that the participants believed was responsible for developing the remaining three attributes

and was further responsible for fostering the previously developed attributes (Connaughton et al., 2007).

<u>Attributes</u>
Having an unshakeable self-belief in your ability to achieve your competition goals. (Early Years)
Having an unshakeable self-belief that you possess unique qualities and abilities that make you better than your opponents. (Early Years)
Having an insatiable desire and internalised motives to succeed. (Early Years)
Bouncing back from performance setbacks as a result of increased determination to succeed. (Middle Years)
Pushing back the boundaries of physical and emotional pain while still maintaining technique and effort under distress. (Middle Years)
Accepting that competition anxiety is inevitable and knowing that you can cope with it.
Thriving on pressure of competition. (Middle Years)
Regaining psychological control following unexpected uncontrollable events. (Middle Years)
Switching a sport focus on and off as required. (Middle Years)
Remaining fully focused on the task at hand in the face of competition-specific distractions. (Middle Years)
Not being adversely affected by others' good and bad performances. (Middle Years)
Remaining fully focused in the face of personal life distractions. (Middle Years)

Figure 5: Connaughton et al. (2007) Mental Toughness attributes and their years of development

The researchers concluded that developing one's Mental Toughness is in fact a long term process based on the results above and that, once an individual believes their Mental Toughness has developed, it will require a certain degree of maintenance. More specifically, with regard to maintenance, the researchers presented mechanisms that they believed would assist to achieve maintenance of Mental Toughness. These mechanisms broadly include: "an insatiable desire and internalised motive to succeed, social support networks, and basic and advanced mental skills" (Connaughton et al., 2007, p. 92). Mechanisms for early years include: influence from environment, leadership style, coaching style, exposure to elite athletes, overcoming critical circumstances, mastering skills, social support and enjoyment and fun. Middle year mechanisms

include: early year attributes, competitive nature, sibling rivalry, social support and exposure to anxiety and pressure, while later year mechanisms include: increased competition, applying basic and advanced psychological strategies and better overall physical preparation. Connaughton et al. (2007) stated that given that Mental Toughness was perceived to develop over a performer's career it would be advisable for performers to receive support and Mental Toughness training from an early age rather than in later stages of their sporting careers. This point provides the rationale for implementing Mental Toughness programmes with young school athletes in this study.

2.9 BULL'S MODELS OF MENTAL TOUGHNESS

The study conducted by Bull et al. (2005) that will now be detailed is of great significance to this research. These authors identified various factors that influence the development of one's Mental Toughness. Bull et al. (2005) devised a model of Mental Toughness in cricket that focused heavily on environmental influences and considered specifically three categories of Mental Toughness namely: tough character, tough attitudes and tough thinking. They present this particular model by means of a pyramid hierarchy with environmental influence as the base structure. Tough character is therefore built and developed as a direct result of the environmental influences and tough attitudes are simply manifestations of these tough character attributes. Tough thinking is the end result or summit of the pyramid model and "represents the key psychological properties of a mentally tough mind" (Bull et al., 2005, p. 225).

The premise of this model is that a broader environmental impact and a more extensive experience base would provide a suitable foundation upon which tough character, tough attitude and tougher thinking can be further developed (Bull et al., 2005).

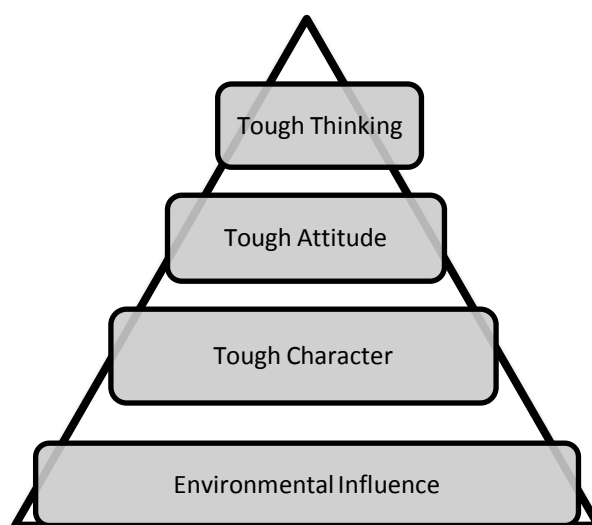


Figure 6: Bull's (2005) Hierarchy of Mental Toughness Development

Bull et al. go further and present specific themes that assist in developing each one of the pyramid hierarchy levels. They can be seen in figure 7 shown below.

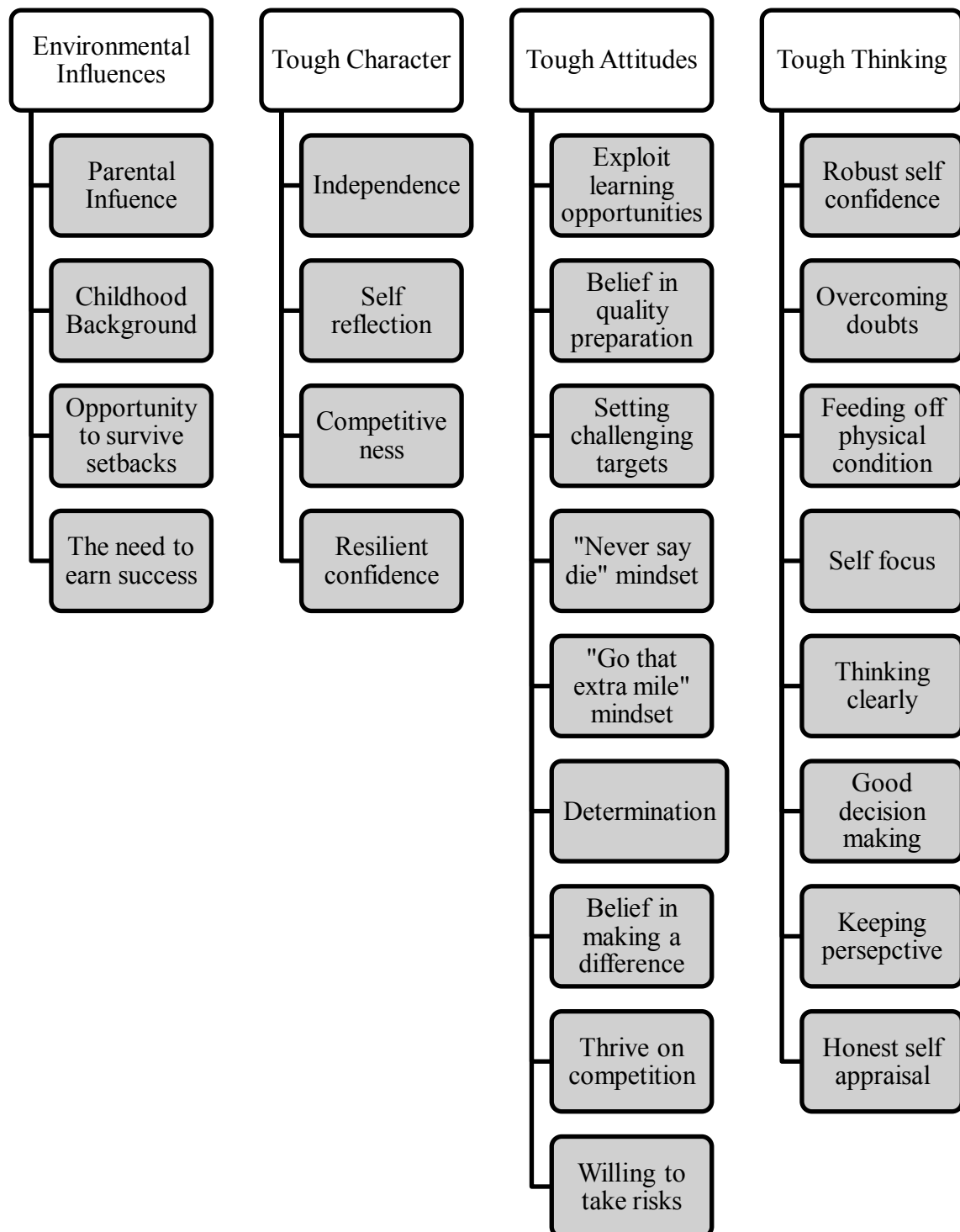


Figure 7: Bull's (2005) Model of Mental Toughness

Background to this model is that Steve Bull, a well known sport psychologist, wrote a book titled *The Game Plan: Your Guide to Mental Toughness at Work* which was a continuation of his

work done in 2005. In this work, Bull (2006) stated that performing under pressure is a tough task to master, and it requires a mental approach that is unnatural to any individual, not just athletes. Certain aspects such as anxiety, stress, fear and poor emotional control are the normal responses to adverse or challenging circumstances, but not for those whom Bull (2006, p. 9) calls “winners”. Bull (2006, p. 9) believes that “winners have the capacity to enter challenging situations with confidence and a sense of excitement against the odds”. Bull (2006) characterises these ‘winners’ as individuals who approach adverse challenges with confidence and excitement and they thrive on performing against the odds and under pressure. Being able to stay focused and remain strong in their self-belief when dealing with intimidating environments Bull (2006) adds this is owed to the fact that these particular individuals are mentally tough in their nature and approach and have what Bull et al. (2005) refer to as the ‘winning mind’.

Bull (2006) takes the concept of the ‘winning mind’ further and presents what he calls the ‘winning environment’. The winning environment is an environment that athletes need to make a conscious effort at creating. Developing one’s mental skills and engaging in psychological interventions such as mental training programmes will all be beneficial, but amalgamating these interventions with the winning environment will set athletes in good stead for better developing their overall Mental Toughness. Bull (2006, p. 143) begins his presentation of the winning environment with a quote by Marcus Trescothick who in 2005 was the vice captain for the England cricket team that won the ashes:

Ability gets you part of the way, hard work and preparation are fundamental, but it is the creation of a winning environment that really makes the difference.

Bull (2006) presents his model for Mental Toughness to help individuals become more mentally resilient and the model includes four different forms of toughness namely: turnaround toughness, critical moment toughness, endurance toughness and risk management toughness. Bull’s (2006) model was drawn upon to develop the focus group interview schedule for initial data collection for this research endeavour and therefore a more detailed account of this model will now be discussed.

To begin with, individuals approach tasks, whether they be work, social or sport related, in different ways and the ways in which these people do this will illustrate certain types of toughness that they may possess. Turnaround toughness is concerned with “regaining self-belief when things are going badly” (Bull, 2006, p. 12) and furthermore about “dealing with adversity and setback” (Bull, 2006, p. 12). Critical moment toughness concerns staying focused under pressure, maintaining clear thinking and a positive mind and being able to engage in quality

preparation to maintain emotional control whilst performing (Bull, 2006). Endurance toughness shows that one can retain states of good health and perform well in the face of excess fatigue and stress induced by relentless and continual demands (Bull, 2006). The fourth type of toughness that Bull (2006) discusses is that of risk management toughness. This form of toughness is seen when individuals hold personal responsibility for their confidence in making and challenging decisions and thereafter have faith in themselves and their abilities to stick to their decisions (Bull, 2006).

In addition to this model of Mental Toughness, Bull (2006) presents six tips or strategies on how to develop one's Mental Toughness. Engaging in these tips, according to Bull (2006), will contribute greatly toward creating the 'winning environment' mentioned earlier. These tips are a means by which people can engage in a 'self help' way of improving their Mental Toughness.

2.9.1 BULL'S (2006) MENTAL TOUGHNESS TIPS IN RELATION TO EXISTING MENTAL TOUGHNESS LITERATURE

A vast amount of Bull's (2006) work on the development of Mental Toughness can be seen in the definitions of Mental Toughness and its components provided by an array of different Mental Toughness authors. The tips he offers are summarised below.

a) Reconnecting with past experiences

During this phase, athletes are encouraged to delve into their past experiences and focus on the positives rather than the failures. Forgetting the failures of the past can be linked to positive self talk in the sense that athletes can use positive self talk to nullify the negative effects of past failures. In turn, this will assist athletes in obtaining a more positive and focused outlook and attitude. Various researchers of the past stress how important positive self talk actually is. Loehr (1982) speaks about athletes being self motivated, self directed and self confident, all of which can stem from engaging in positive self talk. Thelwell et al. (2005) present having a positive reaction to situations as one of their components of Mental Toughness. This is directly linked to concentrating on the positives of the past and forgetting the failures whilst encouraging yourself through the art of positive self talk.

b) Learning and moving on

This tip can be linked to focus and more specifically focusing on the 'now' and 'what is to come'. Athletes must make a concerted effort to learn from their past and thereafter concentrate their focus on the future as it is a matter of evolving in performance that will lead to greater

success. Athletes need to concentrate their efforts on ‘process focus’ discussed by Bull (2006) where athletes focus heavily on the performance process as this is in direct control of the athlete. In his work, Loehr (1982) outlines the issues of being realistic and prepared for action. Being realistic can be linked to Bull’s (2006) idea of learning and moving on in the essence that it is important for athletes to understand that the past cannot be changed, but that lessons that can be drawn from the past and can therefore be utilised to prepare more thoroughly and meticulously for the future. This idea of being realistic about the control athletes have over the past, the present and the future helps athletes become more prepared for action. Fourie and Potgieter (2001) refer to preparation skills as a component of Mental Toughness which can be correlated to Bull’s (2006) notion of being prepared for action.

c) Controlling the controllables

Part of a mentally tough athlete’s mindset is discerning between what is controllable and what is not. Loehr (1982) touches on the importance of controlling one’s emotions while Jones et al. (2002) speak about control and remaining calm under pressure. Thelwell et al. (2005) support these notions in their research where they highlight that it is only possible to control certain things outside of a sporting game.

d) Seeing and thinking success

This concept is common among mental toughness theorists and can be compared to a number of different Mental Toughness aspects such as visualisation, positive self talk and attitude as well as goal orientation. Loehr (1982) stresses that mentally tough athletes are positive, highly energetic, mentally-alert and focused. Fourie and Potgieter (2001) outline the importance of goal directedness while Jones et al. (2002) stress the influence of having a psychological edge which can be achieved by engaging in the aforementioned aspects. Clough et al. (2002) present visualisation as a Mental Toughness component while Thelwell et al. (2005) focus on aspects such as having a positive reaction to situations, remaining focused and having a positive presence whilst enjoying the pressure. Gordon and Sridhar (2005) add that engaging in attitudes characterised by optimism and positive perfectionism are crucial while Gucciardi et al. (2008) present emotional intelligence as a significant Mental Toughness component. All of the above aspects can, in some way, be linked to Bull’s (2006) idea of seeing and thinking success.

e) Managing energy levels and outlook

Few theorists have focused on the issue of managing energy levels and outlook directly. However certain aspects can contribute towards keeping a well balanced energy level and a

positive and focused outlook. Loehr (1982) states that mentally tough athletes need to be positive, realistic, in control of their emotions, calm, relaxed and self confident. If athletes are able to remain calm and relaxed in competitive situations it is unlikely that they will expel unnecessary energy on stress, anxiety and fear of failing. Being positive about one's abilities and performances (while still remaining realistic about expectations) will contribute towards controlling emotions and assist in managing one's outlook appropriately.

Fourie and Potgieter (2001) stress the significance of goal directedness and cognitive skill. Too many people, including athletes, underestimate the power and influence in goal setting. Goal setting provides direction as well as structure and furthermore provides a means by which to analyse one's performance progress. Having a well designed, realistic goal schedule will empower the athlete with a sense of drive and motivation along with feelings of heightened control. If athletes feel more in control, it is inevitable that less energy will be wasted on factors such as worry, stress and anxiety. Having disciplined goal directedness will thus help the athlete's outlook in being more focused and intricate which in turn will assist them in channelling a more specific energy into performance preparation. Touching briefly on cognitive skills, also presented by Fourie and Potgieter (2001), these have similar effects to that previously discussed. Having cognitive skills at a particular activity and practising these skills will help athletes be able to perform them as second nature. This leads to a sense of heightened self confidence which, if channelled appropriately and correctly, can help improve performance. In addition to this, increased self confidence will help athletes concentrate less on worrying about their performance as they begin to believe in their ability and therefore their outlook becomes more positive and confident too. Furthermore, Jones et al. (2002) speak of mentally tough athletes being able to cope well in their competitive circumstances which will essentially assist athletes in saving energy by not engaging in emotions like stress, anger, anxiety and the fear of failing. An additional element that will help reduce the influence of these factors, and therefore help athletes manage energy levels better, is focus. Various authors (Clough et al., 2002; Jones et al., 2002; Loehr, 1982; and Thelwell et al., 2005) refer to focus as a vital component of Mental Toughness.

f) Seeking the challenge and reframing appraisal

This aspect is not covered extensively in current literature on Mental Toughness and in light of the clear gap in literature, this research aims to address this. Loehr (1982) and Jones et al., (2002) briefly outline how it is important for athletes to be highly determined. If athletes are determined, it is likely that they will be looking for continuous ways to improve their

performance, one of which is by seeking challenges so that athletes can learn about themselves and better refine their skill set. Thelwell et al. (2005) suggest that athletes strive for involvement and feedback after sporting performances and this post-performance engagement is a key focus area in this study.

Overall, this review has illustrated the different factors that come into play in the multi-dimensional construct of Mental Toughness. Although a previously misunderstood and misinformed concept, researchers over the years have helped to contribute to this growing area of research in terms of establishing a holistic definition of the phenomenon as well as suggesting various methods and models for measuring and correlating Mental Toughness in athletes. Additionally, this review emphasises the role that researchers still need to play with regard to implementing and establishing Mental Toughness programmes in the sporting sphere, an area which this study aims to contribute to.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 RESEARCH QUESTION

This chapter outlines and discusses the various methodological decisions and considerations that were taken into account while conducting this research. To begin with, the research aims and goals of this study are highlighted.

As stated in Section 1.3, the goal of this research is to investigate the following research question:

How will the development and implementation of a Mental Toughness programme, tailored exclusively to the needs of Kingswood College 1st XI cricket team members, assist in adding significant theory to the current body of knowledge regarding successful Mental Toughness intervention programmes.

Specifically, this research project aims to, with the aid of information specifically collated through meticulous data collection procedures, develop a tailor-made Mental Toughness programme for Kingswood College 1st XI cricket team and to furthermore implement this programme with the team. In addition to answering the abovementioned research question this research endeavour includes a two-fold subsidiary aim. Firstly, this programme was developed and executed in order to help the cricketers of Kingswood College 1st XI develop levels of Mental Toughness within their own and the team's cricketing performances. In addition to this, the researcher aims to evaluate the experience obtained by the cricketers throughout the programme development and its implementation. The rationale for the inclusion of the later aim is to gather information on the development and implementation procedure in order to make a significant contribution to the field regarding implementation of this nature.

At this point it is important to note that Kingswood College expressed no interest in the name of their institution to remain anonymous and in fact requested that it be known. This furthermore meant that the participants of the study, although their names remain anonymous during the study, will be identifiable through their association with the 1st XI cricket side. This was negotiated with the participants prior to the implementation of the study to their satisfaction.

3.2 BROADER SCOPE

This research endeavour forms part of a broader research project on Mental Toughness conducted at a Doctoral level and thus the information gathered and the conclusions drawn throughout this research process will form part of that particular project. In addition to contributing towards a Mental Toughness project aimed at examining the development of Mental Toughness with young athletes, including an examination of the psychometric properties of various Mental Toughness measures and the development of norms conducted at a PhD level, this masters project ran in conjunction with an honours project. It must be noted, however, that although this research endeavour contributes towards Doctoral research and furthermore ran in union with an honours project, it is still a separate research project in its entirety. Athletes who participated in this study were fully informed that information gathered throughout the research process would be used in further research endeavours.

3.3 RESEARCH DESIGN

3.3.1 Paradigmatic Orientation

An Action Research Approach was adopted for this project coupled with the use of a mixed-methods approach to data collection. A qualitative research design has been adopted for this form of project. Qualitative research entails the collection of data in written form or spoken language, or in the form of observations that are recorded in language and analysed by identifying and categorising specific emerging themes (Terre Blanche, Kelly, & Durheim, 2006). In addition to this, a qualitative approach was adopted because it allows the researcher to investigate specific issues in great depth and rich detail with a sense of openness which fits appropriately with the action research structure. More specifically this research endeavour utilised the Organisational Development Process (ODP) Model proposed by McLean (2005, p. 21) as the model of methodology. This model is rooted within the foundations of the Action Research Model as will now be discussed.

3.3.2 Action Research Model

Action research is “a form of enquiry that enables practitioners everywhere to investigate and evaluate their work” (McNiff & Whitehead, 2006, p. 7). The practice of action research aims to improve one’s learning and furthermore influence the learning of others in the process. Keeping in mind the research question and research aims expressed above, action research was deemed the most suitable model for this project. An envisaged outcome of this research is that the findings of this research endeavour will improve one’s learning by adding significant theory to

the field regarding successful Mental Toughness programme development and implementation and influence the learning of others by means of instilling a more comprehensive idea of what Mental Toughness is and how to develop and further maintain it. Action research requires researchers to identify a concern, develop a suitable action or solution for this concern, monitor this action by means of gathering data, evaluate the progress of this action and to modify the practice in the light of the evaluation (McNiff & Whitehead, 2006). A basic action research model is depicted by the diagram displayed in Figure 8 below. This diagram is the PDCA cycle developed by Shewharts (2004) (as cited in McLean, 2005).

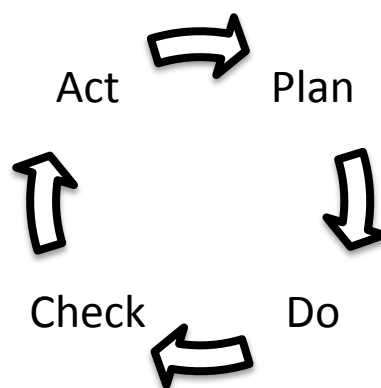


Figure 8: Shewharts' (2004) PDCA cycle of Action Research

Action research is suited for this type of study as the nature of amalgamating action and reflection as well as practice with theoretical application all within a participatory context is ideal for achieving anticipated benefits (Reason & Bradbury, 2008). Action research encourages high level of participation and ensuring quality communication with the participants is beneficial to the research process as this contributes positively toward the design, implementation and evaluation of the psychological intervention (Reason & Bradbury, 2008). Given the way in which data is collected, analysed and incorporated for this particular research endeavour and the way in which action research incorporates action, reflection, theoretical and practical application, made it an attractive and suitable framework for this research project.

The Organisational Development Process Model (referred to with the acronym ODP model from this point onwards) was used as the structure by which this thesis is written and presented and therefore guides the structure of this thesis. Each step of the ODP model forms a heading under which the specific processes undertaken will be unpacked, explained and the results drawn from the process will be analysed and elucidated. This method of presentation was chosen to allow a more effective and efficient flow of information when describing the research process. The research procedure was relatively intricate and in order to reduce the risk of confusion the

traditional thesis structure has been replaced by the ODP model structure. This involves an interlinked engagement between Chapter 3 and Chapter 4 of the thesis in order for a holistic description and explanation of the study. However, with this being said, the required material and content included in traditional structures are still incorporated.

3.4 The Organisational Development Process Model

The ODP model follows 8 specific interacting phases, which will guide Chapter 3 and 4 of this thesis, and include the following: Entry, Start-up, Assessment and feedback, (as part of Chapter 3) and Action plan, Implementation, Evaluation, Adoption and Separation (as part of Chapter 4).

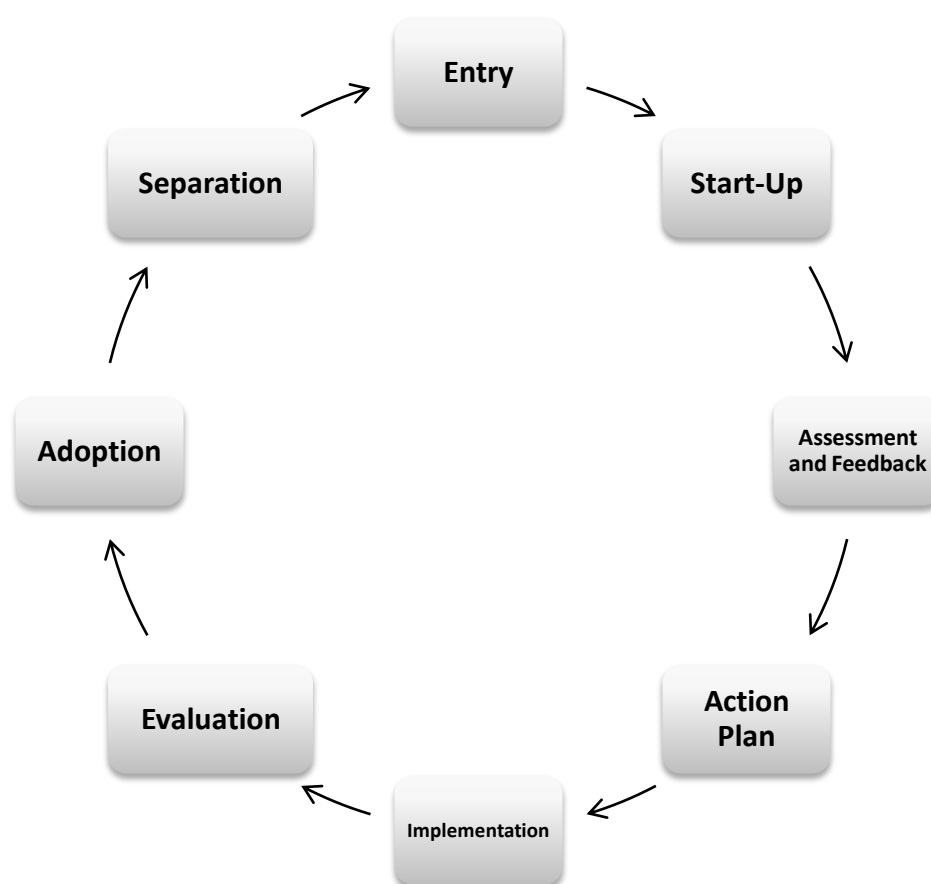


Figure 9: McLean's (2005) Organisational Development Process Model

3.4.1. ENTRY

The entry phase requires the consultant, who in this case is the researcher and the Organisational Development Process facilitator; to identify a need and desire for a specific, tailor-made intervention. The researcher identified that the development and implementation of a Mental Toughness programme would be beneficial for the teams and therefore the schools future

performance, through liaison with Kingswood College and the 1st XI cricket coach. The resulting interest expressed by the school meant that the specific procedures to start the research process could be devised and implemented. Appendix A illustrates the required permission letter from the school for the research to be conducted.

The initial step of the research process included an orientation and induction meeting with the athletes and the coach which took place in a classroom on school premises. This meeting included a discussion with the athletes confirming their willingness and interest to participate in the study after which the aims and objectives of the study were explained and any uncertainties were clarified. The procedures for data collection were outlined and described, and it was explained to the athletes how each of the phases (performance profile, focus group, individual interviews) were to be facilitated, implemented, analysed and incorporated in the study. The anticipated procedures regarding programme implementation and evaluation were also outlined to the athletes.

This entry phase is a vital phase for psychological interventions such as the implementation of a Mental Toughness programme. It is a common trend for athletes to hesitate in pursuing sport psychology consultation and resist engaging in psychological interventions, as the knowledge regarding the benefits of such interventions are insufficient, particularly in a South African context (Donohue et al., 2004). In addition to this, it is a common trend that athletes only request psychological assistance when something is wrong or when adversity seems insurmountable. Gucciardi et al. (2008, p. 277) state that the most important finding of their study was that “mental toughness was considered important not only for those situations with negative effects (injuries, de-selection), but also for some situations with positive effects (good form, previous season champions)”. This research endeavour assisted ‘normal’ functioning athletes. It is important for athletes to understand that psychological intervention and consultation is by no means limited to athletes who are experiencing trouble or difficulty in their performances. It is this research’s belief that athletes should be incorporating sport psychology consultation into their daily training routines and performances in order to reach superior and elite levels of performance. It is the hope of the researcher that the results that stem from this project shed some informative and significant light onto this issue.

Athletes are often sceptical about discussing personal issues with sport psychology consultants and will therefore rarely be the ones to step forward in pursuit of assistance of this nature. With this being said, the entry phase becomes crucial as it is often necessary for the sport psychology consultant, who in this case was the researcher, to instigate the initial consultation. Once the

consultant has made initial contact, described the nature of their assistance and explained the anticipated results, this strategy is therefore likely to prepare the athlete for further consultation with minimal anticipated negative effects (Donohue et al., 2004). In addition to facilitating this initial contact with the athletes, the effectiveness of sport psychology consulting is highly dependent on the quality of the consultant-athlete interaction and the relationship that they build together (Donohue et al., 2004). This therefore illustrates the importance of the need for the consultant (researcher) to ensure excellent quality of the initial meeting as this is where the relationship between the athletes and the consultant will begin.

These abovementioned considerations were kept in mind when facilitating the initial consultation meeting with the athletes. A good rapport among researcher and the athletes was established and this was achieved through the researcher striking a balance between being a colleague of theirs and an authoritative figure. This is an important consideration due to the fact that the participants were school students who partake in various school commitments, both academic and sporting and are therefore limited with regard to 'free time' in their schedules. The researcher was aware that if intervention intentions and the future programme came across to them as additional 'school work' or 'homework' or furthermore if the researcher came across as another teacher then their desire, motivation, interest and determination to participate in the study would be compromised. As a ripple effect of this, the results would have been negatively affected and failure of the intervention would have been probable.

3.4.1.1 Sampling and Research Participants

Purposive sampling was applied to this project as the researcher worked with the Kingswood College 1st XI cricket team as the participants. Purposive sampling was chosen due to the convenient availability of the participants as they were situated in the local area as well as the sample range being willing to take part in the project, two characteristics which make up the nature of purposive sampling. These participants ranged in age from 16 to 19 years and the researcher therefore required informed consent from these participants and their respective guardians, to participate in the study.

After ensuring that the specifics of the study were fully understood and that the participants were completely aware of what was expected of their participation and what they could expect with regard to feedback, participant and parent agreement forms were sent home to be read, signed and returned. Included in this agreement form was an outline of the study and the intentions of the study in order to fully inform the guardian of the specifics of the research. Furthermore, participants were fully informed of their right to withdraw from the programme at any stage

should they feel it necessary. The researcher emphasised that withdrawal from the programme would not label that participant as ‘mentally weak’ and their rationale for leaving the programme would be respected and kept confidential. A copy of the consent forms for the student athletes, the coach and the guardians of the athletes can be viewed as Appendix B, C and D respectively.

3.4.2 START-UP

The start-up phase included the development of infrastructure designed specifically to elicit particular information to be used for the programme development. This phase included devising a well thought out structure as to how the required data was to be efficiently and effectively collated, further analysed and put together in order to create a tailor-made Mental Toughness programme. Therefore, during this phase the focus group and individual interview schedules were generated and the procedures for performance profiling and psychometric testing of the athletes were set up. The intricacies and details of each of these data collection procedures are discussed in greater detail in Section 3.6 of this chapter. The start-up phase incorporates a large portion of administrative work where documentation is prepared for the athletes and the route ahead for the programme development, implementation and evaluation is set out.

3.4.3 ASSESSMENT AND FEEDBACK

3.4.3.1 Observation

The initial observation phase consisted of three data collection procedures. Firstly, a team focus group was designed and implemented and included a group interview, a mental skills list generation, and a performance profiling session. Secondly, individual interviews with the captain and the coach of the team were conducted and finally the administration of a scale to measure Mental Toughness was performed. The scale to measure Mental Toughness consisted of a form of psychometric testing by means of the PPI-A (Golby et al., 2007). The specific details of each data collection procedure will be unpacked in greater detail in Section 3.6. Additionally, the focus group and individual interview schedules that were used in this study can be viewed as Appendices E, F, and G respectively.

3.4.3.2 Reflection and Feedback

In addition to the observation phase and to allow the data collected to be utilised in an effective manner to develop the programme, an element of reflection and feedback was necessary. Thus, to fully understand the information gathered throughout the observation stage of data collection a thematic analysis was applied to the information elicited from the focus group and individual interviews. More specifically, the six phase outline for thematic analysis presented by Braun and

Clarke (2006) was utilised as the framework for data analysis. This model of thematic analysis was user-friendly and easy to apply to collated data and thus became the analysis tool of choice. In addition to being user-friendly and easily applicable, it is an accessible, flexible and theoretical approach to analysing qualitative data (Braun & Clarke, 2006). Its flexibility and theoretical freedom as a research tool assist in providing a rich and detailed, yet complex, account of data coupled with its ability to be applied to varying contexts (Braun & Clarke, 2006). The six phases included: becoming familiar with the obtained data, coding significant features of the obtained data, collating codes into potential themes, defining and naming the themes and finally producing the findings (Braun & Clarke, 2006). In analysing the data, thematically extracted and developed themes and characteristics from the data were further compared to presently-existing Mental Toughness literature. Thematic analysis along with a more detailed outline of the specific model used will now be considered.

3.5 Why Thematic Analysis?

Thematic analysis is a data analysis technique that “offers an accessible and theoretically flexible approach to analysing qualitative data” (Braun & Clarke, 2006, p. 77). Thematic analysis is known for its theoretical freedom and by its nature provides an analysis tool that encompasses the ability to provide a rich, detailed and complex account of data while its application can be worked to reflect and unpack the surface of reality (Braun & Clarke, 2006). More specifically, thematic analysis is a method of data analysis used for identifying, analysing and reporting particular patterns or themes within a data set (Braun & Clarke, 2006). This element of theme derivation makes thematic analysis an ideal analysis tool for this specific research project. Specific mental skills need to be identified as needing development and one effective way of identifying these mental skills is by applying a thematic analysis to the initial data collected during the observation phase of this research project. The ability of thematic analysis to assist in organising and describing data sets in a rich and descriptive manner, as well as being a good tool for the interpretation of various research aspects. This analysis tool combines effectively with Action Research as both procedures are characterised by the ability to extract rich, thick and detailed data. Action Research requires the practitioner to identify certain needs or problem areas within a specific context after which they can devise suitable methods for meeting these needs or methods to overcome particular adversities.

Overall, Thematic Analysis helps the practitioner understand, more intricately, the specific context involved in a question offering a descriptive and explanatory account of a research concern.

3.5.1 Braun and Clarke's (2006) Thematic Analysis

According to Braun and Clarke (2006), the general process of a thematic analysis commences with the researcher detecting and observing patterns of meaning and interest within the data collected, before ending with a report on the content and meaning of the patterns identified. These themes are considered to be abstract constructs that the researcher identifies before, during, and after the specific analysis (Braun & Clarke, 2006). These authors (2006) provide a six phase guide of analysis which was applied in this research project. It is important to note that qualitative analysis guidelines are merely guidelines and are by no means rigid rules. With this being said, the basic precepts of such a recommended analysis need to be applied in a flexible manner to fit the context of specific research endeavours and the researcher ensured that this recommendation was incorporated in this research project (Braun & Clarke, 2006).

Below is a table of the six phase guideline that Braun and Clarke (2006, p. 87) propose and the model that was applied for theme derivation in this research project.

Table 2:

Braun and Clarke's (2006) Six Phase Thematic Analysis Outline

Familiarising yourself with the data
<ul style="list-style-type: none">• Transcribing data, reading and re-reading the data, noting down initial codes.• Aim is to immerse yourself in the depth and breadth of the content.
Generating initial codes
<ul style="list-style-type: none">• Coding interesting features of the data in a systematic manner across the entire data set as well as collating data relevant to each code.
Searching for themes
<ul style="list-style-type: none">• Collating codes into potential themes and gathering all data relevant to each potential theme.• During this phase it is crucial to begin thinking about the relationship between the different themes and how they may correlate with or influence one another.
Reviewing the themes
<ul style="list-style-type: none">• Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), thereafter generating a thematic map of the analysis.
Defining and naming themes
<ul style="list-style-type: none">• Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
Producing the report
<ul style="list-style-type: none">• The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

3.5.2 Specific Thematic Analysis Procedure

The abovementioned procedure for conducting an effective thematic analysis was considered when analysing the data for this research project. The specific results and themes extracted from the data will be presented further on in this report and the following is a detailed account of how the thematic analysis techniques were applied.

The first stage of phase one incorporated transcribing the recorded interviews from the initial data collection procedure in the observation phase of this research. This transcribed data was thereafter kept on record for post interview analysis. The written form is useful and necessary for continual reflection when analysing the data as it allows the researcher to constantly refer back to the data thus equipping them with the ability to fully interrogate the meaning behind what is presented. Once the interviews had been transcribed verbatim the researcher conducted a thorough reading of the entire data set numerous times to gain a clear understanding of the information. The researcher followed Braun and Clarke's (2006, p. 87) advice of reading in an "active way" whereby the researcher actively searches for particular patterns and meaning within the data set. This is where phase two of the analysis was incorporated. As reading and re-reading was taking place the researcher documented possible trends that were arising and further began identifying potential ideas for themes that were beginning to emerge. These ideas were thereafter carried forward into future phases of the analysis and this is the very reason why Braun and Clarke (2006, p. 87) refer to this phase as the "bedrock" for the rest of the analysis.

During phase three the researcher collated all the different codes identified and thereafter developed the relevant themes from the data set. The researcher began with a comprehensive list of different codes generated from the data which were then sorted into potential themes. This phase concluded with the presentation of a collection of candidate themes along with the extracts that complemented these themes. Phase four involved reviewing the extracted themes in relation to the data from which they were derived in order to confirm that a satisfactory match was made and that the chosen themes represented the extracted data in the most accurate way. Once confirmation was made that the derived themes were satisfactory, they were officially defined and presented for use in this research project.

3.6 Data Collection Process

3.6.1 Focus group

According to Vaughn, Schumm, and Sinagub (as cited in Puchta & Potter, 2004. p. 6) a core element of a focus group entails the goal of "eliciting participants' feelings, attitudes and

perceptions about a selected topic”. Focus group interactions are set up to help empower and foster social change within a particular context and are therefore designed to produce specific outcomes (Puchta & Potter, 2004). A researcher adopting the use of focus groups must establish a means of achieving the following aspects. Firstly, it is important that the researcher creates a relaxed environment for the participants whereby informality can be present. Informality, in this sense, must not be considered as the absence of formality or the simple nonchalant atmosphere that surrounds a particular interaction. Instead, informality must be considered as the means by which to elicit information as it “encourages interaction to happen” (Puchta & Potter, 2004, p. 25) and furthermore facilitates appropriate styles of responding which in turn become valuable to the research process in question (Puchta & Potter, 2004). If participants do not feel comfortable and confident within their environment, their willingness to respond and provide valuable and honest responses will be restricted and it is therefore crucial that the researcher understands the importance of creating a suitable rapport with, and environment for, the participants.

In addition to producing suitable environments and informality, researchers using focus groups must facilitate and encourage valuable participation. “Focus groups allow people to give their own views in their own ways and in their own words” (Puchta & Potter, 2004, p. 47) and therefore the art of encouraging fully committed participation is important. It is crucial that the researcher presents the idea of participating in an attractive manner that will motivate potential participants to take part in the focus group and will further convince them of the benefits of participating and remaining committed. Once the researcher has achieved a committed and focused group of participants it is important to produce opinions. This, in essence, is the primary goal of the focus group; to elicit from the participants valuable information about a specific topic and the quality of opinions produced within these focus group interactions will significantly influence the quality of the research project.

3.6.2 Focus Group Process

The abovementioned aspects regarding successful focus group implementation were incorporated when designing the specific focus group for this research endeavour. The focus group for this research project incorporated a mental skills list generation, a performance profile generation, psychometric testing by means of the PPI-A (Golby et al., 2007) and a team focus group interview. The goal of this focus group process was to elicit specific information about the players’ strengths and weaknesses, identify their goals as a team and as individuals for the upcoming cricket season and to highlight the team members’ needs, wants, aims, and the areas

of Mental Toughness which required development and improvement. For the focus group interview a specifically designed schedule was considered and drawn up. Here, aspects such as turnaround toughness, critical moment toughness, endurance toughness and risk management toughness, all taken from Bull (2006) in his model of Mental Toughness, were considered when designing the focus group schedules. These questions are outlined below.

General Mental Toughness Questions

1. What do you believe entails being mentally tough?
2. What situations in cricket do you think requires Mental Toughness?
3. Do you believe performing well is based on physical talent alone?
4. How influential do you believe the mind is?
5. What mental skills do you believe are required to play cricket well?

Turnaround Toughness

6. How do you as a team and as individuals deal with poor team performance?
7. For the batsmen here, how do you deal with going out for a duck? ¹
8. What about the bowlers, how do you deal with getting hit for a six?
9. Are you guys able to deal with these issues during the game or do you find yourselves dealing with them after the game only?

Critical Moment Toughness

10. How do you stay positive when things are going badly?
11. Do you guys let previous performances affect your confidence levels?
12. How you your previous performances affect your self-belief?

Endurance Toughness

13. How are your concentration levels during the game?
14. Do you guys have any methods for staying sharp during your games?

Risk Management Toughness

15. How do you guys rate your decision making under pressure?
16. How well do you think you are able to analyse your opponents in terms of their strengths and weaknesses?

Areas of Possible Improvement

17. How do you feel as a team you have performed throughout this year?
 - If you had to give yourselves a score out of 10 as a team with 10 representing excellent and 0 representing extremely poor, what do you believe your team deserves? Let's have some opinions?
18. What are the strengths of this team?
 - Let's draw up a list of the positive aspects about this team over the last season.

¹ A term in cricket which refers to a batsman going out without scoring any runs.

19. What are the weaknesses of this team?
 - Let's draw up a list of the negative aspects about this team over the last season.
20. What are the goals for this team for the up and coming season?
 - Let's draw up a list.
21. Do any of you have individual or personal goals for the upcoming season?
22. Generally speaking now, let us discuss what this teams needs in order to have a successful cricket season.

A week before the focus group procedures an initial briefing meeting was set up with the cricketers. The rationale behind this meeting was to brief the participants about the focus group procedure in order to ensure that they arrived mentally prepared and ready for a group discussion. The topic of discussion was given to the participants but no information regarding Mental Toughness or mental skills were given prior to the focus group interaction. During the briefing meeting the researcher arranged a time with the athletes for data collection and organised a classroom at Kingswood College in which to conduct the focus group process. In addition to this, the participant consent forms as well as the guardian consent forms were collected back after being distributed in the meeting prior to this one.

A week later the athletes met to commence with the first data collection procedure. This meeting was held at Kingswood College as stipulated earlier. The school was considered the most suitable environment in which to conduct the initial data collection procedure as the majority of the athletes were boarders at the school and therefore did not have to travel to attend the meeting. The classroom furthermore provided an effective learning atmosphere because of its familiarity for the participants. The same classroom was used throughout the entire research process (data collection, programme implementation as well as programme evaluation). This data collection session commenced with a detailed outline of the procedures to be followed with regard to the specific data collection procedure. The athletes were briefed about the mental skills list generation, performance profile procedures, psychometric testing procedures as well as the focus group and individual interview processes that were to take place.

The classroom was set up by means of a circular layout of chairs surrounding a table to be used as a focal point for diagrams and discussions. The researcher ensured that the participants felt free to speak openly and honestly and that they understood that confidentiality would be upheld at all times. The researcher asked the coach not to be present during this initial data collection phase as the objective was for the athletes to speak freely, openly and honestly without hesitation or reluctance due to the coach's presence. The desire for the coach to be absent during this initial data collection phases also came at the request of the athletes themselves.

3.6.3 Mental Skills List

The first step of the initial data collection procedure included the generation of a mental skills list. The participants were asked to generate a list of mental skills that they believed were required in cricket and furthermore essential to perform at an elite level. No prior information regarding Mental Toughness or mental skills was given to the participants before generating this list. The participants were given time to discuss amongst themselves as a team the different Mental Toughness characteristics and mental skills that they believed were vital for effective and successful performance in cricket. The list they discussed and generated as a team consisted of the following skills:

• Visualisation	• Determination
• Concentration	• Patience
• Calm Under Pressure	• Professional
• Switching On and Off	• Experience
• Decision Making	• Self Belief
• Communication	• Confidence
• Goal-Directedness / Orientation	• Coping
• Discipline	

Figure 10: Initial Mental Skills List

After identifying these 15 mental skills the researcher asked the participants to further develop a list of what they believed to be the top 8 mental skills from the ones they generated. In addition to this, the participants were asked to consider which mental skills they felt they needed to develop and learn how to maintain more effectively as a team. This list included the following mental skills:

• Concentration	• Discipline
• Calm Under Pressure	• Determination
• Decision Making	• Patience
• Goal Directedness / Orientation	• Confidence

Figure 11: Revised Mental Skills List

Once the generation of this mental skills list was completed, the second phase of the focus group data collection procedure commenced which included compiling a performance profile.

3.6.4 Performance Profile

Performance profiling is typically found in psychological skills training programmes (Morris & Summers, 2004) and is used to help athletes identify what aspects of their sporting performance need attention. “The athlete identifies characteristics required by elite performers in their sport and receives a visual profile of their self ratings on each of these characteristics” (Morris & Summers, 2004, p. 254). In this case the top 8 mental skills displayed above were the mental skills that were used to conduct the initial pre-programme performance profile. After the characteristics have been identified and evaluated, a discussion of the results provides guidelines for the design of a psychological skills training programme which in this case was a tailor-made Mental Toughness programme. Performance profiling has many benefits to the athlete striving to achieve better and improved Mental Toughness. Through incorporating a performance profiling technique in assessment the athlete is actively engaged in the assessment process rather than simply being passively engaged (Morris & Summers, 2004). “It is argued that this will lead to the identification of pertinent needs and avoid irrelevant measurement” (Morris & Summers, 2004, p. 254). With the athletes being so inherently and personally involved and invested in the assessment procedure, adherence and compliance to the developed training programme is likely to increase.

On the negative side of performance profiling, asking athletes to identify attributes to be assessed assumes that these athletes have knowledge of the psychological skills required for high levels of performance in their particular sport (Morris & Summers, 2004). Although knowledge of this nature may develop with expertise, it is more likely that athletes are unaware of some of the psychological skills that may enhance their performance. To account for this, this training programme (designed for school athletes competing at school level sporting competition) only incorporated mental skills that the athletes themselves have identified as needing development and maintenance. It was a concern that if the facilitator of the assessment put forward other Mental Toughness attributes it would negatively affect participation and commitment. The athletes needed to feel as if the programme was going to benefit them as athletes rather than just being an additional school requirement that they were forced to attend. It was recommended however that should these school athletes strive to take their sport more professionally and move onto higher levels of competition, that they consult with a sport psychologist who can further

and extensively highlight more pertinent skills that they could concentrate on in addition to their own ones devised.

The top 8 mental skills taken from the initial 15 identified by the athletes themselves were used for the performance profile. Using an A3 piece of cardboard a performance profile grid was drawn up with the 8 mental skills distributed in a pie chart fashion.

For each mental skill presented there was a scale ranging from 0 to 10 with 0 representing 'poor' and 10 representing 'excellent'. As a group the athletes were asked to rank themselves as a team for each individual skill and the results from this performance profile are shown below:

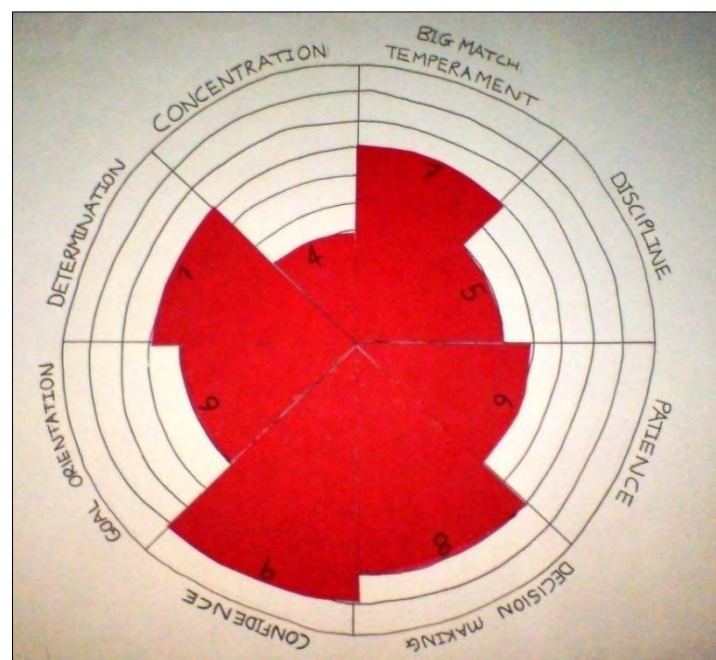


Figure 12: Photograph: Pre-programme Performance Profile

The performance profiling presentation above show the following team ranking:

Concentration	-	4
Calm Under Pressure ²	-	7
Decision Making	-	8
Goal Directedness / Orientation	-	6
Discipline	-	5
Determination	-	7
Patience	-	6
Confidence	-	9

² Also referred to in this study as Big Match Temperament (BMT) as outlined in Section 4.2

Considering a rating of 10 represents ‘excellent’, there was clear room for improvement in all aspects of performance and these mental skills, as identified by the athletes, were then included in the Mental Toughness programme.

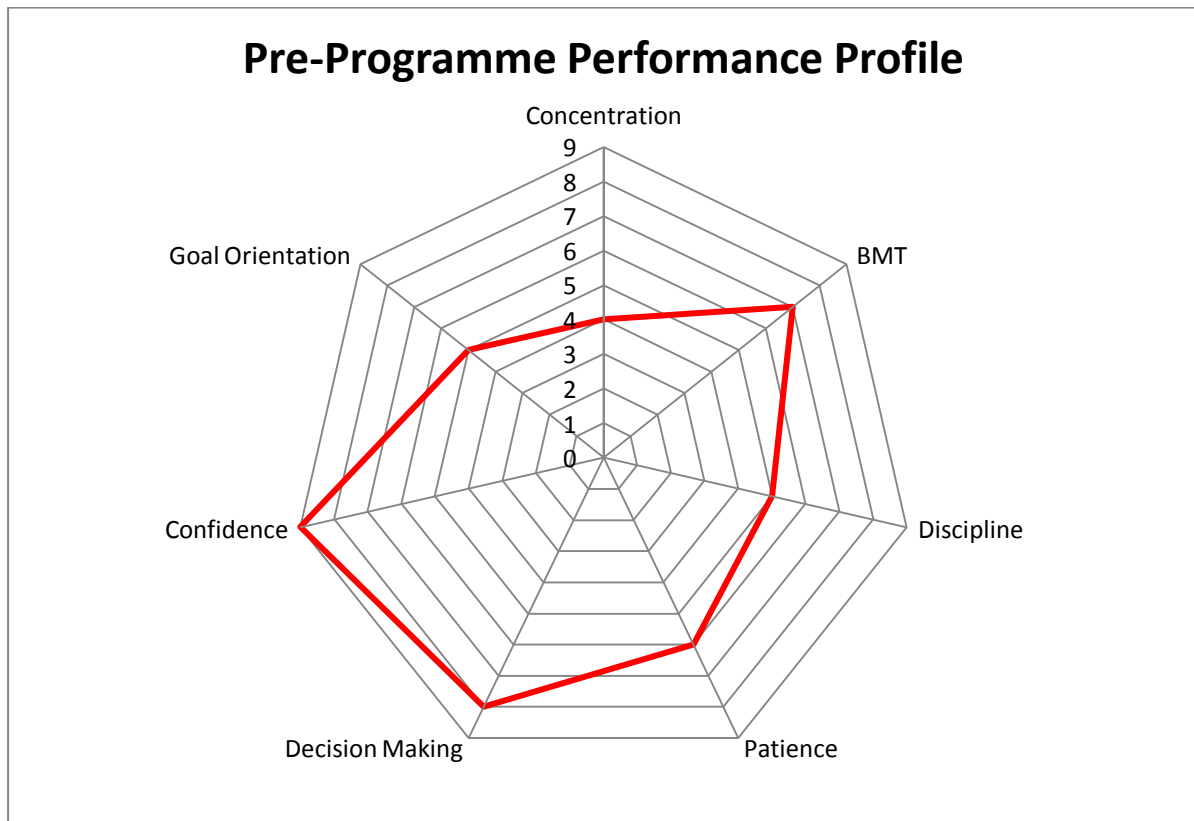


Figure 13: Graphical Representation: Pre-programme Performance Profile

3.6.5 Focus Group Interview

In addition to the mental skills list generation and the performance profiling, a focus group interview with the entire team was conducted. This interview incorporated a group discussion whereby the questions on the interview schedule were presented to the athletes and, as a group, were discussed in great detail. This gave the athletes a chance to express their own individual opinions, views, feelings and emotions and engage in discussion with one another. The team participated well and some significant data was gathered from the process. Recording devices were placed on tables in the middle of the circular seating arrangement and the entire focus group interaction was recorded. These recordings were transcribed for post data collection analysis and as mentioned earlier, a thematic analysis was conducted on the transcribed data to elicit various mental skill themes. These themes are presented below in Figure 14.

Big Match Temperament
Self belief
No fear of failure
Handling high pressure situations
Confidence
Decision making
Bouncing back
Consistency
Patience
Concentration

Figure 14: Focus Group Interview Themes

3.6.6 Individual Interviews

In addition to the focus group interview, individual interviews were conducted with both the coach and the captain of the team separately. The rationale for these interviews was to further explore information extracted from the focus group and to gather any additional information to be used in the development of the Mental Toughness programme. An interview schedule was designed and drawn up after considering the information gathered from the focus group. These interviews were also transcribed verbatim and used for analysis. The themes that were extracted from the individual interviews are as follows:

Big Match Temperament
Self belief
No fear of failure
Confidence
Decision making
Composure
Concentration
Patience
Visualisation

Figure 15: Individual Interview Themes

3.7 Summary of Themes

To conclude this Chapter, this section will now list the mental skills list generation, the focus group interview, the individual interviews.

Mental Skills List	Focus Group Interview	Individual Interviews
Visualisation Concentration Calm Under Pressure Switching On and Off Decision Making Communication Goal Directedness Discipline Determination Patience Professionalism Experience Self Belief Confidence Coping	Big Match Temperament Self Belief No Fear of Failure Handling High Pressure Situations Confidence Decision Making Bouncing Back Consistency Patience Concentration	Big Match Temperament Self Belief No Fear of Failure Confidence Decision Making Composure Patience Concentration Visualisation

Figure 16: Summary of Themes

An analysis of the extracted data is presented in Chapter 4 which outlines the results and details various themes that were found to be consistent throughout.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction of key trends and themes

To begin this chapter, the following figure depicts the consistent themes that emerged from the data collected.

Consistent themes:
Big Match Temperatment
Self Belief
Confidence
Visualisaioon
Concerntaion
Decicios Making
Patience
No Fear of Faiulre
Handling Pressure / Bouncing Back from Adversity
Consistency
Composure and Discipline

Figure 17: Consistent themes

4.2 Unpacking the themes

The mental toughness attributes and themes extracted from the data collection procedure are discussed in greater detail here. Each characteristic is discusses in terms of its definition and how it relates to existing literature and more specifically the theory presented within the literature review of this research report.

i) **Big Match Temperament**

‘Big match temperament’ (BMT) is a commonly heard phrase in sport and is highly associated with the construct Mental Toughness. BMT refers to an attitude, mindset and outlook that is positive and encouraging in nature when athletes are faced with adverse and high pressure situations. An athlete who successfully demonstrates high levels of BMT will thrive under competitive environments and will not let the pressure distract or deteriorate their performance.

In addition to this, athletes who show BMT use these high pressure situations to their benefit. They use the pressure to put their skills and abilities to the test and furthermore use these competitive environments to foster a greater sense of focus and concentration in order to increase their chances of performing at a more competitive level. Athletes who show BMT have a competitive advantage over those who do not and often the victors of competitive endeavours are usually those who can outperform their competitors throughout the tyranny of pressure felt situations. BMT essentially puts an athlete into a category of superior psychological hardiness. The two concepts mentioned above; having a competitive advantage and having a superior level of psychological hardiness are both elements found in mentally tough athletes. Within the literature we see Fourie and Potgieter (2001) and Jones et al. (2002) defining Mental Toughness athletes as having a superior psychological hardiness and a psychological edge over competitors respectively.

Although the literature is not inundated with Mental Toughness definitions incorporating BMT, various authors do refer to BMT indirectly. When discussing and describing Mental Toughness Loehr (1982), Bull et al. (2005), Thelwell et al. (2005) and Gucciardi et al. (2008) all refer to remaining calm and relaxed under pressure as well as being able to effectively handle high pressure situations and enjoy them, while Bull et al. (2005), Fourie and Potgieter (2001) and Jones et al. (2001) touch on mentally tough athletes being able to cope with the pressure. This element of coping with the pressure and learning to enjoy the demands of competition was evident in the individual interview with the coach where he stated the following:

But then, we try, again get the guys going that they must thrive on pressure, that's what they must enjoy. So it's not a case of when you're under pressure you're overwhelmed by it, you must enjoy it, you know and, actually rise to the occasion.

(Coach Interview 1, lines 121 - 124)

This very point relates well with what Thelwell et al. (2005) discuss with regard to Mental Toughness attributes where they deliberate over concepts such as athletes having positive reactions to situations while not only remaining calm under pressure but also enjoying it.

Considering that school athletes have the ability to identify BMT as a Mental Toughness attribute with no prior information given to them on the topic is testament to the fact that BMT is a well used term describing superior mental fitness and this theme was identified in the focus group interview with the athletes by means of the following quotation:

Someone like Ricky Ponting, those kind of players, who come when, like the pressure's on, when the big matches come, they always perform.

(Focus Group Interview 1, lines 5-7)

Looking closely at the abovementioned quote, an interesting point can be drawn. Too often in the sporting world, whether from coaches, players, fans and even spectators, athletes are constantly being encouraged to deal with and thrive on the pressure that they are forced to face. Athletes who continue further to professional sporting setups may come to learn how to deal with these pressures and furthermore thrive on them, however at school levels, and even at tertiary level institutions, the infrastructure for teaching this aspect is lacking. It is one thing to be able to extract elements of BMT from athletes but how do we further develop this BMT and how do we help those less gifted with BMT to develop it? If one were to target improving athletes Mental Toughness then efforts need to go beyond educating the athletes about Mental Toughness and 'hone' in on developing the individual characteristics of Mental Toughness such as BMT.

Earlier in the literature review reference was made to Bull's (2006) model for developing Mental Toughness. Within this model Bull (2006) presented for types of toughness one of which was critical moment toughness defined as the ability to stay focused under pressure, maintain clear thinking and a positive mind and being able to engage in quality preparation to maintain emotional control whilst performing. This definition relates with the definition of BMT. It is therefore positive to note that if athletes are showing elements of BMT in their performances and attitudes then they are essentially expressing critical moment toughness. The presence of BMT and critical moment toughness are positive steps towards developing improved Mental Toughness.

ii) Self-Belief and Confidence

"Self confident athletes hold high levels of conviction and certainty relative to their ability to perform" (Morris & summers, 2004, p. 322). Forbes Carlile (as cited in Morris & summers, 2004) stated that specific attributes such as belief, optimism, high aspirations as well as anticipation of positive results all contribute toward an athlete's confidence and are thus keystones for success. In essence self-belief is exactly what it says it is; the belief in oneself, the belief in your abilities as an athlete to perform successfully at a particular task or goal. Athletes who possess high levels of self-belief and confidence look forward to competitive endeavours, they expect themselves to do well and they accept the inevitable challenges, adversities and opportunities that will come their way during competition (Morris & Summers, 2004).

The Mental Toughness attribute of self-belief has been seen in numerous texts where authors (Bull et al., 2005; Jones et al., 2007, and Middleton et al, 2004) have concentrated efforts on defining and measuring the Mental Toughness construct. Connaughton et al. (2007) have linked self-belief to other aspects of improving performance such as maintaining a positive and strong self focus along with minimising the debilitating effects of self doubt and a lack in faith of one's abilities and talents. Self-belief was a distinct theme that emerged throughout the focus group and individual interviews. When asked about what Mental Toughness entails and what makes up a mentally tough performer one of the athletes responded with the following:

People who believe in themselves.

(Focus Group Interview 1, line 9)

In addition to this, with regard to performance success, when asked about the contribution of mental skills in addition to physical skills one of the athletes responded with this statement:

I think it's based on self-belief.

(Focus Group Interview 1, line 53)

Self-belief is a characteristic that is developed generally through one's own motivation and an improved sense of self worth and value that stems from inside the athletes own mind, but can be stimulated from external sources too. Self-belief can be improved through various means such as achieving goals, breaking previous performance records, having a run of success as well as the belief from fellow team mates. The latter point refers to the fact that within a team environment if individuals concentrate on developing their own self-belief through means that are intimate to themselves and that hold value to them, this greater and more positive attitude and outlook will contribute toward an overall improved team self-belief. Players will begin having faith in one another and this improved self-belief leads to a ripple effect of greater confidence throughout. This trend was identified by the athletes from the focus group interview as they expressed the following:

I think, like, if everyone manages their own space then the whole team will do well, so if everyone works on, like, themselves, then put that together and make a good team.

(Focus Group Interview 1, lines 295 – 297)

And then just try and control our confidence and self-belief but just keep it at, like the correct level.

(Focus Group Interview 1, lines 302 – 303)

Well, certain players have to increase their self-belief, in some parts of the game, 'cos they've got self-belief in different parts of the game.

(Captain Interview 1, lines 106-107)

It is important to stress that having a belief in team mates will go a long way in contributing toward team success. If athletes spend less time worrying about the performance of their team mates and concentrate more intensely on performing at the highest level possible exhausting the entire team's performance potential, then success becomes more inevitable and victory more attainable. This idea was expressed in the following statement:

And I think the guys, I think they've got a believing in each other as well, which is quite a good aspect for like the top six other batters, so it's a case of something we're trying to inculcate, but more so is, that if two okes fail then someone else comes in and does a good job, we're trying to get that belief in each other.

(Coach Interview 1, lines 58-62)

Trends in the literature frequently refer to mental tough athletes as those able to overcome adversity and setback and the journey of improvement after athletes have been knocked down. Clough (2002, p. 33) speaks to this very point in his definition of Mental Toughness which in part said that "with a high sense of self-belief and an unshakeable faith that they control their destiny, these (mentally tough) individuals can remain relatively unaffected by competition or adversity". Gucciardi et al. (2008) also touch on the abovementioned aspects within their definition of Mental Toughness when they allude to Mental Toughness as a collection of values, attitudes, behaviours and emotions that assist athletes in persevering and overcoming any obstacle, adversity or pressure experienced in addition to maintaining concentration and motivation when things are going well. Adding to the abovementioned considerations, Bull's (2006, p. 12) turnaround toughness is about "regaining self-belief when things are going badly" and furthermore about "dealing with adversity and setback".

Whilst unpacking responses to how these athletes deal with adverse situations, challenging circumstances and failed attempts, the following responses were elicited:

You've just gotta forget about it and try and like make up for it the next ball, rest of the over, things like that.

(Focus Group Interview 1, line 103-104)

You've gotta like try work towards then beating the batsman with the next ball, like coming back, bouncing back after that.

(Focus Group Interview 1, line 109-110)

The ability of an athlete to do the aforementioned things will come more naturally to them as they learn to improve their levels of self confidence and self-belief. An athlete who is high in this regard will find it easier to shake off the effects of failed performances and return back to optimal performance once a blow to confidence has been taken. In addition to this, controlling one's confidence is a major factor within sport. Throughout the literature, vast emphasis is placed on the importance and influence of self-belief on performance potential and some researchers (Gucciardi et al., 2008; Gucciardi et al., 2009) go as far as to say self-belief is the most important Mental Toughness factor. It was encouraging to witness that the school athletes were aware of the importance of controlling their level of confidence and avoiding becoming over confident and arrogant, as seen by the following extract:

And then just try and control our confidence and self-belief but just keep it at, like the correct level.

(Focus Group Interview 1, line 302-303)

iii) Visualisation

Visualisation and mental imagery are very well known concepts within the realm of Mental Toughness. Authors such as Clough et al. (2002) and Gucciardi et al. (2008) present visualisation within their efforts of defining the term Mental Toughness. Numerous definitions exist for visualisation and mental imagery but one comprehensive definition is provided by Corbin (as cited in Morris & Summers, 2004, p. 345) who defines mental practice as the “repetition of a task, without observable movement, with the specific intent of learning”. The terms visualisation, mental rehearsal and mental imagery are all considered synonymous with one another and therefore for effective flow within this report the term visualisation will be used to represent all. Visualisation is an effective tool for facilitating concentration and minimising distractions and many athletes have reported great benefits of playing their games in their minds before engaging in the actual competitive encounter (Morris & Summers, 2004). “Images can be powerful tools in enhancing sporting performance” (Morris & Summers, 2004, p. 344) and furthermore “it is readily accepted that greater success is likely if one rehearses an activity mentally before performing it” (Morris & Summers, 2004, p. 344).

During the focus group interaction in the initial data collection phase of this research endeavour the researcher informed the athletes about what Mental Toughness entailed and as a group we discussed the details of such a construct.

Later in the individual interviews when asked about specific Mental Toughness characteristics that the athletes needed to work on, the captain of the team expressed the following:

Concentration, and then visualisation, like for everyone to visualise the game, I think that you plan, like, so we plan before we go into the game, so that our mind's in the game before we actually go, communication, like when to run between the wickets, cos we have quite a lot of run-outs, so that'll be better for the team if we have better communication, and then.

(Captain Interview 1, lines 99-104)

Considering the influence that visualisation has on performance coupled with the notion from the captain of the team that visualisation needed improvement, it was inevitable that visualisation would make up a segment of the Mental Toughness programme. Elements such as improving mental imagery, tips for effective visualisation and methods for developing imagery programmes will all be beneficial and therefore will be included in the programme.

iv) Concentration

Concentration incorporates the “conscious experience of orienting mental effort when perceiving information selectively” (Morris and Summers, 2004, p. 390). Concentration is having the ability to focus excess energy on a specific target within a specific performance situation and have the ability to prevent distractions from debilitating performance. This excess effort does not refer to increasing thoughts; it simply means channeling focus and energy more specifically towards a particular cue. Concentration and focus appear on numerous occasions in the Mental Toughness literature (Clough et al., 2002; Gordon & Sridhar, 2005; Gucciardi et al., 2008; Thelwell et al., 2005; Loehr, 1982) as an influential attribute that assists with athletes’ ability to deal with high pressure situations and competitive anxiety and reducing the negative effects these emotional states have on performance (Connaughton et al., 2007; Bull et al., 2005). It is commonly known now that concentration is highly influential on performance success. “Our performances on virtually all tasks depend on our attentional capacity (the ability to focus on the right thing at the right time), yet the efficient application of these capacities is volatile, difficult and at times fragile” (Morris and Summers, 2004, p. 389). The impact the level of one’s concentration has on performance justifies the necessity of developing and improving levels of concentration and further illustrates the benefits of doing so.

Concentrating on the right thing at the right time is a crucial component of a highly skilled sporting performance (Morris & Summers, 2004) as well as for athletes considered mentally

tough. When athletes turn their attention to trying to improve concentration, too many make the error of believing that to improve concentration one needs to think more. Farely and Curry (as cited in Morris & Summers, 2004, p. 417) suggest the contrary by stating that:

Concentration helps us focus and, in effect, turn off our minds. Thinking too much can hamper our performance ... concentrating helps us turn off the mental chatter that can distract us. It can also help to eliminate extra babble – when we are focused we are not thinking...we are completely involved in our game...we will discover the time passing without our even noticing.

Concentration was a prominent theme identified throughout the focus group and individual interviews. When the athletes were asked about the goals for the cricket season ahead and further asked what aspects of their performance needed improvement for a successful season, they responded with the following:

To get our concentration levels up as well, and try not switch off at the wrong times in games.

(Focus Group Interview 1, lines 292 293)

So like with concentration levels everyone needs to work on getting their own concentration levels up so the whole, so not one oke is consistently reminding everyone to stay concentrated.

(Focus Group Interview 1, lines 297 – 300)

Probing the captain a little more, he was questioned about the mental skills that he believed were necessary as a captain in order to lead the side successfully and concentration was a dominant theme. This is shown by the following extract:

Concentration, I have to sort of visualise the game, see how the batsman's playing, which fielder has to go where, and then know the strengths of your fielders so you put them in the best position, and then also the bowlers, the mental skill is just like, work together with the bowlers so we don't, ya, and then just concentration obviously, and then just always in the game and not let it slip away probably.

(Captain Interview 1, lines 54-59)

The quotes presented above speak extensively to what Farely and Curry suggest. The captain expresses various issues of strategising in his performance and he expresses how important it is to concentrate on the right aspects at the right time. Instead of thinking too much on the negative, the captain shows how he focuses in on certain aspects and concentrates his mind on specific elements of the game. Concentration is crucial for a captain as he needs to make decisions for the

teams' well being which requires him to understand his players, be aware of their current performance form, understand the opponents and thereafter make the appropriate decisions as well as concentrate on his own individual performance.

In addition to the team being asked about their up and coming goals for the season the captain was presented with the same question and provided an answer in close conjunction with the team views:

Just we lack concentration which brings us down a bit.

(Captain Interview 1, line 28)

Like we said earlier, probably increase on our concentration during batting, we lose our concentration and throw our wickets away, and then, sometimes people don't believe in themselves, which I think, they're much better than they think they are, so then they just get, I dunno, they go nervous, they get too nervous then they don't perform to their ability, and then ya just all working as one unit.

(Captain Interview 1, lines 90-95)

This quote above speaks to some significant factors involved in Mental Toughness. Not only does it touch on concentration but it also touches on confidence and self-belief as well as arousal regulation and anxiety control. The captain shows how with some players the loss of concentration leads to the loss of wickets which in turn results in a loss of confidence, This low self-belief thereafter leaves the athlete feeling anxious and nervous and therefore unable to perform to their best ability.

The captain successfully highlights how important it is to improve elements of Mental Toughness such as concentration as this individual factor alone has such a 'ripple effect' influence on other Mental Toughness aspects. This aforementioned point confirms that by targeting certain individual mental skills the athletes overall Mental Toughness is likely to improve as a resulting outcome. Gucciardi et al. (2008, p. 274) said that "mental toughness in sport seems to be a multidimensional construct" and that "the key mental toughness characteristics are not isolated, but rather are interconnected with some being considered more important than others".

As a leader of the team and an athlete who is not only expected to understand the team the best but also the one player in a good position to have insight into the team members, the captain was questioned about what specific mental attributes need work in order to help this team reach higher levels of performance.

The response was the following:

Concentration

(Captain Interview 1, lines 99-104)

In light of the expressed need to improve concentration the researcher probed further into the personal opinions regarding the athletes' level of concentration and in addition to the aforementioned findings the responses confirmed the necessity to include concentration into the Mental Toughness programme. This concern is evident from the following quotes regarding concentration levels.

I'd say low to moderate.

(Focus Group Interview 1, line 163)

Then they go up, and they're like up and down and some situations we'll really concentrate and go on and then we'll just switch off and let it slip, kind of thing.
(Focus Group Interview 1, line 165-167)

If one person talks to you in the field and keeps on reminding you about your concentration and keeps you, in certain situations it gets picked up quite a lot, like in our fielding, sometimes we'll have a really bad patch and then someone will make a comment and say "let's pick this up" and then it picks up from there, so I think we've just gotta keep reminding ourselves about concentration.

(Focus Group Interview 1, line 169-174)

The athlete who can adopt full and effective focus on their performance and avoid being affected or influenced by distractions or any other destructive environmental cues will have a greater possibility of reaching their desired success (Murphy, 2005). Furthermore athletes who can successfully filter out unnecessary noise and distractions and concentrate solely on the goals that need to be achieved in order to succeed in the challenge set before them will have greater chances of success compared to those who cannot. Athletes who are able to engage optimal levels of concentration are better equipped with the ability to allow their mind and their performance to become one (Cohn, 2008). Concentration is a vital aspect of a Mental Toughness programme and it would be valuable to incorporate aspects such as the benefits of intense concentration, the price of losing concentration, being in the zone and being able to handle internal and external distractions when teaching athletes about improving concentration for their performance.

Although concentration is a difficult aspect to teach and it is a difficult aspect to become proficient in, the envisaged outcome of this Mental Toughness programme is to help the athletes with developing an array of skills for improving their Mental Toughness. Incorporating and implementing in their daily training routines the use of the mental skills that the athletes are being exposed to will inevitably improve their focus and concentration. Therefore the researcher believes that a ripple effect of the athletes incorporating the lessons learnt from the Mental Toughness programme will be a heightened level of concentration and a more professional level of focus.

v) Decision Making

Decision making is a vital skill in any aspect of life, including sport. The quality of decisions made can often be the sole factor differentiating success from failure. Regardless of the quality of an athlete's performance, if the appropriate decisions are not made at the right time, the result could be devastating for the athlete. An athlete who understands the intricacies behind quality decision making and furthermore understands the importance and significance of this quality decision making will be equipped with the ability to make effective and efficient decisions both during and after his / her performance. These athletes will therefore be able to avoid being distracted by the inevitable demand of decision making during pressure situations and their performance will therefore be improved rather than diminished. The athletes in the focus group interview were asked whether they can deal with certain mental issues during the game or only after the game and the response was as follows:

I think sometimes, also depending on the situation, if you're under pressure you have less time to think about how to deal with it so you go with natural instinct, and then only after the game you think about the what-ifs, and then vice a versa if you're on top you're not so under pressure then you can really think about what your next step is and, like, think ahead, instead of thinking about what-ifs afterwards.

(Focus Group Interview 1, line 134-139)

This quote above opens up a significant aspect that will be dealt with during the Mental Toughness programme concerning the interrelated relationship between different mental skills that make up Mental Toughness. In this particular case and in reference to the above quote we are dealing with decision making and mental rehearsal and imagery. If athletes train to become proficient in visualisation and mental imagery this technique can be used when preparing for training or games. If the athlete has been experiencing difficulties in certain areas, imagery can be used to rehearse these situations and mentally rehearse solutions for these circumstances. This

will help the athlete evade feeling unprepared and caught unaware if these situations appear again during competition and to avoid it being the first time that the athlete is being exposed to it. This discussion further stresses the point made earlier regarding the interrelated relationships of mental skills and the effectiveness of psychological skills training programmes in developing overall Mental Toughness. This property of interrelated mental skills means that the improvement in one particular aspect will have an influence on other aspects as was seen earlier where concentration can affect self-belief, arousal control and anxiety. The captain expressed the use of decision making during his performance too.

As a captain, probably when bowling, I have to be thinking quite a lot, like field positioning, who's gonna bowl next and all that, definitely when the team's on top of us.

(Captain Interview 1, lines 62-64)

In addition to this the coach was questioned about what specific situations in the cricketing setup and cricketing context, will require mental skills and his responses touched on an element of decision making when he responded with the following:

What are your options, to choose the right option at that time.

(Coach Interview 1, lines 154-155)

Being able to choose the right option at the right time is very much embedded in being mentally tough. This point links with the idea of making decisions based on the 'status of the game' which is described in detail further on. As athletes become more proficient in Mental Toughness they will learn to analyse situations more effectively and understand what options are available to them and thereafter make the most appropriate decisions for that particular circumstance. The team as a whole was asked their opinions regarding the level and quality of their decision making under pressure situations and their responses were as follows:

I'd say pretty good.

(Focus Group Interview 1, line 188)

Decision-making as a team, as a team in whole, we're, pretty good.

(Focus Group Interview 1, line 190)

Cos I think we tend to make decisions as a whole instead of one oke making a decision and me following him, so I think we all have a say to what we should be doing.

(Focus Group Interview 1, line 192-194)

Despite the responses being positive there is always room for improvement with regard to good decision making. It is very beneficial for the athletes to be exposed to theory regarding decision making in order to improve further this aspect of their performance. Good quality decision making links and correlates with Bull's (2006) model of Mental Toughness and more specifically with his inclusion of clear thinking and his model of risk management toughness. In addition to clear thinking and risk management toughness consideration must also be given to a concept rarely considered which incorporates effective decision making under pressure. Bull's (2006) risk management toughness is seen when athletes hold personal responsibility for their confidence in making and challenging decisions and thereafter have faith in themselves and their abilities to stick to their decisions. In addition to this form of toughness Bull (2006) presents 'tough thinking' at the top of his hierarchy for Mental Toughness development which was discussed in the literature review earlier. Within this idea of tough thinking lies two important attributes which includes clear thinking and effective decision making.

This would be an appropriate time to discuss the concept mentioned earlier concerning effective decision making under pressure as this concept links closely with clear thinking and therefore tough thinking. Throughout my experience of working with school athletes I try and encourage them to make decisions based on what I call the 'status of the game'. Every athlete can make decisions but what is important is making the right decisions for the team that will contribute towards obtaining the highest chance of victory. Making decisions based on the 'status of the game' means that athletes must incorporate a holistic understanding of where they stand within the game. A cricket game can be used as an effective example to emphasise this point. Certain situations in cricket games require different decisions and it is important that decision makers are fully aware of the games current status. It is important for decision makers within a cricket game to understand certain aspects such as the state of the cricket pitch and whether it is suited for battling or bowling, the opponents current performance form and how the current 'stars' are performing, where the opponents weak points are, where your teams strengths lie, how many wickets has your team lost and how many runs are required to win the match. Every single one of these factors requires a different decision and those equipped with the responsibility of making decisions must not make irrational and unjust decisions but rather make calculated decisions given knowledge of one's own team, the opponents team and the external factors that make up the 'status of the game' This entire process requires clear thinking and good decision making both of which fall part of tough thinking. If athletes learn to do this and learn to incorporate these aspects into the routines then they are laying positive and solid foundations for developing Mental Toughness.

The athletes indirectly touch on this aforementioned point in the next two quotes. The first quote directly speaks to analysing and understanding the environment. By doing this the athletes understands as fully as possible the immediate surroundings and competitive environment and this lays solid foundations for making effective and valuable decisions and the decision making process now incorporates a sense of ‘calculation’. The second quote speaks to the player anticipating events in order to avoid the sense of surprise and as a result make rushed, uncalculated and irrational decisions.

I think one area that we could maybe improve on is when we're sitting waiting to go in to bat, just assessing pockets in the field, where to take twos, where to take threes, different bowlers, what they're doing, cos you can sort of start picking up trends from the bowlers and stuff, so.

(Focus Group Interview 1, line 212-215)

Identifying moments in the game I think is crucial, trying to read the opposition player before he makes a move, what is he thinking, getting in his head, and try and outplay him by whatever his next choice is gonna be.

(Coach Interview, line 149-152)

vi) Patience

Patience is an extremely hard attribute to develop and will, most often come down to a case of experience. When unpacking some personal or individual goals for the up and coming season patience was a prominent feature.

Patience, choosing the right ball.
(Focus Group Interview 1, line 174)

Have improved time at the crease.
(Focus Group Interview 1, line 172)

When asking the coach what he thought Mental Toughness entailed he touched on an element of patience by using the example of a former South African cricketer, Gary Kirsten.

And then, as a batter, if you look at Gary Kirsten's book, you were saying that his biggest lesson he learnt with regard to mental toughness is actually letting bad shots go, not harping on it, whatever's in the past, leave it in the past, and don't even concentrate on the future just play in the present.

(Coach Interview 1, lines 109-113)

This quote above highlights a specific aspect of patience that contributes to a cricketer being mentally tough. It incorporates the batsman having the patience to let the bad shots go and know what shot to play when the right ball presents itself. Although looking for opportunity is often a good thing, in this case it becomes a matter of being patient enough to wait for the right opportunity to come and then using your ability in decision making to make the most of that opportunity. There is however other aspects that may occur before the athlete has the ability to let the bad shots go. During ones performance there will come a time when a negative situation presents itself such as playing a bad shot. The few seconds directly after this shot are the most important seconds of your game. It is within these few seconds that you decide how you are going to react to this negative circumstance and this decision can be solely responsible for your possibility of success. Athletes therefore need to learn to remain positive after negative situations and use positive self talk to ensure clear thinking in order to make right decisions regarding the rest of your performance. Accomplishing and refining the ability to do this will lead to a heightened level of patience within your performance.

The coach expressed an interest in the team working on aspects of patience when he was questioned about what mental skills the team could improve on to benefit them for the up and coming season. He responded with:

Patience, and how to control your emotions on the field, I think.

(Coach Interview 1, lines 193-194)

vii) No Fear of Failure

Fear of failure was another theme that emerged through the focus group interview with the athletes. Although fear of failure was not dealt with specifically it did emerge through other means. The athletes were asked what they perceived to be the characteristics of a cricketer who shows Mental Toughness and the response was:

People who have no fear of failure.

(Focus Group Interview 1, line 11)

This element of athletes having no fear of failure further emerged when talking to the coach during the individual interview. The coach was questioned about particular strengths of his team and his response was:

I think the batters have no fear of failure, I think they will come hard at the opposition and then maybe take the advantage away from the opposition at the beginning of the game, which is often not something you see at a schoolboy level, where no-one really wants to take the game at the ruff of the neck, but the guys we've got at the top of the order are pretty good at that I think.

(Coach Interview, lines 33-36)

You cannot teach athletes to have no fear of failure however one can address the concept of fear of failure and create a heightened and more educated sense of awareness about it. Certain situations can be created where athletes are exposed to scenarios of failure and are taught how to deal with these situations appropriately. In addition to this psychological intervention facilitators can help athletes develop their confidence, develop a belief in their abilities and a faith in their ability to help them achieve success and also provide them with means to pick themselves up, such as positive self talk and visualisation when challenged with adverse situations. This aforementioned point speaks again to the interrelated relationship of mental skills and how they all contribute to one another to build a heightened level of overall Mental Toughness. In addition to the above recommendations the concept of failure can also be reframed in order to assist athletes in minimising their fear of failure. Athletes need to learn to reframe failure to understand that it is not such a daunting concept and further understand that it only debilitates performance as much as they let it. Athletes must be taught how to react and respond positively to failure and use these failed situations as lessons and opportunities to improve performances for the future.

viii) Handling Pressure Situations and Bouncing Back from Adversity

This element of Mental Toughness presented itself various times during discussions with the athletes regarding what specific situations within a cricketing context require mental skills as seen in the following quotes.

When you're under pressure.

(Focus Group Interview 1, line 43)

When things aren't going your way.

(Focus Group Interview 1, line 41)

I think also like, early season you'll learn about your team, and things like that, and you learn from mistakes or positives and then from there on it can just get better and better.

(Focus Group Interview 1, line 141-143)

I think use our mistakes from previous season and start straight away rather than have a few bad games and then only start picking up after that.

(Focus Group Interview 1, line 261-263)

This particular constituent of Mental Toughness is considered heavily within the literature attempts to define and conceptualise the term Mental Toughness. Various authors refer to handling pressure situations and bouncing back from adversity in many instances. Loehr (1982) refers to mentally tough athletes as being able to remain in control of emotions and thereafter remain calm and relaxed under pressure, while Fourie and Potgieter (2001) speak about athletes being able to cope when performing. Jones et al., (2002, p. 209) stated that Mental Toughness incorporated:

Having the natural or developed psychological edge that enables you to: generally, cope better than your opponents with the many demands (competition, training, lifestyle) that sport places on a performer. Specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure.

Clough et al. (2002, p. 38) touch very specifically on the characteristics in question here when they state that:

Mentally tough individuals tend to be sociable and outgoing; as they are able to remain calm and relaxed, they are competitive in many situations and have lower anxiety levels than others. With a high sense of self-belief and an unshakeable faith that they control their own destiny, these individuals can remain relatively unaffected by competition or adversity.

In addition to this definition provided Clough et al., (2002) categorise mentally tough athletes as having flexibility with the ability to remain balanced and avoid becoming defensive when put under unexpected pressure. In addition to this they believe mental toughness athletes are responsiveness and they occupy the ability to remain focused under pressure and have a powerful fighting spirit and resiliency coupled with having the ability to bounce back from disappointment, mistakes and missed opportunities.

Thelwell et al. (2005) also refer to this very aspect during their discussion on Mental Toughness where they deliberate over concepts such as athletes having positive reactions to situations while not only remaining calm under pressure but also enjoying it. Gucciardi et al. (2008, p. 278) incorporated these aspects into their definition of Mental Toughness when they presented the following aspect:

Mental Toughness in Australian Football is a collection of values, attitudes, behaviours and emotions that enable you to persevere and overcome any obstacle, adversity, or pressure experienced, but also to maintain concentration and motivation when things are going well to consistently achieve your goals.

The two concepts of handling pressure and bouncing back from failure are heavily embedded in Bull's (2005, 2006) research. As seen earlier this particular concept is presented in Bull's (2006) model of Mental Toughness and correlates with Bull's (2006) turnaround toughness.

ix) Consistency

Consistency was one theme that emerged when the athletes were discussing various goals for the up and coming season.

I think we definitely wanna perform more consistently.
(Focus Group Interview 1, line 259)

Consistency, as with concentration and having no fear of failure, is difficult to teach and develop. Routines are a great way to develop consistency and this particular aspect will become prominent with time and persistence with implementing mental skills training. Just like any other form of training, repetition and good quality practice will eventually result in these mental skills becoming second nature to the athlete. In other words the athlete will eventually have an array of mental skills lying 'just below the surface' readily available to be extracted and used in any sporting circumstance that may require them. Once athletes start achieving this level of mental performance they will see a significant increase in their consistency.

Athletic skills, and particularly mental skills, will develop naturally over time in most players and especially in good players. The researchers of this project believe that Mental Toughness can be taught and that the skills that make up Mental Toughness can be developed within a controlled setting and environment. The goal therefore is to help the cricketers develop the skills so that they can improve quicker and earlier and don't have to wait for them to develop naturally. The constant rehearsal of various mental skills through this Mental Toughness programme and the inclusion of mental skills training into daily training routines will eventually result in greater consistency. Repetition and practice will eventually lead to natural use of the skills and consistency will become more prominent.

x) Composure and Discipline

Composure was a theme that did not emerge clearly in the focus group interview but it did come up briefly in the coach interview when the coach was questioned about certain aspects that need improvement within the team for the new season ahead. When asked which mental skills need work he replied with the following:

Difficult, looking at things like working on composure at the moment, in the moment, if they can try look at that.

(Coach Interview, lines 192-193)

The athletes were asked the same question regarding mental skills that need improvement and responded in the following way:

We definitely need to train with more discipline, practice with more discipline I think, it lets us down a bit in the game.

(Focus Group Interview 1, line 290-291)

Composure relates to an athlete being relaxed, cool and having a calm state of mind and could theoretically be linked to other themes described above. Although these two concepts will not be presented as a characteristics to be developed specifically in the Mental Toughness programme they are concepts that the researcher anticipates will be developed naturally throughout the experience of the Mental Toughness programme. Composure and discipline can be linked to concentration and patience. There is a significant relationship between these different components and therefore working on one component will influence the other components. This is illustrated more clearly below:

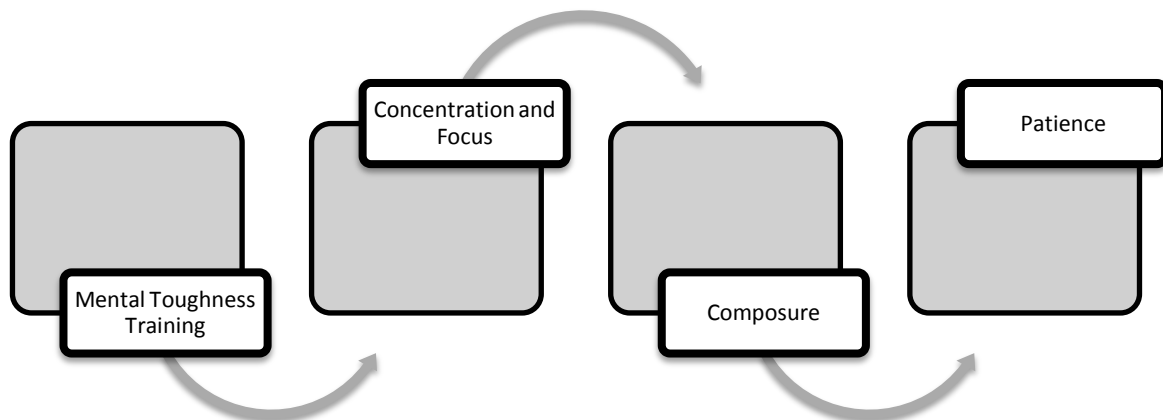


Figure 18: Relationship between concentration, composure and patience

Mental Toughness training by means of mental skills training will result in athletes being able to focus and concentrate more heavily on specific aspects of their game which in turn will result in an improved and more professional sense of composure resulting in the athlete understanding the importance of and implementing the art of patience. This aforementioned point can be linked to Bull's (2006) model of Mental Toughness. Anxiety, stress, fear and poor emotional control are all the normal responses to adverse or challenging situations, but not for people and athletes that

Bull (2006) calls ‘winners’. These ‘winners’ are those who can approach these adverse situations with confidence and excitement and they thrive on performing against the odds. Becoming a ‘winner’ Bull (2006) believes starts with adopting a ‘winning mind’ which once adopted allows the people or athletes to stay focused and remain strong in self-belief when dealing with intimidating environments.

The starting point for Bull’s (2006) model of Mental Toughness is therefore adopting an athlete’s mindset (a winning mind) which incorporates self-belief, clear thinking and resilience. This leads to the very important aspect of Bull’s (2006) model that includes the adoption of the ‘winning environment’ and this is where the link can be made with Figure 16 illustrated above. Figure 16 shows that Mental Toughness training will assist athletes in increasing and improving their concentration and focus as they start unpacking the complexity of their performance potential and begin working on the smaller aspects such as mental skills training to improve their overall performance. This leads to a sense of composure and control and furthermore patience as the athletes are learning specific skills that they will have stored in their ‘performance potential bank’ ready to execute when the circumstances deem necessary. Knowing that they have these skills readily available at their disposal helps the athletes remain calm, relaxed and composed when dealing with adverse or challenging situations and therefore approach these situations with a sense of patience. This entire premise results in a greater self-belief and confidence, clearer thinking and a more resilient mind, all of which are the starting point for Bull’s (2006) model of Mental Toughness. Becoming a ‘winner’, adopting a ‘winning mind’ and amalgamating this all with mental skills training results in the most suitable ‘winning environment’ susceptible to helping athletes become mentally tough.

4.3 Mental Toughness Scale

In addition to the above observation methods, the Psychological Performance Inventory-A (PPI-A) developed by Golby, Sheard, and van Wersch (2007) was also administered and scored, and the results were used in conjunction with the results of the focus group and interviews in developing the Mental Toughness programme. Myself, as the programme facilitator, administered the PPI-A. The Psychological Performance Inventory (PPI) established by Loehr (1986) has been applied in previous Mental Toughness studies (Golby & Sheard, 2003) and is considered the pioneering Mental Toughness inventory (Gucciardi, Gordon, & Dimmock, 2009) as well as the most influential Mental Toughness instrument (Middleton et al., 2004) within the field of sport psychology. Loehr (1986) developed the PPI specifically to “profile a performer’s

mental strengths and weaknesses” (Mellalieu & Hanton, 2009, p. 324). This profile was thereafter regarded as that individual’s Mental Toughness score which comprised of seven sub-scales including “self confidence, negative energy, attention control, visual and imagery control, motivational level, positive energy and attitude control” (Mellalieu & Hanton, 2009, p. 324). The PPI inventory contains forty two Likert type items tailored to measure the seven Mental Toughness sub-scales mentioned above (Golby & Sheard, 2003).

Although the PPI is the most commonly used measure, it has been highly challenged by various authors. Murphy and Tamen (1998) criticised the measure of lacking validity and reliability data supporting its application and therefore questioned its usefulness as a suitable, accurate and effective measure of Mental Toughness. Golby, Sheard and Lavellee (2003) embarked on an investigation into the differences between elite rugby teams and utilised the PPI as a measure for Mental Toughness. Their study revealed no significant results including no differences in any one of the factors assessing Mental Toughness which led them to believe that the psychometric properties of the PPI scale were not very robust. Middleton et al. (2004) administered the PPI on elite high school athletes in an attempt to evaluate the psychometric properties of the Mental Toughness measure. Middleton et al. (2004) concluded, based on their results, that the PPI was a poor model fit and therefore no sound measure of Mental Toughness currently exists. They recommended that further research be done to rectify this poor measure of the multifaceted dimensions of Mental Toughness. Golby, Sheard and van Wersch (2007) stated that the conceptual and theoretical basis for this Mental Toughness instrument was not strong and that there was no psychometric support given.

Based on concerns surrounding the PPI, Golby et al. (2007) set out to replicate and extend the previous psychometric work on the Psychological Performance Inventory producing a multidimensional questionnaire designed to assess Mental Toughness. In essence Golby et al. (2007) shortened the instrument and increased the psychometric properties. Two of the original six components were removed and the end result yielded four factors of Mental Toughness including determination, self-belief, positive cognition, and visualisation and these became the components of the PPI-A model (Golby et al., 2007). As Middleton et al. (2004) expressed a poor model fit of the PPI Golby et al. (2007) illustrated that, using confirmatory factor analysis, both absolute and incremental fit indices showed good support for the evolved four-factor PPI-A model. Golby et al. (2007) concluded that the PPI-A was psychometrically stronger than the original PPI and further expressed that the shorter version possesses psychometric integrity. In addition to this, collectively satisfying absolute and incremental fit index benchmarks, the

inventory possesses psychometric properties with adequate reliability and convergent and discriminatory validity (Golby et al., 2007).

4.3.1 Mental Toughness Scale Results

The athletes undergoing the Mental Toughness programme were exposed to psychometric testing by means of the new and improved PPI-A described earlier. This PPI-A was administered both before exposure to the Mental Toughness programme and after exposure and the pre-programme results are depicted in Figure 17 below. The PPI-A schedule comprises of 14 questions designed around eliciting scores for the four factors: determination, self-belief, positive cognition and finally visualisation. Certain questions are designed to test for these different factors mentioned above. Questions 4, 9 and 11 test determination, questions 1, 2, 5, and 6 test self-belief, questions 7, 12, 13, and 14 test positive cognition and questions 3, 4, and 10 test visualisation.

The PPI-A questions work on a Likert Scale ranging from 1 to 5 representing the options: ‘almost always’, ‘often’, ‘sometimes’, ‘seldom’ and ‘almost never’ respectively and therefore mean that a total of 5 can be scored for each question. Determination therefore has a total score of 15, self-belief a total of 20, positive cognition a total of 20 and visualisation a total of 15. This must be kept in mind when looking at the results from the pre-programme and post-programme PPI-A.

Table 3:

Pre-programme PPI-A Scores and Percentages

	Determination (15)		Self-Belief (20)		Positive Cognition (20)		Visualisation (15)	
		%		%		%		%
Athlete 1	11	73	16	80	13	65	3	20
Athlete 2	11	73	14	70	14	70	10	67
Athlete 3	12	80	13	65	14	70	9	60
Athlete 4	8	53	15	75	14	70	11	73
Athlete 5	12	80	14	70	14	70	12	80
Athlete 6	13	87	17	85	17	85	13	87
Athlete 7	12	80	18	90	17	85	10	67
Athlete 8	13	87	16	80	14	70	7	47

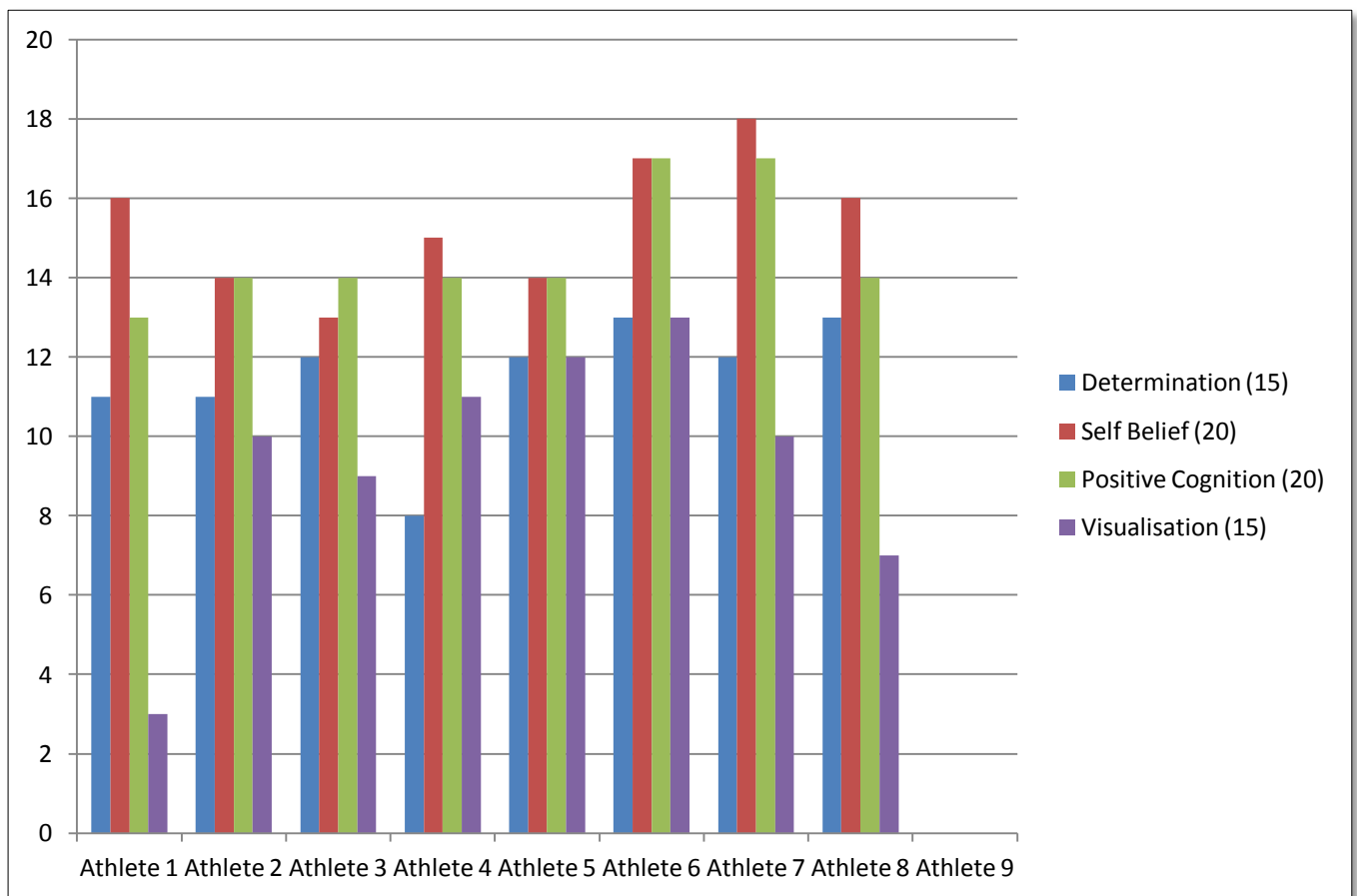


Figure 19: Pre-programme PPI-A Results

4.4 ACTION PLAN AND IMPLEMENTATION

Once the interest had been expressed in the entry phase, the frameworks for research erected in the start-up phase and the initial data collected by means of specific methodology in the assessment and feedback phase, the next phase of the ODP model included the action plan and implementation phases. The action plan of the ODP model includes the generation of the intervention to be implemented. In this particular case the intervention is the Mental Toughness programme.

The prominent mental skills and themes that emerged after data analysis were the mental skills that the athletes were going to be exposed to during the Mental Toughness programme.

4.4.1 Programme Content and Structure

The specific mental skills that were incorporated into the programme include the following:



Figure 20: Programme Content and Mental Skills Training Structure

The Mental Toughness programme was designed methodically and followed the structure depicted by traditional PST programmes which included an *education phase*, an *acquisition phase* and a *practice phase* as described in detail earlier in the literature review. Under each mental skill that was included in the programme there was a theory / educational aspect as well as an application / practical aspect. As the facilitator the researcher presented theory on the mental skill in question and furthermore taught the athletes about the specifics of what each skill entails. In addition to the theory aspect of the programme a practical application was also included. This incorporated the inclusion of various exercises designed to help the athlete understand how to improve the skill being taught and to furthermore illustrate to them the importance and influence of including these skills in their performance routines.

The Mental Toughness theory and the accompanying exercises were adapted, developed from and influenced by various Mental Toughness theorists and authors (Bull, 2006; Cohn, 2008;

Duda, 1989; Etnier, 2009; Janssen, 2000; Jennings, 1993; Jones & Connaughton, 2007; Keuhl, Keuhl & Tefertiller, 2005; Morris, 2005; Morris & Summers, 2004; Murphy, 2005; and Weinberg & Gould, 2007) coupled with my own unique design and input.

The focus of the exercises included in the programme was on creating positive attitudes, developing and maintaining Mental Toughness and building up the athletes' morale in an attempt to assist them in obtaining a mental edge. The specific structure of the individual sessions is described in greater detail below.

4.4.2 Session Structure

The programme was designed to run for a seven week period with one session scheduled per week. The specific day that the programme ran was negotiated with the athletes each week and was dependant on the academic, sport and other school commitments that they were currently involved in. Due to these hindering commitments the sessions were scheduled to run for the majority of the time during weekends with an anticipated duration of two hours per session. The sessions did incorporate various strategic breaks to ensure concentration lapses did not occur and to keep the athletes as focused as possible for the entire session. Although the programme was structured to run over seven weeks, unfortunately, due to some unforeseen circumstances (to be unpacked in the limitations and recommendations section of this report) the seven week duration was cut down to three. This resulted in the sessions being doubled up and therefore took the form of various workshops rather than individual sessions. The workshops differed to the originally structured sessions in the sense that they comprised of various mental toughness sessions coupled together as opposed to individual sessions on one particular day. Therefore more than one mental skill, as seen in figure 19, was presented. Although this was a challenge the researcher believes it had no negative effect on the outcome, success and influence of the programme on the athletes.

The programme was designed for the team's benefit and therefore the more athletes who participated the greater the result would be. An average of nine athletes out of a total of eleven attended the programme of which eight athletes were consistent in their participation. Although a greater benefit would have been achieved had the entire team participated, the researcher was satisfied with the consistent athletes who participated as the researcher knew that they were the ones that were interested in improving their mental game and the researcher further knew that with their positive and determined attitude, the programme was going to be put to good use and

their performances as a team would inevitably improve. Good use of the programme would give the athletes the best opportunity to improve their overall game. As the design structure mentioned earlier on in this report, each mental skills session was conducted in a Kingswood College classroom kindly made available by the coach of the team. This classroom provided a good setting for the implementation of the programme. The researcher was able to structure the classroom in ways that best suited each session and, due to the classroom's location, the researcher was able to use the fields when outside demonstrations were necessary or when the researcher could see that the athletes required breaks between sessions.

4.4.3 Programme Structure

The basic structure of the programme was outlined briefly earlier in Figure 18. Below are illustrations of what was included in each section of the Mental Toughness programme. The entire Mental Toughness programme is too large to include in the body of this thesis, however considering that the research question is structured around the development of this programme and the influence of this programme on the athletes the researcher would like to strongly advise that the programme be observed in its entirety. The programme can be found in Appendix I of this report. Furthermore the researcher strongly believes that this Mental Toughness programme formulates a large portion of this research endeavour and should therefore be considered as an intricate and significant part of the research process and outcome. The exact 'skeleton' of the Mental Toughness programme is depicted below. It has been separated into the seven sessions that were implemented over the course of the three weeks.

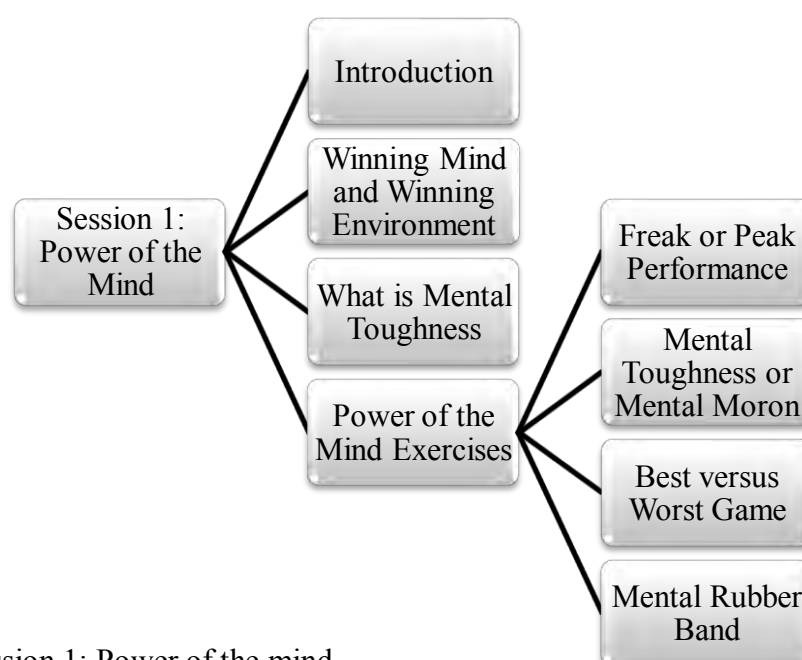


Figure 21: Session 1: Power of the mind

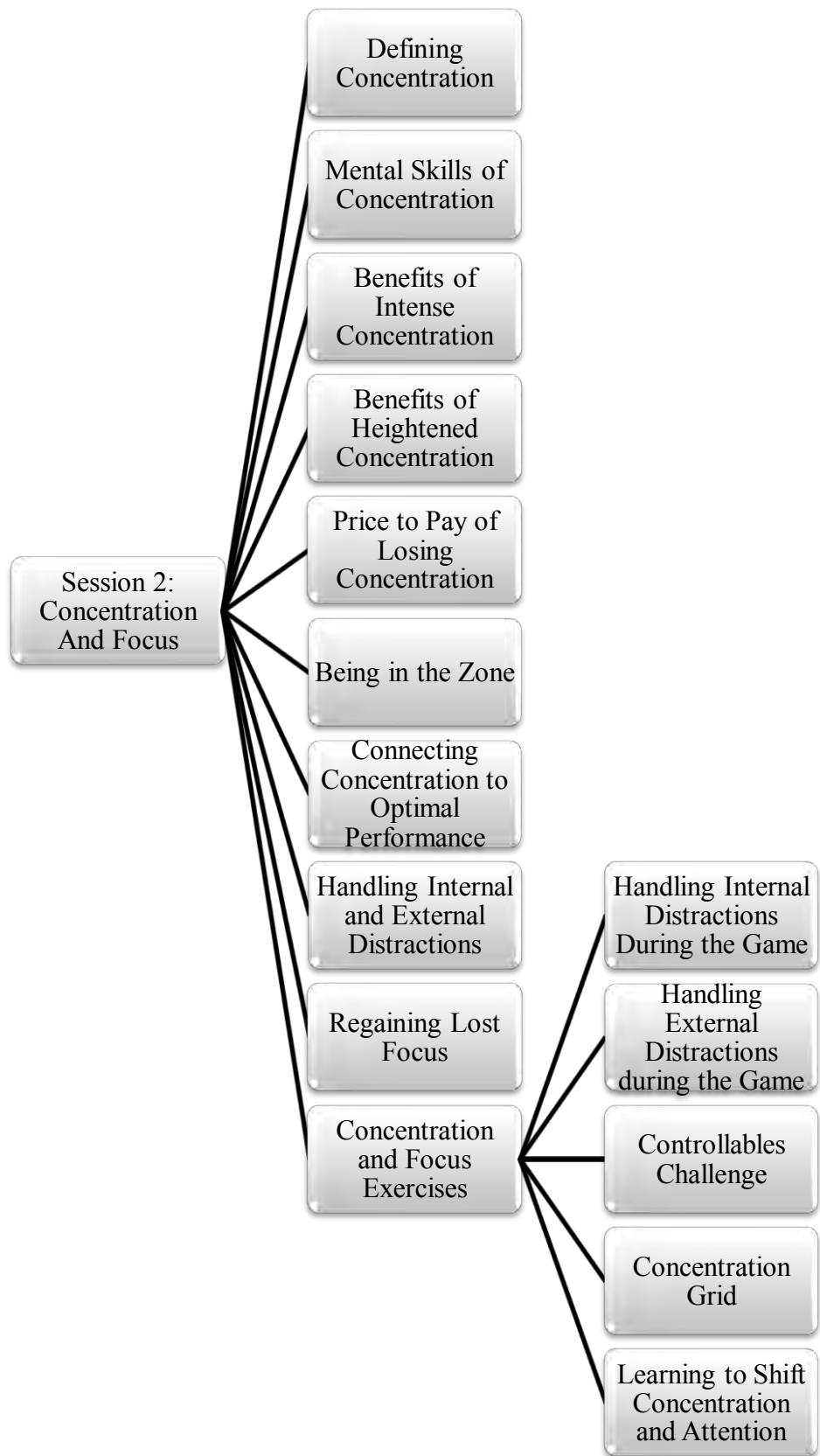


Figure 22: Session 2: Concentration and Focus

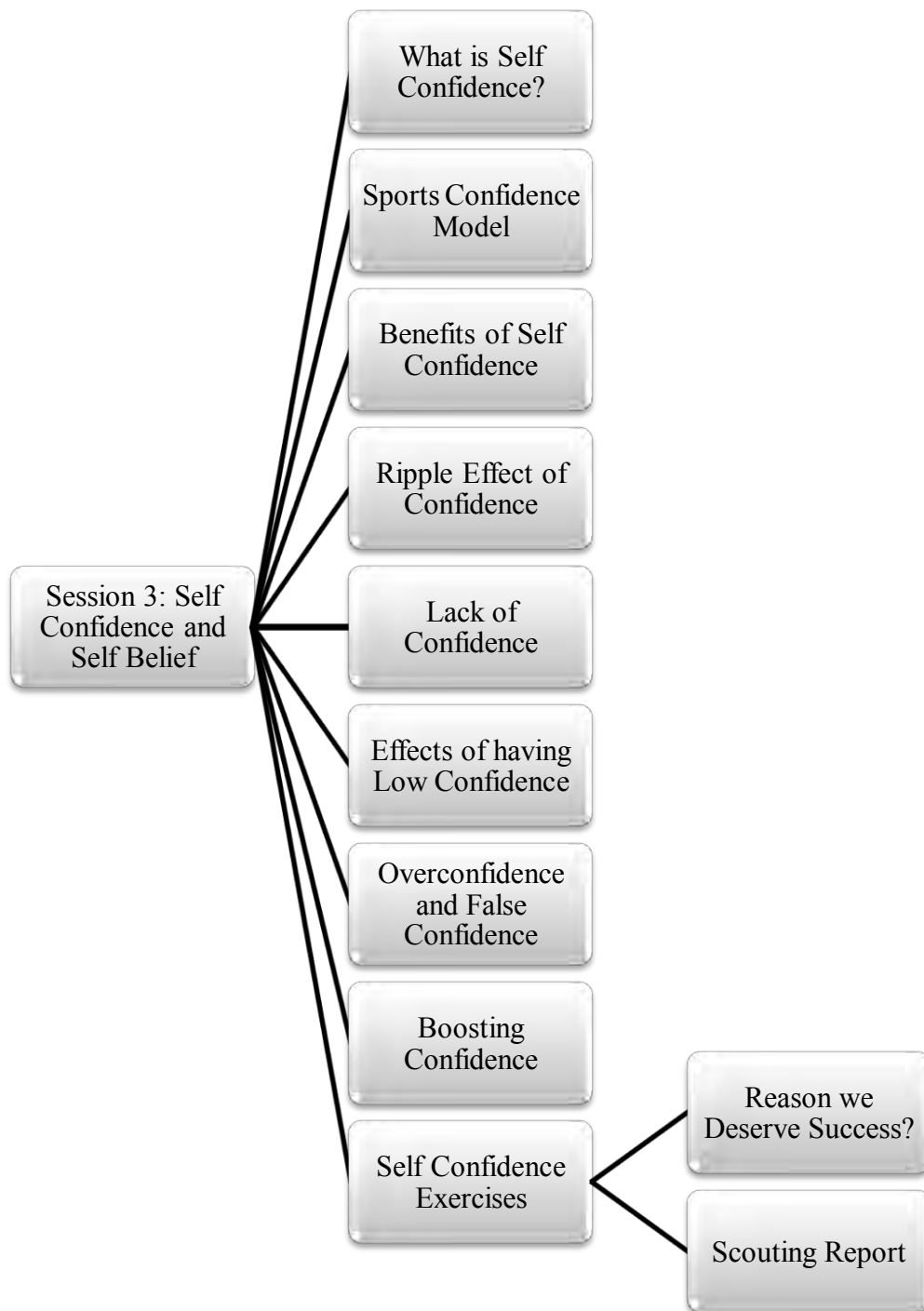


Figure 23: Session 3: Self Confidence and Self-belief

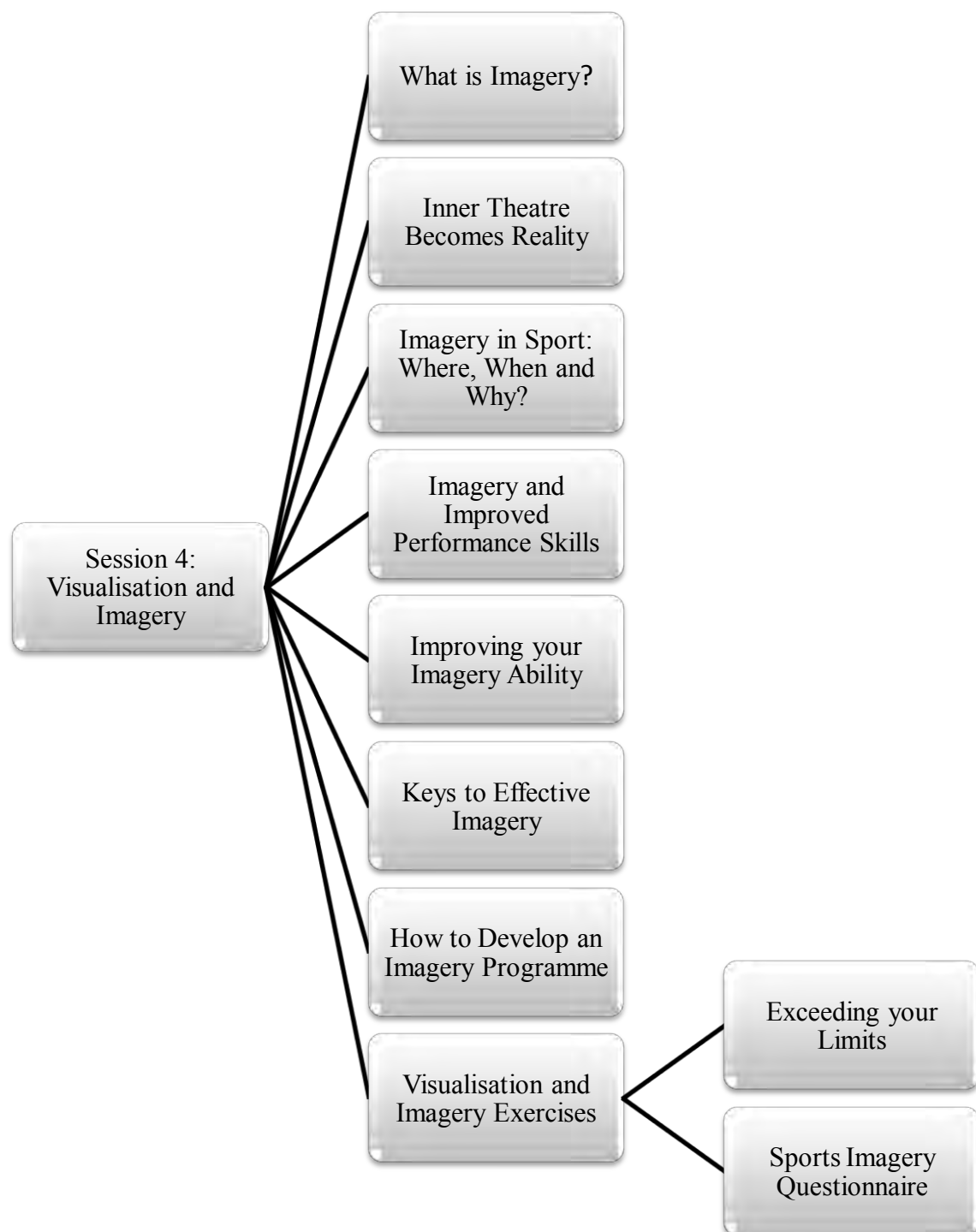


Figure 24: Session 4: Visualisation and Imagery

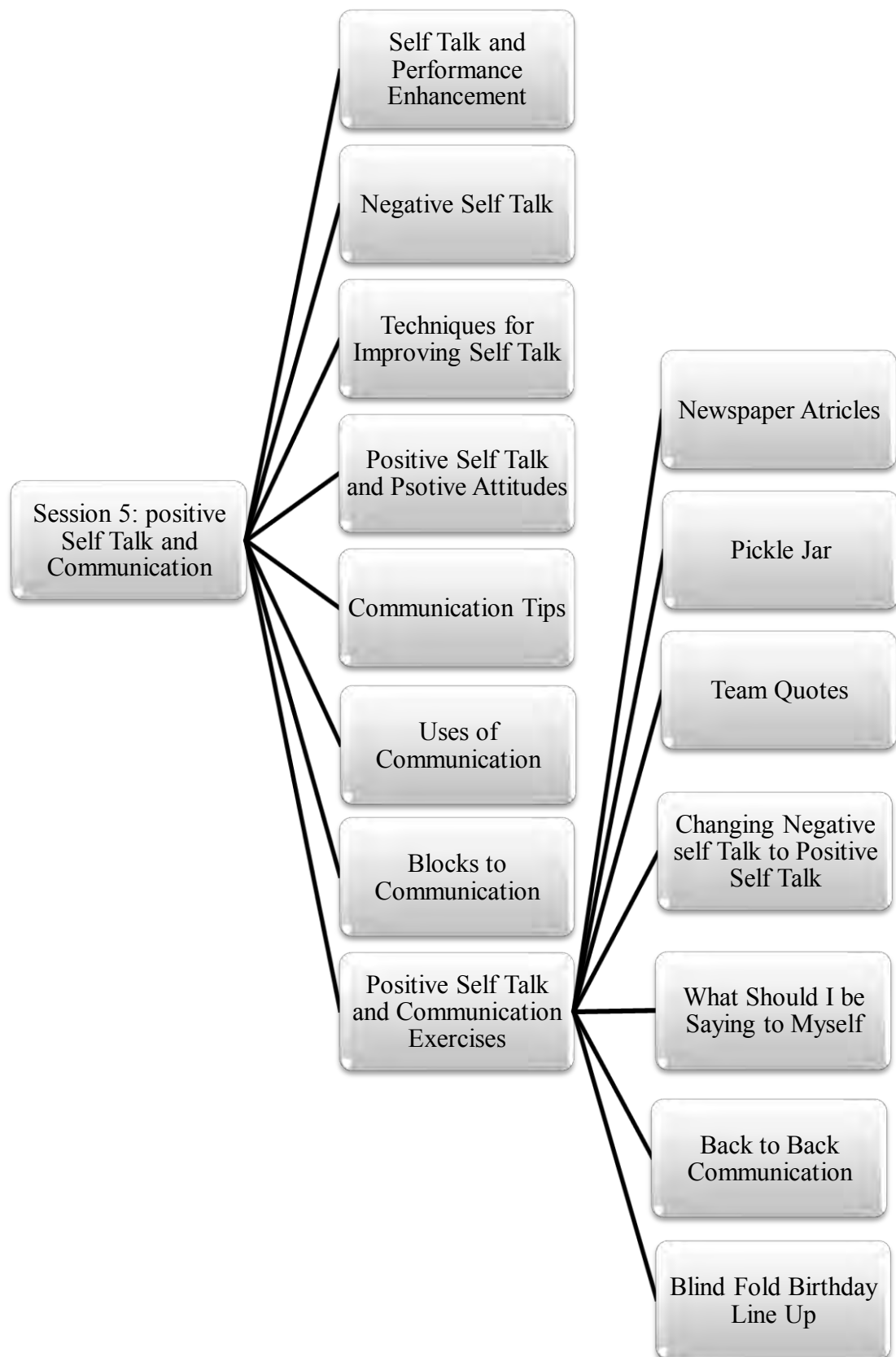


Figure 25: Session 5: Positive Self Talk and Communication

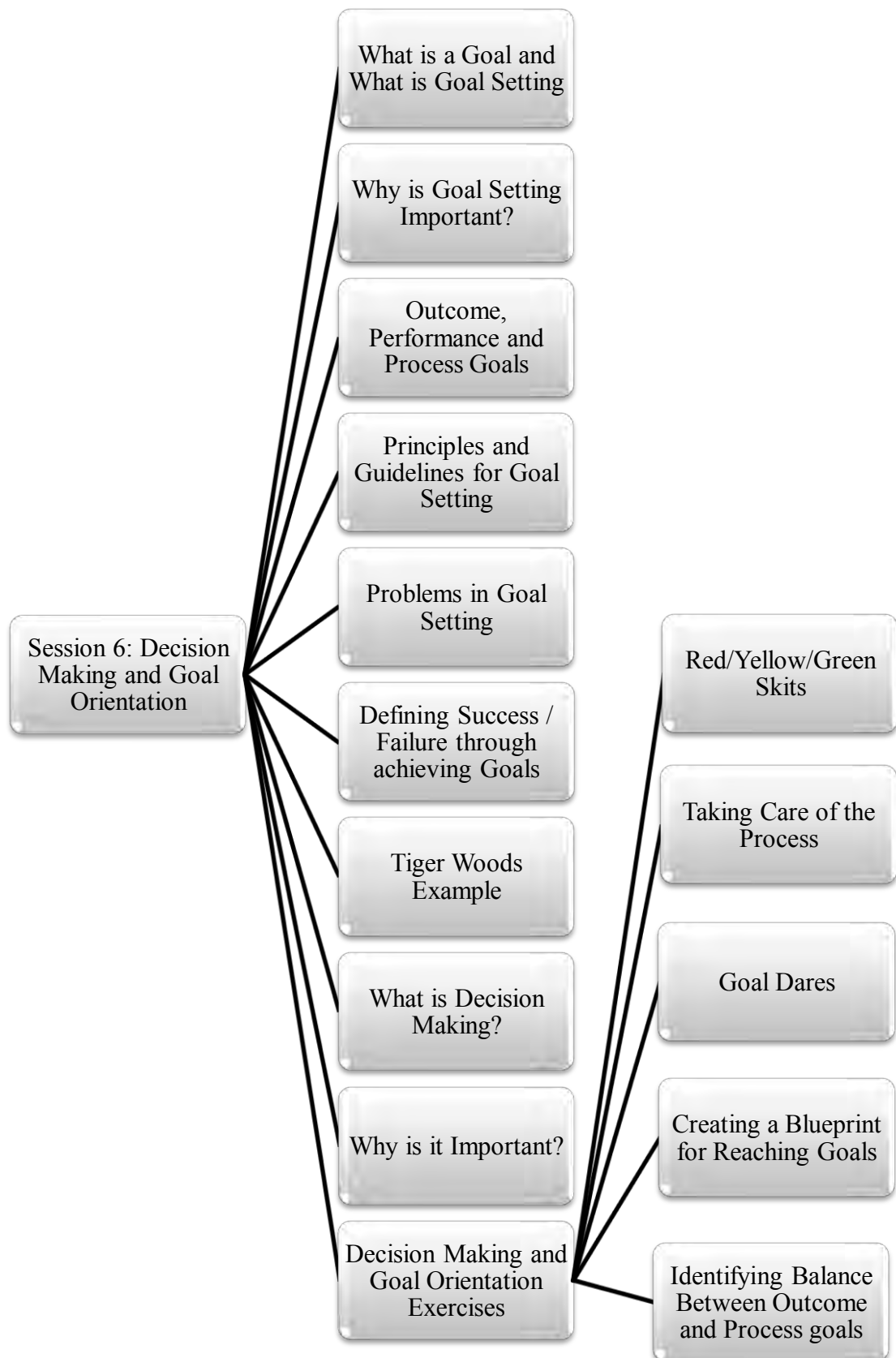


Figure 26: Session 6: Decision Making and Goal Orientation

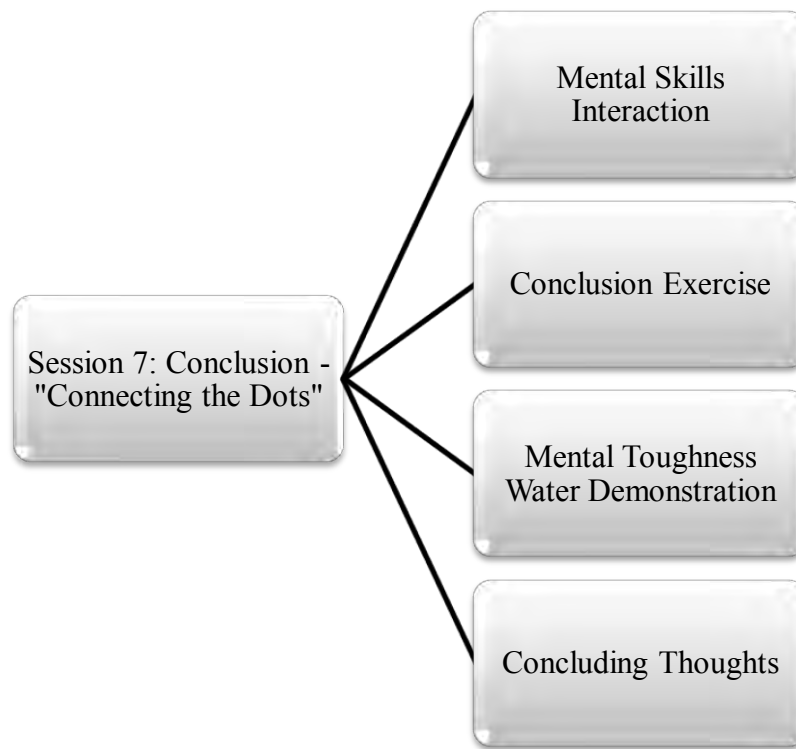


Figure 27: Session 7: Conclusion – Connecting the Dots

4.5 EVALUATION AND REFLECTION

Two evaluation procedures were conducted for the programme. The first evaluation procedure incorporated a post-programme focus group with the cricketers which incorporated a post-programme interview with the athletes, a post-programme performance profile and a post-programme psychometric test (PPI-A), while the second method of evaluation included a post-programme interview with the coach. The purpose of these focus group and interview interactions was to evaluate the experience obtained throughout the programme development and implementation and to further use this information to suggest future modifications for programme implementation. The data obtained from these evaluations was used to answer the aims and objectives of this research endeavour. As with the action stage, both the focus group and interviews were recorded, transcribed verbatim and analysed.

4.5.1 Post-Programme Results

The post programme results section formulates a very significant aspect of this particular research endeavour as various research aims come into question here and it is at this point at which we unpack and illustrate the extent to which the Mental Toughness programme was a success in light of what the research set out to achieve. It is useful to consider here the main aims of this research project. The research questions specifically concerned how the development and implementation of a Mental Toughness programme, tailored exclusively to the needs of Kingswood College 1st XI cricket team members, would assist in adding significant theory to the current body of knowledge regarding successful Mental Toughness intervention programmes.

In addition to this the research aims were to, with the aid of information specifically collated through meticulous data collection procedures, develop a tailor-made Mental Toughness programme for Kingswood College 1st XI cricket team and to furthermore implement this programme with the team. This research endeavour included a two-fold subsidiary aim. The programme was developed and executed in order to help the cricketers of Kingswood College 1st XI develop levels of Mental Toughness within their own and the teams cricketing performances. In addition to this, the researcher aimed to evaluate the experience obtained by the cricketers throughout the programme development and its implementation to gather information on the development and implementation procedure in order to make a significant contribution to the field regarding execution of this nature.

The first step of unpacking the post-programme results is to have a closer look into the performance profiling method that was incorporated both before and after programme implementation. The rationale behind the performance profiling in the initial data collection phase of this research endeavour was to gather a set of characteristics that the athletes believe were possessed by mentally tough elite athletes and to further add to this list a set of characteristics that make up Mental Toughness that the athletes needed further development in. The rationale behind the post-programme performance profile is to see the extent to which the athletes have improved in each mental skill area as a result of being exposed to the Mental Toughness programme. These results are illustrated and explained below.

POST PROGRAMME PERFORMANCE PROFILE

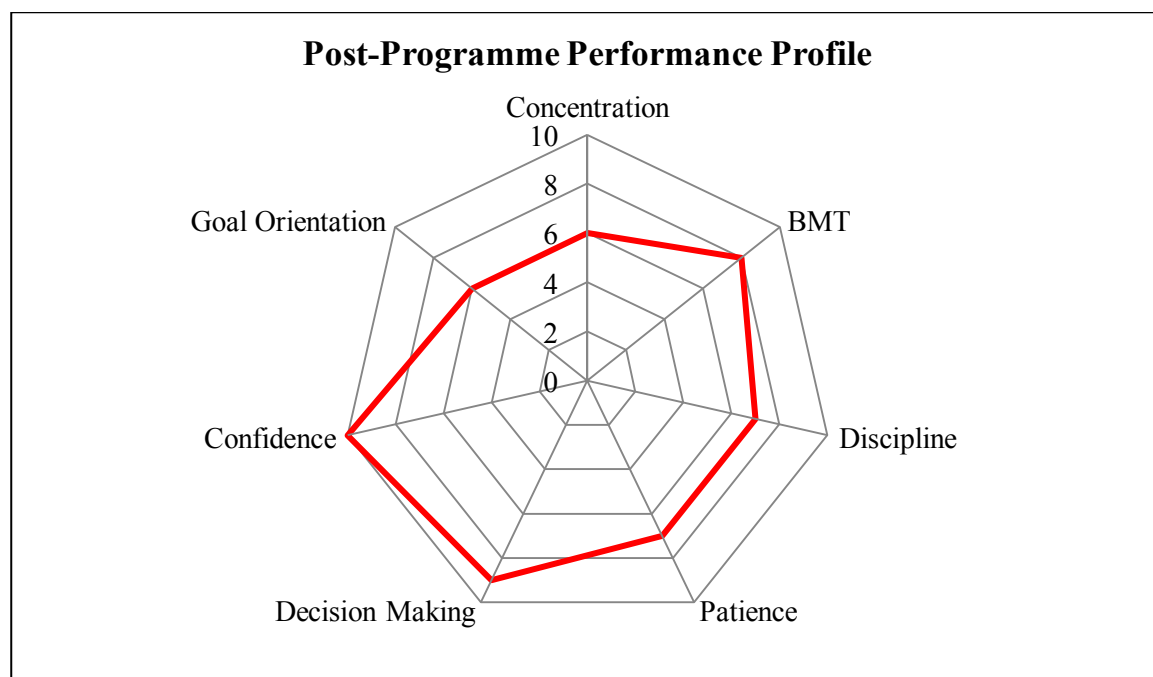


Figure 28: Post-Programme Performance Profile

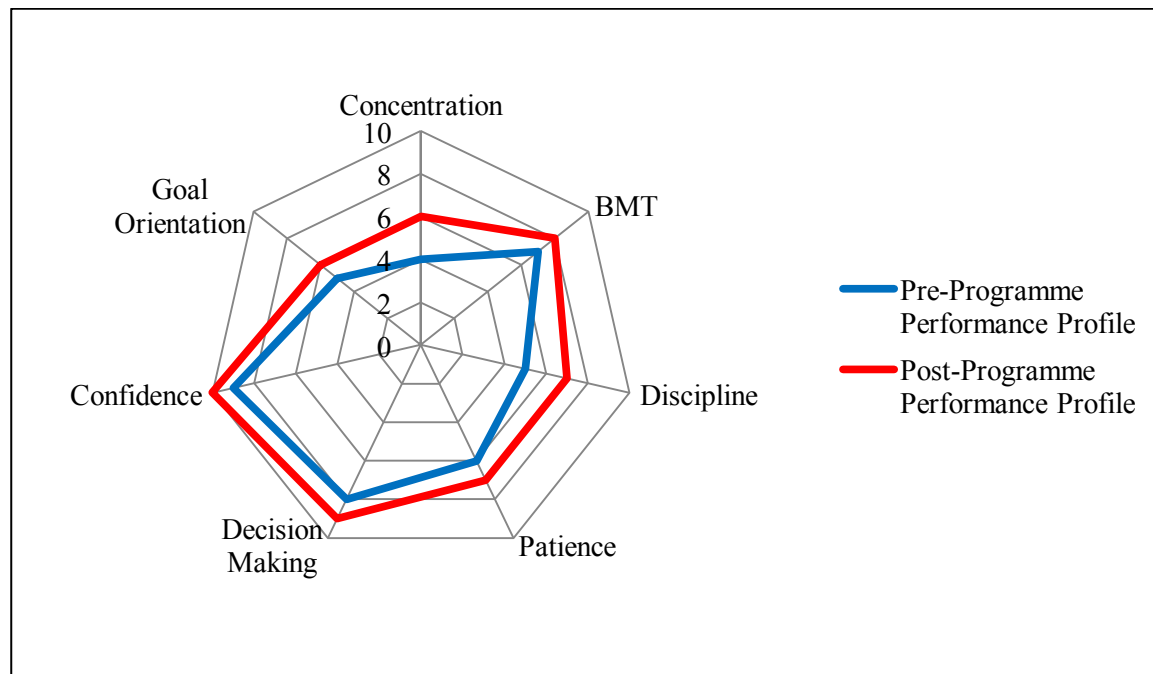


Figure 29: Pre-Programme / Post-Programme Performance Profile Comparison (A)

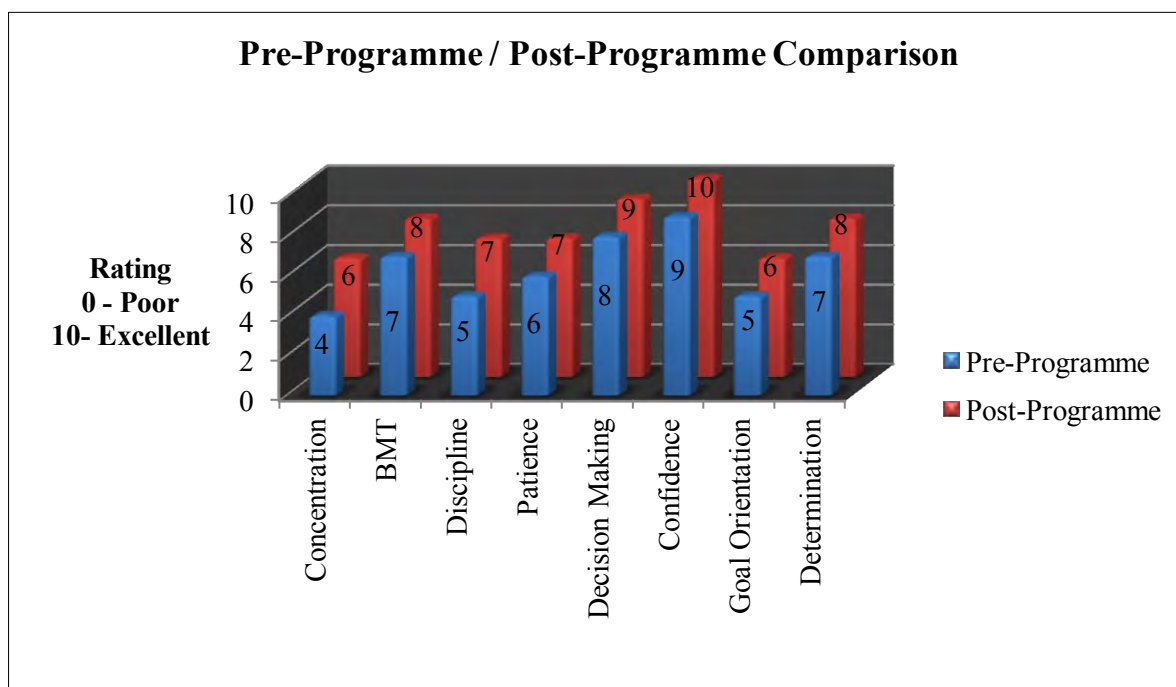


Figure 30: Pre-Programme / Post-Programme Performance Profile Comparison (B)

It is clear from the above two graphs that positive results emerged out of the programme implementation. Figure 28 shows the results obtained from the post-programme performance profile while Figures 29 and 30 above shows a self-reported improvement in all of the mental skills used in the performance profiling procedure. The athletes were not exposed to the results of the pre-programme performance profile results as the researcher did not want this to influence their post programme answers and evaluation. Based on these results we can already see that the intervention has had perceived improvements in the skills that were identified as being needed for Mental Toughness development. This can be justified by viewing table 4 seen below.

Table 4:

Pre-programme / post-programme performance profile results

Mental Skill	Pre-programme score	Post-programme score	Change (%)	Change
Concentration	4	6	20	Increase
BMT	7	8	10	Increase
Discipline	5	7	20	Increase
Patience	6	7	10	Increase
Decision Making	8	9	10	Increase
Confidence	9	10	10	Increase
Goal Orientation	5	6	10	Increase
Determination	7	8	10	Increase

4.5.2 Post-Programme Focus Group Interview

The athletes were exposed to various questions regarding the Mental Toughness programme and their experience of its design, contents and implementation. This next section will look more closely at the specific questions and topics discussed and the responses given by the athletes. After the participant responses have been presented and discussed an overall verdict regarding the success of the Mental Toughness programme will be given.

After reviewing and analysing the transcribed data from the post programme evaluation focus group and interviews various themes and resulting outcomes were identified. These themes were derived by means of the same thematic analysis (Braun & Clarke, 2006) used in the initial data collection procedure. Therefore, with regard to the post programme analysis the following procedure was followed. Staying within the guidelines of the six phase thematic analysis procedure presented by Braun and Clarke (2006) the analysis began with a familiarisation phase which incorporated a thorough browsing of the transcribed data couple with noting down various possible themes. Various quotes were extracted from the transcribed data and grouped together to justify the initially generated themes as possible analysis points. The next phase included confirmation that the themes generate were a valid and reliable representation of what the quotes were portraying as well what the overall body of data was trying to present.

Finally, themes were confirmed, defined and presented for discussion. Considering that, in part, this research was designed to elicit whether the development and implementation of a Mental Toughness programme would assist these individuals in gaining a better understanding of Mental Toughness as well as assist them in developing specific Mental Toughness characteristics and skills, the resulting themes from the analysis helped to understand whether this was achieve. The responses given throughout these interviews also help depict the overall experience gained from the programme implementation.

4.6 RESULTING OUTCOMES

There were various outcomes that the athletes experienced as a result of being exposed to the Mental Toughness programme. Such outcomes included the following:

- There was an improved understanding of what Mental Toughness incorporates and entails.
- The athletes gained a better understanding of the importance of incorporating mental training into their training routines.

- The athletes obtained a competitive advantage over their opponents.
- There were substantial changes in the team as well as individual performances as a direct result of exposure to the programme and its contents.

a) Improved understanding of what Mental Toughness incorporates

Although the majority of the athletes taking part in the Mental Toughness programme had been exposed to the concept before, there was very little understanding of what it really meant and furthermore what it entailed. This was consistent with previous trends expressed in the Mental Toughness literature as numerous researchers (Gordon & Sridhar, 2005; Jones, Hanton, & Connaughton, 2002; Nicholls, Polman, Levy, & Backhouse, 2008; Thelwell & Weston, 2005) have deliberated over how broadly applied the term Mental Toughness is, coupled with it being one of the least understood phrases in sport. It was not surprising therefore that these athletes were no exception. They too have been exposed to the term before and have heard of it on many occasions but still had a very limited and rather juvenile knowledge about its intricacy and convolution. A direct result of exposure to the programme was an increase in knowledge in this regard as seen by the quote below.

Ya, I think I've learnt more because before I only knew like the basic concepts of Mental Toughness and now I know like more in depth and like more of the skills that you can use to make our Mental Toughness stronger.

(Post Programme Athlete Evaluation Focus Group, line 3-5)

This result is of great significance as it directly answers a major part of the research question. The researcher furthermore considers this a significant result as according to the literature (Gordon & Sridhar, 2005; Jones et al., 2002; Nicholls et al., 2008; Thelwell & Weston, 2005) the concept of Mental Toughness has passed through various phases of ambiguity in the past and there were numerous research endeavours solely aimed at improving the Mental Toughness understanding (Bull, Shambrook, James & Brooks, 2005; Jones et al., 2002; and Gucciardi et al., 2008). Although Mental Toughness ambiguity has subsided somewhat in today's context the results from this project prove that, if structured correctly and effectively, mental training by means of Mental Toughness training programmes will result in a better understanding of the concept.

Another athlete agreed with the aforementioned statements and further expressed an improved application of the concept when he said the following:

Ya, I think um, I definitely have learnt uh, in turns of applying it to my game as well.

(Post Programme Athlete Evaluation Focus Group, line 8-10)

To show the extent to which the athletes knowledge regarding the concept of Mental Toughness has improved the researcher has included some of the definitions that they offered me after the programme was completed. When asked what their definition of Mental Toughness would be they include the following definitions:

It would be that I can exclude the unnecessary thoughts and just focus on what's needed to be focused on, and how to visualise on the positive stuff.

(Athlete 3)

The ability to use your mind to overcome challenges and how your mind reacts to certain challenges.

(Athlete 7)

To be able to be mentally strong. Your mind should be an asset. It should be something that helps you.

(Athlete 2)

It would be when everything is failing you use your mind to perform.

(Athlete 9)

Being able to concentrate under different circumstances.

(Athlete 6)

The improvement of an athlete by putting your mind to it and practising it often.

(Athlete 8)

These definitions show various links with Mental Toughness literature. The athletes express a variety of views regarding Mental Toughness and due to the fact that they had little information, if any at all, on the concept before the implementation of the programme it is encouraging to see that their knowledge has improved. Their definitions touch on aspects such as being able to focus on what needs to be focused on and essentially “controlling the controllables” and knowing where to concentrate efforts on. Another athlete mentions using the mind to overcome challenges which shows that his understanding of how powerful and influential the mind really is had improved. Other athletes talk about using the mind to overcome adversity and failure and further express the importance of practicing the art of training mentally. In addition to this one particular athlete speaks about using the mind to improve performance when everything is

failing. This quote shows how the athletes' mindset has gravitated towards understanding the influence of Mental Toughness and mental training. In the literature review of this report mention was made to instances where athletes revert to additional physical training when performances begin to deteriorate. In time of adversity or difficulty athletes will often forget about the mental aspect of training and it was therefore encouraging to see this particular athlete understand that in order to break through performance hindrances, Mental Toughness is beneficial.

Although these views may seem rather superficial when compared to the density of Mental Toughness literature it must be remembered that prior to the programme these athletes' knowledge was very limited with regard to the Mental Toughness construct and defining it was far beyond their reach.

b) A better understanding of the importance of incorporating mental training into training routines

Exposure to the Mental Toughness programme assisted the athletes in achieving a more comprehensive idea of what Mental Toughness entailed as seen earlier. This improvement in knowledge had a ripple effect and lead to the athletes understanding the importance of mental training and the influence it has on their performances. These realisations furthermore lead to the athletes understanding that they need to begin incorporating a heavier focus on mental training in their performance routines. The realisation by these athletes of the need to incorporate mental training into their performance routines is testimony to what the literature (Bull et al., 2005; Connaughton, Wadey, Hanton & Jones, 2008; Crust, 2008; Crust & Azadi, 2009; Fourie and Potgieter, 2001; Gould, Dieffenbach & Moffett, 2002; Gucciardi et al., 2008; Kuan & Roy, 2007; Loehr, 1982; Middleton, Marsh, Martin, Richards & Perry, 2004a and Nicholls et al., 2008) has been saying; that coaches, as well as the athletes themselves are slowly starting to realise that in order for them to get ahead of the competition an added resource is needed and that is to train mentally. Bhambri et al., 2005 stated that if athletes and coaches can combine the two elements of mental training and technical training then they will establish a consistent peak performance every time they come out to compete. Therefore developing and furthermore maintaining Mental Toughness is now imperative and the difference between success and failure may be determined by this sole factor alone (Gucciardi et al., 2008).

A major discussion point when it comes to mental training of any sort is the degree to which athletes should be incorporating mental training into their routines and the level of importance the athletes should be placing on this particular aspect of preparation. The importance that the

literature (Bull et al., 2005; Connaughton et al., 2007; Crust, 2008; Crust & Azadi, 2009; Fourie and Potgieter, 2001; Gould, Dieffenbach & Moffett, 2002; Gucciardi et al., 2008; Kuan & Roy, 2007; Loehr, 1982; Middleton, Marsh, Martin, Richards & Perry, 2004a and Nicholls et al., 2008) is now placing on mental training and how mental training needs to become an intricate, permanent and frequent part of an athlete's training routine is no longer a new notion. Often, athletes will blame poor performances on specific factors such as losing concentration, tightening up under pressure, losing confidence and self-belief, negative self talk, and having a lack of direction. When athletes encounter situations such as this there is often the misled belief that correcting this poor performance will come from more practice time. Certain physical characteristics, technical skills, technical abilities, coaching and competition all contribute toward reaching successful levels of performance and help improve performance, however there is one more critical element that must be in place in order to assist athletes reach their full potential and that is Mental Toughness training (Etnier, 2009). More specifically, becoming proficient in mental skills can result in the difference between athletes who temporarily reach success and those who remain successful (Kreiner-Phillips and Orlick, 1993) as well as differentiating between those who can successfully adapt through changing times and those who cannot (Sinclair & Orlick, 1993). In the interview conducted with the coach he expressed his views regarding the importance of Mental Toughness training.

Um if anything, um just looking at what you have done, just that should actually do more, so um, no I'm a big believer in the mental side especially, maybe more in cricket than any other sport there ever is and I think cricket has more need for it, um, so ya I think it just highlights why we need to do a little more of it.

The coach further elaborated on the importance that needs to be placed on mental training and how important it is, especially within young athletes and the response was the following:

Well absolutely crucial I think ya as you said we have probably jumped the gun with the first question there um, absolutely vital! Um, again if using Kingswood as an example you need to have that kind of added advantage but with outside Kingswood perspective, the big philosophy, I don't know if this will come up in another question, the big philosophy of that whole BMT thing um, that players are born with it, it's a load of rubbish um, you can practice those situations you know we talk about death bowling and bowlers bowling properly in the death, that's a load of rubbish, um batters, Lance Klusener batting in the death, it's because he practises, you know, those skills. It's not a case of ya some players handle it better, I think people handle pressure better than others but talking about BMT in a sports match I think you can definitely practise being under pressure and practise those circumstances around it. (Post Programme Coach Interview, line 38-51)

On a side note it is interesting to witness views such as the above being expressed by the coach. His views are aligned with the views of the researchers of this research endeavour. Our view is that Mental Toughness can be taught, developed and further maintained and it is encouraging to see coaches, who are deeply and intricately involved in the depths of successful school sports, agreeing with this regard.

The athletes themselves were questioned whether, as a result of the programme, they have obtained a greater idea of importance of training mentally in addition to training physically. This question was designed to elicit how close their beliefs were to the importance the literature was placing on mental training. One athlete responded with the following:

Ya I think definitely because it helps you, like, training can only get you so far and through Mental Toughness it gives you like the mental edge over your opponents because not many other people do this kind of stuff so now we have an edge that will push us and take us to the next level.

(Post Programme Athlete Evaluation Focus Group, line 17-20)

Another athlete further elaborated on how his perspective regarding the importance of mental training has changed and improved as a result of the Mental Toughness programme.

I just also learnt how much Mental Toughness as a whole, how beneficial it actually is for me, before I thought it was just one of those things on the side but it's actually much much more important.

(Post Programme Athlete Evaluation Focus Group, line 147-149)

As mentioned earlier the Mental Toughness construct has once before been accused of being vaguely understood and it is interesting to see that within the realms of a successful private school, that has impressive success rates within its sporting departments, the concept is still ambiguous and unclear. The programme assisted the athletes in obtaining a better understanding of how important Mental Toughness training is and faith in this form of training was starting to emerge.

Physical is still more, but mental is growing as it gets like, depending on the sport wise, I think the mental side varies.

(Post Programme Athlete Evaluation Focus Group, line 25-26)

It is encouraging to see the athletes realising and understanding the magnitude behind the necessity of increasing the focus on mental training in their routines. Bhambri et al. (2005, p. 65) sums up the point made earlier regarding the focus being too heavily put on physical training when they state that “competitive sports is 85-90% a mental game, but

unfortunately, many times the physical aspect of the game is magnified at the expense of the other”. When queried about the influence of Mental Toughness on the sporting world one athlete responded with:

Yes it's definitely growing.

(Post Programme Athlete Evaluation Focus Group, line 28)

Furthermore, when the coach was questioned about the influence of psychological interventions such as this Mental Toughness programme and how important he considered Mental Toughness to be and he responded with the following two views:

Absolutely, um, I think it's as you've pointed out it's probably one of the aspects we don't take seriously enough at school sports and is something I fully believe in a lot, um, and not in as much depth as you've done it but I think it's crucial that the boys do these kind of courses, if you look at any good school they going to get good coaching and when I think when the guys get to international level at under 19 or at open, at first class cricket level, they all on par, I mean all their abilities are equally good, so what's the difference then between the players. It's the players that can perform on the day, perform under pressure, um, and have the mental aspect besides the physical abilities.

(Post Programme Coach Interview, line 3-13)

In addition to improving their understanding of Mental Toughness, the athletes expressed the view that their understanding of the application of Mental Toughness was improved. The implementation of the programme exposed these athletes to theory and mental training techniques that they had never come across before and for some athletes this was the first time ever that they were able to apply Mental Toughness training to their sport. As the athletes were working through the programme they slowly became aware of the importance and influence of training mentally in addition to physically and this was justified and motivated by past improvements in performance of the athletes as individual and as a team. The athletes expressed during the evaluation that a major result of the programme was that they now occupied a more competitive edge over their competitors putting them in a more superior position instilling in them a greater potential to succeed and break new goals for the future.

c) Competitive Advantage

It is clear from the above extracts that the athletes have become increasingly more aware of the benefits of Mental Toughness training as one particular athlete expressed obtaining both a mental edge and an improved level of performance as a result of exposure to this type of training. He

further stated that as a result of engaging in training that is unique to them, a level of training that very few opposing teams engage in, they build themselves a firmer ground to perform on and preparation wise they are therefore better equipped for victory. This relates to the message brought forward in the literature (Gucciardi et al. 2008) where various researchers state that superior levels of performance and success cannot be guaranteed by raw physical talent alone.

During the post programme evaluation interview with the coach similar views were expressed. He stated the following:

If you look at the amount of time you are training and a school like us we got 200 boys, every advantage that we can get is crucial I think. You know talking about your provinces here, you need to have that slight advantage, especially if the teams maybe a bigger school, I am just using us as a case scenario here, every weekend we will play a school that has got more boys, therefore they should have more talent, so we need to make up that advantage somewhere else. So I think it's been flipping good for the guys to go through this kind of stuff.

(Post Programme Coach Interview, line 19-26)

Following these aforementioned points the athletes began discussing a very interesting point regarding a difference in performance between those athletes who had taken the time to attend the program compared to those who did not. This again presents credibility to the views expressed regarding the competitive advantage that one gains as a result of incorporating mental training into training routines.

You can see the guys who have been going to the mental training from the guys who haven't been going, like there's a big difference in team mates.

(Post Programme Athlete Evaluation Focus Group, line 72-74)

The guys who have been going like, they have just got a bit more on the guys that haven't been coming.

(Post Programme Athlete Evaluation Focus Group, line 78-79)

These abovementioned points justify the belief that those who train mentally are at a greater advantage to those who neglect this form of training. This big difference that the athletes are referring to was the knowledge and theory gained as a result of being exposed to the programme and the effect it had on their ability to overcome adversity and perform at a more elite level. On various occasions outside of the research perimeters and infrastructure the athletes were expressing to me that they could see how the programme was affecting performances in those who were attending the intervention. They furthermore expressed that during practices and even

games they were referring back to what had been taught in the mental session and were encouraging each other to try incorporate the skills and theory taken away in their performance. They said it was unfortunate to see that those athletes who did not attend the programme did not understand what it was that these athletes were referring too.

After hearing the athletes express that they were better equipped for performance after attending the programme compared to those who did not they were further questioned about the specific benefits of attending such a programme. After being asked if mental training was beneficial one athlete responded with the following response, touching on how his team has gained a competitive edge over their competitors.

Ya, especially because not many other schools or teams engage in this sort of activity so it gives us something that no one else has.

(Post Programme Athlete Evaluation Focus Group, line 84-85)

This abovementioned point speaks not only to the competitive advantage unpacked earlier but also speaks to the athlete's faith and belief. The quote shows that the athlete has faith and belief in the programme being effective and successful and this mindset has influential ripple effects. Earlier in this research report and also unpacked in great detail in the Mental Toughness programme was consideration of and the importance of having the right attitude before entering into such interventions. An earlier mention was made to the right attitude as being an intricate aspect of creating the most suitable environment for improving Mental Toughness. Having the right attitude includes aspects such as the willingness to learn new aspects of training and performance and prioritising Mental Toughness training both of which contribute towards an environment conducive to acquiring new skills and techniques used to improve performance. The fact that the athlete can identify that by putting in the time and effort at attending the programme and furthermore implementing what is being taught into training and performance routines will give him a competitive advantage as his attitude will be correctly aligned with that that is considered to be important for taking the most out of what the programme has to offer.

d) Changes in the team as well as individual performances as a direct result of exposure to the programme

A very important outcome resulting from exposure to the programme was the positive change in and positive influence on the individual as well as the team's performance according to the athletes own self-reflection. Certain themes became vividly clear after analysing the transcribed data and these themes will be considered in closer detail now. The athletes expressed that the

programme helped them with various aspects of performance such the themes presented below in Figure 31.

Blocking out external and negative comments and thoughts

Improved and increased concentration and focus

Thinking (Thinking in the Process), Decision making and Discipline

Bouncing Back from failing and adversity

Increased team spirit, team cohesion and chemistry

Increased self belief and confidence

Increased faith in team abilities

Positive Self Talk

Awareness

Practical Application

Figure 31: Performance Themes

Before continuing further it is important to re-consider the main research question of this project, which sets out to explore how the development and implementation of a tailor-made Mental Toughness programme will assist these particular athletes in gaining a better understanding of Mental Toughness as well as assist them in developing specific Mental Toughness characteristics and skills. This next section explores some of the aspects that the athletes have improved in as well as looking into some of the mental skills that they have acquired as a result of exposure to the programme. Various Mental Toughness authors and theorists allude to specific aspects of performance when discussing what they believe Mental Toughness entails. Linking these views to the views expressed by the athletes will help us understand how closely these athletes have come to improving their Mental Toughness.

1. Blocking out External and Negative Comments and Thoughts

Authors such as Thelwell et al. (2005) and Gucciardi et al. (2008) both refer to elements of blocking out external comments and negative thoughts when they discuss their respective arguments on Mental Toughness. Thelwell et al. (2005) refer to mentally tough athletes being able to ignore distractions when performing while Gucciardi et al. (2008) refer to athletes being able to override negative thoughts. This aspect of overriding negative thoughts links up with the art of incorporating positive self-talk into one's routines which will be discussed further on in

this discussion. When the athletes were probed about the benefits they felt they obtained through exposure to the Mental Toughness programme the aspect of blocking out external and negative comments and thoughts became apparent as can be seen by the following two quotes.

I've learnt to block out a lot of comments being made.

(Post Programme Athlete Evaluation Focus Group, line 32)

On the field, by other team members, opposite opposition and um also like just blocking out things that have been said and blocking out thoughts, unnecessary thoughts, that are on my mind.

(Post Programme Athlete Evaluation Focus Group, line 34 - 36)

2. Improved and increased Concentration and Focus

Mental Toughness literature is strewn with references to concentration and focus as Mental Toughness attributes and it was therefore encouraging to see that post exposure to this Mental Toughness programme the athletes expressed an improvement in this regard. Clough et al. (2002), Jones et al. (2002), Gordon and Sridhar (2005) and Gucciardi et al. (2008) all refer to 'focus' as being a characteristic visibly evident in mentally tough athletes. Thelwell et al. (2005) refer to athletes 'remaining focused', Loehr (1982) refers to athletes being 'mentally alert' and Gucciardi et al. (2008) further refer to concentration as being a crucial Mental Toughness attribute. The theme of concentration and focus became evident as the athletes continued to unpack the benefits gained from the Mental Toughness programme.

Concentrating on the important stuff.

(Post Programme Athlete Evaluation Focus Group, line 36)

I can feel there is a difference in my game, I mean I know when to concentrate now, I know almost how to concentrate and how to see where I'm going to end up.

(Post Programme Athlete Evaluation Focus Group, line 183-184)

Well, before the programme I just knew about like basic concentration and now it's broadened my perspective of concentration levels and now I am starting to visualise things before I play, and how I want to play, it's a lot deeper than what it used to be.

(Post Programme Athlete Evaluation Focus Group, line 91-93)

Ya, like I'm more aware of like my surroundings and also quite focused on the job that I am meant to be doing, like I still try and get involved in what's happening on the outside, like with your team mates and stuff, and also while focusing in on your part of the deal.

(Post Programme Athlete Evaluation Focus Group, line 40-43)

3. Thinking (Thinking in the Process), Decision Making and Discipline

Thinking is not a common characteristic when it comes to discussions regarding Mental Toughness however, the core and central theme of Bull's (2006) model of Mental Toughness, which influenced the interview schedule design for the focus groups, comprises the element of clear thinking. It was therefore encouraging to see the athletes presenting facets of a clear thinking culture as a result of the Mental Toughness programme. This theme became apparent through means of the following two quotations provided by the athletes during the post programme focus group evaluation.

I think I think more on the field, not necessarily batting but like fielding I like just think more for the whole team sort of thing.

(Post Programme Athlete Evaluation Focus Group, line 37-38).

Probably become more disciplined on the cricket field, like being able to leave balls alone instead of just going at them or something.

(Post Programme Athlete Evaluation Focus Group, line 185-186)

4. Bouncing back from Failing and Adversity

Earlier on in the literature review reference was made to adversity as being an unavoidable factor present in sporting achievement and Middleton et al. (2004b) strongly believe that success requires adversity as much as it requires triumph over adversity. In order to be successful, in all facets of life, there needs to be some adverse obstacle or challenge to overcome. An intricate part of being mentally tough is the way in which you deal with the adversity that impact ones performance you are faced with. There are two other concepts that promote positive outcomes in the face of stressful and adverse situation and these include resilience and coping. Researchers, theorists, and authors, on many occasions during their attempts to unpack the construct of Mental Toughness have eluded to these concepts at some point. Fourie and Potgieter (2001), Jones et al. (2002) and Bull et al. (2005) refer to 'coping', 'coping better' and 'coping with pressure' respectively when discussing their relevant aspects of the Mental Toughness construct. In addition to this Clough et al. (2002), Gordon and Sridhar (2005) and Gucciardi et al. (2008) all make references to 'resilience' when discussing their arguments of Mental Toughness. Although the athletes never referred specifically to resilience or coping during the post programme focus group evaluation the theme still became apparent as can be seen by the following quotes.

Um, I feel like it's definitely helped me getting out of slumps, like I've recently been through quite a form dip, I scored 3 ducks in a row and like I've come back and scored 3 fifties in a row straight after that.

(Post Programme Athlete Evaluation Focus Group, line 45-47)

3 fifties in a row, just from working the problem out in my head instead of finding a technical error or something, just telling myself.

(Post Programme Athlete Evaluation Focus Group, line 49-50)

This athlete in particular was facing adversity in the form of a bad performance record and as a result of being exposed to the programme he stated that he was able to utilise the lessons he was being taught during the programme and apply them to his game to lift his performance. As a result he experienced a spell of improved performances and stated further that the use of positive self talk and working through the problem on a mental side rather than a physical side is what helped him with his recent success. This very quote can further be linked to a point raised earlier regarding athletes training mentally as opposed to physically. It was noted earlier that too often, when experiencing problems with performance, athletes resort to increasing their physical training where in fact a change in training on the mental side is what is most often needed. This quote proves that channelling extra effort and energy into mental training can help overcome adverse boundaries or obstacles.

5. Increased Team Spirit, Team Cohesion and Chemistry

In addition to being questioned about their individual performance improvement as a result of the Mental Toughness programme the athletes were asked about the performance improvement as a team. Action research is designed to be facilitated with a team context but by including questions regarding individual aspects too we begin putting a foot in each camp, that of the team context as well as the individual aspect, which if successful will open up greater opportunities for action research as a research framework. The athletes in general believed that the programme had positive effects on team spirit, team chemistry and a better team cohesion.

This point begins to illustrate the holistic nature of becoming mentally tough. Not only does training mentally by means of exposure to Mental Toughness programmes teach athletes about mental skills and help them improve their own specific mental skills but it helps them create a winning attitude and a winning environment. Dr Yukelson in his paper title *What is Mental Toughness and how to Develop It* stated that in order to develop effective Mental Toughness athletes need to start with the right attitude and right state of mind. This can be linked to Bull's (2006) idea of a winning environment which is an environment that athletes need to make a

conscious effort at creating. By improving team spirit, team cohesion and team chemistry, as a result of the programme, a winning environment and winning culture and attitude is inevitably and subconsciously being obtained. This environment can further incorporate a mindset in which one is always striving to reach optimal performance potential, regardless of the outcome of the competition. It is a focus on always giving one hundred percent and never giving up.

This helps the athletes lay strong foundations and groundwork for achieving future success and by amalgamating the skills learnt through exposure to the programme with this winning environment and attitude then obtaining higher levels of Mental Toughness becomes more realistic and more inevitable. When discussing what Mental Toughness entails Fourie and Potgieter (2001) present 'team unity' as one of their Mental Toughness characteristics while Thelwell et al. (2005) refer to 'striving for involvement' which can be closely linked to cohesion and unity. The views expressed regarding increases in team spirit, cohesion and chemistry can be seen by the quotation below:

I think all of us doing this programme together actually helps sort of like spirit and like team chemistry sort of thing, so, I think if all of us did it one by one it wouldn't have been as beneficial as all of us doing it together.

(Post Programme Athlete Evaluation Focus Group, line 58-60)

The broadly used quote 'the whole is the sum of its parts' as well as the notion 'the whole in entirety is only as good as the quality of the individual aspects' can be reflected on here. One athlete in particular alluded to this theory by stating that as they engaged in mental training to improve on their own performances the sum of improved performances improved the team's ability as a whole to reach greater levels of success.

Ya I think also as he said, as our individual performances get better through our own Mental Toughness the whole team comes together and the performances also then grows and gets better and better.

(Post Programme Athlete Evaluation Focus Group, line 62-64)

These two quotes begin to show the true beauty of the action research process as the athletes expressed that inclusion of the entire team, or just about, was more beneficial than working through the programme as individuals. Action research is a continuous process of planning, doing, evaluating and acting and the quality is enhanced when a team context is involved. The researcher says this for two specific reasons. When the team is involved the individual athletes feel a sense of responsibility to learn and adopt the skills and theory that is being given to them as they understand that they form an intricate aspect of the entire team's future performance

potential and they do not want to fear letting the team down. In addition to this, when the athletes identify that the programme will benefit their performance they obtain a sense of motivation to get involved and this leads to a level of personal and emotional investment in the programme which further encourages them to put in the effort and the time for the intervention. This personal investment further incorporated by involving the athletes in decision making regarding aspects of the programme. This was seen within this research endeavour where the athletes assisted in identifying the mental skills that were to be included in the performance profiling as well as the Mental Toughness programme itself. This inclusion allows the athletes to feel that they are a part of the engineering aspect of the programme and therefore adopt a sense of ownership over what they are being exposed to. Allowing the athletes to make decisions regarding the design of the programme will add value to the action research process as once the 'consultant' separates themselves from the intervention the athletes can continue with the process by redefining goals and objectives and progress with achieving what they set out to achieve.

6. Increased self-belief and confidence

It is very rare to browse Mental Toughness literature and not come across the terms self confidence and self-belief. Various authors have referred to these two construct on many occasions whilst dealing with their respective Mental Toughness endeavours. Loehr (1982) refers specifically to 'self confidence' while Fourie and Potgieter (2001), Jones et al. (2002) and Clough et al. (2002) all make reference to 'confidence' and Thelwell et al. (2005), Gordon and Sridhar (2005) and Gucciardi et al. (2008) all make references to 'self-belief'. Self-belief and self confidence are major influencing factors towards athletes becoming Mentally tough. Having belief in oneself can heavily influence performances in ways that athletes have not yet experienced. With high levels of self-belief and self confidence athletes can perform on a level that helps them achieve successes that were otherwise not possible. Self-belief can go further than we initially anticipate. Not only can performers reach levels unreached but a deep inner belief in ability can help athletes perform and operate in a way that energises consistent high performances.

High self-belief has many positive ripple effects such as setting high and stretching goals, learning from criticism, establishing a balance between strengths and weakness, willingness to take risks, bouncing back from failure, creating a positive outlook and future and finally providing a solid and concrete foundation for dealing with pressure and adversity, all of which contribute towards a mentally tough performer.

One athlete in particular felt very strongly about the self confidence that he had achieved as a result of exposure to the Mental Toughness programme as can be seen by the quote below:

I have got a lot more confidence, there is no fear of failure. I'm literally not scared of going out.

(Post Programme Athlete Evaluation Focus Group, line 199-200)

I think the only way we can really judge that at this stage is probably on their own evaluation, and if I can refer to that I'm not sure, but what they seem to believe is that they have improved in every category that you've given them, so I mean who are we to even debate that, if they reckon they have improved in every section then I am quite happy to accept that ya.

(Post Programme Coach Interview, line 131-136)

The coach's comment, although quite vague, speaks to an improvement in self-belief within his athletes. He was stating that if the athletes themselves believe their performances have increased then their self value and self worth have increased too which can be directly linked to an increase in self-belief.

7. Increased faith in team abilities and managing one's own space – Responsibility

One particular athlete conveyed how faith in team member's abilities has improved as a result of the programme. This belief stemmed from the fact that as the athletes are working through the various mental skills they are essentially learning to manage their own space and position within the bigger picture of the entire team performance efforts. Although the literature does not speak too heavily of responsibility and managing one's own space these two aspects are very important within the overall picture of Mental Toughness. Athletes need to manage their own space in a sense of ensuring that not only are they acquiring knowledge regarding the makeup of Mental Toughness but also that they are applying the skills learnt and acquired to their practices and competitive performances. It is up to the individual athlete to put in the effort required within mental training and to adopt the correct positive attitude toward this form of training as their future performances will then form one gear within the team's overall performance machine.

If athletes can witness one another taking control of their own responsibility this leads to an overall increased faith in the team's ability. All the athletes taking part in the mental training will be able to witness improvements in performances and not only will this encourage all the athletes to perform at higher levels but will also increase their belief in their team's potential to succeed. There is also an improved and increased faith in the ability of the athletes to perform their specific roles within the team. Therefore knowing that there is no need to worry about other

players doing their particular duties within the team more efficient decision making can be made. In other words the implementation of such a programme teaches the athletes to manage their own time and be responsible with regard to their own individual performance which in turn adds value to the entire teams performance and results in an increased faith and belief in the teams potential. During the Mental Toughness programme implemented with the athletes the researcher introduced to them the concept of how many of the mental skills involved in the overall Mental Toughness picture can be linked together and how Mental Toughness exists as a web of interrelating mental skills. We can see a small example here of the point the researcher was trying to make and in the conclusion of this analysis section the researcher will unpack this concept a little further. As mentioned earlier the Mental Toughness programme led to the athletes learning to manage their own space and become more responsible with regard to their own performances. This lead to an increase in the individual performances, which ultimately resulted in an increase of the value and worth of the teams' overall performance potential. This increased value improves faith in the team's ability which ultimately results in an increased self-belief which has positive ripple effects of its own. The abovementioned aspects were captured by means of the quote presented below.

Ya I feel like now everyone now can manage their own space which makes it easier for the big decision makers in the side to make crucial decision at the right time so that they don't have to be thinking for everyone else. So like the captain will know that if he puts you in a position and you are always concentrating and stuff and you are aware of what's happening and what the plan is all the time, and I think doing it as a group we all know, uh so I'll know, where all my other team mates are on a mental level, stuff like that, so I think it's definitely helped.

(Post Programme Athlete Evaluation Focus Group, line 65-71)

8. Positive Self Talk

In analysing the benefits the athletes achieved as a result of the programme the mental skill of positive self talk was vividly present. This particular element is very common within the Mental Toughness literature. Loehr (1982) speaks about being 'positive' when discussing mentally tough athletes, Thelwell et al. (2005) speaks about having a 'positive reaction to situations' and adopting a 'positive presence', while Gordon and Sridhar (2005) make reference to 'positive perfectionism' and Gucciardi et al. (2008) speak of adopting a sense of 'positivity' and 'overriding negative thoughts'. The theme of positive self talk can be seen within the following two quotes taken from the post programme evaluation.

I think I definitely have learnt a lot about positive self talk, like uh especially in sort of like pressure crunch situations like, today I came in in a 20/20 over game and I

had faced 12 balls before I had gotten off the mark, and that's not sort of normal in a 20/20 over game, you try get off the mark as soon as possible, and I just had to keep myself positive and I really had to back my ability to score runs quickly because that's what was in the back of my mind the whole time thinking to myself don't worry don't worry you've got the ability to score quickly, so with that in the back of my head I definitely improved my performance and if I had that all the time then I could definitely bat for longer periods of time without stressing about too many things.

(Post Programme Athlete Evaluation Focus Group, line 137-145)

Ya, definitely think being more positive with my ability and there uh, it's definitely helped my performance because in terms of that sort of positive, being more in my ability because a lot of the time I've been, especially when I went through my slump I was very negative with myself. Like I felt that um you know like I wasn't good enough or there was something wrong with my technique where there was actually just something wrong with my thinking and I think what the Mental Toughness has helped me a lot with is the switching on and switching off at the right time because it is hard to concentrate for a long time so you need to know when to switch off sometimes, especially with my batting, I now know when to switch on and when to switch off. That's definitely benefited my performance.

(Post Programme Athlete Evaluation Focus Group, line 190-198)

9. Awareness

In addition to questioning the athletes the researcher questioned the coach about whether he believed the programme had a positive influence on his players and more importantly whether exposure to the programme assisted the players in becoming more aware of certain aspects of performance that they may have otherwise not become aware of the response was encouraging.

Definitely, I think even if they haven't taken all the information on board they would have been introduced to a topic, um its stuff again if probably your elite, when I say elite your better cricketers, would have spent a lot of time talking about it already, um, but to do the nuts and bolts of it was great, to do different exercises and explain to the guys why and how has been I think crucial, um, but then also for the other players who are outside that who haven't really giving it enough thought, I think it would have been even more of a benefit to those oaks than the good players who probably do read your "in the zone" or whatever it might be so um, I think it's been good for all those oaks.

(Post Programme Coach Interview, line 113-122)

This above quote shows that although the athletes may have been exposed to the idea of Mental Toughness before, their awareness was enhanced as the different topics of the programme were unpacked and the 'nuts and bolts' were exposed. Therefore instead of just hearing about a certain mental skills the athletes were educated about each one them and exposed to its influence, effectiveness and methods for enhancing them. Considering that

the coach was relatively scarce during the programme implementation it was encouraging to see that he was noticing a difference in his athletes as this speaks positively to the success of the programme.

The athletes themselves showed elements of an improved awareness too, which can be seen within the following two quotes:

I can feel there is a difference in my game, I mean I know when to concentrate now, I know almost how to concentrate and how to see where I'm going to end up.

(Post Programme Athlete Evaluation Focus Group, line 183-184)

Ya, like I'm more aware of like my surroundings and also quite focused on the job that I am meant to be doing, like I still try and get involved in what's happening on the outside, like with your team mates and stuff, and also while focusing in on your part of the deal.

(Post Programme Athlete Evaluation Focus Group, line 40-43)

10. Practical Application

After probing a little deeper into the enhanced awareness within the athletes we got onto the topic of practical application and one particular athlete elaborated on the aforementioned aspects and said that:

It's the first sort of time that I have applied Mental Toughness to my game and it has definitely helped me performance wise.

(Post Programme Athlete Evaluation Focus Group, line 12-13)

As we were unpacking the practical application of the contents of the Mental Toughness programme the athletes began telling me about a recent win over a team that they usually struggle with and have not beaten in many years. The researcher therefore took this opportunity to try and probe deeper into what they believed were the defining factors behind their recent success in this game and what the win actually meant for them as a team. Talking first about what aspects helped them win this game one athlete responded with the following:

Jxxxn's batting performance.

(Post Programme Athlete Evaluation Focus Group, line 221)

The researcher tried to draw on aspects more closely related to elements found within the programme and therefore questioned the team about their concentration levels in such a high pressure game and they responded positively with the following:

I think very high...

(Post Programme Athlete Evaluation Focus Group, line 227)

From the bowlers...

(Post Programme Athlete Evaluation Focus Group, line 228)

And from the batters because there was a situation in the game when we needed all of a sudden, we're going well and then we needed nine runs an over and that's quite a lot of pressure, um and I think the batters came through and did the job because uh ya I think the batters got quite a big over, and then that helped it all switch around and then immediately we are on top again, so I think in terms of a mental side of things we were definitely able to put ourselves out of a lot of pressure situations today.

(Post Programme Athlete Evaluation Focus Group, line 229-234)

The latter quote was very interesting to analyse as the researcher felt it indirectly spoke about various Mental Toughness aspects that the researcher believes the athletes would not have known about without having been exposed to the programme. The athlete mentions that there was an instance where they needed 9 runs per over which suggests a somewhat adverse or challenging situation. The athletes were able to identify this as a challenging situation and instead of letting this overwhelm them and therefore negatively affect performance they were able to refine their concentration and focus and put their effort into overcoming this obstacle.

Once they achieved this goal of getting back on track with regard to the run rate they used this success to improve self-belief and used this accomplishment in a positive manner to build a positive momentum. This positive mindset, coupled with greater self-belief and effective decision making helped them manage a stressful situation and contributed toward a win at the end of the day. This quote therefore shows positive results with regard to Mental Toughness development and speaks highly of the programme success and assisting with this regard.

Touching on what this win meant to them they responded with the following statements:

I think it's a, today's win was a very beneficial thing for next year because it was both our 'stayers' sides and now we immediately have a mental edge over them just because of the fact that we have beaten them once they know that, and the fact that there is such a difference in numbers and stuff like that so they are always under pressure to beat us, we are always the under dogs so I think that its very beneficial

that we won today, especially for next because ya they are under even more pressure now to come out and beat us .

(Post Programme Athlete Evaluation Focus Group, line 213-218)

Well this year we haven't beaten them once so it puts I think confidence in the people who played and the rest of the team knowing that those oaks can play.

(Post Programme Athlete Evaluation Focus Group, line 211-212)

On a negative note the athletes did refer to a lack in discipline on the day

But we nearly lost because of our fielding.

(Post Programme Athlete Evaluation Focus Group, line 224)

We were just very ill-disciplined in the field but I think we had just done enough to win.

(Post Programme Athlete Evaluation Focus Group, line 225)

4.7 SURVEY

In addition to the above focus group the athletes were asked seven very basic questions regarding the Mental Toughness programme and their experience of it and were given the option to answer 'yes' or 'no' for each separate question. The questions were as follows:

1. I have learnt a lot about the mental skills involved in sport?
2. I learnt a lot about the methods of training mentally?
3. I learnt about the importance of training mentally in addition to training physically?
4. I will start using the skills I have learnt and been taught in my future training preparation?
5. I believe Mental Toughness training helps improve performance as an athlete?
6. I would strongly encourage Mental Toughness training to other athletes?
7. I believe I have the capacity to be a more successful athlete after being exposed to this Mental Toughness Programme?

For all the questions presented 100% of the athletes attending the evaluation workshop answered 'yes'.

4.8 POST PROGRAMME PPI-A RESULTS

As was seen earlier with the pre-programme PPI-A procedure a post-programme PPI-A was also conducted. The aim behind this process was to document any change in the PPI-A factors as a result of exposure to and participation in the Mental Toughness programme. After investigating the results drawn it became evident that in some cases there were significant improvements and in others there were declines. Before divulging deeper into the specific findings it must be noted that results for athletes 1, 5 and 9 could not be compared as athletes 1 and 5 did not participate in the post- programme PPI-A while athlete 9 did not participate in the pre-programme PPI-A. The results for the post-programme PPI-A are depicted below in figure 32

Table 5:

Post-programme PPI-A scores and percentages

	Determination		Self-Belief		Positive Cognition		Visualisation	
	(15)	%	(20)	%	(20)	%	(15)	%
Athlete 1	Did not participate in the post-programme PPI-A							
Athlete 2	12	80	11	55	16	80	12	80
Athlete 3	13	87	17	85	18	90	10	67
Athlete 4	11	73	15	75	15	75	10	67
Athlete 5	Did not participate in the post-programme PPI-A							
Athlete 6	11	73	14	70	16	80	12	80
Athlete 7	15	100	19	95	18	90	13	87
Athlete 8	11	73	16	80	13	65	12	80
Athlete 9	11	73	16	80	13	65	12	80

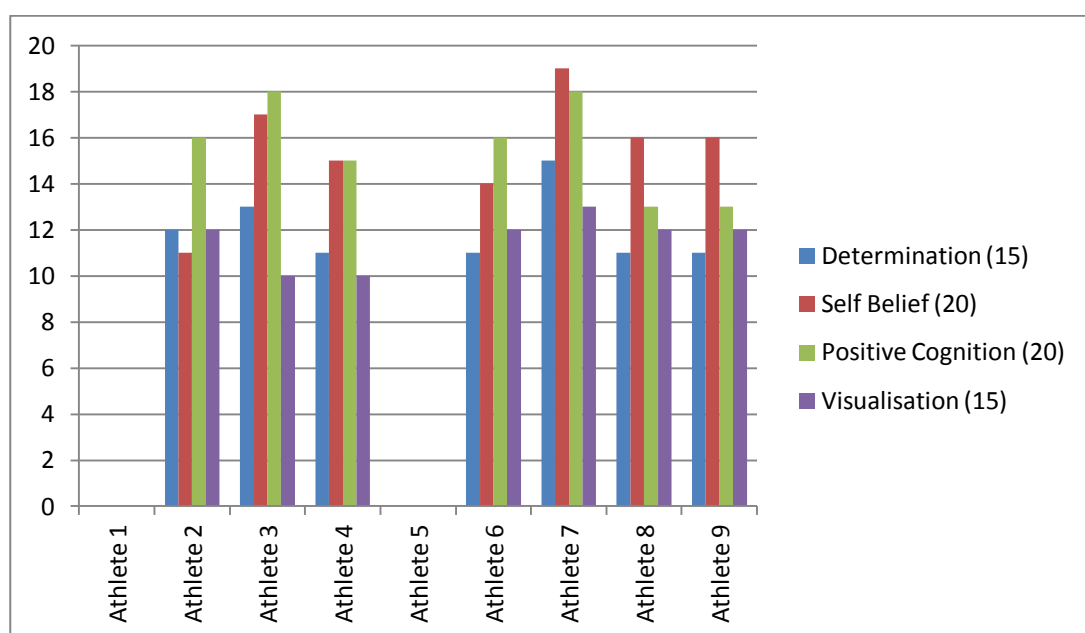


Figure 32: Post-programme PPI-A results

4.8.1 Cross-Comparison Results

After collecting scores from both the pre-programme and post-programme PPI-A a cross-comparison could be generated to show where improvements were found and furthermore the areas which saw no improvement. This comparison is significant as it provides contribution, in addition to the other post programme analyses, toward the verdict as to whether or not the Mental Toughness programme had positive effects on the athletes who participated. Table 6 below presents the pre-programme and post-programme PPI-A compared results and furthermore identifies the areas which saw improvement, no improvement and no change.

Table 6:

Cross comparison pre-programme and post-programme PPI-A results

	Determination			Self-Belief			Positive Cognition			Visualisation		
	PPI-A (1)	PPI-A (2)	Change	PPI-A (1)	PPI-A (2)	Change	PPI-A (1)	PPI-A (2)	Change	PPI-A (1)	PPI-A (2)	Change
Athlete 1	Comparison cannot be made											
Athlete 2	11	12	Increase	14	11	Decrease	14	16	Increase	10	12	Increase
Athlete 3	12	13	Increase	13	17	Increase	14	18	Increase	9	10	Increase
Athlete 4	8	11	Increase	15	15	No Change	14	15	Increase	11	10	Decrease
Athlete 5	Comparison cannot be made											
Athlete 6	13	11	Decrease	17	14	Decrease	17	16	Decrease	13	12	Decrease
Athlete 7	12	15	Increase	18	19	Increase	17	18	Increase	10	13	Increase
Athlete 8	13	11	Decrease	16	16	No Change	14	13	Decrease	7	12	Increase
Athlete 9	Comparison cannot be made											

i) Determination

Out of the six athletes that were eligible for comparison, four saw improvements in their PPI-A determination scores. Athlete 2 increased from 11 to 12, athlete 3 increased from 12 to 13, athlete 4 increased from 8 to 11 and athlete 7 increased from 12 to 15. The remaining athletes both declined in their PPI-A determination score as athlete 6 declined from 13 to 11 and athlete 8 also declined from 13 to 11. Overall however there was a majority improvement in determination.

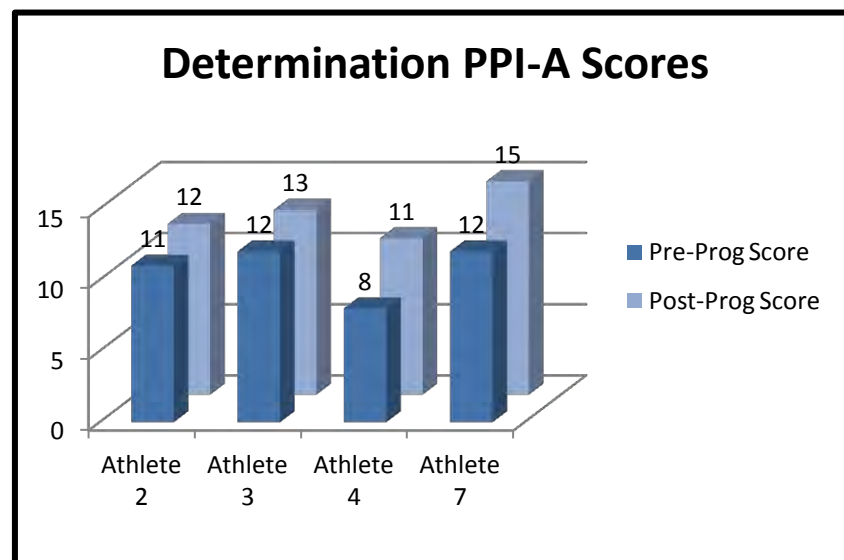


Figure 33: Pre-programme / Post-Programme Determination PPI-A Scores

ii) Self-belief

This PPI-A factor saw the worst improvements of the four factors tested for. With regard to improvements athlete 3 increased from a score of 13 to 17 and athlete 7 increased from a score of 18 to 19. Athlete 2 decreased from 14 to 11 and athlete 6 decreased from 17 to 14. Athlete 4 and athlete 8 saw no change with scores remaining on 15 and 16 respectively.

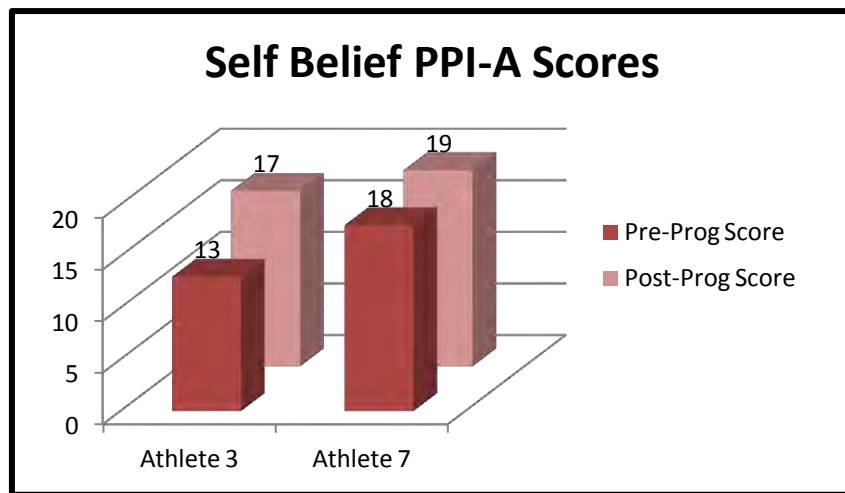


Figure 34: Pre-programme / Post Programme Self-belief PPI-A Scores

iii) Positive Cognition

Positive cognition saw an improvement in 4 out of the 6 athletes who were eligible for comparison. Athlete 2 improved his score of 14 to 16, athlete 3 improved his score of 14 to 18, athlete 4 improved his score of 14 to 15 and athlete 7 improved his score of 17 to 18. Athlete 6 and 8 saw a decline in their positive cognition scores with falling from 17 to 16 and 14 to 13 respectively.

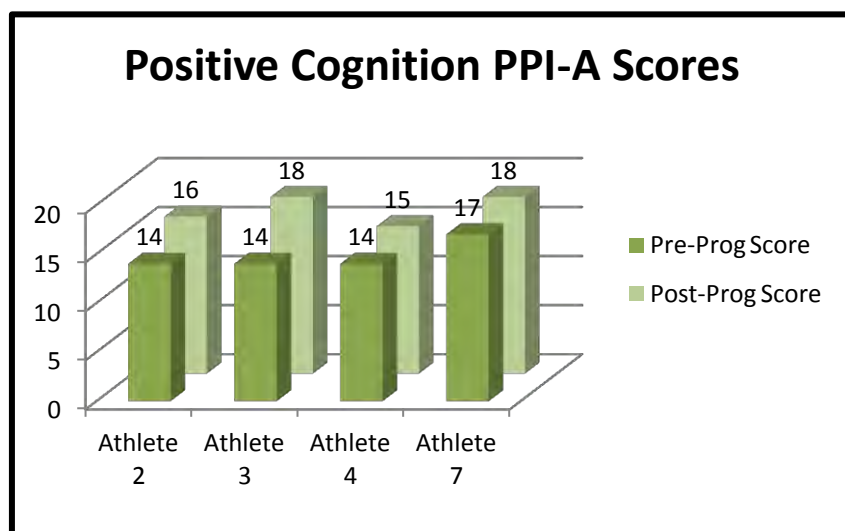


Figure 35: Pre-programme / Post Programme Positive Cognition PPI-A Scores

iv) Visualisation

As with determination and positive cognition, visualisation also saw 4 out of the 6 comparable athletes improve their scores. Athlete 2 increased from 10 to 12. Athlete 3 increased from 9 to 10, athlete 7 increased from 10 to 13 and athlete 8 increased from 7 to 12. Unfortunately athlete 4 saw a decrease in his visualisation score from 11 to 10 and athlete 6 saw a decline in score from 13 to 12.

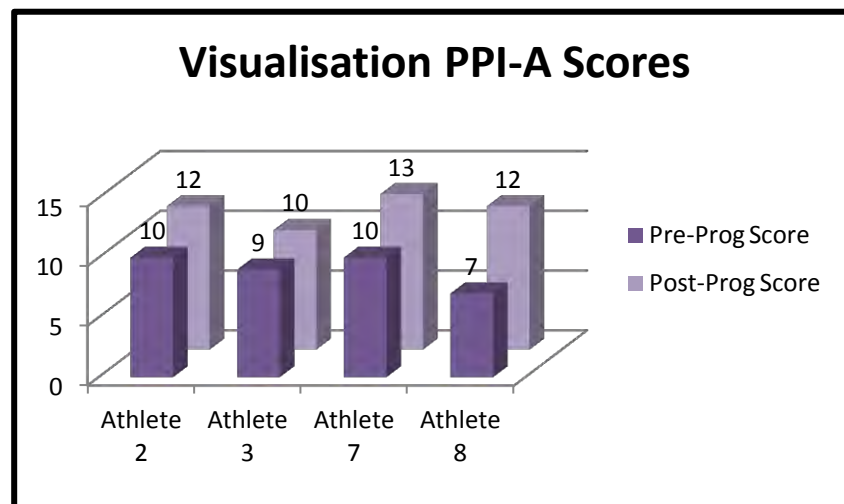


Figure 36: Pre-programme / Post Programme Visualisation PPI-A Scores

After looking at the cross-comparison results there is evidence that there was some improvement as a result of the Mental Toughness programme. It is not ideal that results could not be compared for athletes 1, 5 and 9 but their absence from the respective PPI-A tests was unfortunately unavoidable. Factors that may have affected this absence will be discussed in the limitations and recommendations section of this report. With regard to the improvements it was encouraging to identify that 66% of the athletes that participated improved on the factors determination, positive cognition and visualisation and that only 33% saw no improvement.

4.8.2 Strengths

In addition to being asked about the benefits of the programme the athletes were further asked what they liked about the programme and what they believed the strengths of the programme were. This is an influential section as future programme facilitators can draw on

the positive aspects on this intervention implementation and mimic the structure to improve potential success. Three major themes became evident after probing about the strengths of the programme.

- Team effort
- Athletes relating to practical application aspects
- Well researched and structured

a) **Team effort**

It became apparent that the athletes responded well to a team context and the researcher believes that if the athletes are involved in a team sport, as opposed to an individual sport, the intervention should be designed to be implemented with the athletes as a unit. The team context makes the intervention more enjoyable for each individual athlete and in addition to this the researcher believes that the participation quality and the benefit from the programme is enhanced when implemented with a team. Considering the participants were school students the researcher believes that there would have been a greater resistance and hesitation to respond with feedback and contribution during the programme and its development if it was solely designed for one-on-one sessions. As will be outlined later in the recommendations section, the researcher believes one on one sessions would be beneficial, perhaps after the programme implementation to allow the athletes to understand how they can apply what has been taught to their specific role within the team, but when it comes to expressing views, beliefs and opinions about certain aspects the students respond better in a group context. With this being said the athletes also draw on one another for ideas and often comments made by one athlete would spark a further comment by another athlete.

I enjoyed the programme because the whole team was involved, so it wasn't an individual thing, that's what I enjoyed about it because like I said earlier we now all know where we stand and stuff like that.

(Post Programme Athlete Evaluation Focus Group, line 88-90)

Although the above quote is positive it must not be forgotten that some athletes were missing and although majority attended the programme the entire team was not present. With this said however enjoyment was still obtained from the group context and this enjoyment is important as it increases the chances of a successful intervention.

b) Athletes relating to practical application

One of the 3 sections included in Psychological Skills Training (PST) incorporates practical application of the theory taught. Considering that the infrastructure of traditional PST was drawn upon when designing this specific Mental Toughness programme it was encouraging to see that the athletes responded positively to this aspect of the programme.

I could also like relate to the little exercises we did like to illustrate your point, I could relate to those very well.

(Post Programme Athlete Evaluation Focus Group, line 95-96)

The fact that the athletes responded well to this practical application aspect provides credibility for the structure that PST presents. Considering the sample range for this programme consisted of school learners the researcher believes the inclusion of a practical aspect spoke highly to the success of the programme and must be included in all future implementations. The practical application not only provides a little fun for the students but furthermore enhances the points made by the theory as they can witness first-hand the effectiveness and influence of each individual skill and it limits the risk of the athletes becoming bored and thus non-responsive and disinterested.

c) Well Researched and Structured

The structure of Mental Toughness programmes must be considered highly, keeping in mind the context and sample range that is going to be exposed to its contents. It was encouraging to see that this particular Mental Toughness programme was considered well researched and well structured as seen in the quote below:

I think it's obviously well researched um and from your side looks like it's been put together with a lot of effort and a lot of thought into um what the guys can gain from it and obviously the diagrams and activities, that kind of stuff, I think you would have pulled in more boys that way and I think that's what has been good. Um, I think you're absolutely right in saying that if you want to sit and lecture oaks then they will think they are in history class or the fifth lesson so would probably lose oaks: so from structure wise I think you have got the right balance between the activities and that kind of stuff.

(Post Programme Coach Interview, line 63-71)

In order to ensure the greatest chance of success the structure must be considered very carefully and the theory included must be well researched, interestingly and effectively

presented, and the practical exercises must be designed in a way that allows the athletes to relate to and further transfer the lessons learnt to their training routines and competitive performances.

4.9 Evaluation and Conclusion

The evaluation of the Mental Toughness programme showed some very positive results. There were various ripple effects and significant results of implementing the programme with the athletes.

The pre-programme-post-programme performance profile cross comparison (table 4) showed an improvement in all 8 aspects included in the performance profiling procedure. Considering the fact that these characteristics were the attributes the athletes expressed as being possessed by elite Mental Toughness athletes as well as the attributes that they needed improvement in, it was encouraging to see improvements of this magnitude. Results such as this speak highly to the successful implementation of this Mental Toughness intervention.

In addition to the above, the post-programme focus group interview identified various positive outcomes as a result of exposure to the Mental Toughness programme. These were unpacked in detail earlier and included aspects such as an improved understanding of Mental Toughness, a more comprehensive idea of the importance of incorporating mental training into training routines, a competitive advantage over competitors as well as substantial changes in various performance factors.

4.9.1 Has the Programme Worked?

This research endeavour, in part, set out to determine whether designing and implementing a tailor-made Mental Toughness programme would assist the recipients in understanding more closely the concept of Mental Toughness as well as assist them in developing and further maintaining their levels of Mental Toughness for their competitive performances. One particular way of understanding the level and extent to which this has occurred will be to compare and relate the findings of this research with that of previous Mental Toughness literature and research.

In the evaluation section unpacked above there were specific performance themes that were generated as a result of the athletes being exposed to this particular Mental Toughness programme. These themes can be linked to specific themes that particular Mental Toughness authors and theorists express as making up their respective ideas of what Mental Toughness entails. We saw the following themes being presented and drawn out of this research project and we saw how, on some level, during their research endeavours specific authors and theorists made reference to concepts as was shown explicitly above: Blocking out external and negative comments and thoughts (Gucciardi et al., 2008, Thelwell, 2005); improved and increased concentration and focus (Clough et al., 2002, Gordon & Sridhar, 2005, Gucciardi et al., 2008, Jones et al., 2002); thinking, decision making and discipline (Bull, 2006); bouncing back from failing and adversity (Bull, 2006, Clough et al., 2002, Fourie & Potgieter, 2001, Gordon & Sridhar, 2005, Gucciardi et al., 2008, Jones et al., 2002); increased team spirit, team cohesion and chemistry (Bull, 2006, Yukelson, 2009); increased self-belief and confidence (Clough et al. 2002, Fourie & Potgieter, 2001, Gordon & Sridhar, 2005, Gucciardi et al., 2008, Jones et al., 2002, Thelwell et al., 2005); increased faith in teams abilities; managing one's own space; positive self talk (Gordon & Sridhar, 2005, Gucciardi et al., 2008, Thelwell et al., 2005); awareness.

As one can see, direct correlation can be made between the characteristics drawn from this project and those presented as being the make-up of mentally tough individuals expressed in the literature. This shows that the programme was a success in its attempt to help these athletes in developing their Mental Toughness and furthermore increasing their knowledge about the concept and the importance of its inclusion into their training routines and performances. This perceived success can be justified further by making reference to two specific theorists whose models were both unpacked explicitly in the literature review section of this project. These two theorists and their respective views on Mental Toughness were highly influential with regard to the design, development and implementation of this research endeavour and the success of this programme the researcher believes can be determined by identifying a correlation to the theory drawn from both these theorist's viewpoints. The two theorists whose models will be correlated with the results of this research project include Loehr (1982), who was thought to be the pioneer of Mental Toughness development and Bull (2006) who presented a model for Mental Toughness which influenced the structure of this research project.

4.9.2 Relation to Loehr (1982) and Bull (2006)

Loehr (1982) attempted to define the construct of Mental Toughness throughout the 1980s and the 1990s and became a firm believer in the idea that Mental Toughness is a concept that is learned rather than inherited and further believes that Mental Toughness is a skill that individuals have to work at acquiring. This acquisition of Mental Toughness requires the same process that athletes would work through in order to acquire physical skills, which includes hard work, understanding and practice (Loehr, 1982). The researchers of this particular project took the same stance as Loehr and thus set forth to develop this Mental Toughness programme.

There are many links that can be made between Loehr's (1982) beliefs and views put forward regarding Mental Toughness and the themes drawn from this project. The premise of Loehr's (1982) model lies in the opinion that those athletes who are considered mentally tough have learned, or developed, two very important skills: the first incorporating the ability to increase flow of positive energy when faced with adverse circumstances or crises; and secondly, to think in a manner that promotes the right type of attitude required to solve problems or deal with pressure, mistakes, or competitive environments. In addition to these two skills Loehr (1982) presents a constellation of mental skills which he believes are learned by athletes and are furthermore characteristic of mentally tough competitors. They include athletes being: self motivated and self directed, positive but realistic, in control of emotions, calm and relaxed under pressure, highly energetic and prepared for action, determined, mentally alert and focused, self confident and fully responsible (Loehr, 1982, p. 11).

The themes that were extracted from this particular project can be related, on some level, to Loehr's (1982) views expressed above include: improved and increased concentration and focus; increased self-belief and confidence; as well as positive self talk. There are a few other links that can be made with particular reference to the two skills Loehr mentions as being vital for being mentally tough and must therefore be mentioned. One particular theme that emerged from this project was that of bouncing back from failure and adversity. Loehr (1982) states that mentally tough athletes react to adverse circumstances by increasing positive flow. The concept of positive flow can be defined in so many differing ways. Generally speaking positive flow involves an individual being fully immersed in feelings of being energised, focused, positive, unified and in control of the action in which they are taking part. Athletes

exposed to this programme have enhanced their positive flow to an extent. Three themes in particular expressed as having being developed as a result of the programme the researcher believes contribute towards an enhanced state of positive flow. These themes include: increased team spirit, team cohesion and chemistry; increased faith in team abilities; and managing one's own space. It is worth elaborating on each one of these briefly.

One must never underestimate the power of being involved with a team that is unified and bound by a high level of positive team spirit, team cohesion and team chemistry. These three aspects have huge ripple effects on a team's performance. Before elaborating on this further and before showing a link between the three concepts presented here it would be best to begin with the third theme of managing one's own space. Being exposed to the Mental Toughness programme has broadened the knowledge of the athletes regarding the concept of Mental Toughness, its importance and its influential nature. The athletes learn how to improve and develop their Mental Toughness through skill acquisition by means of Psychological Skills Training. The athletes were educated in the different skills regarded as important for the make-up of Mental Toughness and were further exposed to exercises to illustrate the influence and power of such skills. In addition to this the athletes were given elaborate theories and structures designed to help them improve their Mental Toughness potential. The theory and practice application methods were given to the athletes but it was up to them to incorporate the knowledge obtained into their training and their competitive performances. This is where the athletes learnt to manage their own space and essentially become responsible for the performance as far as mental preparation and competing is required. The researcher encouraged the adoption of this responsibility in a few ways. The researcher informed the coach about the theory that the athletes were being taught and further encouraged him to constantly remind his players to incorporate what had been learnt. In addition to this the researcher encouraged the captain to lead from the front and be the driving force for incorporating the mental techniques that his team had learnt.

Earlier the researcher referred to the commonly heard quote that the whole is merely the sum of its parts and the quality of the whole will be defined by the quality of each individual part. The athletes compete in a team setup and context and therefore the team's quality and future success and competitive potential relies heavily on each individual athlete taking full responsibility for their individual efforts as these will all contribute towards a common whole at the end of the day.

There are positive effects of acquiring this ability to manage one's own space which includes and can be linked to the other two themes mentioned here; that being an increased level of team spirit, team cohesion and team chemistry along with an increased faith in team ability. Managing one's own space and becoming responsible for individual effort leads to an increased faith in team abilities. Each individual athlete acquires a sense of comfort knowing that his / her team mates are putting in the dedicated work at improving their performance potential. Thereafter the athletes know that when competitive environments require the need to draw on professional and elite performances the skills and abilities are readily available to be extracted as good quality groundwork and foundations have been laid down. This increased faith in team ability further results in an increased team spirit, team cohesion and team chemistry.

Responsibility, faith and a fabricated sense of professionalism, stemming from the two aforementioned factors, lead to a heightened sense of camaraderie. This camaraderie sees elements such as encouragement, positive reinforcement and enjoyment becoming common traits within the team all of which will bring the team together working as one unit toward common future goals and create a productive environment and positive team chemistry. Positive self talk was another characteristic prominent in this research endeavour and also a characteristic promoted by Loehr (1982) as a part of the Mental Toughness make-up. Throughout the process of 'walking' the path to positive flow, positive talk will play an important part in ensuring that the fabricated team spirit, team cohesion and chemistry becomes sustainable assisting in manifesting further and future team unity.

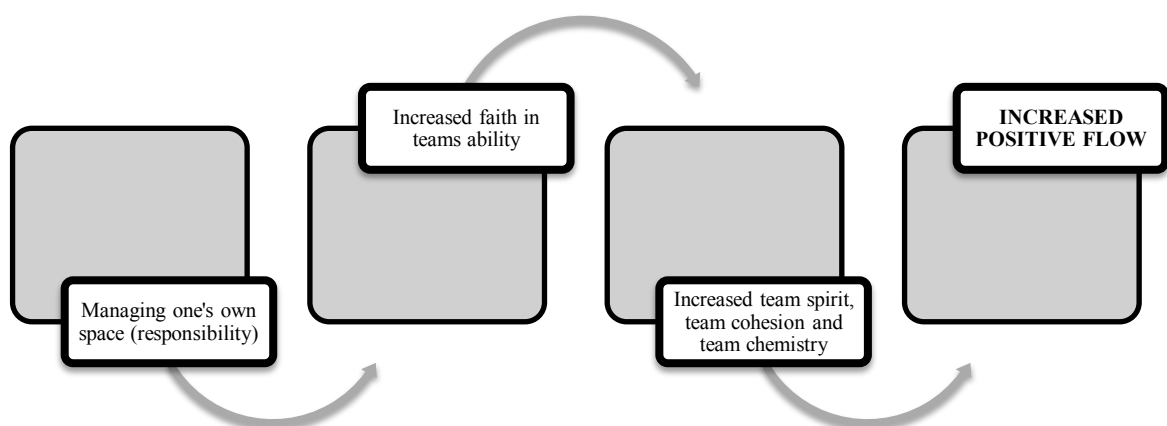


Figure 37: Path to Positive Flow

As Bull (2006) states in his model of Mental Toughness, certain characteristics such as anxiety, stress, fear and poor emotional control are the normal responses individuals express when faced with adverse or challenging situation. Loehr (1982) states, as the second important skill for becoming mentally tough, that athletes need to think in a manner that promotes the right type of attitude required to solve problems or deal with pressure, mistakes, or competitive environments. Both these notions are included within the category Bull (2006) stipulates as 'winners' where 'winning' athletes approach adverse or challenging scenarios with confidence, excitement, patience and whom thrive on performing under pressure against the odds. As we know from Bull's (2006) model becoming a 'winner' begins with adopting a 'winning mind' which comprises focus, composure and a strong self-belief. To gain a 'winning mind' Bull (2006) states that athletes need hold as their core the characteristics of self-belief, clear thinking and resilience. This Mental Toughness programme has assisted the athletes in achieving a mindset that closely relates to Bull's (2006) 'winning mind' and furthermore has helped the athletes improve their attitudes towards the attitude Loehr (1982) states is required for overcoming adversity. The aforementioned point was justified in an earlier discussion within the analysis section.

The Mental Toughness training assisted the athletes in increasing and improving their attentional focus as they were involved in unpacking the complexity of their performance potential. This process lead to a sense of composure and control and furthermore patience as the athletes were learning specific skills that they will have stored in their 'performance potential bank' ready to execute when the circumstances deem necessary. Knowing that they have these skills readily available at their disposal helps the athletes remain calm, relaxed and composed when dealing with adverse or challenging situations and therefore approach these situations with a sense of patience. This entire premise results in a greater self-belief and confidence, clearer thinking and a more resilient mind, all of which are the starting point for Bull's (2006) model of Mental Toughness. Becoming a 'winner', adopting a 'winning mind' and amalgamating this all with mental skills training results in the most suitable 'winning environment' susceptible to helping athletes become mentally tough. Therefore not only does this process, in its entirety, result in satisfying certain aspects deemed important by Bull (2006) for becoming mentally tough but further satisfies the two important skills that Loehr (1982) presents as being crucial for Mental Toughness development.

At this point we can take further this relation and link the results generated from this project to Bull's (2006) four categories of toughness that he represents in his model of Mental Toughness. Bull (2006) developed his model to help individuals become more mentally resilient and in this model presented four types of toughness which if incorporated into daily routines would assist individuals in becoming more mentally tough. The model was built on the premise that the way individuals approach tasks, especially adverse ones, will demonstrate these four types of toughness. We can therefore see that if individuals incorporated the skills and characteristics that these four types of toughness presented then a greater sense of Mental Toughness would be achieved. With this being said one way in which we can justify the extent to which this Mental Toughness programme was a success is to understand how close the results extracted here correlate with the characteristics situated within the model of Bull's (2006) set of toughness categories. As unpacked and discussed earlier the four types of toughness include: Turnaround Toughness, Critical Moment Toughness, Endurance Toughness, and Risk Management Toughness. The following diagram illustrates the general themes that are incorporated in each one of these types of toughness based on Bull's (2006) theory:

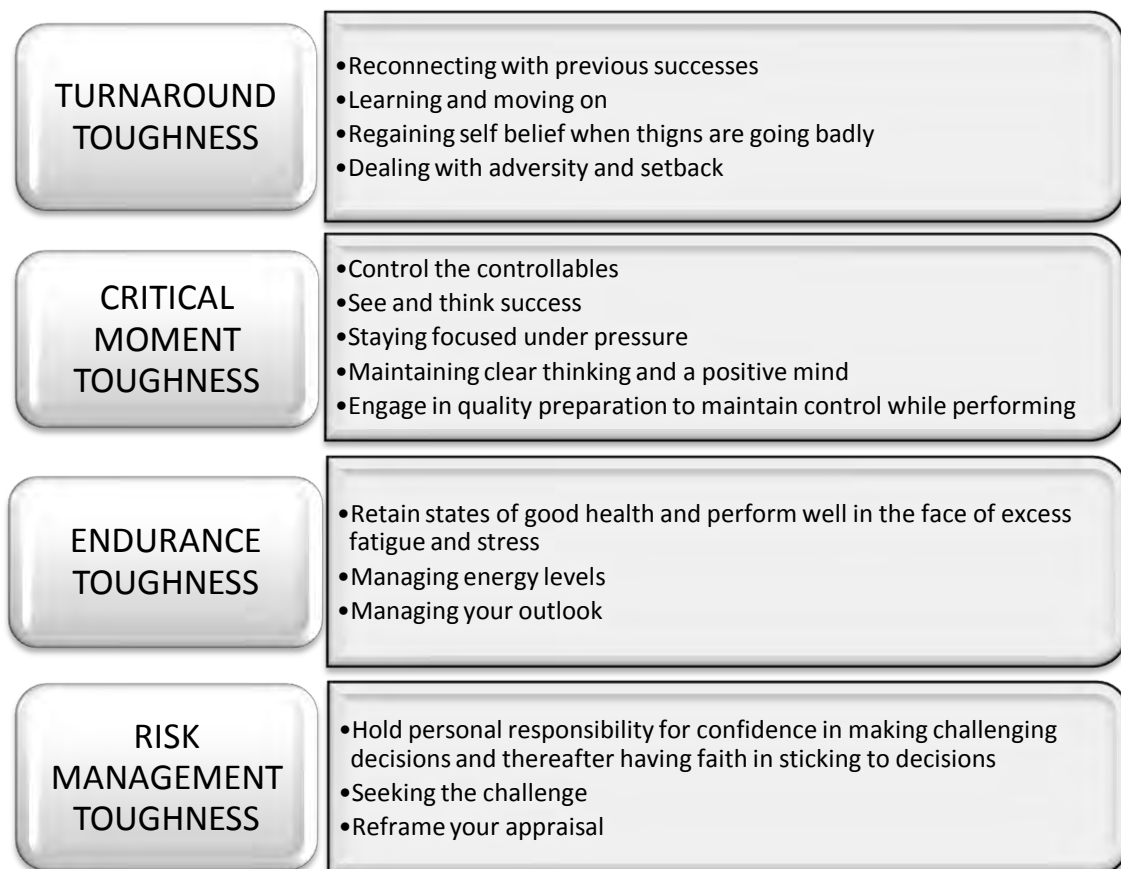


Figure 38: Bull's (2006) four types of Toughness Themes

After analysing the data collected throughout the research process, performance themes were identified from the analysis section and included the following:

- Blocking out external and negative comments and thoughts
- Improved and increased concentration and focus
- Thinking (Thinking in the Process), Decision making and Discipline
- Bouncing Back from failing and adversity
- Increased team spirit, team cohesion and chemistry
- Increased self-belief and confidence
- Increased faith in team abilities
- Managing one's own space - Responsibility
- Positive Self Talk
- Awareness

There are various links that can be made between the performance themes extracted from this research project and the intricacies of Bull's (2006) four types of toughness. Although the relations are not direct, the ideas put forth by both models overlap to some degree. Bull (2006) developed this model to improve Mental Toughness and mental performance capacity and therefore the closer the results extracted here are to his model will help identify how close the athletes have come to improving their Mental Toughness.

The four types of toughness and their content have been unpacked above and coupled with this was a list of the themes extorted from the data analysis. Before unpacking some closely related themes it is beneficial to look at the three themes taken from this project that do not seem to have the most distinct link to Bull's (2006) model. The three themes in question here involve awareness; increased faith in team abilities; and increased team spirit, team cohesion and chemistry. A link between these characteristics was discussed earlier when dealing with positive flow and these links can be unpacked a little further. The programme has the ability to increase the athlete's overall awareness of Mental Toughness as well as its influence and importance. Coming together as a team to take part in the Mental Toughness programme increased the team cohesion as the athletes were learning about both their team mate's performance potential as well as how to increase and improve their own. This process brought the team closer especially with sessions such as goal orientation which involved the thoughts, opinions and views from every one of the participating athletes and required them to come together as a unit and work.

Improving individual performance potential and witnessing the other team mates increasing and improving their own resulted in an increased belief and faith in the team's abilities. This increase in faith, as was discussed earlier, leads to greater team spirit and an overall greater chemistry all within a tighter cohesive unit. All the resultant themes extracted from the programme analysis can be linked to some aspect of Bull's (2006) model. The increase in belief and faith of the team as well as the resultant increase in team spirit, cohesion and chemistry can be related to Bull's (2006) Critical Moment Toughness. In particular Bull's (2006) Critical Moment Toughness included to correlated elements which included that of seeing and thinking success and as well as maintaining clear thinking and adopting a positive mind. The increased faith in the team's abilities will result in a more positive mindset and the increased team spirit, team cohesion and chemistry provides the most conducive environment for fostering a positive mindset. Therefore the team will naturally see and think success and they will believe in their new and evolved performance potential.

There are other more distinct relationships that can be unpacked and presented. Dealing first with Bull's (2006) Endurance Toughness and touching on Critical Moment Toughness, one particular theme taken from this project that correlates with these two themes is blocking out external and negative comments and thoughts. Endurance Toughness incorporates remaining in good health and performing well in the face of excess fatigue and stress as well as managing energy levels and outlook. The athletes learnt how to, and the effectiveness of, blocking out thoughts and comments that they have no control over and that negatively impact their performance. Therefore they learnt to control the controllables which is one particular aspect of Bull's (2006) Critical Moment Toughness. Managing one's outlook and energy incorporates the athlete's understanding that energy spent on allowing negative thoughts and comments to filter in is energy wasted that could otherwise be spent on other positive aspects of performance. Excess fatigue and stress are situational contexts that are easier to deal with when a positive mindset is the default mind frame. Adopting a positive mindset is one particular way in which athletes can remain focused on their goals in adverse circumstances. These aforementioned correlations show how interrelated this project's themes are with Bull's (2006) themes. This link becomes clearer as we unpack the relationship a little further.

Let us consider Bull's (2006) Critical Moment Toughness. We already know that this form of toughness involves controlling the controllables, see and thinking success, staying focused under pressure, maintaining clear thinking and a positive mind and engaging in quality

preparation to maintain control while performing. The themes extracted from this project that can be linked to this form of toughness include the athletes having adopted an improved and increased concentration and focus; thinking, decision making and discipline; bouncing back from adversity, increased faith in team abilities and positive self talk. As a result of the programme the athletes adopted a greater sense of focus and an improved level of concentration which can be linked directly to Critical Moment Toughness which emphasises athletes being able to retain focus when dealing with pressure situations and therefore maintain clear thinking all while adopting a positive mindset.

The theme of thinking, decision making and discipline can be directly linked to controlling the controllables and engaging in quality preparation from Bull's (2006) model. The athletes showed signs of an increase in the art of thinking more about their performances and furthermore expressed an adopted ability to make better and more calculated decisions as well as become more diligent and disciplined with their training and performing. Learning to control the controllables requires athletes to think about what aspects are controllable and what aspects are not and therefore channel energy into the ones that are. This firstly reiterates how the athletes thinking processes have evolved and furthermore shows an element of decision making by choosing when to channel energy and effort and also discipline by not allowing those aspects that are uncontrollable to take over and affect performance. We can therefore see a peripheral link here with athletes blocking out negative and external thoughts and comments and controlling the controllables. The athletes, as mentioned earlier, have shown that they have improved at being able to minimise the influence the negative and external comments and thoughts have on their performances and are therefore understanding what aspects are uncontrollable. The themes of decision making can also be linked to Risk Management Toughness which incorporates holding personal responsibility for confidence in making decisions and having faith in these decisions. The athletes expressed that they were able to make better and more calculated decisions after being exposed to the programme and coupling this with the acquired increases in self-belief, confidence, team spirit, team cohesions and team chemistry, the athletes belief in one another and the teams abilities will have increased too in resulting faith to stand by decisions made as individual athletes and as a team.

Bouncing back from failing and adversity; increased team spirit, team cohesion and chemistry; an increased faith in team abilities and increased self-belief and confidence can all be linked to Bull's (2006) Turnaround Toughness. The athletes expressed that they gained an

increase in self-belief and confidence which can be directly linked to Turnaround Toughness of which one element includes athletes regaining self-belief when things are going badly. The link between team spirit, team cohesion and chemistry with positive flow was unpacked earlier. Positive flow results in an increased self-belief and confidence which in turn results in an increase in faith in the team's overall abilities. One particular aspect of Bull's (2006) Turnaround Toughness is athletes being able to reconnect with previous successes and learning and moving on. This can be correlated with the theme extracted by the athletes in this study where they learnt how to bounce back from adversity and failure. A major factor of dealing with failure and adversity is learning from what went wrong in the past, learning how not to do certain things. Gucciardi et al. (2008), in a different context, elaborated on a particular procedure where it is often useful and constructive to understand something in the context of what it is not. Therefore the athletes can learn how to perform in the future by understanding what went wrong and how not to perform. They need to connect with previous successes and understand the positives from those successes and take them forward.

The final relation can be made between managing one's own space and taking responsibility with Bull's (2006) Risk Management Toughness. Risk Management Toughness incorporates athletes holding responsibility for certain things such as decision making and thereafter having confidence and faith to stick to decisions made. The athletes expressed that they learnt to manage their own space as a result of being exposed to the contents of the programme and therefore learnt how to become more responsible for their own performance potential.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Limitations and Recommendations

As with all research endeavours it is inevitable that there will exist some limitations and this project was no exception. In addition to this and as a result of analysing the programme and documenting the experience gained by the athletes after their exposure to the programme, various recommendations can be made in light of the evaluation and the limitations presented. The researcher believes this is a significant addition to any research effort as it offers valuable insight into how the research was conducted and helps to highlight and justify any problem areas that arose as well as offering useful and effective recommendations for future researchers. This section has been structured by means of presenting the various limitations that were experienced and includes appropriate recommendations as each one of the limitations is unpacked and discussed. The structure for this section will take form of the following points:

Timing of the Programme

Athlete Participation

Athlete Contribution

Duration of the Mental Toughness Sessions

School Contribution and Lack of Mental Toughness Knowledge

Lack of Enthusiasm

Environment

Avoiding Problems

Figure 39: Limitations and Recommendations

5.1.1 Timing of the Programme

It became clear, through both my experience of implementing the programme and through analysing the responses from the athletes in the evaluation focus group interview, that the timing of the programme was a major hindrance. The programme was designed to run

towards the end of the year. The rationale behind this was to allow the programme to be facilitated during the athletes off season in order to allow the mental skills to be taught and learnt and thereafter made readily available to the athletes for the next season. Unfortunately this did not occur as anticipated due to unforeseen circumstances that will be unpacked later in this section.

The end of the year is a very demanding time of the year for school learners, especially those who compete at a first team level. At the time of programme implementation these students were busy completing final year assignments and preparing for their final year examinations. This added excessive levels of stress and anxiety on the students and prevented them from being in the most appropriate mind frame for learning new material such as mental skills. Unfortunately the programme implementation being scheduled to run later in the year was unavoidable. Working with school students is challenging for many reasons, one of which is the demanding academic schedules and commitments that they are obliged to fulfil. There were numerous occasions when arranged Mental Toughness sessions needed to be rescheduled due to athletes withdrawing because of school commitments. This affected the momentum of the programme and resulted in a seven week scheduled programme having to be cut down to 3 weeks which was explained in the programme implementation section earlier. The quotes below accentuate this aforementioned concern.

I think like bringing it back to the point of if we started early in the year we wouldn't have to sort of cram into these times like especially now we've had, like we moving into exams and stuff so it has been quite difficult on us but I think if we had stretched it out over the whole year, sort of a pre-season thing, during season, it would be a whole lot better because then we could afford to miss out some stuff, so I think our schedules in general is a bit of a problem.

(Post Programme Athlete Evaluation Focus Group, line 168-173)

I didn't like that it started like late in the year, if we could have started like early January like when we came here it could have been more effective.

(Post Programme Athlete Evaluation Focus Group, line 103-104)

Because it kind of like started in the middle of the year, it was more like, you know.

(Post Programme Athlete Evaluation Focus Group, line 6)

Just the timing, I think if we could do it like pre season then we could work on, like practice those skills before and then implement them and then go out and see how your performances get better.

(Post Programme Athlete Evaluation Focus Group, line 124-126)

As a result of the athletes busy and full schedules the Mental Toughness sessions were forced to be held either late at night during the week or in the early mornings on Sundays. This may have had an effect on athlete participation. After attending long days at school the researcher found that the athletes were very tired when attending the Mental Toughness sessions, especially those scheduled for the evenings. This left the researcher with a challenge. It was the researcher's responsibility to create an environment that would foster effective learning and prevent the athletes from perceiving these sessions as additional school work. If the athletes saw these sessions as extra school work their attitude and outlook towards them would have been negative resulting in minimal learning. In addition to this the researcher found it very important to ensure that as the facilitator of the programme the researcher did not come across as another authoritative school figure. This meant that the researcher needed to draw a fine line between being friends with the athletes and creating a friendly rapport but still ensure that they respect the researcher as a leader and put in the hard work when it is required.

The aforementioned quotes lead to some significant recommendations. Although the programme was still a success, the researcher believed that greater success could have been achieved should the programme have run at a different time of the year, more specifically at the beginning of the year as the athletes were suggesting. There are many positive aspects behind the desire to run the programme at this time. Firstly, young students generally start off commitments much better than they finish them, as mentioned earlier, and running the programme at the beginning of the year would have been helpful in the sense that we could have tapped into some extra energy and perhaps greater levels of concentration, determination and enthusiasm. Secondly, the beginning of the year is generally more relaxed with commitments and therefore less stressful as compared to the end of the year and the cricket season is just beginning which often finds the athletes excited and looking forward to the season ahead. This excitement leads them to instil a drive to prepare well and the idea of entering into a Mental Toughness programme may have been more appealing to them as compared to entering into this form of training as their season is coming to an end. This drive to prepare effectively creates a mindset and attitude which is positive and enthusiastic in

nature and is therefore more accommodating for successful implementation of programmes such as this one. This point speaks to the Bull's (2006) point of creating a winning environment and a winning mind. In order to benefit the most from psychological interventions such as this Mental Toughness programme the right attitude needs to be adopted, a winning mind needs to be created and the most effective environment for fostering a positive, strong and resilient mental athlete needs to be built and implemented.

Implementing the programme in the beginning of the year, while the athletes are starting up their season, would also help with successful implementation of the programme and furthermore provide more concrete grounds for effective analysis of the programmes' success. Implementation at this time would allow the programme to be completed within the development phases of the athletes' season. This allows the athletes to take the skills and lessons learnt and apply them to their practices and thereafter their seasonal fixtures. In addition to this, having completed the programme in the first few weeks of the year presents some time and the opportunity for the facilitator to work alongside the team as they practice for their fixtures and during the season can continuously remind them about the skills and reiterate various techniques and skills that may have been forgotten or neglected. With regard to a more efficient and effective analysis it would have been very useful to have collected pre programme statistics regarding the teams previous year performances and thereafter collect post programme statistics and compare the two sets in order to establish whether there was a noticeable statistical difference in performances that may be attributable to the implementation of the Mental Toughness programme. Although this may be too in-depth for a Masters level thesis the researcher believed that should the situation have accommodated an earlier programme implementation this type of comparison could have been made possible and should most certainly be considered for future research.

5.1.2 Athlete Participation

During the programme implementation one of the major problems was the inconsistent numbers that attended the sessions. Although the same core group of 8 athletes attended every session, there was not one instance where the entire group of 12 athletes were present.

Well I didn't enjoy that the whole team wasn't around, I think that if the whole team was around it would have been more beneficial, especially if we could get everyone to do it.

(Post Programme Athlete Evaluation Focus Group, line 101-102)

Not being a part of the programme led to two major disappointments. There was a sense of segregation between team members who attended the programme and those who did not. Earlier on in this analysis we saw how the athletes expressed an increase in team unity, team spirit and team cohesion as a result of the programme. The athletes who did not attend the programme would not have been a part of this increased camaraderie that was enhanced. The athletes who did not attend the programme would not have gained this competitive advantage and the researcher therefore believes that although the team had an overall improved success rate, the individual performance potentials would have differed. These points further accentuate the need and importance to have the entire team 'buy' into the idea of mental training and further shows coaches and athletes the importance of making mental training an intricate, regular and more concrete aspect of their training routines. One particular athlete touched on this very fact that in order to benefit highly from programmes such as this the athletes need to arrive in the right mind frame with a desire to improve their Mental Toughness. This accentuates the importance of Bull's idea about adopting the right attitude, creating the right mindset, a winning mind and ensuring a competitive and winning environment is fostered for mental training.

Uh, just not getting together obviously as a team and then some people, if you don't buy into this then it will never work, you have to like, fully buy into this and then you will realise the benefits. If you think it a stupid or some silly thing then it won't help you.

(Post Programme Athlete Evaluation Focus Group, line 159-161)

Not only does this comment speak again to the importance of adopting a positive outlook and a winning mind but also speaks to the fact that this desire to improve will stem more intensely from the team having a future vision and a set of specific goals that they would want to achieve. In a sense a team mission statement should be setup, written and kept on record in order to provide an element of direction and focus. The quote presented below simply reiterates the point being made about the importance of getting the entire team involved but further adds an element of practical application which will be discussed further on.

Getting the whole team to do the programme and just one or two maybe like, not like testings but maybe like little practices to try each skill out.

(Post Programme Athlete Evaluation Focus Group, line 178-179)

5.1.3 Lack of enthusiasm

One of the weaknesses of the programme identified from the post programme interview with the coach was a minor lack in enthusiasm. The coach himself identified the lack of enthusiasm and further stated that this may have been partly the reason behind the lower than expected participation levels too. The theme of enthusiasm can be seen in the quote below.

I think just, the weaknesses I don't think I know enough from your side to even pin point any weaknesses, I'd say the weaknesses have been on getting the guys together, um, maybe from their side as well, um, enthusiasm and going through the course and realising what value it probably would have added so maybe an explanation of that, as you said if it was a case of next year, it would be very easy now to know all that.

(Post Programme Coach Interview, line 101-107)

Asking the coach about participation inconsistencies he replied with the following:

I think from, just chatting to some of the guys, the matric boys, were probably not as enthusiastic about it, um, simply because you know maybe it's their last year, um, but I mean I find the same thing with practices or whatever it is, the guys wanna move on the sooner the better therefore when you add something to their schedule they not going to be jumping up and down.

This above quote justifies views expressed earlier in this section regarding the timing of the programme. In the beginning of this limitations and recommendations section the researcher made reference to the programme being implemented at the end of the year and how this affected the quality of the intervention to some degree due to a perceived lack in enthusiasm. The researcher made reference to how the athletes' determination, motivation, drive and desire would be diminished toward the end of the year and as a result of their heavy academic commitments and the coach, in the above quote, presented similar views. He accentuated this point by unpacking the idea that the athletes just want to finish up and move on with what they have planned next. This does not provide the correct environment to learn new skills. This particular aspect lead me to try understand whether there was a lack in interest in addition to a lack of enthusiasm or just a lack of enthusiasm so the researcher therefore unpacked further as to whether the coach believed the fluctuating participation levels were due to a lack of interest on the behalf of the athletes and he responded with the following.

No I don't think, it can't be a lack of interest because I think we, Kingswood takes its sport seriously, this group of boys takes their sport seriously, so they, no no not a lack of interest, other than maybe matrices simply figuring that they don't have

time to do another course of whatever it is so ya, but I think they are very interested in listening to what you've done and I know the grade 11 boys in particular have enjoyed it so I wouldn't say lack in interest no.

(Post Programme Coach Interview, line 194-200)

It is evident from this quote that it is a lack of enthusiasm that may have affected participation levels and not a lack of interest. The enthusiasm seems to stem from the timing of the programme and the researcher must therefore stress the importance of considering heavily the timing of any future Mental Toughness programme implementations.

5.1.4 Prior MT exposure

The coach raised an interesting point about a particular factor that may have affected participation levels. This factor was concerned with the fact that some of the athletes at this level have been exposed to Mental Toughness before and at this age they are prone to being averse to learning new aspects. The participation for the under 15 age group who were exposed to a similar programme was a lot higher. The researcher questioned the coach about this phenomenon.

You would probably also find a case of, a lot of this will be all very new for a lot of those oaks, I have no doubt that one or two of the matric boys have done this all before and say we know this, what are you going to teach us that is new, where um, maybe we can if you had talk about next year and address it maybe that's part of the first things you say to the guys, we know you've talked about some of the topics before but um, we will try go into the nuts and bolts of new exercises and get them to buy in maybe, um, because I think that's what you talking about with the grade 9 boys, the under 15s, this would have been all very new for those oaks, so I think that why they probably have enjoyed it.

(Post Programme Coach Interview, line 180-190)

This above quote speaks to the importance again of creating a good rapport among both the school and the participating athletes as well as creating the right attitude and environment for programme implementation. This begins with the facilitator successfully and attractively “selling” the idea of the Mental Toughness programme and thereafter the school “buying” into the idea of its implementation. By getting the school to buy into the idea more successfully and being more committed towards the intervention many problems may have been avoided. Problems such as putting time aside for Mental Toughness sessions may have been overcome as the school would have realised the potential benefit of such a programme

and could therefore have assisted in prioritising its implementation. Prioritising such a programme would have had ripple effects on the athletes themselves. The higher the school places the programme on the priority list the more receptive and responsive the students would have been. Their attitudes toward the programme would have therefore been more positive and conducive toward learning new skills and techniques and therefore regardless of the amount and extent of prior Mental Toughness exposure the athletes have had they would have been more open to the potential of this programme. The researcher elaborated on these aforementioned points when the researcher was implementing the programme with the athletes. The researcher helped them understand that Mental Toughness incorporated a superior environment and attitude that will inevitably be created within their sporting context as a result of exposure to this programme. In addition to this the researcher elaborated to the athletes how the programme will assist them in understanding and creating a winning mind and a winning environment.

Furthermore the researcher discussed with them how the quality of the programme and the effect it has on them as athletes and their future success and performance will be determined by the importance that they place on learning such aspects and their attitudes coming into the programme. This is where the researcher elaborated on how it is important that they ‘buy’ into the idea of this form of mental training and that they apply, as best as possible, all aspects of what they learned. Attitude breeds success and more specifically it dictates who we are as individuals, whether on or off the sporting field (Kuehl, Kuehl, & Tefertiller, 2005). Attitudes make up our personality, they direct our approach to our sports, our professions and our lives in general (Kuehl et al., 2005). Furthermore our attitudes control how we act, how we interpret information set before us and how we respond to and use this information to better our performances. Attitude is the “thoughts, beliefs, opinions, feelings, or intentions with which you approach your tasks and goals” (Kuehl et al., 2005, p. 14). Most importantly your attitude will determine what you achieve, how you feel and how happy and satisfied you are with your life (Kuehl et al., 2005). In closing off this particular point the researcher explained to the athletes how working on their Mental Toughness will essentially help them adjust their attitude and mindset and guide it in the right direction and assist them in adopting the most professional attitude for their sporting career, but further elaborated that it is important that they start with a positive attitude in the first place. An attitude of patience, determination, dedication and the willingness to try, learn and adopt new things was required.

5.1.5 Duration of the Mental Toughness Sessions

The athletes expressed, through the evaluation focus group interview, that the sessions should have been shorter. Although the researcher agrees with them on this particular aspect there were cases where sessions needed to be doubled up in order to fit the entire programme in with their busy academic schedules and with the timeline of this research endeavour. These lengthy sessions were unavoidable.

I think also the sessions must be shorter so that we can concentrate but then also like concentrate for longer, do you know what I mean by that? And then also get the sessions maybe like in a routine, not scattered around, ya just get the sessions like as part of a routine.

(Post Programme Athlete Evaluation Focus Group, line 11-13)

In addition to expressing the need for shorter sessions the above athlete raises another very important point about the sessions being more in a routine. As unpacked earlier, the session structure was adjusted to accommodate the busy academic commitments to which the athletes were exposed. This meant some sessions had to be doubled up as explained. The recommendation for regular sessions structured in the most appropriate manner was discussed earlier. It is furthermore recommended that as a part of including these sessions into a routine that they are structured into practice sessions. This particular point leads into the next recommendation which includes practical application. This not only will increase the chances of having the entire team attending the practice but will also give the programme more credibility. Furthermore this Mental Toughness programme was built around the structure of Psychological Skills Training programmes which consisted of three major sections one of which was amalgamating knowledge and theory into practice and it is therefore important to ensure that this is included in order to ensure a maximum success rate of the programme.

I think sessions should be shorter and more intense, so like uh we should have more days instead of trying to like fit it all into like 3 days, so we should have more days with shorter intense sessions.

(Post Programme Athlete Evaluation Focus Group, line 16-18)

The researcher agrees with the opinions expressed by the athletes and would recommend for future researchers that sessions be designed to run for no longer than 45 minutes, especially if implemented with school students as 45 minutes would be on the edge of their concentration

span. The researcher would recommend for future implementers of such programmes that mental sessions be scheduled to run in conjunction with practices. The researcher would advise that coaches take the time to design their training routines in a way that would accommodate for regular Mental Toughness sessions.

5.1.6 One on One sessions and Practical Application

As the athletes are learning about the various mental skills it would enhance their understanding if they were given the opportunity to apply the newly acquired skills to their performances as seen by the opinion brought forward by the athlete quoted below.

Getting the whole team to do the programme and just one or two maybe like, not like testings but maybe like little practices to try each skill out.

(Post Programme Athlete Evaluation Focus Group, line 178-179)

In addition to this one athlete suggested including one on one sessions before the teaching of each individual mental skill. A one on one session is a very effective method of practical application in addition to structuring Mental Toughness sessions into training routines.

I was thinking maybe a one on one session so you can learn more about the programme, like before you do it as a group, because I think it's more difficult to learn as a group about the programme, so learning specifically what it's about then join as a group once you know everything.

(Post Programme Athlete Evaluation Focus Group, line 119-122)

If time allows for such a schedule to be setup the researcher would highly recommend this. After implementing the programme with the entire group the researcher came to realise that although they were benefiting highly from the contents the researcher was presenting, it was all presented within a rather generalised context. If time was put aside to meet with the athletes as individuals and consider each mental skill within the context of that particular individual athlete's role and job within the team the researcher believed they would benefit in a greater way.

5.1.7 Schools Contribution and Lack of Mental Toughness knowledge

As already discussed earlier a large contributing factor towards the concern regarding the scheduling of the Mental Toughness sessions was the busy time table and school commitments of the students. A compounding factor was the inability to organise regular session times. Despite being generously accommodating towards the programme implementation by allowing us to use their facilities in conjunction with being enthusiastic about the programme being implemented with their athletes there were some minor breakdowns with the school in certain areas as the coach identifies in his post programme interview. The two points, which can be seen within the quotes depicted below, concern a lack of knowledge surrounding the programme intentions as well as a lack in formalising session schedules that would ensure smooth and efficient running of the programme. The first point was identified by the quote below.

Ya I think lots from our side in a sense of, probably when you guys came to us initially we weren't sure exactly what you guys wanted to do and I think that if, knowing now, if we had known it then we probably would have approached it slightly differently.

(Post Programme Coach Interview, line 79-82)

This opinion highlights the importance of future facilitators in ensuring that intentions as well as benefits of such programmes are explicitly outlined and explained. The recipients of such programmes need to be encouraged that the results gained will ensure greater success within the context in which the programme is designed to be implemented. The recipients must be made to feel that the time and energy spent on such an endeavour is worthwhile. Although the researcher explained the programme intentions in a comprehensive and thorough manner it may have been beneficial to have held a pre programme session with the coaches and other influencing stakeholders at the school. This session could have been designed in a way that illustrates to them what Mental Toughness is all about, how it influences performance, the importance of mental training coupled with an outline of what the researcher intended on completing with the athletes and how a competitive advantage would have been gained as a result. The researcher believes that knowing this the coaches and the school overall would have been more accommodating with their contribution toward helping out with scheduling regular sessions. Understanding the impact Mental Toughness has on performance and furthermore understanding the ripple effects that training of this kind would have on sport at their school would have motivated them and encouraged them to want such an intervention.

After identifying problems such as those aforementioned here the researcher questioned the coach about how this could have been avoided and whether there was more the researcher, as the facilitator, could have done on to improve the efficiency of the programme implementation. This is where he alluded to the fact that the problem may have stemmed partly from their side as seen in the quote below.

I don't think it's on a case of that side I think it's a case of us formalising a time better, I think we have relied on when oaks are available and I think that hasn't been ideal for yourselves, more probably for yourselves than us really, but it might have been a case of, you know talking about time tables, scheduled a time whenever it is and the guys will be available on that time to see you once a week for an hour and nothing else interferes with that, would have been, whether it's, a problem at a school like this whether that's a possibility I don't know because the guys are so busy with different things but I think that would have been the right way to go, um because I think they would have learnt more I suppose.

(Post Programme Coach Interview, line 85-95)

5.1.8 Athlete Contribution during the Mental Toughness Sessions

In a research endeavour that relies heavily on personal responses from participants it is always a possibility that feedback will be of poor quality. Fortunately the responses received in this research project were of a good quality however, preparation for this took some work. The researcher found that the athletes were reluctant to contribute initially and during most of the data collection procedures various probing techniques needed to be administered to 'spark' off a discussion. Once one or two of the athletes would start contributing the rest of the athletes would feel more comfortable to do the same. It was important as facilitator of the programme to ensure that the athletes understood the concept of confidentiality and that they were fully aware that it would be upheld at all times. This was crucially important as the researcher believes one of the reasons behind the hesitation to respond was the fact that the athletes thought their responses might get back to the coach and therefore jeopardise their position in the team. In addition to this, the possibility of participants being reluctant to respond highlights the necessity and importance of creating an environment and rapport that allows and encourages the athletes to respond freely, openly and honestly.

5.1.9 Environment

The creation of a suitable environment was vital for success of this psychological intervention. Considering that the Mental Toughness sessions were held at the school it was

challenging to prevent the athletes from considering this as additional school work. As the facilitator, the researcher ensured that the classroom was setup in a different way to how they were used to for ordinary school. The researcher rearranged the furniture into a circular setup to endorse a sense of feeling like the athletes were a part of a group setting. In addition to physical settings the researcher needed to ensure a friendly but respectful rapport was created. It is important that the athletes have the right attitude when it comes to psychological interventions such as this one as intrinsic motivation plays an influential role in the quality of engagement and participation. This correct attitude was fostered by making the athletes feel comfortable within the environment. They were reminded that responses should be honest and personal and that their names would by no means be used in the reporting of the findings. It was important that the athletes understood that they were allowed to be themselves during the sessions and therefore respond how they felt necessary. Although it was important as the facilitator to keep decorum whilst implementing the programme the environment was kept relatively relaxed and comfortable.

5.2 Future programme interventions

All of the abovementioned recommendations would be suitable and effective ways of avoiding problems for future programme implementation and should be considered heavily when conceptualising future research within this area. The coach brought forward a few other aspects that have not yet been mentioned. The two further issues he raised include firstly his lack of participation with regard to programme implementation and then secondly he offers an extent of justification for the problems that were faced. In Mental Toughness programmes such as this one the involvement of the coach is vitally important and it speaks to the environmental aspects that Bull (2006) raises in his model of Mental Toughness. The concerns regarding the lack of involvement by the coach can be seen in the quote he gave below:

Um, I suppose, we probably covered those already I suppose but just to add those maybe, one of the ways of looking at it is you know what would my role be in it, I've tried to stay out of it for a very good reason, I didn't want them to see it coming from my side, I wanted them to see it as a professional person from outside coming in and doing it, so I've tried remain on the outside and let the guys work with you but maybe one of the answers there is not having such a distant from it, um, but I suppose also its more ideal for you to work without a staff member there, I think a staff member probably brings a lot more discipline to maybe to attendance, to to participation and whatever it is, but at the same time you want the freedom of them speaking out, also I think a lot of the things is, it's

quite nice to chat without your coach listening to everything, I mean that's why we have mental coaches.

(Post Programme Coach Interview, line 201-216)

During the initial stages of the research process, which involved the initial data collection, the researcher requested that the coach not be present for this. These phases included collecting information regarding the aspects of Mental Toughness that needed to be include in the programme as was shown earlier in this report when we discussed pre-programme focus group interactions, individual interviews, psychometric testing and performance profiling. The rationale behind asking the coach to be absent during these processes was to allow the athletes to express their thoughts, belief and opinions in the most open and honest manner. The researcher foresaw the athletes hesitating to provide valuable information regarding their experiences and honest opinions with the coach being present. The researcher believes they would have hesitated hugely to avoid being seen in a possible bad light by the coach and thereafter risking their potential position in the team in the future and further causing unnecessary tension between the coach and his players.

The researcher did not however anticipate this theme to continue into the implementation phase of the Mental Toughness programme. There were many reasons as to why the coach was not involved in the implementation phase. As with the students, the coach of the team is a teacher at the school and therefore too had a busy schedule. The fact that some of the mental sessions had to be scheduled over weekends and often during evenings within the week meant that the coach could not be present all the time. A solution to such a problem goes back to the recommendation made earlier regarding the school commitment and improving on the communication processes and structuring of mental sessions. Better communication and a greater commitment from the coach would have allowed for mental sessions to be structured in a manner that suited all athletes as well as his own commitments. It is very important for the coach to be seen as being involved and he needs to take an active role. With the coach reluctant to get involved the players may interpret the Mental Toughness programme as not being important or that the coach, who should be a role model for the athletes, fails to support the programme. Despite my recommendation for the coach to remain uninvolved during data collection and despite his request to remove himself from programme implementation out of fear to limit and restrict the athletes experience the researcher does believe that the coach must be involved intricately with the actual implementation of the programme. The coach is the driving force behind the team and the person who is involved

with the athletes on a daily basis. An ideal situation would be to structure the mental sessions in with the practice sessions during the week as this serves two purposes both of which have been identified as shortfalls in this project. This form of inclusion will ensure that the whole team attends the programme and not just a core few and furthermore the practical application aspects is included and the coach is involved in the process as well.

In addition to this it is also important that the coach experiences what the athletes are taught during the programme. Being aware of the content, theory and practical application that the athletes are exposed to will help ensure continuation of mental training once the facilitator exits the intervention process. Therefore it is recommended that the coach participates in the mental training session. Although continuation was ensured by the researcher by means of providing a copy of this research report as well as the Mental Toughness programme, it would be very influential if the coach could include elements of each mental session in future training sessions. This would help with emphasizing the points expressed during the programme and considering that repetition often leads to habitual behaviour this would assist in the athletes being exposed more regularly to Mental Toughness material and thus help in Mental Toughness becoming a more permanent performance enhancer.

The final aspect dealt with here includes a final thought expressed by the coach regarding justification for the problems that were faced.

I suppose the only other thing on that is, we say so much to the kids that eventually they actually switch off, um, you know more information more information so just somebody different mentioning one or two of the same things and then elaborating on those things is quite nice so ya also from that side, um, but just to overcome problems maybe just from, this is all very new so I think we have maybe gotten through a couple of the teething problems so if it has to happen in another year, you know it will be so much easier, like anything else I suppose in life, you know what's worked and what hasn't worked, um, putting things in place for a future course will be so much easier. So it would have been a lot, just go through that one year of, with all your difficulties and then manage to get the right times, you'd probably learn a hell of a lot on how to implement it for the future.

(Post Programme Coach Interview, line 221-233)

A very important consideration must be mentioned to conclude the aforementioned points. Rouda and Kusy (1995) state that a crucial element for the successful implementation of any organisational development process is that support is obtained by top management for this

type of intervention. Although Rouda and Kusy (1995) were referring to a corporate context in this regard the consideration applies to this context too. In addition to this they state that management must be involved intricately in the intervention process so that post the separation phase of the ODP the effects of the intervention can still be seen and future interventions and programmes can be implemented. There must therefore be a complete 'buy-in', ownership and involvement by all the stakeholders in order to ensure a successful intervention. These considerations were lacking to an extent within this research process as mentioned earlier and this absence therefore justifies the limitations that were presented. Future programme facilitators must ensure that top management is secured and that there is a positive, determined, loyal and collaborative attitude and mindset associated with the intervention.

Programmes such as this one are rare in South Africa and so many sporting contexts neglect to incorporate such training into performance preparation. This thesis has helped therefore to identify various problem issues or 'teething issues' as well as identify various positive and successful aspects all of which should be considered heavily when designing and facilitating future programmes. The researcher therefore believed that the points raised throughout this thesis provide good groundwork for future Mental Toughness programme engineers and therefore will help dampen the "sour taste" that surrounds the inclusion of mental training into training routines. The researcher believes this sour taste exists because there is a lack of knowledge that exists surrounding the successful methods for development and implementation of Mental Toughness training programmes. This thesis therefore provides some effective success points which should be mimicked in the future as well as some problem areas which should be considered and avoided if possible.

5.3 ADOPTION AND SEPARATION

The final stages of the Organisation Development Process model included the 'Adoption and Separation' phase. The adoption phase is the phase where the objectives of the intervention have been accomplished and the changes made, the ethos and culture created and the knowledge imbedded as a result of the programme become institutionalised and therefore become an integral part of the unit that was exposed to the intervention. The separation phase is the time at which the 'consultant', who in this case was myself as the researcher, engineer and facilitator of the Mental Toughness programme, withdraws from the intervention process

after having transferred the knowledge and skills that were needed as identified through the entry and action phases.

Therefore with regard to adoption the researcher stressed to the athletes as well as the coach that the lessons learnt and the knowledge and skills given to them must be included in their daily training routines. It was suggested to the coach that Mental Toughness sessions be structured into the weekly training sessions. The researcher emphasised to both the coach as well as the athletes and furthermore explicitly within the Mental Toughness programme that Mental Toughness training is not something that can be considered a once off solution nor something that can be completed and refined within a few weeks. The researcher stressed the importance of persevering with Mental Skills training and ensuring constant contact and incorporation with Mental Toughness literature, theory and exercises. The researcher furthermore elaborated on how the Mental Toughness programme was by no means the answers to all of the performance adversities that they may be facing and that the programme was designed specifically to open up their minds to the power, significance and influence of Mental Toughness.

5.4 CONCLUDING REMARKS

The theory presented within the literature review of this report emphasised the importance and significance of Mental Toughness training and went as far as to say that within a modern day sporting context, victory is almost unattainable without a sense of a heightened and refined mental fitness. As mentioned earlier, South Africa encompasses a stubborn audience with regard to the acceptance of sport psychology interventions as there is a negative stereotype attached to psychological assistance of this nature. The stereotype portrays that this assistance is only required when something is wrong with performance and athletes therefore try refraining from being labelled as ‘under-performing’ or seen as needing psychological support. This project clearly shows the positive effects of Mental Toughness training and considering that it was implemented with ‘normal’ functioning athletes further accentuates the point that psychological intervention is suitable and recommended for any calibre of athlete and should be incorporated and prioritised in performance training routines.

It was noted earlier that in many circumstances, especially after the recent dearth of Mental Toughness research, that it is not the lack of knowledge regarding the psychological skills involved or required in superior sports performance that is the problem but more so the lack of knowledge surrounding the methods available to enhance such skills. This project has not

only helped athletes in laying groundwork and foundation for building Mental Toughness, and further helped the athletes develop a heightened sense of Mental Toughness, but has additionally provided educational and reflective insight as well as valuable recommendations for future programme facilitators.

The meticulous data collection procedure, which initially comprised of a focus group interview, a mental skill list generation, performance profiling and psychometric testing, allowed for mental skills to be identified and a Mental Toughness programme thereafter developed. The mental skills drawn from the initial observation phase linked accurately with the attributes described within Bull's (2006) four types of toughness. Considering that the attributes extracted from the observation phase link successfully with existing literature on Mental Toughness justified and validated their inclusion in the Mental Toughness programme. Furthermore, an association of this nature presented a credible reference point for evaluating Mental Toughness levels at the end of the research process.

The Mental Toughness programme was implemented in a successful manner and resulted in producing positive outcomes. There was an improved understanding of what Mental Toughness incorporates and entails, the athletes gained a better understanding of the importance of incorporating mental training into their training routines, the athletes obtained a competitive advantage over their opponents and furthermore there were substantial changes in the team as well as individual performances as a direct result of exposure to the programme and its contents. The positive performance outcomes included: learning to block out external and negative thoughts and comments, obtaining an improved and increased level of concentration and focus, knowing how to bounce back from failing and adversity, being able to think in the process, achieving an increased level of team spirit, team cohesion and chemistry, obtaining a heightened sense of self-belief and confidence, improving faith in team mates abilities, learning the effectiveness of positive self talk and increasing their sense of Mental Toughness awareness.

Mention must also be made to the specific methodology models that this research drew inspiration from. Action research by definition aims to improve one's learning and furthermore influence the learning of others in the process. The outcomes of this research endeavour satisfy these aims comprehensively. There is an improvement of one's own learning by means of the theory that is added to the current literature regarding Mental Toughness programme implementation. In addition to this there was learning by others by

means of the resulting outcomes stemming from participation in and exposure to the Mental Toughness programme generated throughout this research procedure. The nature of action research requires researchers to identify a concern, develop a suitable action plan for this concern, monitor this action by means of gathering data, evaluate the progress of this action and then modify the action in light of the evaluation. The model most suited for fulfilling the aims of this action research methodology was the Organisational Development Process model.

Action research and more specifically the ODP model contributed to the successful implementation of this research endeavour. These methodologies allowed the research to be collected, analysed and interpreted in a successful and effective manner allowing comprehensive fulfilment of the research in question. Organisational development is a planned system of change which is a long range nature approach at improving performance and efficiency. The structure of organisational development and specifically the ODP model allowed for useful data to be collected and analysed for use in the Mental Toughness programme. This particular structure furthermore allowed an effective implementation process in order to fulfil the need expressed by Kingswood College for a Mental Toughness programme. Fulfilling this need is the end stage of an action research process which is why both the ODP and action research models fit well together and were furthermore a suitable structure for this research project.

Ingredients for a successful organisational development intervention include motivating the change, creating a vision, developing support, managing the transition and sustaining momentum. These recommendations were incorporated within this project. The change was motivated within the entry phase of the ODP model where the need for a Mental Toughness programme was identified. Vision was created by means of the initial briefing meetings held before the research process began whereby the influence and importance of Mental Toughness was presented and the action plan and anticipated results of the research were portrayed. Support was developed by means of the Mental Toughness programme development and generation and the researcher managed the transition by facilitating the implementation of the programme. Momentum was sustained through emphasising the long term process of mental training, equipping the athletes with practical application methods and by providing copies of the research project and the Mental Toughness programme for future reference.

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Appendix A

Kingswood College Permission Letter

KINGSWOOD COLLEGE		
SENIOR SCHOOL 046 603 6600 FAX: 046 622 3084		P O GRAHAMSTOWN 6140 SOUTH AFRICA e-mail kingswood@kingswoodcollege.com website www.kingswoodcollege.com
JUNIOR SCHOOL 046 603 6650 FAX: 046 622 8069		
INTERNATIONAL +27 46 603 6600		
BURTON STREET, GRAHAMSTOWN, SOUTH AFRICA		

To whom it may concern

Re: Research Project: **'Mental Toughness in cricket – The Development and implementation of a mental toughness programme for school level cricketers.'**

Kingswood College hereby grants permission for Mr. Gary Steele, Mr. Stuart Pattison and Mr. Mike McInerney to conduct their research for the above mentioned project utilizing Kingswood College pupils on the Kingswood College campus.

Kingswood College is amenable to being mentioned in any or all published reports generated from this research project, but ask that we are first allowed to preview the context in which our name is used. We do however request that the names of the pupils involved be kept confidential.

If a situation should arise whereby one of the participants feels negatively effected by the research project, Kingswood College gives Rhodes University permission to arrange a suitable councillor on our behalf in order to facilitate the recovery of the effected pupil.

If there are any further queries or questions, please feel free to contact me.

Kind regards



Graham Carlson
Director of Sport
Kingswood College
0825641509



Appendix B

Athlete Consent Form

<p style="text-align: center;">RHODES UNIVERSITY</p> <p style="text-align: center;">DEPARTMENT OF PSYCHOLOGY</p> <p style="text-align: center;">AGREEMENT</p> <p style="text-align: center;">BETWEEN STUDENT RESEARCHER AND RESEARCH PARTICIPANT</p>

I (participant's name) _____ agree to participate in the research project of STUART PATTISON on the Development and Implementation of a Mental Toughness Programme for a school 1st XI Cricket Team.

I understand that:

1. The researcher is a student conducting the research as part of the requirements for a Master's degree at Rhodes University.
2. The researcher is interested in:
 - Helping the cricketers of Kingswood College 1st XI develop Mental Toughness to enable them to compete more successfully at the level applicable to their context.
3. The research process has been communicated to me clearly and I am aware of the procedures to follow with regard to participating in the study.
4. My participation (as a participant of the study) will involve:
 - Attending a focus group meeting with the researcher. During this focus group I will be required to engage in a discussion with my team mates and the researcher regarding specific aspects of our cricketing performance.
 - Attending an additional one-on-one interview with the researcher should I possess the position of captain of the team.
 - Working through various Mental Toughness exercises provided to me and my team by the researcher.
 - Attending a follow up focus group discussion after completion of the Mental Toughness programme. This will involve reflection of the programme and will give me an opportunity to provide feedback to the researcher regarding my experience.
5. I am invited to voice to the researcher any concerns I have about my participation in the study and to have these addressed to my satisfaction.
6. I am free to withdraw from the study at any time – however I commit myself to full participation unless some unusual circumstances occur or I have concerns about my participation which I did not originally anticipate. The researcher will ensure that any withdrawal from the programme will by no means label that individual as mentally weak.

7. Inclusion of specific names will not be included in the study report. Names will be altered in order to ensure anonymity.
8. Feedback will be provided to me after the completion of the Mental Toughness programme in the form of a full report along with feedback meetings.
9. This research project forms part of a broader research project on Mental Toughness conducted at a PhD level and thus the information gathered and the conclusions drawn throughout this research process will be used in the generation of that particular project.

Signed on (Date): _____
Participant: _____
Guardian: _____
Researcher: _____
Witness: _____

Appendix C

Coach Consent Form

<p style="text-align: center;">RHODES UNIVERSITY</p> <p style="text-align: center;">DEPARTMENT OF PSYCHOLOGY</p> <p style="text-align: center;">AGREEMENT</p> <p style="text-align: center;">BETWEEN STUDENT RESEARCHER AND RESEARCH PARTICIPANT</p>

I (participant's name) _____ agree to participate in the research project of STUART PATTISON on the Development and Implementation of a Mental Toughness Programme for a school 1st XI Cricket Team.

I understand that:

1. The researcher is a student conducting the research as part of the requirements for a Master's degree at Rhodes University.
2. The researcher is interested in:
 - Helping the cricketers of Kingswood College 1st XI develop Mental Toughness to enable them to compete more successfully at the level applicable to their context.
3. The research process has been communicated to me clearly and I am aware of the procedures to follow with regard to participating in the study.
4. My participation (as a participant of the study) will involve:
 - Attending a one-on-one interview with the researcher.
 - Assisting with the implementation of various Mental Toughness exercises provided for the team by the researcher.
 - Attending a follow up interview after the completion of the programme to assess and evaluate the experience obtained throughout programme implementation.
5. I am invited to voice to the researcher any concerns I have about my participation in the study and to have these addressed to my satisfaction.
6. I am free to withdraw from the study at any time – however I commit myself to full participation unless some unusual circumstances occur or I have concerns about my participation which I did not originally anticipate.
7. Inclusion of specific names will not be included in the study report. Names will be altered in order to ensure anonymity.
8. Feedback will be provided to me after the completion of the Mental Toughness programme in the form of a full report along with feedback meetings.
9. This research project forms part of a broader research project on Mental Toughness conducted at a PhD level and thus the information gathered and the conclusions

drawn throughout this research process will be used in the generation of that particular project.

Signed on (Date): _____
Participant: _____
Guardian: _____
Researcher: _____
Witness: _____

Appendix D

Guardian Consent Form

<p style="text-align: center;">RHODES UNIVERSITY</p> <p style="text-align: center;">DEPARTMENT OF PSYCHOLOGY</p> <p style="text-align: center;">AGREEMENT</p> <p style="text-align: center;">BETWEEN STUDENT RESEARCHER AND GUARDIAN OF RESEARCH PARTICIPANT</p>

I (guardian name) _____ agree to give my child
(participant name) _____ permission to participate
in the research project of STUART PATTISON on the Development and Implementation of a
Mental Toughness Programme for a school 1st XI Cricket Team.

1. I understand that:

2. The researcher is a student conducting the research as part of the requirements for a Master's degree at Rhodes University.
3. The researcher is interested in:
 - a. Helping the cricketers of Kingswood College 1st XI develop Mental Toughness to enable them to compete more successfully at the level applicable to their context.
4. The research process has been communicated to my child clearly and they are aware of the procedures to follow with regard to participating in the study.
5. The participation (as a participant of the study) will involve:
6. Attending a focus group meeting with the researcher. During this focus group they will be required to engage in a discussion with their team mates and the researcher regarding specific aspects of their cricketing performance.
7. Attending an additional one-on-one interview with the researcher should they possess the position of captain of the team.
8. Working through various Mental Toughness exercises provided to them by the researcher.
9. Attending a follow up focus group discussion after completion of the Mental Toughness programme. This will involve reflection of the programme and will give them an opportunity to provide feedback to the researcher regarding their experience.
10. They are invited to voice to the researcher any concerns they have about their participation in the study and to have these addressed to their satisfaction.
11. They are free to withdraw from the study at any time – however they commit themselves to full participation unless some unusual circumstances occur or they have concerns about their participation which they did not originally anticipate. The researcher will ensure that any withdrawal from the programme will by names means label that individual as mentally weak.

12. Inclusion of specific names will not be included in the study report. Names will be altered in order to ensure anonymity.
13. Feedback will be provided to them after the completion of the Mental Toughness programme in the form of a full report along with feedback meetings.
14. In addition to this the full report will also be made available to you (the guardian) should you wish to read it.
15. This research project forms part of a broader research project on Mental Toughness conducted at a PhD level and thus the information gathered and the conclusions drawn throughout this research process will be used in the generation of that particular project.

In addition to the above:

1. I (as the guardian of the participant) have read the agreement between the student researcher and the research participant and have ensured that my child understands fully the contents of this document.

Signed on (Date): _____
Guardian: _____
Researcher: _____
Witness: _____

Appendix E

Focus Group Interview Schedule

FOCUS GROUP SCHEDULE

Let us start by talking about Mental Toughness.

1. What do you believe entails being Mentally tough? Here are some definitions of Mental Toughness (Given to the athletes after their response).
 - “Having the natural or developed psychological edge that enables you to: Generally, cope better than your opponents with the many demands (competition, training, lifestyle) that sport places on a performer. Specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure”.
 - “Mentally tough individuals tend to be sociable and outgoing; as they are able to remain calm and relaxed, they are competitive in many situations and have lower anxiety levels than others. With a high sense of self-belief and an unshakeable faith that they control their own destiny, these individuals can remain relatively unaffected by competition or adversity”.
 - “Mental Toughness is a collection of values, attitudes, behaviours and emotions that enable you to persevere and overcome any obstacle, adversity, or pressure experienced, but also to maintain concentration and motivation when things are going well to consistently achieve your goals”
2. What situations in cricket do you think requires Mental Toughness?
3. Do you believe performing well is based on physical talent alone?
4. How influential do you believe the mind is?
5. What mental skills do you believe are required to play cricket well?
6. How do you as a team and as individuals deal with poor team performance?
7. For the batsmen here, how do you deal with going out for a duck?
8. What about the bowlers, how do you deal with getting hit for a six?
9. Do you believe there are different Mental skills required for the different positions?
10. Are you guys able to deal with these issues during the game or do you find yourselves dealing with them after the game only?
11. How do you stay positive when things are going badly?
12. Do you guys let previous performances affect your confidence levels?
13. How you your previous performances affect your self-belief?
14. How are your concentration levels during the game?
15. Do you guys have any methods for staying sharp during your games?
16. How do you guys rate your decision making under pressure?
17. How well do you think you are able to analyse your opponents in terms of their strengths and weaknesses?
18. How do you feel as a team you have performed throughout this year?

- If you had to give yourselves a score out of 10 as a team with 10 representing excellent and 0 representing extremely poor, what do you believe your team deserves? Let's have some opinions?
19. What are the strengths of this team?
- Let's draw up a list of the positive aspects about this team over the last season.
20. What are the weaknesses of this team?
- Let's draw up a list of the negative aspects about this team over the last season.
21. What are the goals for this team for the up and coming season?
- Let's draw up a list.
22. Do any of you have individual or personal goals for the up and coming season?
23. Generally speaking now, let us discuss what this teams needs in order to have a successful cricket season.

Appendix F

Captain Interview Schedule

INDIVIDUAL INTERVIEW SCHEDULE - CAPTAIN

1. Tell me a bit about your team?
 - Do you know any history about the team?
 - How long have the guys been playing together for?
 - How did the season at the beginning of the year go?
 - i. Do you feel the team performed well?
 - ii. If so, what makes you believe this?
 - iii. If not, what do you think went wrong?
 - iv. Was the team winning games?
 - v. Where is the team ranked in the country at the moment?
2. Tell me a little bit about the strengths of the team?
3. What about the weaknesses of the team?
4. What is your role as captain of the team?
5. What do you think Mental Toughness is?
6. How important do you think Mental Skills are?
7. What Mental skills do you believe are needed in cricket?
8. Are there any mental skills that you as captain try and incorporate in your team?
9. Are there any mental skills that you don't really focus on but perhaps believe would be beneficial.
10. What situations to you believe require Mental skills?
11. Do you think different positions or different roles require different Mental skills?
12. Talk to me a bit about the goals for your team for the up and coming season?
 - What about the big match against St Andrews?
 - Do you think developing mental skills a little better will give you the edge over St Andrews?
13. What exactly does this team need with regard to specific mental skills development?
 - What mental skills do you believe we could work on that would benefit this team for the up and coming season and the seasons to follow?

Appendix G

Coach Interview Schedule

INDIVIDUAL INTERVIEW SCHEDULE - COACH

1. Tell me a bit about your team?
 - Do you know any history about the team?
 - How long have the guys been playing together for?
 - How did the season at the beginning of the year go?
 - i. Do you feel the team performed well?
 - ii. If so, what makes you believe this?
 - iii. If not, what do you think went wrong?
 - iv. Was the team winning games?
 - v. Where is the team ranked in the country at the moment?
2. Tell me a little bit about the strengths of the team?
3. What about the weaknesses of the team?
4. What is your role as coach of the team?
5. What do you think Mental Toughness is?
6. How important do you think Mental Skills are?
7. What Mental skills do you believe are needed in cricket?
8. What mental skills do you try and teach or incorporate in your team?
9. Are there any mental skills that you don't really teach but perhaps believe would be beneficial.
10. What situations to you believe require Mental skills?
11. Do you think different positions or different roles require different Mental skills?
12. Talk to me a bit about the goals for your team for the up and coming season?
 - What about the big match against St Andrews?
 - Do you think developing mental skills a little better will give you the edge over St Andrews?
13. What exactly does this team need with regard to specific mental skills development?
 - What mental skills do you believe we could work on that would benefit this team for the up and coming season and the seasons to follow?

Appendix H

Historical context of Mental Toughness definitions and components

Authors	Definitions	Components
Loehr (1982)	No single definition provided. Loehr (1982) believes there are a number of mental skills, all of which are learned and are characteristic of a mentally tough athlete.	<ul style="list-style-type: none"> • Self motivated • Self directed • Positive • Realistic • In control of emotions • Calm and relaxed under pressure • Highly energetic • Prepared for action • Determined • Mentally alert • Focused • Self confident • Responsible
Fourie and Potgieter (2001)	No single definition provided. Fourie and Potgieter (2001) identified elements of mental toughness as perceived by expert coaches and elite athletes.	<ul style="list-style-type: none"> • Motivation • Coping • Confidence • Cognitive skill • Discipline • Goal directedness • Competitiveness • Pre-requisite physical / mental requirements • Team unity • Preparation skills • Psychological hardiness • Religious convictions • Ethics
Jones et al. (2002)	Having the natural or developed psychological edge that enables you to: Generally, cope better than your opponents with the many demands (competition, training, lifestyle) that sport places on a performer. Specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure.	<ul style="list-style-type: none"> • Psychological Edge • Coping Better • Consistency • Determination • Focus • Confidence • Remaining controlled under pressure

Clough et al., (2002)	<p>Mentally tough individuals tend to be sociable and outgoing; as they are able to remain calm and relaxed, they are competitive in many situations and have lower anxiety levels than others. With a high sense of self-belief and an unshakeable faith that they control their own destiny, these individuals can remain relatively unaffected by competition or adversity.</p> <p>Flexibility and the ability to remain balanced and avoid becoming defensive when put under unexpected pressure, responsiveness and the ability to remain focused under pressure, strength and having a powerful fighting spirit and resiliency and having the ability to bounce back from disappointment, mistakes and missed opportunities.</p>	<ul style="list-style-type: none"> • Focus • Visualisation • Persistence • Resilience • Confidence • Discipline • Focus • Fighting spirit • Handling pressure • Bouncing back
Bull et al., (2005)	<p>No single definition provided. Bull et al., (2005) presented the term ‘winning mind’ as an analogy for Mental Toughness.</p>	<ul style="list-style-type: none"> • Personal Responsibility • Dedication • Commitment • Belief • Coping with pressure • Tough character • Tough attitude
Thelwell et al., (2005)	<p>Mental Toughness is having the natural or developed psychological edge that enables you to; always cope better than your opponents with the many demands (competition, training, lifestyle) that soccer places on the performer and specifically, be more consistent and better than your opponents in remaining determined, focused, confident, and in control under pressure.</p>	<ul style="list-style-type: none"> • Self-belief • Striving for involvement • Positive reaction to situations • Remaining Calm under pressure • Grind yourself out of trouble • Ignoring distractions • Remaining focused • Positive presence • Controlling everything outside of the game • Enjoying pressure

Gordon and Sridhar (2005)	No single definition provided. Conducted a seven series presentation and workshop on elements considered to make up Mental Toughness. This was conducted after participants were asked to express what attributes and behaviours they believe mentally tough cricketers possess	<ul style="list-style-type: none"> • Motivation • Commitment • Resilience • Self-belief • Optimism • Positive perfectionism • Focus • Handling pressure • Sport intelligence
Gucciardi et al. (2008)	Mental Toughness in Australian Football is a collection of values, attitudes, behaviours and emotions that enable you to persevere and overcome any obstacle, adversity, or pressure experienced, but also to maintain concentration and motivation when things are going well to consistently achieve your goals.	<ul style="list-style-type: none"> • Self-belief • Self motivation • Tough attitude • Concentration • Focus • Resilience • Being able to handle pressure • Personal values • Emotional intelligence • Physical toughness • Sport intelligence • Work ethic • Determination • Perseverance • Goals • Meticulous Preparation • Inspiration • Competitive drive • Team Success • Vision • Discipline • Commitment • Positivity • Professionalism • Sacrifices • Overriding negative thoughts • Self awareness • Team role • Responsibility • Understanding the game

Appendix I

Mental Toughness Programme – Kingswood College 2011



MENTAL TOUGHNESS PROGRAMME

Kingswood College 1st XI Cricket

This programme has been specifically tailored for the use of Kingswood College 1st XI Cricket in order to develop, improve and maintain their level of Mental Toughness

**STUART PATTISON
2010**

INTRODUCTION TO THE MENTAL TOUGHNESS PROGRAMME

In this day and age the sphere of sports psychology is growing tremendously and the information gathered and presented by sport psychologists is being made more readily available for our disposal. In order to define the context in which this programme will function, it is useful to first consider a definition of sport psychology. Sport psychology can be defined as the “study of psychological and mental factors that influence and are influenced by participation and performance in sport, exercise, and physical activity, and the application of the knowledge gained through this study to everyday settings” (Leunes & Nation, 2002, p. 4). Sport psychologists have developed interventions that focus specifically on developing an athlete’s mental skills and these intervention techniques are group into what are called Mental Skills Training (MST) and / or Psychological Skills Training (PST) programmes. Psychological Skills Training (PST) programmes such as this Mental Toughness programme will help to educate and equip you as young athletes with useful techniques and strategies that can be applied to assess, monitor, and adjust your thoughts and feelings in order to produce psychological states that facilitate a superior performance within your particular sport.

Athletes who are striving to improve their athletic performance need to develop specific skills demanded for their particular sporting context and for generations now various scientists, coaches, and athletes have sought after particular training programmes which are effective in the long term, offer an optimal approach to athletic development, and furthermore enable peak performances to be obtained at precise times. For you as young athletes it is important to note that psychological skills training is just as, if not more, important as physical training and that these PST programmes are designed and implemented to develop and train an array of psychological skills to assist in achieving superior performance.

This programme has been specifically tailored for the use of the Kingswood College 1st XI Cricket in order to help you as athletes develop, improve and maintain your level, and the teams’ level, of Mental Toughness. Specific Mental Toughness characteristics have been chosen based on the importance and significance that I have placed on them as well as the literature in assisting you as young athletes with

developing a more competitive and multi faceted sense of Mental Toughness. Some of the skills chosen were further added as a result of the importance that you as athletes placed on them during the research process that was conducted with you as participants of a Masters degree in Psychology. The programme has been designed in a very specific way. It will follow the general structure of most PST programmes which includes the facilitator presenting various educational aspects on the mental skills chosen coupled with useful exercises that have been developed in order to help illustrate the influence of these characteristics and assist in improving them. Along the way various discussions between the facilitator and you as athletes will occur as well as discussions among yourselves as a group in order to fully engage in the material being covered and to further ensure that a more holistic experience is obtained through the programme implementation. The discussions are aimed at opening up the minds of you as athletes and to encourage you as individuals and as a team to think about the topic of each session and how it can be applied to your own specific sporting context.

One important consideration must be made clear at this point in the programme. Mental Toughness is a complex construct that includes more than just learning certain specific mental skills. This programme is designed to expose you to various mental aspects that are considered crucially important for you as young athletes to reach greater levels of performance. In addition to gain theoretical knowledge about each different concept the exercises that are included are designed to show you the effects of each skill and of improving these skills and how to effectively further develop and maintain these newly acquired skills. In addition to learning about these skills and how to develop them further it is important for you to take the lessons learnt and knowledge gained and apply them to your practice sessions as well as your competitive endeavours. In fact, the aspects involved in mental training must be applied to all levels of preparation for your sporting competitions, that being practice, matches and even time spent preparing outside of practices such as visualisation and goal setting sessions done at home for example.

Mental Toughness is more than just learning about mental skills. As already touched on briefly, after acquiring the skills the next step involves incorporating the practice of

these skills into your regular training routines. “To benefit fully from these mental skills, you must practice them on a regular basis so that they become second nature and so that they help you to consistently perform at a nearly automatic level in your sport” (Etnier, 2009, p. 48). Performing at an automatic level is important because you will be able to perform well in the face of pressure, adversity, injury as well as various other challenging constraints. Top sport activity often requires automatic and spontaneous movement as too much thinking, too much mind and too much planning in a sporting situation can restrict natural flow and impede on performing at your best when sporting demands are high and intense. Therefore it will be beneficial for athletes such as yourselves to have superior mental skills readily available to use when necessary without expelling too much effort resulting in a dampening of your performance. As athletes train physically certain skills become habitual and the execution of these skills often occurs without the athlete even realising. Training mentally will allow mental skills to be learnt and acquired and just like physical skills will eventually become second nature. Mental Toughness further includes the superior environment and attitude that you will inevitably create within your sporting context as a result of exposure to this programme. The programme will assist you in producing and creating a winning mind and a winning environment, both of which will be explained a little later in this programme.

It is important to note that such a programme is by no means a „quick fix“ to any mental barriers that you or your team may be facing. The programme is a foundation upon which to build your capacity, potential and ability to overcome mental obstacles that you may face and it is important to understand that maintenance of the mental skills that you learn here and the potential to improve on your mental capabilities will require dedicated work and commitment. This programme must be considered an investment into your future sporting performance ability and not a „once off“ mental workshop. Be wary of those people who try to convince you of the „proven“ methods to achieve success. We often hear about the quick „10 step formula for success but we rarely hear about how successful these programmes really are. In order to reach success in sport, specific programmes need to be designed in a way that will help you achieve a psychological state of winning. Elite athletes today have realised and understood that winning goes beyond technique and that it further incorporates

developing a unique style of the psychology of winning and a part of this winning psychology is the development, implementation and maintenance of a Mental Toughness programme such as this one.

Although the programme will only run for a couple of weeks, it is more realistic to understand that developing one's Mental Toughness to a level where superior performance can be seen on a more regular basis will take several months. "The true winner is one who realises that there is no end to the journey" (Jennings, 1993, p. 44). Mental training is not something that is a „once off“, instead it should become a way of functioning within your sporting performances. The quality of the programme and the effect it has on you as athletes and your future success and performance will be determined by the importance you place on learning such aspects and your attitudes coming into the programme. It is important that you „buy“ into the idea of this form of mental training and that you apply, as best as possible, all aspects of what you are about to be taught. Attitude breeds success and more specifically it dictates who we are as individuals, whether on or off the sporting field (Kuehl, Kuehl, & Tefertiller, 2005). Attitudes make up our personality, they direct our approach to our sports, our professions and our lives in general (Kuehl et al., 2005). Furthermore our attitudes control how we act, how we interpret information set before us and how we respond to and use this information to better our performances. Attitude is the "thoughts, beliefs, opinions, feelings, or intentions with which you approach your tasks and goals" (Kuehl et al., 2005, p. 14). Most importantly your attitude will determine what you achieve, how you feel and how happy and satisfied you are with your life (Kuehl et al., 2005). Mental Toughness training will essentially help you adjust your attitude and mind-set and guide it in the right direction to assist you in adopting the most professional attitude for your sporting career, but it is important that you start with a positive attitude in the first place. An attitude of patience, determination, dedication and the willingness to try, learn and adopt new things is essential.

Another aspect to remember is to have fun at all times. This is an investment into your own sporting potential and it is important to enjoy what you are being exposed to. Acknowledging that discipline and dedication are necessary it is important and

crucial for success that you find a balance between fun, enjoyment and intensity. You need to adopt an inner drive and desire to achieve a high quality of performance coupled with enjoyment (Jennings, 1993). As time is an inevitable and unavoidable constraint the main idea behind the programme is to illustrate to you how important and influential the concepts are and provide you as athletes with a solid grounding upon which to build your Mental Toughness. The programme is well structured, comprehensive, informative and fun to take part in and the results should see you as young athletes obtain a greater and far more competitive mental edge over your future competitors.

Dr Steve Harris, who has worked with the Springbok Rugby team on numerous occasions over many years as the mind coach, makes some interesting points when he discusses the art of developing Mental Toughness. By nature athletes are all competitive, but being competitive alone will not set athletes apart. In addition to being competitive athletes need to acquire a unique competitive advantage, an advantage that gives your performance a superior dynamic to your competitors. He states that in order to convert our own desires, passions and determination into success and positive results we need to overcome our opposition with a competitive advantage, having a heightened, elaborate and more sophisticated level of Mental Toughness. However, just as I mentioned earlier, Dr Harris further emphasises that developing one's Mental Toughness is a rigorous choice and a difficult journey that requires the right attitude and mindset characterised by patience, determination and passion.

MENTAL SKILLS COVERED IN THIS MENTAL TOUGHNESS PROGRAMME

The contents of this Mental Toughness programme will include the following aspects and mental skills:

Power of the Mind

Concentration and Focus

Self Confidence and Self Belief

Visualisation and Imagery

Positive Self Talk and
Communication

Decision Making and Goal
Orientation

Conclusion: Connecting the
Dots

SESSION 1: INTRODUCTION – POWER OF THE MIND

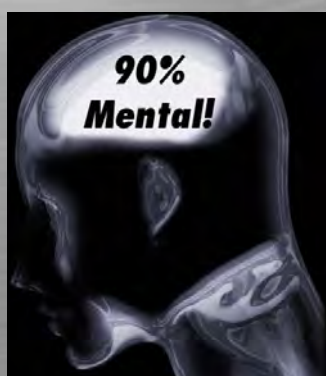
This first session is titled the „**Power of the Mind**“ and is a basic introductory session aimed at exposing you to a few exercises and ideas surrounding how powerful and influential your mind can be over the way that your body performs and functions. Before commencing with the programme and this particular session on the power of the mind we will discuss now as a group what is to come over the course of the next couple of weeks as the programme unfolds as well as deal with various logistical issues regarding successful and efficient implementation of the actual programme.

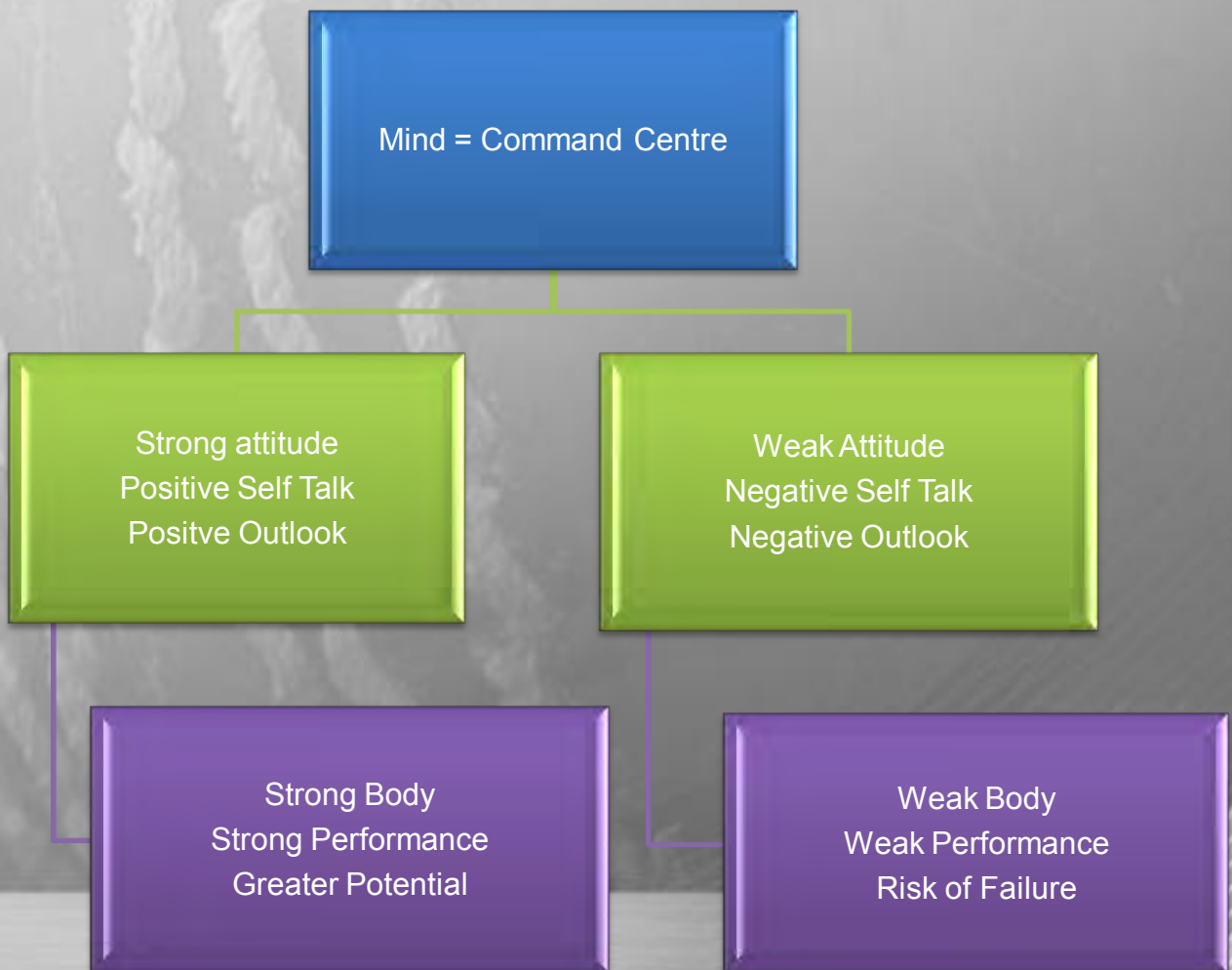
By now you all would have received a Mental Toughness Programme Booklet. This booklet contains the skeleton or outline of what we will be covering in the next 6 weeks and will give you a brief indication of what aspects of mental skills training we will be unfolding. It is highly recommended that during the course of this programme implementation you keep a journal of the process that you will be experiencing. You are provided with a journal in your Mental Toughness booklet. In this journal you can write about the programme as you experience it personally. This writing may regard anything that influences you during the programme, whether it be positive experiences or negative experiences, it may be about lessons learnt, or about whether you enjoyed an exercise or not, whether you felt comfortable or uncomfortable and even your thoughts regarding whether the exercises were beneficial, helpful and informative or not. This form of writing will allow you to make the most out of the programme and help you benefit more significantly to what you are being exposed to. In addition to this when we evaluate the programme upon completion it will be useful to look back at what you wrote in these journals to gather a clearer idea and offer an educated consensus.

Right, so let us begin! There have been numerous occasions where we have all witnessed athletes, or even ourselves, blaming poor performance on factors such as losing concentration, tightening up under pressure or loss in confidence and self belief, lack of direction or negative self talk. Too often athletes make the mistake of believing that correcting this poor performance will come from more practice time. Although this is true, it may come down to practicing in a different area, focusing your energy and outlook into an alternative domain for performance improvement.

More than often physical skills or talent are not the real problem; rather it is a lack of mental skills that is the problem. Certain physical characteristics, technical skills, technical abilities, coaching and competition all contribute toward reaching successful levels of performance and help improve performance, however there is one more critical element that must be in place in order to assist you as young athletes reach your full potential and that is Mental Toughness training (Etnier, 2009). In today's sporting world Mental Toughness most often separates successful from unsuccessful athletes. Bill Russell was an NBA player who was awarded most valuable player on five occasions and he stated once that "concentration and Mental Toughness are the margins of victory" (Etnier, 2009, p. 46). Athletes and their coaches already know how to prepare physically and most athletes have the appropriate and adequate resources for skills and tactical training which has lead to coaches to believe that the single most critical attribute determining success or failure comes down to the effective and successful inclusion of Mental Toughness training.

Our minds are so influential and powerful, while our bodies can only come up with what the mind can imagine. The mind has been created as the command centre over our bodies. So when we allow our minds to be strong, the body will obey this command and be strong too. When we decide to let our minds be weak, inability will set in and our body becomes weak. If we decide to adopt a weak mindset when our bodies are faced with the slightest hint of difficulty and pain, the body will give up and tell the mind it is giving up. As athletes, when we decide to put our heads and our minds in their rightful place of authority over the body, limitless potential breaks out and we begin to experience a level of performance that we never knew was possible. There is only so much that physical talent can achieve. Athletes need to start crossing over into mental training that compliments their physical training. Almost always, athletes who train mentally will have an advantage over athletes who choose not to train mentally, sometimes even regardless of the difference in physical capabilities or skills and talents.





WINNING MIND AND WINNING ENVIRONMENT

Certain aspects such as anxiety, stress, fear and poor emotional control are the normal responses to adverse or challenging circumstances that can be experienced within a sporting context, whether during practice or even during competition. However these responses are not normal for those athletes known as and called “**WINNERS**” (Bull, 2006, p. 9). These types of athletes or “winners” have the capacity to enter challenging situations with confidence and a sense of excitement against the odds (Bull, 2006). Bull (2006) characterises these “winners” as individuals who approach adverse challenges with confidence and excitement and they thrive on performing against the odds and under pressure. A winner will project the following personal attitudes:

- ✓ **I am a competitor and I love and thrive on challenges set before me.**
- ✓ **I love pressure and I love to be tested because I know it helps me improve which I understand is an important part of my personal and sporting performance enhancement, growth and development.**
- ✓ **I want to be right there when the game is on the line and I am not afraid to fail. I will learn from it, adjust and go for it again.**
- ✓ **Tell me I cannot do something and I will find a way to do it.**

Being able to stay focused and remain strong in their self belief when dealing with intimidating environments is owed to the fact that these particular individuals are mentally tough in their nature and approach and have what is referred to as a “winning mind”. Bull (2006) takes further this concept of the „winning mind” and presents what he calls the “**WINNING ENVIRONMENT**”. The winning environment is not something that just appears to athletes but is rather an environment that athletes need to make a conscious effort at creating. Developing ones” mental skills and engaging in psychological interventions such as MST and PST and this particular Mental Toughness programme will all be beneficial to the athlete, but amalgamating these interventions with the winning environment will set athletes in good stead for better developing their overall Mental Toughness. The environment that the athlete creates must be pervious to the development of mental skills such as self belief, decision making, resilience and other Mental Toughness characteristics. Marcus

Trescothick who in 2005 was the vice captain for the England cricket team that won the ashes stated that:

“Ability gets you part of the way, hard work and preparation are fundamental, but it is the creation of a WINNING ENVIRONMENT that really makes the difference”

With regard to this „winning environment“ Bull (2006) provides 3 winning strategies, which if incorporated into your training routines will assist you in creating a positive winning environment. Consider these three strategies and make a conscious effort to begin incorporating them into your training sessions until you feel comfortable and confident enough to begin incorporating them into your competitions too. These strategies are described below.

1. Firstly, it is important to understand explicitly what your role is in the actions that you are taking part in. This understanding refers specifically to roles under performance pressure, role acceptance and role clarity and understanding these three areas immensely will contribute towards developing overall mental toughness.
2. The second winning strategy is playing to your strengths and revolves around the premise of utilizing strengths as a platform when working under pressure as this will inevitably help with making confident decisions and calculated risks (Bull, 2006). This is where your coaches' role becomes particularly important. It is vital for your coach to assist you in understanding your strengths as too often athletes get caught up in their own view of themselves which most of the time is an underestimate of their true potential. “We all have talents but it is astonishing how some people lack basic awareness of what these talents are” (Bull, 2006, p. 151).
3. The third winning strategy is enjoying the ride. Competitive environments for athletes will be characterised heavily by stress, adverse circumstances, increased levels of anxiety, they will be emotionally and physically draining and the pressure will be high and intense but an athlete who is considered mentally tough will learn to enjoy this ride, as uncomfortable and nerve

racking as it may be. Elements of confidence and relaxation are more easily reached if athletes enjoy their competitive endeavours and “the absence of fear is such a great antidote to the debilitating effects of pressure” (Bull, 2006, p. 154).

In addition to adopting a winning mind and creating a winning environment it is crucial to ensure that a winning attitude (spoken about briefly earlier) is adopted in unison with these two aspects. “A change in attitude precedes a change in behaviour” (Kuehl et al., 2005, p. 14). In order to make a successful adjustment to your sporting performance, an attitude adjustment is crucial and necessary and should be the first step or adjustment in order to improve your performance. Winning attitudes are rarely a natural gift instead they are learned and honed, developed through the maturation process and emphasized through effectively designed Mental Toughness programmes.

WHAT IS MENTAL TOUGHNESS

Before continuing further with the programme I believe it is essential for you to understand briefly what the concept Mental Toughness entails. There are a large variety of different definitions that exist for Mental Toughness and if we were to attempt to cover them all we would be here for days and undoubtedly engage in various discussions regarding the diversity of the Mental Toughness construct. Therefore I have included some significant ones to help you understand more closely what the construct incorporates. These definitions are direct quotes from various Mental Toughness theorists. Consider them carefully and work through them slowly until you can say that you have a concise idea of what Mental Toughness means.

“Mental Toughness may be evident in the willingness of an athlete to respond to criticism of his or her performance, in the ability of an athlete to stick to a more difficult training regime than his or her closest competitor, in the commitment of an athlete who fights back from injury, or in the ability of an athlete to maintain focus at the end of a gruelling competitive event. Mental Toughness is evident every time that you push yourself a little harder, that you persevere in the face of adversity, that you rebound from a difficult experience, and that you perform well under pressure. If you want to increase your chances of playing at the highest level you need to develop your Mental Toughness” (Etnier, 2009, p. 48).

“It is the mind-set to meet a challenge and overcome the obstacles that stand in the way of success. It is the inner strength that creates resolve and dedication, the courage to fight back from failure. It is the understanding that achievement rarely comes without enormous hardships along the way, and that the mentally tough are those who can work their way through the ordeals and persevere to success. It means keeping your head when others around you are losing theirs, and it means having the courage to speak up at the right time. The goal for Mental Toughness is a conscious decision a person makes in order to increase his or her opportunities for success” (Kuehl et al., 2005, p. 6)

When professional scouts refer to „make-up“, they mean Mental Toughness. It is a collection of values, attitudes, and emotions, a blend of the flexibility to make adjustments with the stubborn perseverance to overcome obstacles. Players who are mentally tough know how to control their emotions to perform in clutch situations, they can stay calm when breaks go against them; they avoid becoming intimidated; they don't give in by changing plans, losing sight of goals, or taking the easy way out; they push themselves to become their best, even working through exhaustion; they are disciplined and avoid easy distractions; they bounce back from disappointments and adversity; they are prepared and know how to prepare; they do not make excuses, particularly to themselves; they overcome fear. Mental Toughness requires a state of alertness that allows the player to react quickly to changing situations while remaining intensely focused. It is a combination of self control and discipline that allows quick, intelligent decisions at the most intense moments. Everyone feels fear, the mentally tough learn to execute despite fear” (Kuehl et al., 2005, p. 7).

An overview of what a mentally tough athlete generally looks like and the type of athlete that you should be striving to become is described below. This programme is designed to help you begin your journey towards becoming an athlete of this nature.

- ✓ ***A mentally tough performer acquires the unshakeable self belief that results from a total awareness of how the performer got to that level.***
- ✓ *Mentally tough performers know what is and is not achievable within a given time frame. They do not dream about the impossible or set unrealistic targets that cannot be achieved in the time available to them.*

- ✓ ***The ideal mentally tough performer must be in control and not controlled – retaining as much control as the performer believes is necessary.***
- ✓ *Mentally tough performers must exert control in pressure situations, they are in control of their destiny, they can grab the situation and shape it according to what they want to happen as opposed to being externally controlled.*
- ✓ ***Mentally tough performers are not swayed by extraneous factors in training that they cannot control. They view these factors as challenges to overcome and use these challenges to enhance their performance.***
- ✓ *Mentally tough performers accept, embrace, and even welcome the elements of the training regime that are considered painful.*
- ✓ ***Mentally tough performers derive pleasure from being able to give absolutely everything.***
- ✓ *Mentally tough performers, at every opportunity, practice being better than everyone else. They are extremely competitive with themselves, as well as with others. They love to compete and would try to establish a competitive environment in training.*
- ✓ ***Mentally tough performers love the pressure of competition. The ideal mentally tough performer is perceived as being able to adapt to or cope with any unplanned adverse situation and perform optimally no matter what was thrown at them.***
- ✓ *Mentally tough performers are able to make the right decisions and choose the right options under conditions of extreme pressure, even when the situation contains ambiguity.*
- ✓ ***Mentally tough athletes are perceived as being able to cope with high pressure situations and channel anxiety in order to enhance performance.***
- ✓ *Mentally tough performers believe that goal achievement will occur. A mentally tough performer remains committed to the belief of goal achievement until every possibility of success had passed.*
- ✓ ***The ideal mentally tough performer can put a mistake to one side and carry on performing regardless. They have resilience, toughness; they***

are not fazed by mistakes. They stay mentally strong when things do go wrong, they are able to bounce back from mistakes or errors and then produce it again.

- ✓ ***Mentally tough performers can raise their performance level when required.***
- ✓ ***Mentally tough performers remain completely focused on the job at hand, despite any distractions. Their focus is on why they are there and what they must do in order to achieve their goal, despite distractions attempting to divert their attention.***
- ✓ ***Mentally tough performers remain committed to their self-absorbed focus, regardless of external distractions.***
- ✓ ***Mentally tough performers are described as being able to create a state of mind in which they are able to think about other people, the opposition, and other events yet are able to stay committed to their internal focus.***
- ✓ ***Mentally tough performers know how to achieve their eventual outcome.***
- ✓ ***Mentally tough performers change the inappropriate thoughts and feeling they experience into ones that help them win.***
- ✓ ***Mentally tough performers rationalise and use failure to learn how to reach their ultimate goals.***
- ✓ ***Mentally tough performers know or understand what to take away from success, how long they can live in the glory of that success, and when it is time to move on and get back to focusing on the next challenge.***
- ✓ ***Mentally tough performers are able to deal with the fame, rewards, and additional pressure that success brings in a rational and level headed manner.***

(Jones & Connaughton, 2007, p. 248-260)

FUEL TANK ANALOGY

Before continuing with some “power of the mind” exercises I thought it would be beneficial to end off this section by explaining a Mental Toughness analogy to help set the context for Mental Toughness training. The process of obtaining a greater sense of Mental Toughness can be compared to the analogy of a vehicles fuel tank, a concept originally developed by Dr Steve Harris. I adjusted and developed further this analogy and this idea provides an interesting way of looking at Mental Toughness training. Before describing the analogy I must first unpack another concept that will assist in understanding the link between these models. Tim Noakes, a professor of exercise and sports science, published papers looking into the central governor model of exercise regulation which will be touched on very briefly.




When an athlete is training hard they will inevitably and eventually reach a level of fatigue where the lactic acid builds up in the muscles to an extent that causes the athlete to feel like they cannot train for much longer. The fatigue is onset by signals in the brain, specific mental signals. The brain is telling the muscles they are getting tired and must stop stressing themselves further to prevent injury or damage. This is linked very closely to what Noakes states when he says that it is the mind **NOT** the muscles that regulate fatigue. The muscles have not reached optimum performance capacity but the brain sends signals to tell the athlete that he / she is getting tired and to avoid injury or damage the signals cause fatigue which encourages the athlete to stop training. Most athletes stop at this point and very few push too far past the level of fatigue. This process is similar to a fuel gauge in a vehicle. When the warning light comes on, and the gauge may even indicate that it is empty, there is still fuel in the tank. The vehicle enters into a reserve and can still continue driving for a small distance. The warning signal however is telling the vehicle that it needs more

fuel just the way in which the mind sends signals to force fatigue and indicate to the athlete that a rest is required. Keeping this analogy in mind and going back to the training athlete, it is our bodies' natural reaction, predisposed, to send signals to protect itself. Mental Toughness is all about knowing how to push through those „signals“ until true „empty“ is reached.

This idea leads nicely onto the belief that athletes with greater Mental Toughness are going to be the athletes who reach the top and become leaders in their respective fields and be greater athletes who are considered to be mentally weaker. Very few athletes, and even general people in other spheres such as business, enter into the area past the „empty“ warning signals. It can almost be considered an untapped and uncharted domain. It is an uncomfortable area to operate within. If you can teach yourself to venture this ground then you are engaging in mental training that will provide you with a greater competitive advantage over any of your competitors. Training beyond your limits i.e. past the „empty“ warning, helps you reach levels of strength you didn't know where possible and prepares you for adverse challenging situations that you may otherwise not have been prepared for. This is why you as the athletes in this intervention have been heavily involved in the contents of the programme as you needed to learn aspects that were beyond your everyday performance routines rather than just skills that myself and the literature deemed important to develop Mental Toughness.

Mental Toughness, in my opinion and to an extent, can be considered the *sum of its parts*, in other words training such elements like concentration, focus, visualisation, self belief etc are all beneficial, they are the aspects of performing before the tank reaches the „empty“ warning signal and going into the reserve tank. True as this may be, any athlete can train in this way, Mental Toughness programmes are available from various sources and most athletes can engage in some sort of mental skills training that will help them improve their level of Mental Toughness. They can be taught how to be better at certain individual aspects that make up Mental Toughness. However, combining all these skills together, understanding them individually and how they interact in an interdependent relationship, all combined in the correct environment with the right mental attitude and mindset will take the

The background of the page is a grayscale image. On the left side, there is a close-up of a thick, braided rope. On the right side, there is a basketball, showing its characteristic lines and texture. The image is slightly faded and has a soft, artistic feel.

athletes into the „reserve“ level of the tank and into the true meaning and purest form of what Mental Toughness really is.

POWER OF THE MIND EXERCISES

Exercise 1: FREAK AND PEAK PERFORMANCE

Objective:

The objective of this exercise is to assist you in understanding your mindset when you are performing poorly and when you are performing well.

Setup:

Each player must receive a copy of the Freak or Peak Performance sheet.

Direction:

In the Freak box you must write and draw words, phrases, or pictures which depict your thinking and emotions when you are performing poorly. After you have done this write and draw words, phrases, or pictures which depict your thinking and emotions when you are performing well. Try to engage in the thoughts as best as possible generating as much detail as you can. The richer, thicker and more illustrative the detail the more effective the exercise will be. The more vivid the thought process the better the outcome will be for this exercise.

Discussion:

- Discuss the exercise and what you wrote with your team mates.
- What similarities are there between teammates when playing poorly?
- What similarities are there between teammates when playing well?
- Compare the quantity and quality of thoughts between the Freak and Peak side.
- Discuss how much control you believe you have over the words and pictures presented on the Freak side?
- Who decides which thoughts dominate your thinking?
- What can teammates and coaches do to help players think more regularly the Peak performance thoughts?

Worksheet 1

Freak Performance



Peak Performance



Exercise 2: MENTAL TOUGHNESS OR MENTAL MORON

Objective:

The objective of this exercise is to get you as athletes to examine certain aspects that could mentally influence your heads and mindset and to further help you generate plans to overcome them.

Setup:

Each athlete must receive a copy the Mental Toughness or Mental Moron worksheet.

Direction:

Think about a situation or circumstance during your own or the team's performance when you have felt frustrated, mad, discouraged, angry or disappointed. List these typical challenging situations in the far left column. Situations may include getting injured, getting angry with team mates, losing, making critical errors and so on. With these challenging situations write up a Mental Moron response which is a poor way to react to the situation described and list this in the far right column. After this is done, with these challenging situations write up a Mental Toughness response, or a positive and effective way to react to the situation and list this in the middle column.

Discussion:

- Once the exercise is completed by all the athletes, cut off the Mental Moron column and THROW IT AWAY.
- After doing this you will be left with only the one column and will therefore be able to focus on the challenging situations and their Mental Toughness responses only.
- As a team, discuss the different challenging situations and what you believe your Mental Toughness responses were.
- It is important that you keep your sheet so that you can refer to it throughout your season. During this exercise you will begin noticing a trend that will follow throughout this entire programme and that trend is the simple, yet effective, idea that the responses you as athletes choose to elicit after any adverse circumstance is completely your choice.

- During this previous exercise you can see how easy it is to generate positive and negative responses and it is just as simple to choose which response you would like to apply to your sporting world.
- It is important to understand that choosing to think in a certain way will initially be a decision that you as athletes need to make, but ultimately, just as with physical training, this decision making will become second nature and being able to respond in positive ways to contextual situations, especially adverse ones, will be a part of you being mentally tough.

Worksheet 2

CHALLENGING SITUATION	MENTAL TOUGHNESS RESPONSE	MENTAL MORON RESPONSE

Exercise 3: BEST VERSUS WORST GAME

Objective:

The objective of this exercise is to help you compare and contrast your mindsets and emotions experienced during your **ALL-TIME BEST** and **ALL-TIME WORST** games.

Setup:

Each athlete must receive a copy the Best vs. Worst Game worksheet.

Direction:

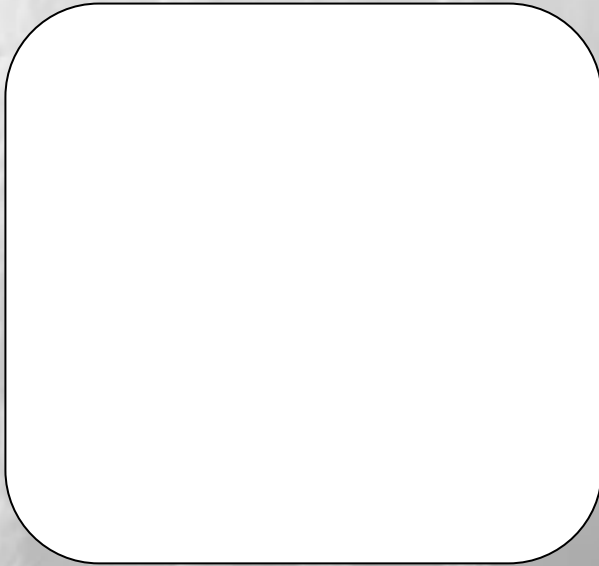
List two or three of your all-time worst games. Try and reflect back briefly on each one of these experiences. Whilst recalling these events think about your mindset going into and during that particular game. List two or three of your all-time greatest games. Reflect back briefly on each one of these experiences too. Try recall your mindset going into and during this game. Try and engage in the thoughts as best as possible and try sense the real feelings and emotions that you were experiencing during these two different scenarios.

Discussion:

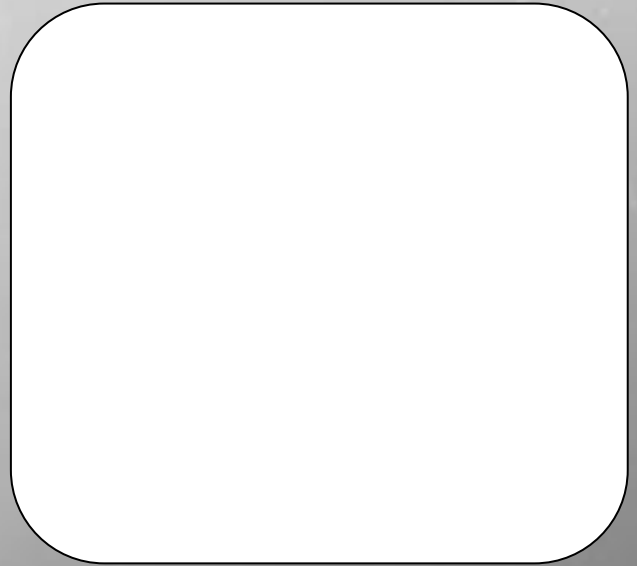
- Compare the two scenarios now.
- What do you focus on when you are doing well compared to when you are performing badly? How would you describe your levels of confidence and self belief in each of the performances?
- What happens to your body physically as a result of each mindset?
- Do you think your mind has a hold on or an influence over what your body does?
- Did you notice any correlation between the types of thoughts you were having, the attitude you adopted and the results of your performance?
- What can athletes do to mentally prepare themselves to consistently perform to their potential?

Worksheet 3

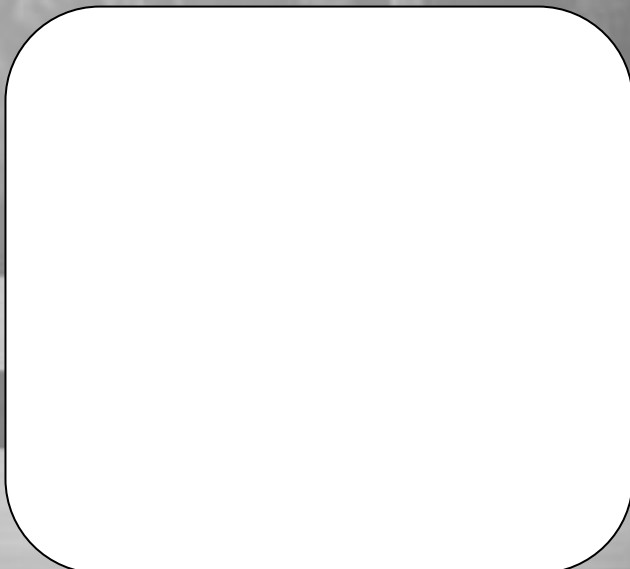
List Worst Performances



List Best Performances



Thoughts, Feelings, Reactions



Thoughts, Feelings, Reactions



Exercise 4: Mental Rubber Band

Objective:

The objective of this exercise is to demonstrate how your mind can impact or influence your bodies in a direct way.

Setup:

Spread yourselves out so you have a good amount of space to move in then listen to the direction from your facilitator.

Direction:

Hold your hands together about a foot in front of your faces. Raise and fully extend both index fingers so that they are roughly in inch apart resembling a number “11”. Close your eyes. Whilst keeping your eyes closed and using as much of your imagination in as much detail as possible, imagine that a very strong rubber band is looped around the knuckles of your extended fingers. Gaze strongly with intense concentration and focus at your fingers and imagine this rubber band is getting stronger and stronger pulling your fingers tightly together. Discuss as a group what happens?

Discussion:

- What is very interesting to note is that the images we project in our minds have a real affect and a big influence on our bodies.
- Most of you would have noticed that your fingers would have started slowly moving closer together as you were imagining the rubber band getting stronger. Some of you may even have noticed that your fingers were getting wider apart as your mind was fighting the instinct to bring your fingers closer together with the imagination of the tightened rubber band.
- As athletes you need to start thinking about what kinds of images you picture in your minds before and after games and even during practice as these images have a huge influence on your performance?
- It is important that these images are positive and productive.

SESSION 2: CONCENTRATION / FOCUS

DEFINING CONCENTRATION

Concentration deals with a person's ability to "exert deliberate mental effort on what is most important in any given situation" (Weinberg & Gould, 2007, p. 367). Furthermore, concentration includes focusing on relevant cues within one's environment, maintaining attentional focus over a period of time, having awareness of one's situation and having the ability to shift attentional focus when necessary (Weinberg & Gould, 2007). Effective concentration allows the athlete to apply appropriate attention to the internal and external cues that they are exposed to within their particular sporting context (Murphy, 2005).

MENTAL SKILLS OF CONCENTRATION

The athlete who can adopt full and effective focus on their performance and avoid being affected or influenced by distractions or any other destructive environmental cues will have a greater possibility of reaching their desired success (Murphy, 2005). Furthermore athletes who can successfully filter out unnecessary noise and distractions and concentrate solely on the goals that need to be achieved in order to succeed in the challenge set before them will have greater chances of success compared to those who cannot. Athletes who are able to engage optimal levels of concentration are better equipped with the ability to allow their mind and their performance to become one (Cohn, 2008).

BENEFITS OF INTENSE CONCENTRATION

Athletes who are able to adopt and implement a focused level of concentration toward their performance will equip themselves with a competitive advantage over their opponents. Athletes will always strive to compete at their optimal level of performance and reach their peak and those athletes who understand the importance and influence of concentration will have better and greater opportunities for performing at this level. Athlete must learn to take lessons, skills and methods practiced during training and focus attention on performing these in their competitive

environments. Athletes will have refined their skills and abilities during training, and competition is therefore the time to concentrate these efforts and apply their skills and abilities in the most efficient and effective manner in order to succeed in the challenge faced with. “Pure concentration allows you to take advantage of all your mental and physical assets, at an unconscious level, and play at your very best” (Cohn, 2008, p. 4).

Some benefits of heightened concentration include:



PRICE TO PAY OF LOSING CONTROL OF YOUR FOCUS AND CONCENTRATION

“When you lose concentration at a crucial moment in your game, you run the risk of making errors, losing momentum, or being beaten” (Cohn, 2008 p. 5). During that split second of losing your concentration the mind gets bombarded with various forms of internal and external stimuli which eventually corrupts your state of being „in the zone“. This disruption becomes destructive to your performance and may end up negatively affecting your chances of success as well as your teams” chances. Once athletes understand the importance of good and effective concentration and have mastered the art of engaging in optimal concentration states, it is important that these athletes control the length of this superior mental state. The idea of being able

to control the length of superior mental states refers to the ability of athletes being able to switch their concentration on and off during competition and practice. Mentally tough athletes are able to do this with ease and the act of engaging in the art of intense concentration states soon becomes second nature to them. The price that athletes pay when they lose concentration can be high. Some of these prices include the following:

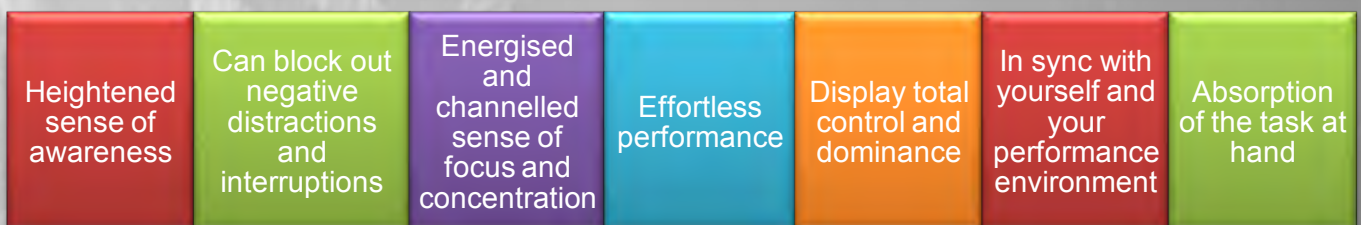


BEING IN THE ZONE

Most athletes, regardless of whether they are school athletes or professional and elite athletes, have come across the term being „in the zone“. This term refers to a superior mental state where athletes feel in complete control of their performance and everything is going their way during this performance. They have this unique sense that their body is one with their environment and athletes who are able to enter „the zone“ and thus become one with their environment have the added skill of being able to limit the influence of external stimuli and essentially block out any negative distractions or interruptions that may become detrimental to their performance and affect their chances of success. During practice and more intensely during competition athletes are bombarded continually with stimuli from various different sources, through all their senses such as vision, hearing, touch and even

smell. The brain has an amazing capacity to ignore stimuli that are not needed at that moment in time for that particular performance, and in addition to this, also has the ability to concentrate on something considered more important. When athletes learn to filter out the distractions and focus only on the important stuff, they have then mastered the elusive art of getting „into the zone“. Their performance objectives and goals become clearer to them and achieving them seems almost effortless to fulfil.

Being 'In The Zone'



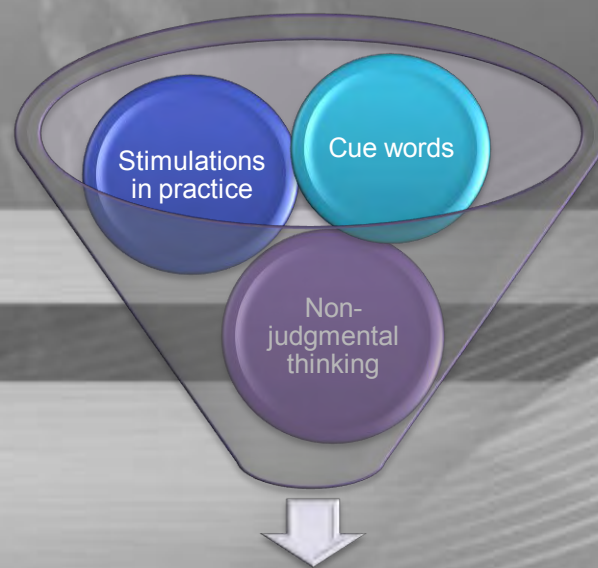
One of the biggest secrets of the top elite athletes is that they have learned to concentrate in a particular way where they can create their own version of „the zone“. This takes time and requires practice and patience and it is important for you as young athletes to try understand what your zone looks like and direct efforts at creating this zone over and over again until it becomes natural. In order to find the zone you can begin by controlling your thoughts through **self talk** and **visualisation** and try **maintain the same level of emotion and intensity every time you recall or replay your particular zone**.

What are the benefits of creating your own zone? You essentially plan your concentration and inevitably take control of your situation which assists you in determining where to direct your focus. You ultimately plan a mental routine which includes **evaluating the situation, receiving signs, fine tuning the approach to meet the demands of the moment, self coaching on mechanics, relaxing, visualising, and a final dominant thought** (Kuehl et al., 2005, p. 153).

CONNECTING CONCENTRATION TO OPTIMAL PERFORMANCE

Researchers have found eight physical and mental capacities associated with peak performance of which three of these include high levels of concentration. More specifically, athletes describe themselves as (a) being absorbed in the present and having no thoughts about the past or the future, (b) being mentally relaxed and having a high degree of concentration and control, and (c) being in a state of extraordinary awareness of both their own bodies and the external environment (Weinberg & Gould, 2007, p. 327). Researchers who have engaged in studies comparing successful and less successful athletes have consistently found that concentration along with attentional focus is an important discriminating factor. Furthermore, successful athletes are less likely to be affected by distractions such as irrelevant stimuli; instead they maintain a more task-orientated attentional focus, as opposed to worrying or focusing on the outcome. Some researchers have argued that peak performers have developed exceptional concentration abilities appropriate to their sport and optimal performance states have a characteristic that is referred to as concentration, the ability to focus, a special state of involvement, or awareness of and absorption in the task at hand.

IMPROVING CONCENTRATION



IMPROVED CONCENTRATION

There are various ways of improving an athlete's level of concentration. Three basic methods will be discussed here; **stimulations in practice, cue words and nonjudgmental thinking**.

We often hear athletes talking about playing or performing in a match in the same way they practice, and this concept is very important in achieving potential success. The competitive environment includes numerous factors that are not present in the training environment. However, if athletes are striving to increase their peak performance it is important that they try include competitive factors or distractions in their training routines so that their training can best represent the competitive environment that they will be performing or competing in. This type of practice is known as **STIMULATION TRAINING**. In other words athletes, and even more so the coaches of these athletes, must attempt to best create an environment that is as closely representative of the competitive setting. The term „practice makes perfect“ is heard of often within the sporting environment however I think the term more appropriate for athletes is **„perfect practice makes perfect“**. Consistently doing it right in practice will build a confidence that carries over into your competition. If an athlete practices in a sloppy manner then he / she is ultimately practicing failure and this sense of sloppiness will be seen in their performance. It is important to practice exactly how you expect yourself to perform in competition settings. An athlete can train intensely on a regular basis but if this athlete is not training appropriately and effectively then their performance will portray this. By training effectively and appropriately I am referring to training with the correct equipment, using the most valuable and efficient training methods and exposing oneself to environments that are likely to be experienced during competition.

CUE WORDS are used to trigger a particular response and also form part of another mental skill known as positive self talk. These cue words can be instructional, motivational or emotional and the key to using cue words in performance is to keep them simple and let them automatically trigger the desired response. Using these cue words as motivational and technique-orientated statements both in practice and directly before competing would be of great benefit to the athletes' performance. These types of cue are very helpful when trying to vary or change a movement pattern or even an attitude or emotional state that may be negatively affecting

performance. Although they are simple and often neglected, reminding yourself about certain aspects such as the examples given below will often help you align and alter your mindset more towards a positive attitude which will in turn improve the chances of a superior performance.

Examples - Cue Words or Phrases

"One shot at a time"
"Focus"
"Concentrate"
"Forget about that last ball"
"You can do this"
"You have practiced this
hundreds of times"
"You are better than this"
"You are better than them"

"Your team needs you"
"Your team relies on you"
"Your team believes in you"
"You have the skills"
"Block out the negative
chirping"
"Remember your technique"
"Patience is key"
"Believe in yourself"

One of the biggest disturbances of concentration that athletes face is the tendency to evaluate performance as good or bad. In other words athletes will assign positive or negative value to their performances and if this is done whilst still competing it can result in one's performance deteriorating rapidly. What athletes will experience when they begin to judge their performance is an element of generalisation where negative thoughts start flowing over into other aspects of performance and as your brain, your mind and your thoughts start taking over you lose fluidity, timing, rhythm, muscles start tensing up, excess effort is expelled, concentration lapses and decision making becomes impaired and irrational. What is being suggested here are two recommendations. Firstly, athletes must try leaving evaluation until after the competitive performance. By doing this the athlete will not waste energy on appraisal during competition which could otherwise have been used to improve or salvage their performance. Secondly, athletes must try looking at performance action **NON-JUDGEMENTALLY** and adopt a **solution-based approach** to preparing for future performance rather than a **problem-based approach**.

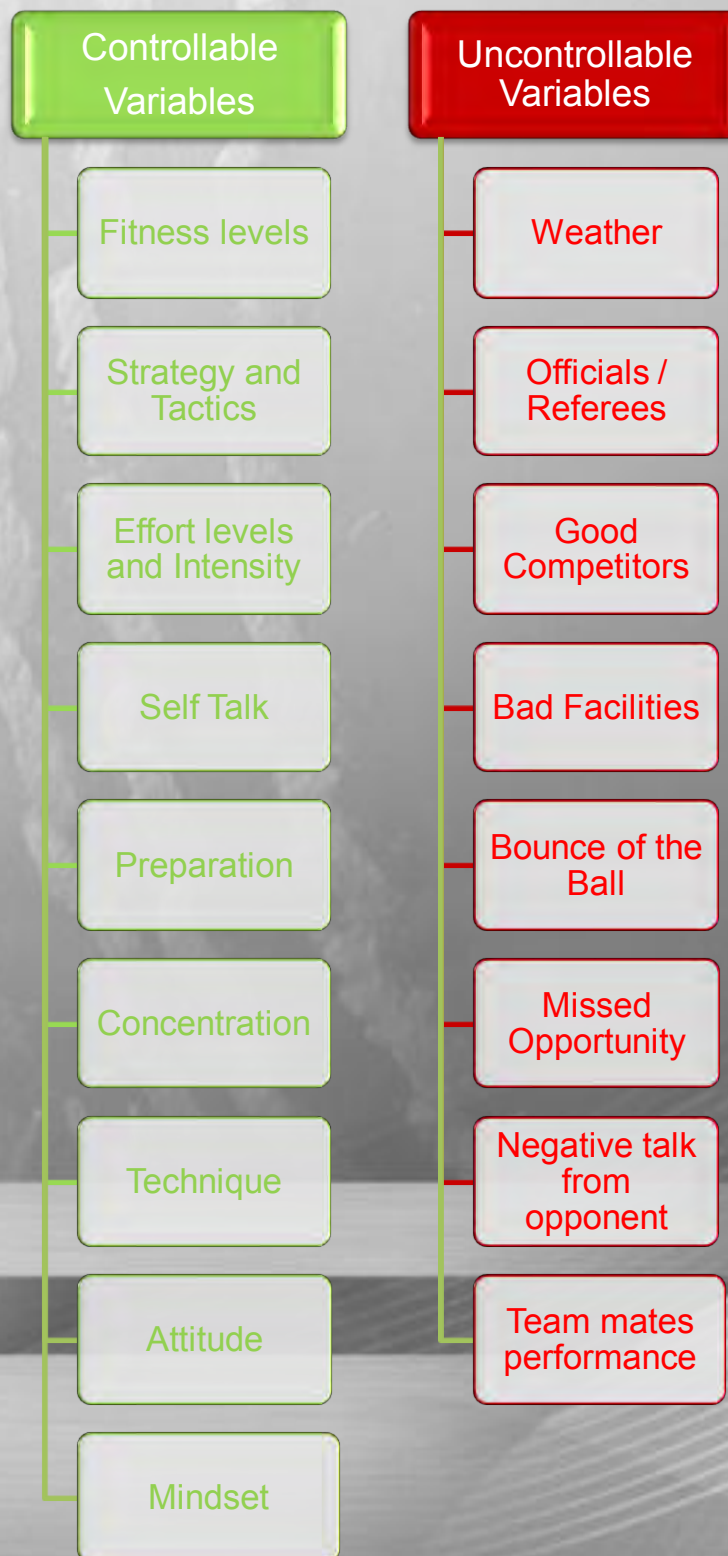
HANDLING EXTERNAL AND INTERNAL DISTRACTIONS

Distractions can be internal or external. External distractions are very likely to break an athlete's concentration level and can include elements such as **weather**, **opponents** and **competitors**, **spectators**, **equipment** and **facilities** as well as **officials**. What is interesting to note about the external distraction is that **NONE** of them can be controlled and this idea of controlling the controllables will be covered briefly now. An important part of an athlete becoming Mentally Tough is being able to focus energy only on those aspects of your game and performance that are in your control and understanding that in most circumstances there are in fact only a small number of variables that you can control. When in competition or even in practice there are many circumstances or variables that you cannot control. One example of this is the weather. The weather may not be suitable or ideal for training or competition but it is a factor that is uncontrollable. Focusing on it will not help in any regard and will only result in distracting you from performing at your best. Learning to focus your energy on things that are within your control is a mental skill that most elite athletes have and is certainly a characteristic of an athlete who is Mentally Tough.

What an athlete can do about the external distraction is understand them. It is advised that athletes make a comprehensive list of all the external distractions that they experience during practice and during competition. Although not much can be done about these, knowing about them and being aware of their existence will eliminate the element of surprise when they present themselves during performance.

Internal distractions come from inside the athlete and are a little more intense and dense than external distractions. Athletes often get distracted by their own thoughts. These thoughts can take many different forms. They may be **personal issues** unrelated to the particular sport at all which may be distracting the athlete, they may be **self judgement statements** about the athlete's performance and they could be **representations of self doubt** that are affecting the athlete's level of confidence and self belief. These internal distractions are however controllable to a certain degree. The athlete has complete power over what to think and what mindset to adopt and what emotions they let enter their thought patterns. He / she can choose whether to

implement a positive or negative attitude when faced with an adverse situation.
Below are a few examples of controllable variables and uncontrollable variables.



REGAINING LOST FOCUS

It is important for athletes to develop a heightened sense of self-awareness and understanding of themselves as people and as athletes so that they can become fully aware when they have lost focus due to a distraction (Cohn, 2008). Athletes must therefore engage in an interactive process of observing their own mind and being aware of their internal desire as understanding this fully will help athletes identify when they are shifting off track and losing focus of their competitive goals. Recognising that an athlete has lost focus is the first step in regaining it. Dr. Cohn (2008) presents the „Three R’s” for improving concentration and refocusing which include the following:



As already mentioned, recognising that the athlete has lost focus and concentration is the first step taken toward regaining it. This step helps the athlete understand that concentration has been lost and will thus motivate them to direct excess energy into regaining this concentration. Regrouping then needs to occur after recognising the problem and this incorporates the athlete calmly and collectively organising his / her thoughts and refocusing on the performance goals and outcomes they have set themselves. In addition to this it is also vital for the athlete to distinguish what distractions broke the concentration and thereafter try eliminating them to ensure they do not cause a similar negative effect on future focus. Finally the athlete must make mental adjustments and ensure that they regain focus as fast as possible to eliminate the destruction that may have already been caused by a loss in concentration (Cohn, 2008).

CONCENTRATION AND FOCUS EXERCISES

Exercise 1: HANDLING EXTERNAL DISTRACTIONS DURING A GAME

Objective:

The objective of this exercise is to help you identify what external distraction may be affecting your performance in your particular sport.

Direction:

Athletes must try thinking back to their last competitive performance. Once you have identified this performance think back specifically to how you dealt with the distractions that affected you during this performance. External distraction can come in many forms such as environmental factors like the weather or even from other people whether it be from spectators or your opponents. Think now specifically of what distractions broke your concentration. Write a list of all the distractions that you can remember. After writing this list rate how distracting these elements were using a scale of 1-10 with 1 representing „not too distracting“ and 10 representing „detrimental to performance“.

Discussion:

- Discuss amongst yourselves some of the distractions that you have written down.
- Compare your distraction with your team mates and see if any of them overlap.
- See if you can identify any trends that may immerge between yourself and your team mates. Discuss reasons behind the way you have ranked your list of distractions.
- Discuss how the negative effect of these distractions can be limited or restricted.
- What can you do to avoid these types of distractions for the future or at least restrict the influence these distractions have on your performance?

Exercise 2: HANDLING INTERNAL DISTRACTIONS DURING A GAME

Objective:

The objective of this exercise is similar to the previous one and is designed to help you identify what internal distraction may be affecting your performance.

Direction:


Just as distractions can come from external factors, distractions can also come from inside you too, such as your own thoughts during performing. Think back to your last competitive performance as you did with the previous exercise, and specifically how you dealt with the internal distractions that affected you during that performance. Think now specifically of what internal distractions broke your concentration. Write a list of all the distractions that come to mind. After writing this list rate how distracting these elements were using a scale of 1-10 with 1 representing „not too distracting“ and 10 representing „detrimental to performance“.

Discussion:

- Discuss amongst yourselves some of the distractions that you have written down.
- Compare your distraction with your team mates and see if any of them overlap.
- See if you can identify any trends that may immerge between yourself and your team mates. Discuss reasons behind the way you have ranked your list of distractions.
- Discuss how the negative effect of these distractions can be limited or restricted.
- Discuss how internal distraction differ to external distractions.
- What can you do to avoid these types of distractions for the future or at least restrict the influence these distractions have on your performance?

Further Discussion:

- Assess how well you are able to regain control of your concentration when it breaks down or when you lose it completely.

- 
- If something disturbs you and causes you to lose control of your focus and concentration, does this continue to affect you for the rest of the game, or is it only for a few minutes?
 - Top athletes can refocus within seconds or less. How well do you think you can refocus?
 - Discuss what it is about elite athletes that allow them to do this.

Exercise 3: CONTROLLABLES CHALLENGE

Objective:

This exercise is designed to help you recognise and focus on the things you can control as you practice and perform rather than the things you cannot control.

Setup:

Each athlete must be given a copy of the Controlling the Controllables worksheet sheet and the group must be divided into groups of 3.

Direction:

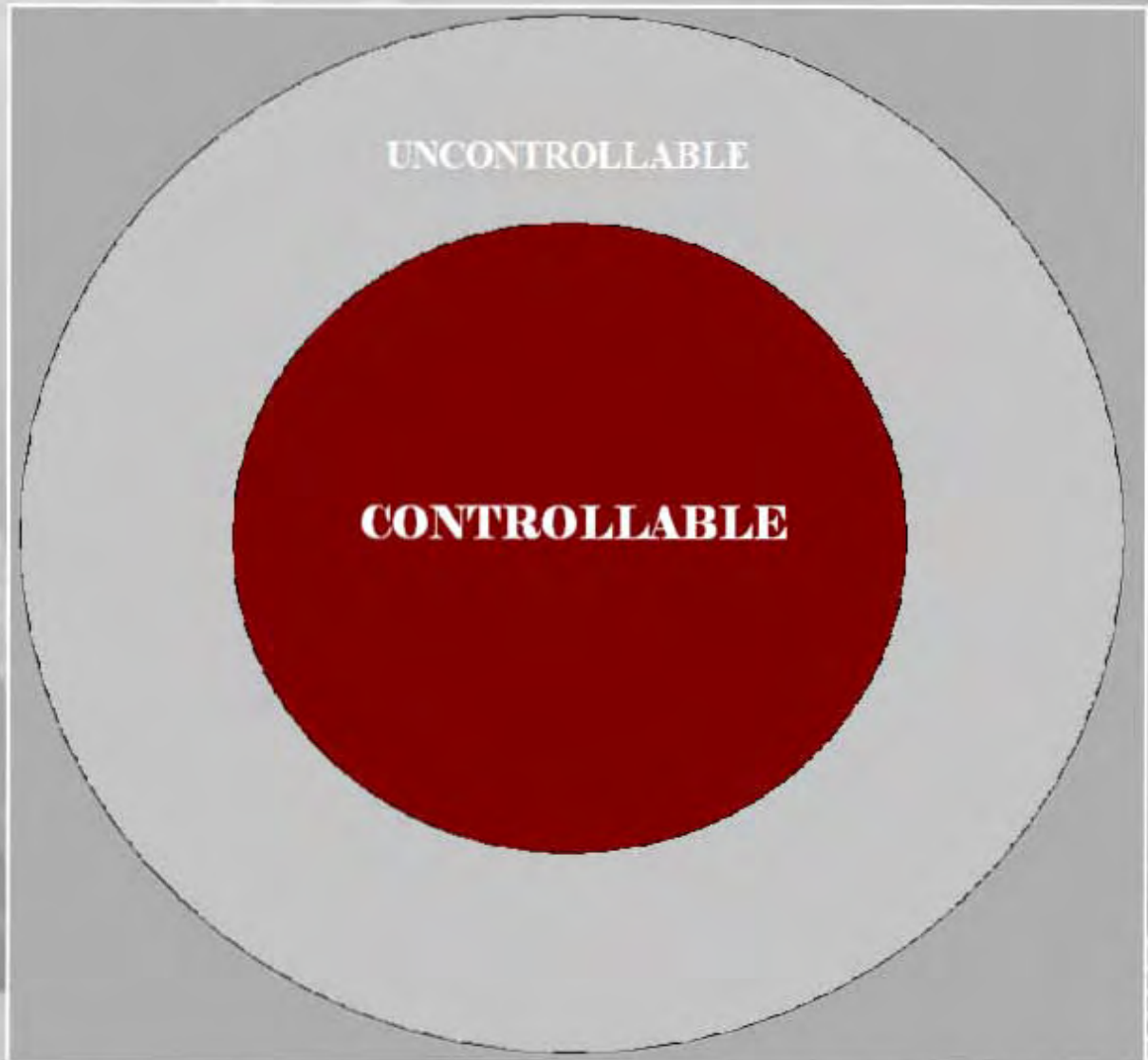
In your groups think about all the things which could affect you and your performance when you are competing, but which you have little control over. These things could include officials, weather, playing conditions, playing time, equipment etc. Write the list of uncontrollable things inside the outer part of the diagram given to you where it is labelled “uncontrollable”. When performing this exercise try and think as broadly, generally and as vividly as possible. Once each group believes they have written down all they can think about with regard to uncontrollable factors, compare the answers with the other groups until the entire team has exhausted all possible factors. Engaging in a discussion like this will help the athletes think about factors that they may have overlooked or perhaps never considered. Once this is done move to the inner part of the diagram and write down as many controllable factors as possible. Repeat the same procedure as before by comparing the controllable factors that each group presents.

Discussion:

- It is important for athletes to recognise the multitude of factors which are outside of their control when competing.
- Remember that focusing on these things and using them as excuses only makes the situation worse which is why the stop sign shape is used for the uncontrollable diagram.
- Focusing on aspects out of direct control for the athlete is a waste of time and energy when this energy could otherwise be used in bettering or improving one's performance or ensuring concentration and focus remain optimal.

- When focusing on the things you can control, athletes have a much better chance of keeping composed and being therefore a greater chance of reaching goals and success.

Worksheet 4



Exercise 4: CONCENTRATION GRID EXERCISE

Objective:

The objective of this exercise is to demonstrate the effects of distraction on concentration.

Setup:

Give one athlete a copy of the concentration grid worksheet.

Directions:

Numbers from 0 to 99 are randomly placed somewhere on the grid. Start by using the top grid only. The athlete with the grid must be asked to search for a specific number given to you by the facilitator. When given this number the athlete must search for it in any way they like. Once this number has been found they must cross it out and immediately search for the next consecutive number. Continue this process for the next minute. After a minute is complete the athlete must count up the total number of crosses that have been completed. After this the same athlete must complete the same procedure as before but on the grid below the first one. This time around the remaining athletes must try and distract this athlete as best as possible. Once completed compare the results from both grids and see if you can notice a difference.

Discussion:

- With the athlete who completed the grid exercise, discuss the stress levels that they may have experienced.
- Discuss how they were feeling completing the exercise under the two different environmental situations.
- Compare the stress level of completing the exercise with silence as opposed to completing it with the noise distractions.
- Discuss with the athlete and as a group what mental strategies would have been adopted when trying to deal with the distractions.
- Try identifying whether any one did better with the distractions. Tap into what strategies these players used to succeed.

Worksheet 5

63	84	12	24	28	27	19	83	40	32
60	51	25	45	20	02	76	96	72	78
37	91	56	66	36	48	87	65	04	59
16	30	41	14	69	34	44	82	71	39
97	52	23	38	15	58	94	62	00	53
67	89	95	80	90	13	21	08	26	74
92	42	88	70	06	79	93	47	98	77
31	85	73	64	75	54	43	10	46	18
33	50	68	05	11	35	81	49	57	61
03	09	99	22	07	17	01	86	29	55

13	21	08	26	74	67	89	95	80	90
79	93	47	98	77	92	42	88	70	06
54	43	10	46	18	31	85	73	64	75
35	81	49	57	61	33	50	68	05	11
17	01	86	29	55	03	09	99	22	07
27	19	83	40	32	63	84	12	24	28
02	76	96	72	78	60	51	25	45	20
48	87	65	04	58	37	91	56	66	36
34	44	82	71	39	16	30	41	14	69
58	94	62	00	53	97	52	23	38	15

Exercise 4: LEARNING TO SHIFT CONCENTRATION AND ATTENTION

Setup:

The athletes must lie down in a comfortable position wherever they are and ensure there is absolute silence. Once the athletes are all in place and silence is achieved they must take in a few deep breaths and begin the exercise.

Directions:

After lying quietly for a while pay attention to what you are hearing around you. Take each separate sound as it is heard and label it. These sounds could be people, birds, cars, radios etc. After this, listen to all the sounds around you without attempting to label them. Simply dismiss all your thoughts about the different sounds and just listen to the blend of sounds as if you were listening to music. After this take notice of some of your body sensations, such as the feeling of the floor supporting you or the temperature in the room. As with the sounds before mentally label each sensation as you notice it. Try engage intensely and vividly in the sensations you may be experiencing.

Now turn your attention to your thoughts and emotions as you have been working through this exercise. Remain relaxed, calm and at ease, no matter what you are thinking or feeling. Now try to experience each one of your feelings and thoughts one at a time. Try understand them and get down to their true meaning. After engaging in this for a while finally see if you can just let go of all these thoughts and emotions.

Immediately after this open your eyes and pick an object across the room from where you were lying. While looking straight ahead at the object you have chosen, try and take in as much detail about the surrounding room as your periphery vision will allow. After this narrow your focus of attention to just the object centred in front of you. Now expand your focus little by little, widening your perspective until you can again see everything in the room. Think of your external focus as a zoom lens on a camera, practice zooming in and out, narrowing or broadening your emotional focus according to your preference. By shifting your focus across external-internal and broad-narrow dimensions, this exercise helps you experience differential attentional styles.

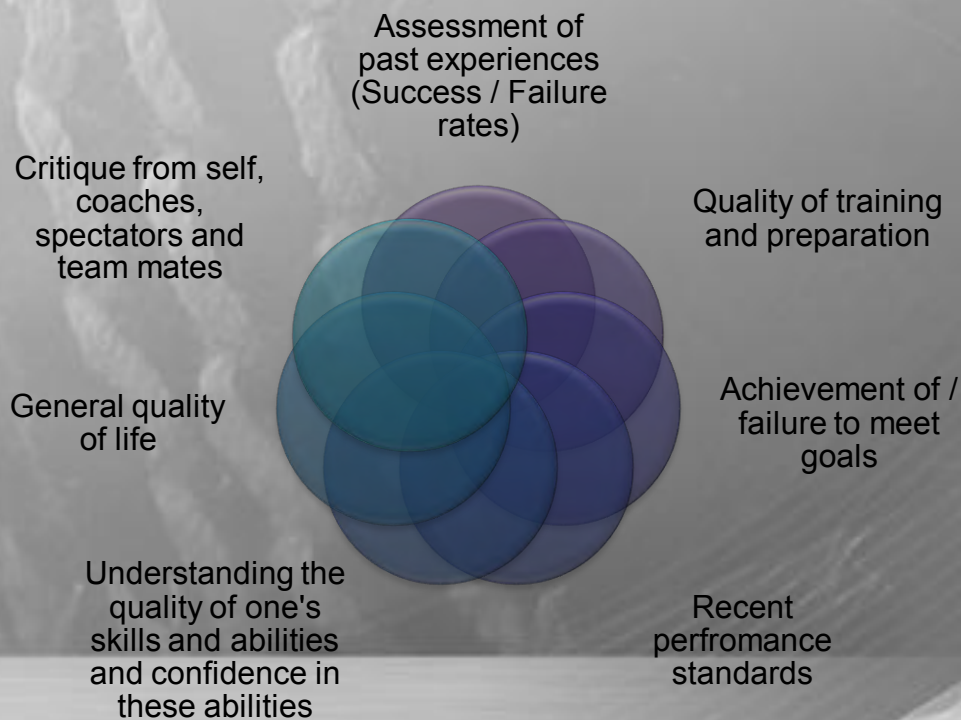
Discussion:

- Discuss how learning to focus attention is important for performance.
- Discuss how a concentrated focus will allow athletes to grapple with their surroundings and understand fully their competitive environments.
- Discuss with the athletes how this exercise can be applied directly to their specific sporting performance.
- Discuss how each sensation that occurs around athletes can be identified and labelled. Doing this helps athletes understand their environments more closely. Being able to understand your environment and being able to identify and label certain aspects will give athletes a clear advantage when performing.

SESSION 3: SELF CONFIDENCE / SELF BELIEF

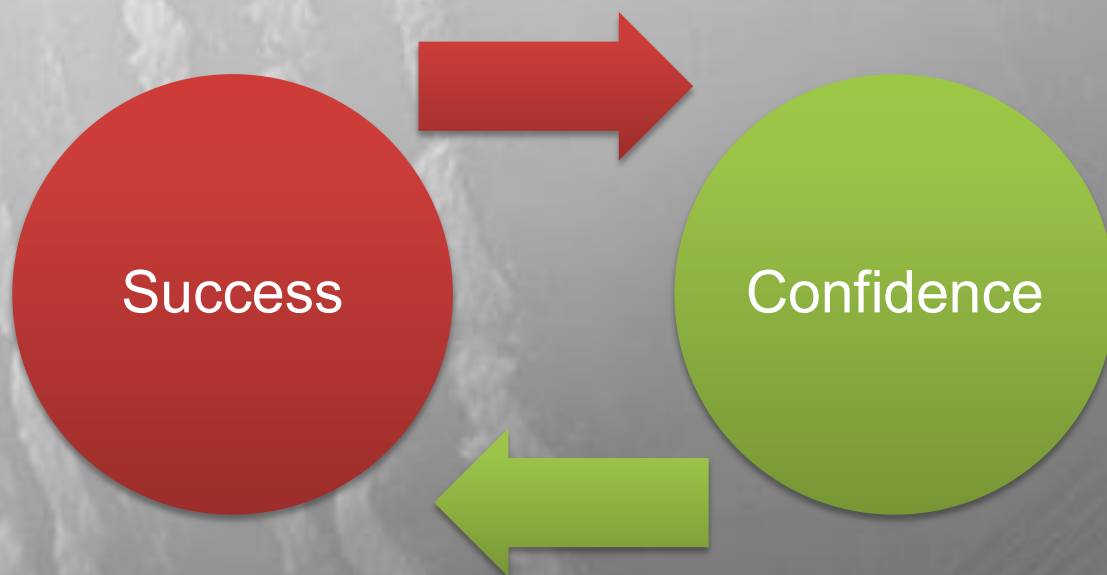
WHAT IS SELF CONFIDENCE?

Self confidence is the simple belief in one's own abilities and the extent to which athletes believe in their own abilities. Self confidence is how firmly and strongly athletes believe in the potential to execute a physical skill or perform a task or exercise well. It is the basic internal belief that a person can and will succeed and "consistent success is built upon a player's belief that he can perform successfully every time he steps onto a field" (Kuehl et al., 2005, p. 90). Levels of self confidence are influenced by various factors such as:

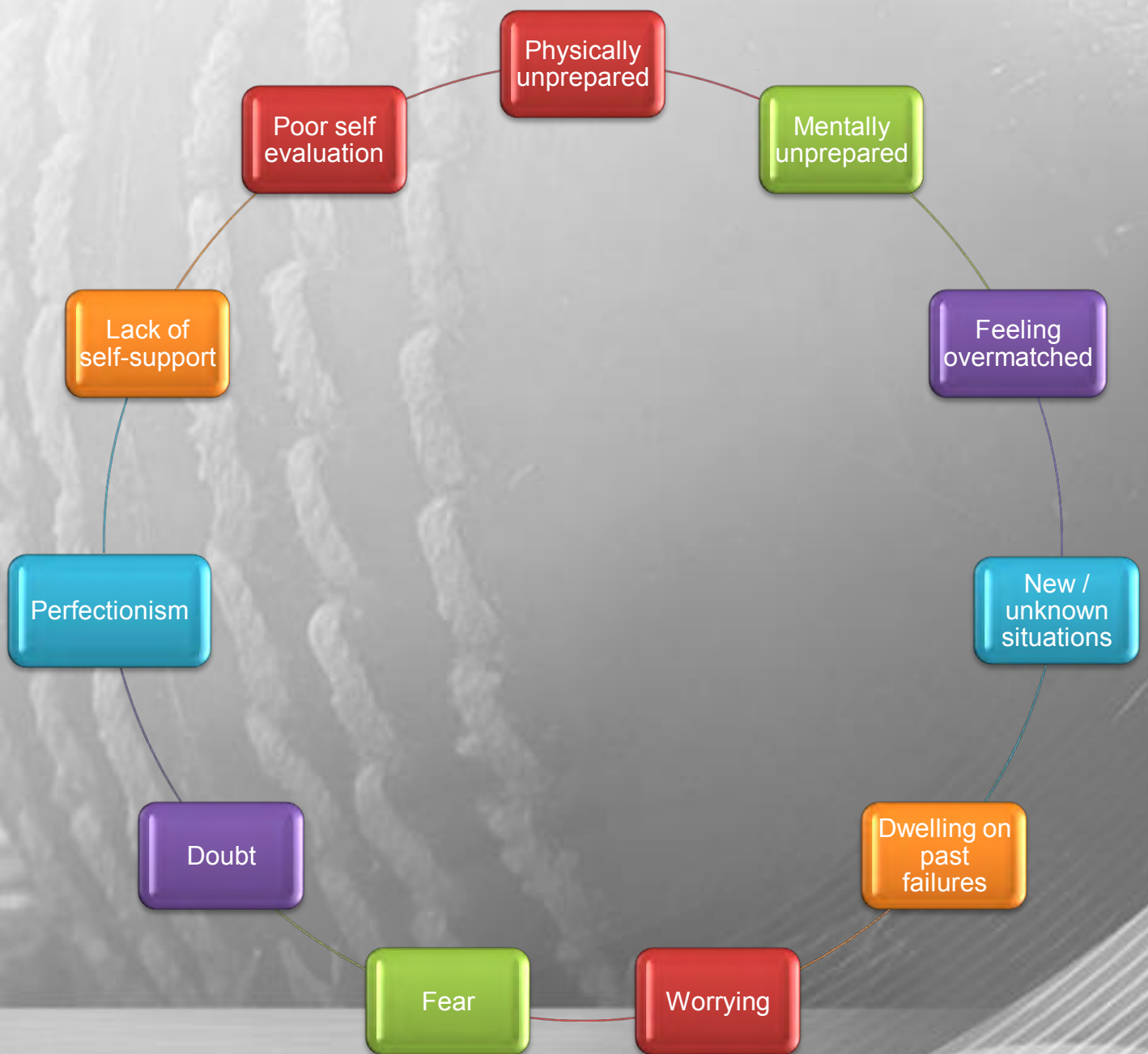


As your competency or skill mastery grows, your confidence becomes proportionately stronger. You can also derive confidence from the belief that you are physically talented and successful training and quality practice both help to create a strong sense of self confidence (Cohn, 2008). Only athletes with the highest level of confidence will have the Mental Toughness to reach the top and overcome their challenges successfully. Self confidence has also been referred to as sports confidence which is defined as the belief or degree of certainty that individuals

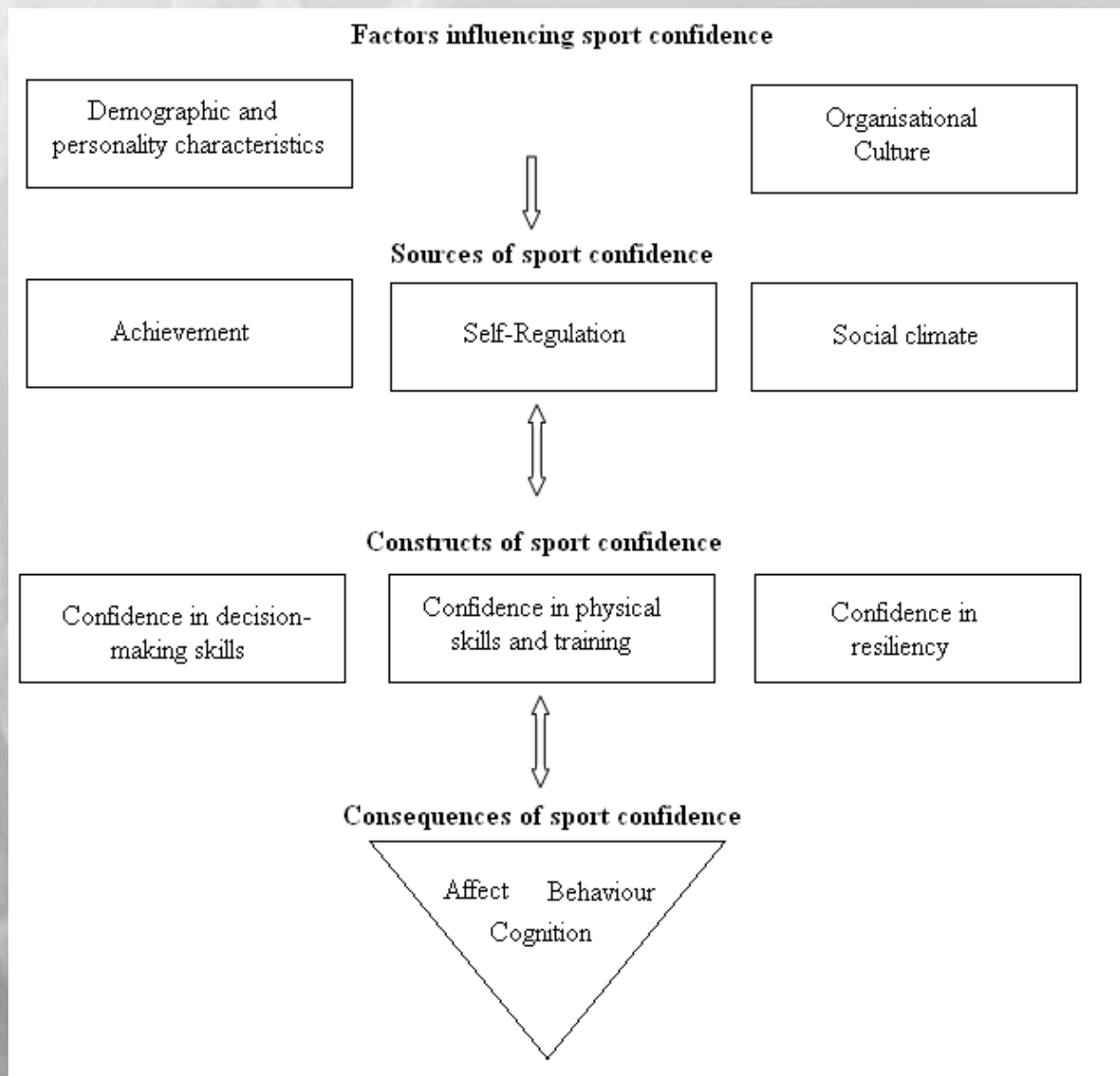
possess about their ability to be successful in sport. Self confidence is largely based on the concept of self efficacy which is the belief that individuals have in their capacities the ability to perform a particular task (Morris & Summers, 2005). Most mental skills have a co-dependent relationship with each other. What this means is that most of the mental skills involved in mental skills training programmes affect some other mental skill in some way. This idea will be ironed out more specifically and more thoroughly toward the end of the programme. Keeping this idea in mind it is important to note that confidence breeds success and success further exaggerates confidence.



Mentally tough athletes will understand that it is inevitable that confidence will have highs and lows, peaks and troughs and that when confidence does seem to be low will identify the causes and set out to repair the problems. Some common factors that cause lows in confidence include the following:



SPORTS CONFIDENCE MODEL (Weinberg & Gould, 2007)



The above model is a more scientific way of looking at the factors which influence sport confidence. It is beneficial to consider this model when considering your own confidence levels. The organisational culture includes the structural and cultural aspects of the sport subculture which includes aspects such as competition level, the motivational climate, coaching behaviours and the expectations of the sport programmes. Furthermore, specific personality characteristics such as optimism, goal directedness, gender and race also affect confidence and self belief levels. In addition to the aforementioned sources of confidence, self regulation, social climate, developing and improving skills, demonstrating physical and mental ability, social support, coaches' leadership, environmental comfort and situational favourableness

all play a part in improving an athlete's confidence levels. Confidence is constructed in many ways and aspects such as confidence about physical ability, psychological skills, adaptability, fitness and training level, learning potential, and decision making all contribute towards confidence levels. "In general, high levels of confidence arouse positive emotions, are linked to productive achievement behaviours such as effort and persistence, and produce more skilled and efficient use of cognitive resources such as attributional patterns, attentional skills, and coping strategies".

BENEFITS OF SELF CONFIDENCE

There are a vast number of benefits of being a self confident athlete. However one particular factor must be cleared up before continuing on. There is a very significant difference between being self confident and having high self belief and then being arrogant. Athletes need to ensure that, as much as they train to improve their self confidence, they don't cross over into the sphere of arrogance. Arrogance is characterised by a dominating superior attitude towards those considered inferior and athletes considered arrogant occupy an overbearing sense of self worth. Being arrogant has many negative effects. Arrogance can lead to a false sense of hope and security if athletes automatically think they are better than other opponents and assume they will therefore win.

Arrogance instils in athletes a sense of pride that may result in them becoming somewhat unproductive during training as they believe minimal effort is required to succeed. Arrogance results in an attitude, mindset and outlook that is selfish by nature where athletes will begin neglecting other athletes and concentrating solely on themselves and their own performance and success. This may cause severe damage and corruption to team cohesion and unity and may result in conflict regarding team goals and athletic performance. Arrogant athletes follow self created goals and have minimal consideration toward any other athlete.

Self confidence is characterised by a high expectancy of success. Self confidence is about knowing that you as an athlete have the abilities, skills and significant and sufficient training to succeed at the task ahead. High levels of self confidence can help individuals in many beneficial ways some of which are displayed below.

To arouse positive emotions	Facilitate concentration and focus	Assist in setting goals	Assist in achieving goals
Increase effort	Focus game strategies	Maintain momentum	Encourage taking calculate risks and chances
Adopt a positive attitude toward these opportunities	Increase drive, desire, motivation and determination	Seek out opportunities and possibilities	'Winning Mind' attitude

To arouse positive emotions: When athletes are feeling confident and have a high sense of self belief during their performance in competitive settings and / or in practice they are more likely to remain calm and relaxed under pressure and stress. Anxiety within sport is unquestionable and inevitable and the athlete with greater confidence will interpret this anxiety more positively than those athletes lacking self confidence and belief. This leads to an environment created by the athlete where emotions can be reconstructed and reframed within a positive belief system and therefore used to facilitate improved performance. Athletes who have high self confidence will approach adverse situations with a positive mindset and will be more prone to seeking effective solutions to any problems they may be faced with. They will seek to draw out the positives rather than the negatives from their competitive endeavours.

To facilitate concentration: When athletes are feeling more confident, their mind becomes free to focus on their performance. A lack in confidence leads to worry and anxiety and results in athletes expelling excess energy on being concerned about how they are doing in relation to other athletes. Athletes who have a higher sense of confidence are more skilled and efficient in managing emotional responses to situations and are better equipped with applying mental skills to deal with adversity and coping.

To help set goals: Confidence leads to greater and higher expectations which is why confident athletes tend to set more challenging goals and pursue them more

actively than an unconfident athlete. Athletes with confidence believe in their abilities and furthermore believe that they possess the appropriate skill set to achieve high goals. This elevated perception of an athlete's ability is what leads them and drives them to set high goals. Because they believe in themselves they seek opportunities and hesitate less when making decisions or taking risks.

To increase effort: How much effort someone expends and how long the individual will persist in pursuit of a goal depend largely on confidence. When ability is equal, the winners of competitions are usually the athletes who believe in themselves and their abilities. This is especially true in situations that necessitate persistence or in the face of obstacles such as painful rehabilitation sessions.

To focus their game strategies: Confident athletes generally compete to win. Couple with the fact that they rarely hesitate to take chances they also take control of the competition and make it work to their advantage. An athlete who is not confident will compete to avoid defeat rather than pursuing victory. This unconfident athlete will be hesitant, tentative and will focus a lot of energy of avoiding mistakes rather than pursuing a positive outcome. A confident athlete has faith in their ability and will therefore set suitable goals for their performance which in turn help them structure and formulate their game strategies. An unconfident athlete will adopt a game strategy that is much less positive and much more problem avoidant rather than solution seeking and success driven.

To maintain momentum: Athletes who are able to produce positive momentum or reverse negative momentum will improve their chances of achieving success. Confidence appears to be a critical ingredient in this momentum process. People who are confident in themselves and their abilities never give up instead they are driven by perseverance, determination and motivation. They view situations in which things are going against them as challenging and react with increased determination. They use these situations as a means of learning, evolving and adapting to become a better equipped and more competitive athlete.

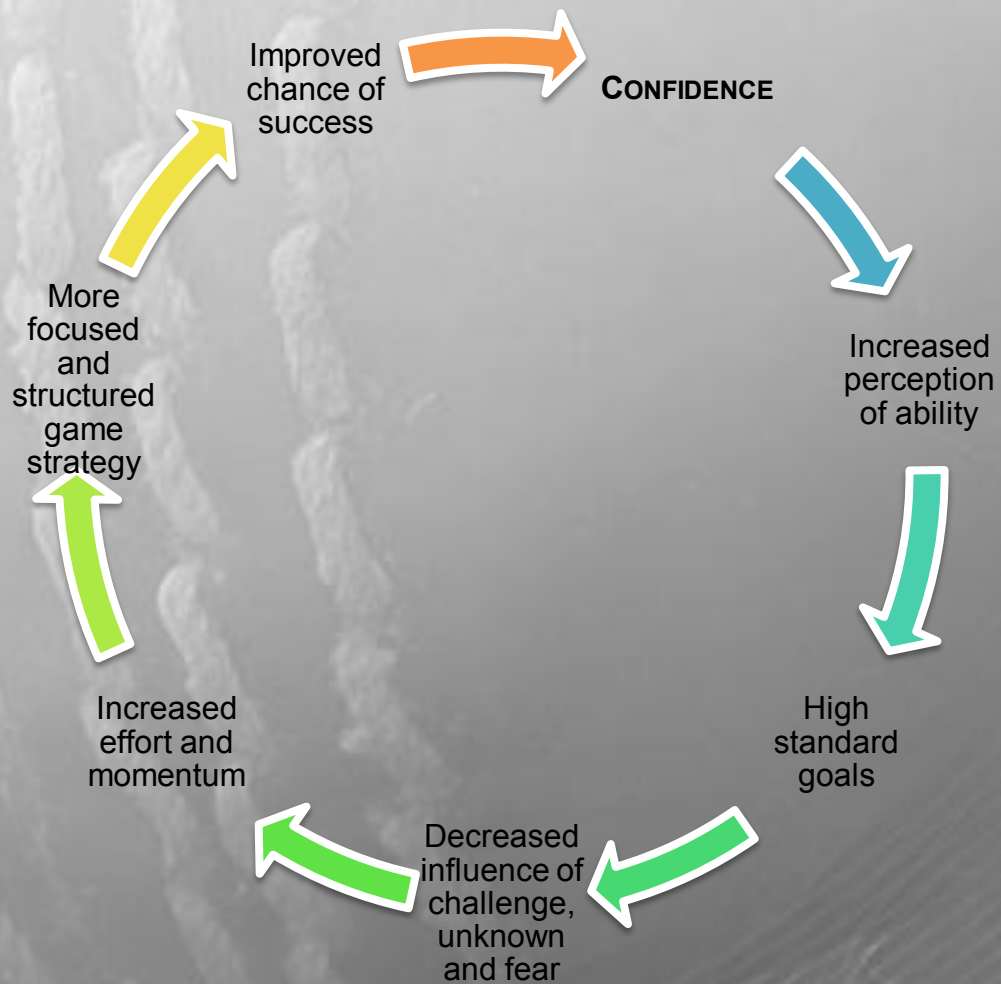
Encourage taking of calculated risks and chances: As mentioned earlier self confident athletes believe in themselves and their abilities and have faith in their

potential to achieve their future goals. This belief leads to athletes having a reduced concern for challenges and unknown opportunities. Confident athlete understand that in order to reach new levels of performance optimisation they have to be the best among the best which means a fair amount of risk taking during competition and practice is vital and necessary. They further adopt the view that if the chances they take do not work out as they had planned then a learning process has taken place and they use this information to better prepare themselves for the next challenge.

Seek out opportunities and possibilities and adopting a positive attitude toward these opportunities: Part of becoming a better athlete is venturing into unknown domains, whether this be exploring new training methods, using new equipment, testing different mental preparation models and techniques or even changing regular routines or habitual training patterns. Confident athletes understand the important of engaging in such activities and because their sense of self worth and belief is high they rarely hesitate to explore such possibilities. Confident athletes look towards these opportunities as a way of investing positively in their performance as an athlete. Evolving as a competitor is a very important training consideration and athletes who fail to do so and fail to expose themselves to new opportunities and possibilities will find it harder to compete on the same level as those who do consider this.

Increase drive, desire, motivation and determination: Increasing confidence will lead to greater opportunity to increase confidence further. Having a higher sense of confidence and self belief will lead to a more focused and positive drive, desire, motivation and determination. This link can be seen in the model depicted below.

RIPPLE EFFECT OF CONFIDENCE



Lack of Confidence

It is a simple fact that self-doubt undermines performance. Self doubt creates **anxiety**, **breaks concentration**, and causes athletes to become **hesitant** as well as **indecisive**. Individuals who lack confidence will focus more intently on their shortcomings and failures rather than on their strengths or successes, distracting themselves from concentrating on the task straight ahead. Sometimes athletes will doubt their ability to fully recover from injury and this mindset alone does not help with the healing process. The theme throughout this entire programme has been about the power of the mind and how influential an athlete's thoughts are toward their actions and the way their body reacts to situations. A doubtful mind when dealing with an injury or when dealing with any aspect of sport, will hinder the chances of positive progress and potential success or victory. However, having a little self doubt can be positive in the sense that it may help athletes maintain motivation and previous complacency.

EFFECTS OF HAVING LOW CONFIDENCE

- Fear making adjustments because of doubt in ability to succeed.
- When confidence wanes athletes change their approach – They will adopt a negative and / or conflicting attitude.
- Athlete will hold on to techniques and strategies that have worked in the past in hope that they will work again.
- Athletes will try harder, think more, lose discipline, lose patience, become overaggressive or become too passive.
- Your confidence level as an individual athlete will affect your teams' confidence. Low self confidence will result in the team having a low confidence in you too and in the team.
- Displays poor body language.
- Makes excuses.
- Worry about the outcome and what they cannot control.
- Worry about what others will think of their performances.

OVERCONFIDENCE AND FALSE CONFIDENCE

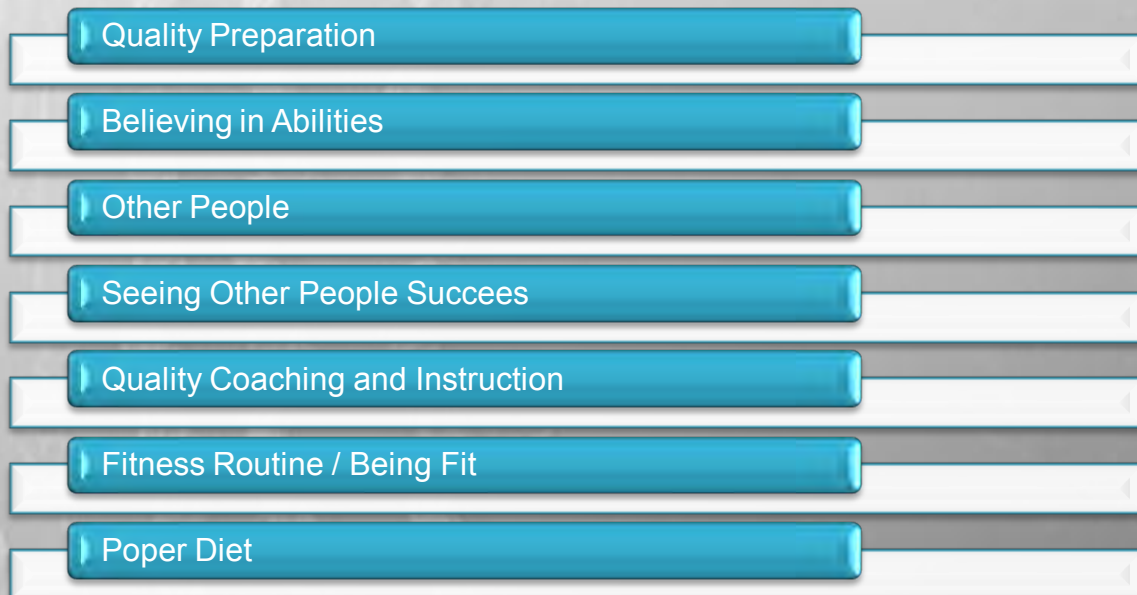
The element of overconfidence was briefly touched on early when speaking about arrogance. Overconfident people are essentially falsely confident meaning that their confidence level is in fact far greater than their abilities warrant. Their performance declines because they believe that they do not have to prepare themselves or exert any excess effort in order to success at the task ahead. False confidence essentially replaces work ethic. Athletes must strive to have a confidence level that is justified by their skills and ability level. This will help them understand their expectations and thus set realistic goals and athletic aims. Overconfidence is much less of a problem than having a lack in confidence but athletes must monitor their confidence levels as overconfidence can become hugely detrimental to an athlete's performance.

CONFIDENCE AND SUCCESS

Having the ability to respond quickly to adversity is what separates the great athletes from the mediocre. This is where confidence can assist in building success. Confidence and success are very circular as mentioned earlier. As successes mount, so will confidence. However, confidence is what is needed to initiate the cycle of success. A truly confident player will be unafraid of making adjustments that will lead to improvement and an athlete "striving for Mental Toughness must stop to evaluate whether he carries with him a *can-do* attitude that leads him to greater achievement, or a false confidence that interferes with success" (Kuehl et al., 2005, p. 108). If athletes can learn to evaluate and understand their confidence levels and also recognise when their confidence takes on highs and lows then they will be able to positively start influencing their mental preparation and thus their performance. Once athletes start engaging in this type of behaviour with regard to their training they will start recognising a key ingredient in achievement which is that confidence is a choice (Kuehl et al., 2005). Athletes who take charge of their confidence levels will ultimately learn to take control and take advantage of this major mental ingredient and therefore begin taking on a mental edge over their competitors.

BOOSTING CONFIDENCE

Dr Cohn (2008) presents 7 tips for boosting self confidence which include the following:



Quality Preparation – Cohn (2008) suggests that athletes should concentrate on facilitating short, effective and focused training routines rather than long unfocused sessions. In addition to this he further suggests that athletes should try new techniques and routines in order to keep the training unique and interesting. Changing habits will expose the athlete to various alternate methods may assist them in finding more effective means of achieving success. Instilling a sense of excitement into training will motivate the athlete and this sense of determination will drive them to succeed and reach new levels of achievement during practice and competition which if successful will improve and increase the athlete's self-confidence.

Believing in Abilities - As simple as it sounds one of the most effective ways of increasing one's self confidence is adopting a belief in your own abilities. If athletes train hard and properly then they develop a sense of trust in themselves which allows them to execute their training exercises or competitive performances with little tension, worry or anxiety. This in turn creates an amplified sense of self confidence.

Other people – Cohn refers to the idea of other people as “cheerleaders” and by this he stresses that athletes need to surround themselves with positive and influential people who will champion them toward success. These people need to be encouraging the athlete on a continual basis and provide them with constructive criticism whilst still representing the best intentions for the athlete. Encouragement from external sources goes a long way for an athlete as most people are positively motivated by appreciation and approval of their successes.

Seeing other people succeed – Knowledge is an extremely powerful and influential tool and in all aspects of life one can never have enough knowledge. In sport it is the same. Athletes must strive to continually learn new things and evolve as athletes. This is why Cohn stresses the importance of athletes surrounding themselves with successful people. By doing this athletes can analyse other athletes and learn new ways of performing or training as well as understanding and interpreting how these successful athletes deal with setbacks and failures.

Quality coaching and instruction – Earlier in the programme I mentioned „perfect practice makes perfect” and an element of this perfection lies in the quality of the coach and the way in which they train their athletes. Quality instruction will help improve an athletes’ confidence by teaching them the most effective ways to execute a task that is most suited to the athletes performing style and competition format.

Fitness Routine / Being fit – This fitness refers to being mentally fit as well as being physically fit. An athlete who is fit on both these fronts will have a high sense of self confidence. Being fit and mentally prepared for competition takes away an element of worry or concern that might occur as the athlete will know that they are appropriately prepared for their tasks ahead. Not having to worry about such aspects ultimately means the athlete can spend more energy on concentration and focus and refining technique and skills during competition. Eliminating this anxiety trap means that the athlete will enter practice competition with elevated levels of confidence and self belief.

Proper Diet – The common cliché „what goes in comes out“ applies to this context too and it is important for athletes to understand that the resources that are fed into their body will influence the performance potential that will be expelled. Food is the human body fuel. Athletes must ensure that they eat quality fresh food and monitor what they put in. Dieting will differ for each individual according to what sport they are entering into and what their goals are within this sport. It is advised that all sportsman / sportswoman consult a dietician on a regular basis during their sporting career and continue to understand what type of foods to eat as well as how much food, when to eat and what the most effective, efficient and energy providing methods are when dieting.



SELF CONFIDENCE AND SELF BELIEF EXERCISES

Exercise 1: REASON WE DESERVE SUCCESS

Objective:

The objective of this exercise is to help you focus on the reasons why you should be confident going into a competition.

Setup:

Each athlete must receive sheets of lined paper and a pen.

Directions:

The athletes must be divided into three different groups. Each group should brainstorm a list of all the reasons why they should be confident as a team and as individuals. Athletes can discuss such things as past successes and victories, team strengths and any compliments or praise they may have received after a good performance. Discuss technique, skill and ability levels of each player. After the different groups have exhausted all their ideas during the brainstorming session each group must report back with all the answers from their group discussion.

Discussion:

- Discuss the different answers generated.
- Compare the answers among the different groups and see how the answers differ.
- Talk about how each group generated their answers.
- Discuss any disagreements that may occur regarding answers provided.
- Help one another understand the reasons why you can and should be confident going into competition.
- This exercise is designed to help the athletes boost one another's confidence and help improve the entire teams' morale.

Exercise 2: SCOUTING REPORT

Objective:

The objective of this exercise is similar to the previous exercise and is designed to build confidence and focus on what you do well rather than opponents' strengths. It is created to identify and understand strengths over competitors and appreciate how the group has a competitive advantage when going into competition.

Directions:

General scouting reports are designed to outline the strengths of other teams and competitors. They are designed to identify competitors' structure, routines, game strategies, game performance strengths and weaknesses. However for this scouting report, the athletes must discuss their own team strengths. Talk about specific players' strengths as well as team strengths. Talk about the things you do well and plan to execute in the game. Try get motivated about your strengths and try focus of your strengths so much so that it doesn't matter who the other team is.

Discussion:

Although it is good and beneficial to future performance to know your opponents strengths and tendencies, it is vitally important to be sure to know your own, especially when tough competition is approaching. If athletes view their opponents as better and stronger they will immediately impose a negative mindset on their performance and their chance of success minimises. Although athletes should not be overconfident about their own performance they should not underestimate it or exaggerate their opponents either to the extent that this perception debilitates their self belief and confidence in their ability to win. When coaches build up the athletes by focusing on the strengths then they are demonstrating their confidence in the athletes and as athletes you can do this with one another too. . You as players can also do this with one another.

SESSION 4: VISUALISATION / IMAGERY

WHAT IS IMAGERY?

Mental imagery or visualisation involves the athlete presenting, within the boundaries of their mind, certain aspects of performance that are not physically present. It involves cognitively producing an object, scene or sensation as though it were occurring in overt physical reality (Driediger, Hall, & Callow, 2006, p. 261). The idea behind visualisation and mental imagery is to evoke the physical characteristics of something related to that particular athletes sporting context. Imagery simply bypasses words and allows the athlete the opportunity to explore their sporting situations with greater complexity. They may visualise **training patterns, game strategies, specific movements** within the sport, **past successes** or even **future projections** about victory. “Information can be retained better by creating a mind picture” (Woods, 1998, p. 47). Visualisation and mental imagery are by no means limited to past or current events or even present ability of that particular athlete. Instead visualisation is aimed at motivating the athlete by helping them prepare mentally for the competitive endeavour and to help them work through all possible outcomes that may present themselves while competing (Morris, 2005).

INNER THEATRE BECOMES REALITY

Murphy (2005) refers to the activities and thought patterns that go on inside our minds as our *inner theatre*. Our minds are our theatres. We have the ability through imagination and visualisation to construct pictures, circumstances and situations that have never occurred in reality, and athletes can furthermore foresee, or even rehearse, events that have not yet happened. It is important for athletes to understand that they are highly active participants in their own images and visualisations and must therefore use imagery not just to “see” an event but to “feel” it too. Many athletes have stated that mental imagery and visualisation seem so vivid that it is like an alternate form of experience and that the athlete can almost believe the events that he / she have imagined. Athletes must ensure to create a visualised environment as closely related to the real environment as possible. This is one of the

most effective and beneficial ways of preparing for competition and even practice and will assist the athlete immensely in ensuring the chances of success are higher. Visualisation is far deeper than a simple day dream or fantasy, rather it is an effective tool for preparation that can be used to programme thoughts, feelings, and actions for future performances. “Proper visualisations can be described as a virtual-reality movie with you, the visualiser, as the star” (Kuehl et al., 2005, p. 163).

IMAGERY IN SPORT: WHERE, WHAT, WHEN AND WHY?

It is well known fact that imagery can positively enhance performance. Research has revealed that athletes use imagery before, during, and after practice; outside of practice and before, during or after competition (Weinberg & Gould, 2007). Interestingly, athletes report using more imagery before competition than during or after competition, whereas imagery use is more frequent during practice than before or after practice. Imagery plays both cognitive and motivational roles in mediating behaviour, each capable of being oriented toward either general or specific behavioural goals. On the motivational specific side people can use imagery to visualise specific goals and goal oriented behaviours, such as winning a particular contest or being congratulated for a good performance. Imagery can help individuals set specific goals and then adhere to the training to reach these goals. On the cognitive specific side, imagery focuses on the performance of specific motor skills. This is the type of imagery most often used as individuals attempt to get the “feel of the movement” and improve their level of skill. A great deal of research has demonstrated the effectiveness of this type of mental imagery in enhancing performance above and beyond the level achieved merely through physical practice. Such training should supplement and complement physical training, not replace it. Cognitive general imagery refers to rehearsing entire game plans, strategies of play, and routines inherent in competition (Weinberg & Gould, 2007).

There are four recommended times when visualisation can help you prepare for a game. These four times are:

- **Before getting to the field** – this is often a good time to work through your visualisation techniques because it will be easier to find a quiet place where your routine can be uninterrupted.
- **At the sporting field** – before warming up, this would be a good time to start going through some short plays in your head. Perhaps replaying some memories about good shots that you played previously or some excellent wickets you have taken in past performances. This visualisation will assist you in getting your mind frame into the right state.
- **During the game** – this is the best time to prepare for many situations. You may want to visualise to remain focus and avoid losing concentration. Things may not be going as well as you had hoped and you would therefore need to start visualising more positive situations, or things may be going very well and you want to try visualise all the good points in order to keep your momentum. Visualising during the game helps you to stay calm, focused, in control and helps you anticipate what actions or outcomes could appear next. It further assists you in making adjustments during the game.
- **After the game** – Athletes very rarely do this but it is very important to visualise after the game too. It's crucial to think back to all the positive situations and outcomes and to visualise how you performed, what technique you used and the feelings and emotions you worked through when things were going right. This is important because getting into the habit of engaging in after match visualisation will help the technique of visualisation become more natural and images will be readily available for use in your next performance.

IMAGERY AND IMPROVED PERFORMANCE SKILLS

Imagery can be used to enhance ones performance. The use of imagery can influence many factors which in turn, if improved, will assist in improving performance. Athletes use imagery for a variety of purposes. Imagery is used for learning new skills, retaining skills over time, performance rituals, developing strategies and plans, reducing competitive anxiety, psyching up, stress

management, enhancing confidence, enhancing motivation, improving concentration, rehabbing from injury, and building team work (Murphy, 2005).

IMPROVING YOUR IMAGERY ABILITY

The first step in successful visualisation is learning how to make your imagination as vivid and realistic as possible. The best way to do this is by involving all the senses.



Sight – Different athletes will visualise differently using various forms of stimuli and methods. Whichever method chosen, for athletes to maximise the effectiveness of their mental imagery and visualisation it is important to try incorporating as much detail in their imagery as possible. Athletes must include as much emotion, detail and feeling from past experiences as they visualise and image future performances. It is vital to try and set yourself firmly within the image as if you were really there. When athletes are practicing the art of visualisation they must explore their imagery as much as possible. Try manipulate the images, change them, alter them, and move around within the scenery that has been created. By engaging with the visualisation in this way the athlete gets to grip with the true detail and imagery as

closely related to real life scenarios will lay solid foundations for athletes to prepare mentally for competition.

Hearing – When athletes think back to past experiences there will always be some sound that is remembered with the memories. These sounds may include team mates, the coach, the officials and even the crowd or spectators. Athletes must strive to recall a positive event or a successful event and further try recalling any sounds that can be associated with this successful event. Athletes must then use these sounds when visualising future events and add to this imagery more sounds that will help the visualisation more vivid, more clear and closer to the real environment.

Smell – Although the sense of smell tends to evoke strong memories, in sport it may be a bit difficult to recall smells. However, if athletes can recall some smell, like the smell of a new cricket ball when you are the opening bowler, the smell of a new grip on your cricket bat or even the smell of your wicket keeping gloves then this will add to the vividness of visualisations.

Touch – As with smell, touch is another strong form of memory triggering. Athletes must try recalling the exact feeling of their involvement in their particular sport. If they are a batsmen in cricket they can recall events such as the feeling after a smooth shot hitting the ball for four runs or the timing of hitting six runs. If you are a bowler it may be the feeling of releasing the ball after bowling a wicket taking slower ball. Recalling these feelings and including them in visualisation are effective ways of improving the vividness of mental imagery.

Taste – At first thought one would think that sport does not have that many tastes and recalling tastes may seem rather absurd. It is interesting though when you start thinking about the different tastes that actually exist in a sporting context. These tastes can be very influential when used in visualisation. Boxers may recall the taste of blood and associate this with pain which in turn motivates them to train harder. Swimmers may recall the chlorine taste in the pool water while sportsmen / sportswomen in general may recall the taste of sweat from their training or competition routines.

In addition to the aforementioned aspects regarding vividness of visualisation, it is important for athletes to consider the emotional experience of past performances. It is vital that athletes engage in the emotional side of visualisation. Recollecting the feelings that athletes experience as their bodies move through the performance is the most important part of any image they rehearse. Just as athletes are encouraged to engage fully and intimately with their imagery, they are further encouraged to incorporate emotions when visualising. These emotions could be feelings and sensations after a win such as happiness, relief, joy, excitement and could also include various physiological feelings such as sweaty palms, racing pulse, pounding heart beat, all experienced when victory was imminent. Including as much detail as possible, using all the senses and emotions, will all contribute toward making visualisation and mental imagery more lifelike and therefore assist the athlete in appropriately preparing for their competitive endeavours.

KEYS TO EFFECTIVE IMAGERY

Like all psychological techniques and mental skills, the art of imagery and visualisation is acquired through practice, just as with any physical skill. Although some athletes are more effective at visualisation than others all athletes have the potential to improve their mental imagery and there are two important keys to good visualisation. One has been eluded to already during this programme which is vividness and the other involves controllability (Weinberg & Gould, 2007).

1. **Vividness** – Throughout this section on visualisation the point of vividness has been emphasized immensely. The point being stressed is that when athletes engage in mental imagery it is extremely important to ensure the visualisations are as detailed as possible and that the environments and scenarios that the athlete creates are as close to real life as possible. Visualisation needs to include specific detail, true and influential emotions and feelings as well as clarity and accuracy.
2. **Controllability** – Another key to successful imagery is learning to manipulate and control the images and visualisations so they do what you want them to do. Controlling the images will help athletes to picture what they want to

accomplish and achieve instead of seeing and visualising failures, setbacks or mistakes. The key to gaining control over visualisation and mental imagery is continuous and effective practice.

HOW TO DEVELOP AN IMAGERY PROGRAMME

In order for this psychological technique to be effective, it should become part of daily routine for the athletes. Imagery programmes should be tailored to the needs, abilities, and interests of each athlete according to their specific sporting context. Some guidelines to make imagery more effective are outlined below. These particular aspects must be considered when athletes and their coaches decide to devise a context specific imagery programme.

Physical nature of the movement

The specific movement for the task

The type of task

The timing of the movement

Learning the content of the movement

The emotion of the movement

The perspective of the person

VISUALISATION AND IMAGERY EXERCISES

Exercise 1: EXCEEDING YOUR LIMITS

Objective:

The objective behind this exercise is to demonstrate to you that you can break through limits and past performances by visualising future successes and greater levels of achievement.

Directions:

All the athletes must spread out and stand at least an arms distance away from one another. All athletes must raise and extend their right arm to chest level with their index fingers pointed straight forward. Keeping their feet still rotate the torso to the right as far as possible and note the point by seeing where the index fingers were pointing. After returning back to original position all the athletes must close their eyes and now visualise doing the same exercise but this time rotating to a point even further than the first time. It is important that the athletes try using the techniques presented here on visualisation. In other words include as much detail as possible, be as vivid as the imagination will allow and engage thoroughly in the mental imagery being produced. The athletes must try seeing that particular point clearly furthermore must mentally visualise rotating around and pointing to this point. All the athletes must open their eyes, stretch out the arms and rotate to the right once more seeing how far they can go second time around.

Discussion:

This exercise demonstrates to athletes the importance of visualisation. It shows then that they can exceed current levels of performance by first visualising higher levels of performance. Often these improved images are the first steps in helping performers achieve greater levels of success.

Exercise 2: SPORT IMAGERY QUESTIONNAIRE

(Weinberg & Gould, 2007 – p. 313)

Objective:

The objective of this exercise is to help you understand your level of proficiency at visualising within specific sporting situations.

Setup:

Each athlete must receive a copy of the Sport Imagery Questionnaire

Direction:

Read the following descriptions of four general sport situations. For each one, imagine the situation and provide as much detail from your imagination as possible (using all the senses – seeing, hearing, feeling, tasting, and smelling) to make the image as real as you can. Think of a specific example of the situation (e.g., the skill, the people involved, the place, the time). Now close your eyes and take a few deep breaths to become as relaxed as you can. Put aside all thoughts. Keep your eyes closed for about 1 minute as you try to imagine the situation as vividly as you can. Your accurate appraisal of you images will help you determine which exercises to emphasize in the basic training exercise. After you have completed imagining each situation, rate the four dimensions of imagery by circling the number that best describes the image you had.

Discussion:

- For each dimension, your top possible score is 20 and your lowest score is 4.
- The closer you came to 20 on each dimension, the more skilled you are in that particular area.
- Interesting note: It is imperative to note that as athletes you can perform mental rehearsals and by doing so the mind and body become trained to perform the skill that is being imagined and it has been stated that “repeated imagery can build both experience and confidence in an athlete’s ability to perform certain skills under pressure (Quinn, 2008, p. 3)

- 1= No image present
- 2= Not clear or vivid, but a recognizable image
- 3= Moderately clear and vivid image
- 4= Clear and vivid image
- 5= Extremely clear and vivid

For each situation, pick the number that answers each of these four questions:

- a. How vividly did you see yourself doing this activity? 1 2 3 4 5
- b. How clearly did you hear the sounds of doing the activity? 1 2 3 4 5
- c. How well did you feel yourself making the improvements? 1 2 3 4 5
- d. How clearly were you aware of your mood? 1 2 3 4 5

Practicing Alone

Select a specific skill in your sport. Now imagine yourself performing this skill at the place where you normally practice, without anyone else present. Close your eyes for about 1 minute and try to see yourself at this place, hear the sounds, feel your body, perform the movement, and be aware of your state of mind or mood.

a____ b____ c____ d____

Practicing With Others

You are doing the same activity, but now you are practicing the skill with your coach and your teammates present. This time, however, you make a mistake that everyone notices.

a____ b____ c____ d____

Watching a Teammate

Think of a teammate or an acquaintance performing a specific skill unsuccessfully.

a_____ b_____ c_____ d_____

Playing in a Contest

Imagine yourself performing in a competition. You are performing very skilfully, and the spectators and team mates are showing their appreciation.

a_____ b_____ c_____ d_____

Scoring

Now determine your imagery scores and see what they mean. Add the ratings for your four answers to part „a“ in each section, your four answers to part „b“ in each section, and so on, recording them below.

Total Dimension Score

a. Visual	_____	+	_____	+	_____	+	_____	=	_____
b. Auditory	_____	+	_____	+	_____	+	_____	=	_____
c. Kinesthetic	_____	+	_____	+	_____	+	_____	=	_____
d. Mood	_____	+	_____	+	_____	+	_____	=	_____

SESSION 5: POSITIVE SELF TALK AND COMMUNICATION

SELF TALK AND PERFORMANCE ENHANCEMENT

When athletes make attributions internally they are engaging in what is called **SELF TALK**. More specifically self talk is the internal dialogue that takes place inside your mind (Etnier, 2009). Self talk can take two forms namely positive or negative. Various studies on self talk have been conducted and in one particular study researchers found that more negative self talk was present than positive self talk amongst athletes. These negative self-statements were mainly displayed after mistakes. In other words negative self talk was associated with poor performance and players exhibited little instructional positive self talk. Research using a variety of other athletic samples has shown that different types of positive self talk such as instructional, motivational, mood related, self affirmative can enhance performance. It appears that self talk can be effective for a variety of tasks and practitioners should evaluate the type of task and the most appropriate type of self talk likely to enhance performance. Self talk can reduce the frequency of interfering thoughts and thus keep participants focused more closely on the task.

NEGATIVE SELF TALK

Negative self talk can present itself in many forms but two specific forms stick out: Mean Self Talk and Negative Prediction. Mean self talk is the worst of the two for the simple reason that it is brutally mean and hurtful to an athlete's ego. Examples can include: "I suck", "I'm never going to win" or "I don't even know why I play this stupid game". Saying these things and hearing these things on a regular basis will eventually make you feel terrible about yourself and result in hurting your self confidence, your happiness and ultimately negatively affect your performance (Etnier, 2009). Negative predictions are negative statements that an athlete instils in their mind. They can include comments such as: "I hate shots like this", "I can't play shots like this" or "I never succeed at shots like this". The major problem with negative predictions such as these are that they often create reality (Etnier, 2009). "Negative predictions can become a powerful self fulfilling prophecy" (Etnier, 2009, p.

95). In other words if you constantly tell yourself that you are going to miss a shot the likelihood that you will is very high.

There is a simple yet powerful relationship between the way your minds operates and the way the body operates. The body will generally follow directions given to it by the mind. Therefore if you influence your body with positive thoughts and positive self talk then the body will respond in a positive way. It is important to understand that although doubt may creep into your mind and although you may at times feel unprepared and hesitant to compete you must engage in positive self talk to increase your confidence, master your emotions and create a heightened sense of competitive readiness.

TECHNIQUES FOR IMPROVING SELF TALK

There are six rules that athletes can think about when creating self talk for performance execution:



In addition to these suggestions, various techniques, or strategies have been found to improve self talk. Two of the most successful involve thought stopping and changing negative self talk to positive self talk.

1. **Thought Stopping** – One way to cope with negative thoughts is to stop them before they harm performance. Thought stopping involves concentrating on the undesired thought briefly and then using a cue to trigger or stop the thought and clear your mind. The trigger can be a simple word like „stop“ or a trigger like snapping your fingers or hitting your hand against your thigh. Initially it is best to restrict thought stopping to practice situations. Whenever you start thinking a negative thought just say „STOP“ (or whatever cue you as an individual athlete have chosen) aloud and then focus on a task-related cue. Old habits die hard so you should practice thought stopping continuously.
2. **Changing negative self talk to positive self talk** – When negative thoughts come one way to cope with them is to change them into positive self talk which redirects attentional focus to provide encouragement and motivation. First, list all the types of self talk that hurt your performance or that produce undesirable behaviours. The goal is to recognise what situations produce negative thoughts and why. Then try to substitute a positive statement for the negative one. To work on changing self talk from negative to positive, use the same guidelines that you used for thought stopping. That is, do it in practice before trying it in competition. Because most negative thoughts occur under stress, first try to halt the negative thought and then take a deep breath. As you exhale, relax and repeat the positive statement. (Under concentration - Weinberg & Gould, 2007 psychology)

Practicing positive self talk alone will not create a successful performer. Therefore you must combine positive self talk with every aspect of your preparation routines and training methods, even pre-practice and pre-competition routines. If an athlete is physically prepared and has practiced performance to perfection then using positive self talk to increase self confidence and create positive reality will set them in good stead for becoming a more successful performer (Etnier, 2009). If you incorporate positive self talk in training routines on a regular basis it will eventually become an

automated aspect of your performance and the skill of using positive self talk to boost performance will therefore be readily available and quick to use when necessary.

POSITIVE SELF TALK AND POSITIVE ATTITUDES

Positive self talk can stem from having a positive attitude and having a positive attitude can stem from positive self talk. There exists a symbiotic relationship between the two. In other words each aspect influences the other and they exist in relation to one another. Negative self talk will generally stem from a negative attitude and if it doesn't then engaging in negative self talk will inevitable result in a negative attitude. There are many benefits of having a positive attitude (Kuehl et al., 2005, p. 18).



However, it is easy to understand the benefits of having a positive attitude but adopting one is a lot harder considering the fact that negative self talk and adopting a negative attitude comes more naturally to most people. Below are some outlines given by Kuehl et al. (2005, p. 18) for developing positive attitudes.



COMMUNICATION

In all aspects of life, sporting life included, communication is vitally important for efficiency and effective and successful operations. Without professional communication things will most often end up falling apart. In sports particularly communication serves various purposes some of which include: persuasion, evaluation, gathering and portraying information, motivation, strategy and tactic development and implementation, injury diagnosis and problem solving to name a few. Adopting good communication skills within your sport is one of the most important ingredients contributing to the performance and growth of exercise in athletes. When it comes to communication, whether it be between athletes and

coaches, coaches and managers, coaches and other staff members or even between athletes themselves, there are a few very simple tips that you need to firstly understand and secondly start implementing when communicating between the various parties involved in your sporting context. These tips include the following:



Some of the areas in which communication is used within sport were mentioned briefly earlier. Below is a more comprehensive list. Although it may seem relatively obvious it is still important to identify the areas where communication is used as this may help you identify various aspects that may need adjusting in order to help you improve your efficiency and professionalism. Communication is used:

- So coaches can provide information about training times, training days and training venues.
- To help coaches inform athletes about the structure and plans for practice sessions.
- To help coaches inform the athletes of squad selection.
- To help athletes understand match dates and other accompanying logistics.
- To help coaches elicit specific information to their teams regarding up and coming opponents and help portray specific strategies, tactics and game plans.
- For liaison between coaches and management regarding team logistics such as team kit, travelling and accommodation arrangements.
- For liaison between teams and their sponsoring entities.
- To help athlete's express injury status and to help coaches, athletes and doctors understand more closely the complexity and severity of injuries sustained.
- To help players with understanding one another on and off the field.
- Used to encourage, motivate and praise players on the field during practice and competition.
- To help the captain make decisions regarding his team's performance during matches.
- To help athletes perform well together during competition – effective communication improves fluidity, flow and control of the team during competition.
- To help each individual athlete express their intentions during the game.

There are many blocks to effective communication and it is important to understand these so as to try avoiding them to allow yourself to have the most effective communication possible. Some of the blocks include the following:



THINK POSITIVE

Your life is your garden, your thoughts are the seeds.
If your life isn't awesome, you've been watering the weeds.
~Terry Prince

SELF TALK EXERCISES

Exercise 1: NEWSPAPER ARTICLES

Objective:

To get you thinking and feeling positively heading into the big game.

Setup:

Make copies of the Newspaper Articles sheet and arrange yourselves into pairs.

Directions:

Take turn interviewing each other as if the game already occurred and of course your team was successful. Have the players discuss the keys to success in the game, providing quotes from players, coaches, and even opponents. Make sure each player makes contribution to the team's success whether it is a starter playing well, a sub coming in and sparking the team, or a reserve enthusiastically cheering on the team to victory. Fill in the newspaper article together as a pair.

Discussion:

- Share the newspaper articles with your teammates.
- Stress that everyone plays a role with the team and can have a great game even if they don't get playing time.
- This exercise also gets players expecting to win and can be used especially when you are the underdog.
- The important part is to get players focused on the keys it will take to play well and hopefully get the win.

Worksheet 7

Newspaper Articles

NEWSPAPER NAME:

SPORTS

DATE:

Headline:

Article:

Picture:

Caption:

Exercise 2: PICKLE JAR

Objective:

Help players recognise and release thoughts prior to practice or competition.

Setup:

Get an empty small jar and some pens and scrap paper.

Directions:

Imagine you have just arrived at practice. Take a few minutes to close your eyes and picture yourself walking up and arriving at practice. Think about all the things that might be on your minds as you come to practice. They could be problems that occurred earlier in the day, being in a bad mood, worried about future exams, projects, or concerns about finances, friends, etc. Once you have imagined this for a few moments open your eyes and write all of these on some of the scrap paper provided. Collect all the papers from all the players, put them into the jar, seal the jar shut tightly and throw it in the bin.

Discussion:

- Focusing on these problems and concerns during practice time is a very unproductive use of your time.
- Obviously, players will have things on their minds when they come to practice.
- However, to have a quality practice where you are focused, it is important that you set aside other concerns during practice time.

Exercise 3: TEAM QUOTES

Objective:

To share the responsibility of team motivation with players and allow you the chance to find and read inspirational quotes that mean a lot to them.

Setup:

Bulletin board, thumb tacks and paper.

Directions:

Bring to the session a couple of quotes from people who inspire you and share them with the group. Pin them up on the board.

Discussion:

- Discuss the quotes together.
- Discuss why the quotes inspire the players.
- Discuss how the quotes can be applied to their situations.

Exercise 4: CHANGING NEGATIVE SELF TALK TO POSITIVE SELF TALK

Objective:

To illustrate that one way to deal with negative self talk is to change them into positive self talk which further redirects attentional focus to provide encouragement and motivation.

Setup:

Divide the group into 3 groups. Make copies of the self talk sheet.

Directions:

In the negative self talk column write down various negative comments that you may have said, heard or thought during a bad performance. Once this has been done work through these negative comments with the group one at a time offering an opposite positive comment for every negative comment. Write the positive comment in the positive self talk column opposite. Make sure all players agree on the positive comment.

Discussion:

- Discuss how we have control over our emotions and thoughts.
- We can control what we think, be it negative or positive.
- When you feel like a negative response is coming on you need to train yourself to throw away that negative thought pattern and replace it with positive thoughts.

Worksheet 7

Change to



NEGATIVE SELF TALK	POSITIVE SELF TALK

Exercise 5 WHAT SHOULD I BE SAYING TO MYSELF?

Objective:

This exercise is designed to get you thinking in a more positive way. It is designed to help you understand the positive ways you can and should react in adverse or challenging situations

Setup:

Divide yourselves into groups of three. Distribute the scenarios among the different groups.

Directions:

Work through the different scenarios and after each one write down a couple of statements that you as athletes should be saying to help improve performance during these challenging situations. Try picture yourself in these situations as best as possible.

Discussion:

- Discuss amongst yourselves how easy it is to think about positive statements such as the ones you generated.
- Whether to think negatively or positively is a choice and the result of your performance will be determined by your choice.

Worksheet 8

CHALLENGING SCENARIOS

Scenario one: You are playing a cricket match against your most rival team. Both teams are unbeaten and you are entering into the last game for the season. You are the number 6 batsman and your team is not doing very well. There are 60 runs on the board, a wicket falls and it is your turn to take the crease. A lot of pressure has suddenly been bestowed on your shoulders. As you walk out to the wicket what should you be saying to yourself?

Scenario two: You are the opening bowler for your 1st XI cricket side. Your captain has asked you to bowl the final over of a very important match. A win in this match means an unbeaten season for your team. Your bowling performance has not been good for the match so far and in the last over the batting team needs 10 runs to win. Winning this game suddenly becomes your responsibility and depends on your bowling performance. What should you be saying to yourself in this particular situation?

Scenario three: You have performed well throughout your season and you are about to enter the last game for the year. You are on the brink of breaking records for your school. If you score more than 25 runs in your final cricket game you become the highest runs scorer ever in the history of your school. A couple of days prior to this game your rivals start bad mouthing you, distracting you with negative talk regarding your performance and putting you off by telling you that you don't deserve the record and that you will never achieve it. What do you say to yourselves and to your critics?

Scenario four: You have been playing for your 1st XI cricket team for the majority of the year. As you approach the final few games you get dropped for a player younger than you because his performance has been considered excellent while your coach has expressed to you that your performance has been less than satisfactory. What

do you say to yourself at the exact moment you find out the news and what should be saying to yourself in the following few weeks after being dropped?

WHETHER YOU
THINK YOU CAN,
OR THINK YOU CAN'T,
YOU'RE RIGHT.

COMMUNICATION EXERCISES

Exercise 5: BACK TO BACK COMMUNICATION

Objective:

To emphasize the importance of clear communication and attentive listening. The exercise also stresses the importance of two way communication and being specific when giving directions.

Setup:

Make copies of the Back to Back Communication diagrams, enough for half the group, and then for the other half provide blank paper. Arrange yourselves into pairs sitting back to back giving one player the responsibility of drawing and the other the responsibility of communicating. The drawer must not see the diagram at any stage.

Directions:

Hand the describer a sheet with the various shapes portrayed on it. Ask the describers to describe the drawing in detail to their partner. The drawers should attempt to draw what is described on a blank sheet of paper. The drawers are not allowed to speak during the exercise at all. After about 5 minutes stop drawing and compare drawings with other groups. Get the partners to switch roles and hand out the second drawing and repeat the same process as before. This time allow the drawers to clarify and ask questions of the describer, again without actually seeing the drawing beforehand. Compare the drawing again with the other groups

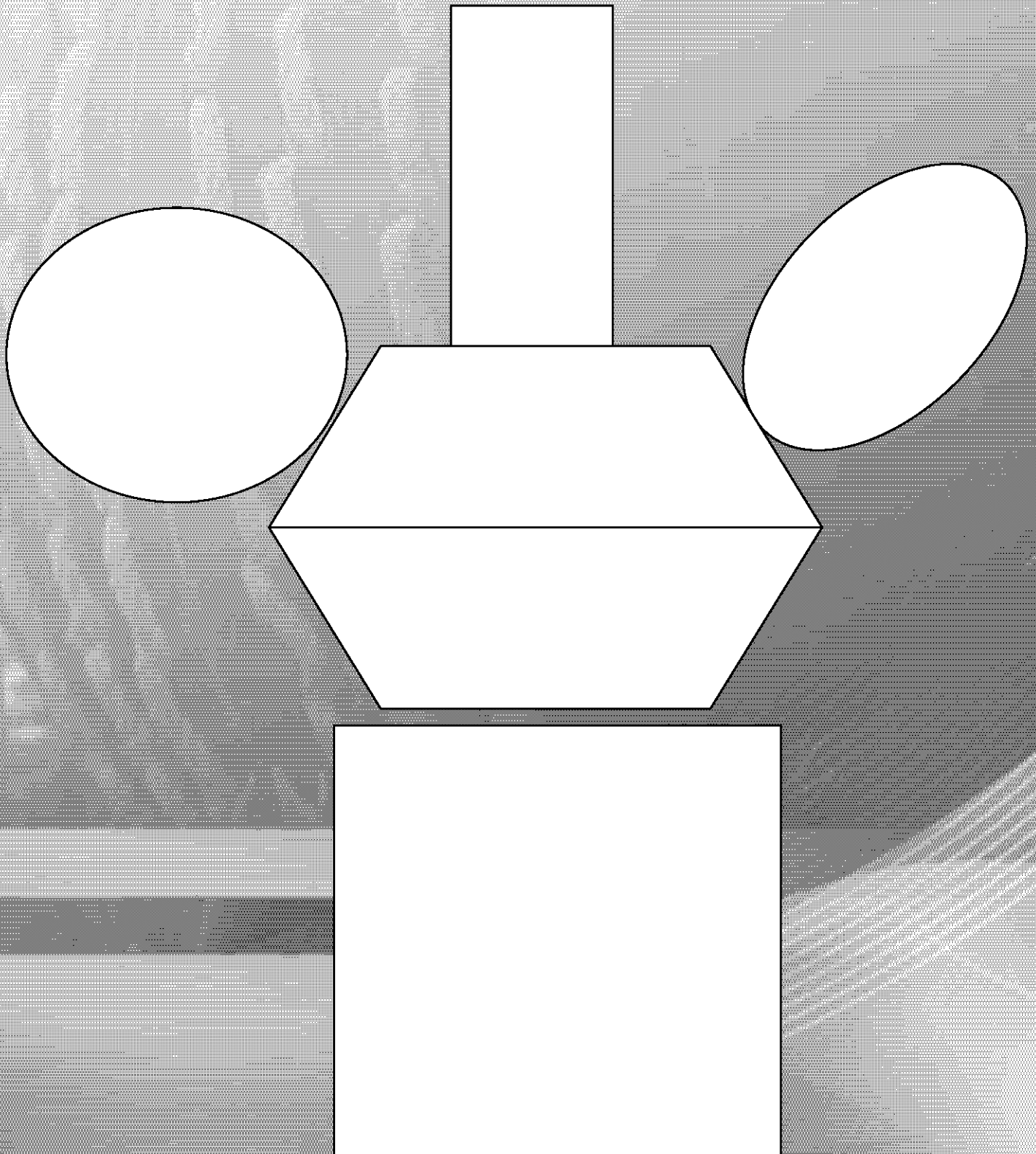
Discussion:

- Discuss what it was like not being able to clarify the instructions they were given.
- Ask the describers what it was like not to be able to see or hear how their partners were doing.
- What communication principles were emphasized with this exercise?
- As a describer, how could you have been a more effective communicator?

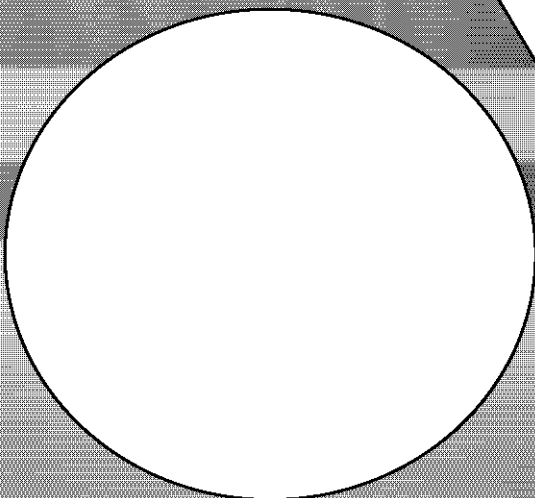
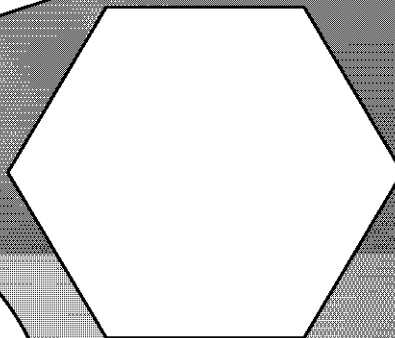
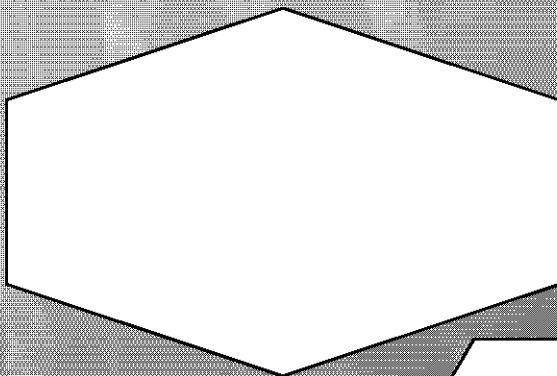
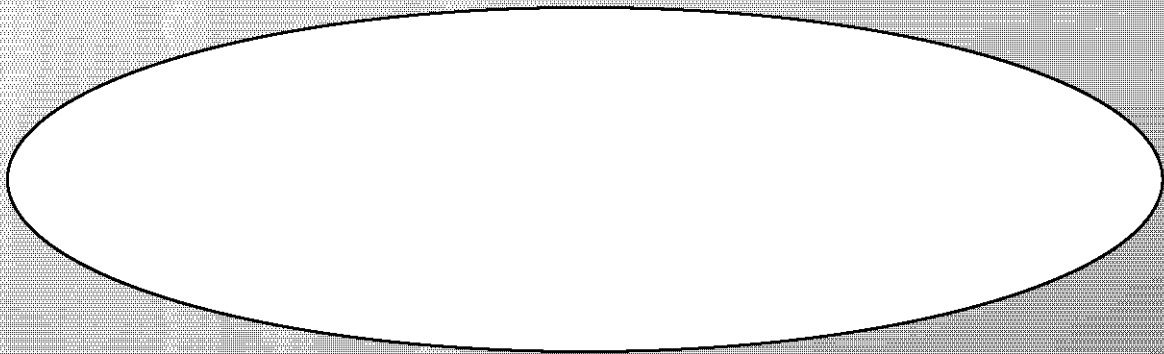
- As a drawer, how tuned in were you as a listener?
- What does this exercise remind you about seeing things from another person's perspective?
- How did the describer's attitude and tone of voice affect the accuracy of the drawing and the feelings of competence by the drawer?
- What was it like being able to describe instructions?
- Discuss as describers the ability to feedback from their partners.
- What does this exercise teach about communication within a team.

Worksheet 8

Back to Back Communication (a)



Back to Back Communication (b)



Exercise 6: BLINDFOLD BIRTHDAY LINE-UP

Objective:

To have players creatively communicate with each other without talking

Setup:

Need a large open area and blindfolds for the players

Directions:

Blindfold all players. Scatter the players all over the room. Without directly saying when your birthday is use alternate communication methods to arrange yourselves into chronological order according to your birth dates.

Discussion:

- What did it feel like being separated from your teammates?
- Did you think it was possible for the team to complete the exercise?
- What methods did they use to communicate with each other?
- How did they deal with the frustration they may have felt?

SESSION 6: DECISION MAKING AND GOAL ORIENTATION

WHAT IS A GOAL AND WHAT IS GOAL SETTING

A goal is described as attaining a specific level of proficiency in a task, usually within a specified time limit. In reality goals typically focus on improving one's own performance or beating another person or team. It doesn't matter whether your ultimate dream goal is to play professional sport, or to represent your high school first team or university team, one thing is clear and crucial and that is that you identify your goal early on in order for you to create a blueprint for achieving this goal and thus begin working toward this ultimate dream in a committed fashion. Although this long-term goal should be realistic it should still demonstrate a high degree of confidence in your ability as an athlete to work toward that dream. In other words it should be an achievement that you feel is your ultimate destiny that you want to try and reach and attain.

Goal setting includes presenting specific targets that you as an individual athlete or as a team are striving to reach or achieve. It is simply the technique used to assist you realise your potential and further help you find a position to achieve your ultimate goal in life and in this particular case your sporting career (Etnier, 2009). Your ultimate goal will be considered your long term goal and goal setting therefore includes identifying both short-term and mid-term goals that will lay the ground work and the path to reach your ultimate goal. Goal setting is effective because it is the means by which you develop and create the blueprint mentioned earlier for you to reach your long-term goal and in addition to this provides a checkpoint system for the journey as well as a reward system which motivates you as you work and strive toward achieving the ultimate dream (Etnier, 2009). Goals help athletes persist, they help direct attention to a particular skill, they motivate the athlete, they reduce stress by channelling a particular focus and ultimately the help achieve long term aspirations (Woods, 1998). Goal setting comes directly after identifying your ultimate goal. "If you've identified an ultimate goal that is realistic yet challenging, that you've committed to achieving, and that you feel motivated to work toward, the next question to ask yourself is: what do I need to do to get there" (Etnier, 2009, p. 52).

WHY IS GOAL SETTING THEORY IMPORTANT?

According to goal setting theory, an individual's conscious goals while trying to perform a task actually regulate task performance. Athletes can achieve a higher performance level if specific, hard goals are created. Research has shown that easy goals, no goals or generalised goals are not as effective. However theory also suggests that a number of variables mediate this performance, including personality factors, monetary incentives, degree of commitment, knowledge of results, time limits, participation in decision making, and competition. Results have revealed that goal setting strategies were perceived to be effective by leading sport psychology consultants working with US Olympic athletes. In addition to using goal setting as part of their daily training regimen, Olympians reported that goals were one of the most often used psychological interventions. Amongst various researchers conducting research on goal setting consistent findings are listed below (Morris & Summers, 2004).

- Performance is enhanced when goals are moderately difficult, challenging and realistic.
- Goal setting provides athletes with direction and focus.
- Motivation will be higher if athletes are committed to their goals and accept them.
- Goals plus feedback produce better performance than either goals alone or feedback alone.
- Goals should be given priorities.
- Goals should generally be emphasized because they come under the athletes' control.
- Time pressures, stress, tiredness, academic pressures and social relationships negatively affect goal achievement.
- Both short-term and long-term goals are important. Long-term goals provide direction and short-term goals provide motivation as well as making long-term goals seem more achievable, since sometimes the „whole“ can be daunting.
- While action plans help to implement goal-setting strategies, many athletes do not use them.

- Athletes using multiple goal strategies have the best performance.
- While many athletes and coaches think about and image their goals, they are not consistent in writing them down.

OUTCOME, PERFORMANCE AND PROCESS GOALS

It is important to differentiate between outcome, performance and process goals. Outcome goals focus on the end result of a competition and are therefore primarily concerned with winning and losing. An athlete is not in total control of reaching his / her outcome goal, since winning or losing depends, at least in part, on the performance of the opponent. Performance goals refer to an individual athletes' performance independent of other competitors or the team. An athlete is in control of achieving a performance goal because the performance of other players or competitors does not affect the goals attainment. Process goals are used during practice or training. All these types of goals can be effective in enhancing performance and positively affecting behaviour. Process and performance goals are particularly important since they are to a large extent under the individual athletes' control.

Having a balance between all these types of goals is important but more specifically between outcome goals and process goals as this balance is crucial for success in performance. Although winning is important in competition, the winner of most competitions is often NOT the person or team that has the strongest outcome orientation or who focus only on winning. The winners have the correct balance of outcome and process orientation. There are negative results of being 100% outcome orientated or 100% process orientated:



If an athlete is 100% outcome orientated they will not respond well to losing as they inherently only care about winning. This absolute drive for success and winning therefore leads to these types of athletes judging their success and performances on win / lose ratios. Considering that winning is the only priority to this type of athlete they will enter into challenges that they know they can win. If losing is a possibility these types of athletes will most often hesitate at entering into the challenge. Complete outcome orientated athletes will often fail to develop appropriate skills due to the fact that the outcome can often be achieved without learning to perform necessary skills appropriately (Etnier, 2009).

If an athlete is 100% process orientated they don't care much about winning but are more motivated and driven by being able to improve their skills in the sport. These types of athletes are likely to become very skilled at their sport but are less likely to win because of their energy levels and focus being directed into skill development rather than into commitment, effort, exertion and risk taking that competitive environments demand to win. These athletes will lack competitive spirit necessary to be successful and therefore reach higher levels within their sport (Etnier, 2009).

Considering the negatives of both being 100% outcome orientated and 100% process orientated it is obvious to see that a balance is what is required and suggested for successful performance. Etnier (2009, p. 78) actually suggests leaning more towards process orientation if you were to favour one particular side. Her two reasons for saying this include the following:

- **You will be able to develop better as an athlete. As young athletes this is your time to hone your skills and become increasingly more technically sound. Therefore focusing more heavily on the process rather than the outcome is stressed here.**
- **You free yourself up to face those competitors who will challenge you and therefore force you to improve.**

The key then is to prioritise a process focus but still remain interested in the end outcome. Elite athletes have the ability to shift their focus between process and outcome goals in a way that benefits their development as competitive performers (Etnier, 2009). They understand when it is important to focus on which type of goal. This should be your aim too.

PRINCIPLES AND GUIDELINES FOR GOAL SETTING

Various aspects should be considered when setting goals such as those outline by Morris and Summers (2004) and Etnier (2009):

- 
- Set specific goals and make a Blueprint
 - Write down and post your goals
 - Using short term and long term goals
 - Making goals specific, measurable, action orientated, realistic and timely
 - Recording goals
 - Share goals with supportive people
 - Using a combination of process, performance and outcome goals
 - Incorporating individual and team goals
 - Using practice goals
 - Developing plans to reach goals
 - Consider participant personality
 - Providing an encouraging social support
 - Evaluating goals
 - Be flexible and willing to adjust goals
 - Setup a reward system

Setting specific goals and make a blueprint – When athletes set specific goals within their sporting context their performance enhancement becomes more consistent as compared to setting more general goals. In addition to setting specific goals, athletes should ensure that they are measurable to allow individuals or teams to understand and gauge levels of progress towards achieving the goals set ahead. Achieving your ultimate goal will not be possible unless you setup and achieve a

series of short-term goals (Ladders) and mid-term goals (Lower level platforms). These ladders and lower level platforms provide three purposes. Firstly they provide a blueprint that will help lead you toward your dream, secondly they provide you with a measuring instrument to gauge your level of progress and lastly they help you experience the reward of reaching each one of the lower level platforms setup (Etnier, 2009).

Write down and post your goals – It is advised that you write down your goals when planning for your future and post these written goals somewhere where they can be seen regularly on a daily basis. There are two main reasons why this is important. Writing down your goals allows you to physically see what you are aiming at achieving and this provides an easy way to evaluate your progress and furthermore provides a check system that you can tick off when each lower level goal is met. This check / ticking system provides you with motivation and will increase your drive and determination to continue achieving as each goal is met. By writing down you goals you are taking the first step at demonstrating that you are committed to working toward your goals

Using short-term and long-term goals – Athletes and teams will generally set outcome-orientated as well as long-term goals and this type of goal setting is vital for potential success and victory as they provide individuals and teams with direction, determination and focus. However both short and long-term goals are needed in order for the athletes to maintain high levels of motivation and improved performance. Short term goals help individuals focus on small improvements and also provide continuous feedback which is crucial for evolving as an athlete. It is important for athletes, in addition to setting larger long-term goals that they set short-term „mini“ goals setup to guide athletes toward achieving the bigger picture.

Making goals specific, measurable, action orientated, realistic and timely (SMART) -

Goal setting theory states that the more difficult the goal the greater the performance exerted by the athlete. However if athletes set goals that are too difficult and perhaps out of reach then performance will often reach a plateau or even a decline in

performance. With this being said athletes should strive to set goals that are challenging to them yet realistically achievable. If athletes set goals that are too easy to achieve then they will become complacent and fail to put in consistent effort since they feel that they can reach the goal without greater effort. If goals are too difficult to achieve, athletes will have the tendency to become frustrated, lose motivation and give up when they become discouraged by failing to achieve their goals. It is important that athletes and teams know their limits in order to understand whether they are setting goals that are realistic or not. An excellent guideline to follow is the SMART criteria. Your goals should be written in a particular manner that allows you to consistently evaluate your progress, reward your accomplishments along the journey and understand specifically the time frame for reaching and achieving goals. Therefore your goals **MUST** be **SPECIFIC, MEASURABLE, ACTION-ORIENTATED, REALISTIC** and **TIMELY**.

Recording goals – It is essential that athletes keep goals first and foremost in their minds and remain salient to them. Athletes should display goals where they can consistently see them and be reminded about their objectives ahead. This will help athletes remain focused, motivated and determined keeping their eyes on the „prize“.

Using a combination of process, performance and outcome goals – Athletes will often experience an increased level of competitive anxiety when too much emphasis is placed on outcome goals. Outcome goals are goals that are inherently result-orientated and depend highly on the athlete's level of performance. When athletes set outcome goals the focus is on victory and success determined and defined by competitive results. Outcome goals are descriptions of an athlete's ultimate outcomes derived through discipline and continuous pursuit. Although these types of goals are influential and positive for performance they do exert excess pressure on the athletes and often a less stressful way to strive for victory is to focus on performance or process goals. Performance and process goals are smaller achievable goals designed to provide athletes with „stepping stones“ toward their outcome goals. Athletes using performance and process goals will concentrate more intensely on the direct control they have over their abilities, skills, techniques and strategies of their competitive performance. Outcome goals need to be balanced by

performance and process goals. If teams and athletes meet their performance goals, winning will usually come naturally. .

Using individual and team goals – This particular aspect of goal setting will vary depending on whether athletes are competing in individual or team sports. However, regardless of the domain athletes are competing in, each individual athlete will have their own individual goals. It is important that the athletes concentrate on achieving these goals in order to ensure they develop, evolve and improve as athletes but must ensure that the individual goals do not come into conflict with team goals.

Using practice goals – Given the amount of time that athletes spend practicing, it is important that, in addition to competition goals, practice goals are set too. Setting practice goals is a good way to keep an athlete focused, determined and motivated during their practice sessions. Some research has found that setting practice goals could be more important than competition goals. Here we can refer back to the point made earlier that „perfect practice makes perfect“ whereas practice goals can assist athletes in increasing their levels of preparation for competition and therefore improve the athletes performance potential. Practice goals should focus more on developing skills and working on improving weak areas than an outcome. Practice goals can also affect skill improvement as well as mental and psychological preparation.

Developing plans to reach goals – Developing plans for goals is about setting up specific strategies that an athlete can abide by in order to achieve goals. Relevant learning strategies can help athletes achieve goals that enhance performance and these strategies should be specific and involve definite numbers. In setting these goal achievement strategies, it is recommended that athletes build in some flexibility in order to avoid disappointment if goals are not met and to further allow adjustments to be made if needed ensuring minimal disruption to motivation and overall performance.

Consider participant's personality – This factor of goal setting will be more orientated towards the coaches of athletes. Each individual athlete will be different,

occupying a variety of varying personalities and will therefore be motivated and driven in different ways. It is important when setting goals to ensure that these goals are individualised in order for the athletes to be personally and emotionally invested in them. This investment and attachment to these goals will ultimately result in greater dedication and focus toward achieving them. It is therefore important for coaches to ensure that a motivational climate that matches the motives of the individual athletes is created and maintained in order to help produce maximum motivation. A motivational climate should be created by fostering learning, progress and improvement in striving to reach the overall goals.

Providing and encouraging social support as well as sharing your goals with supportive people – Social support helps athletes remain motivated, particularly when goals are difficult to reach. In a sport context, social support, which can come from various sources such as parents, teachers, friends, or teammates should focus on the achievement of goals rather than winning or losing. Support and reinforcement at home can go a long way to keeping young athletes motivated and focused on behaviours espoused by the coach. The people in your life that you consider close can support you in a variety of ways and this will directly contribute toward the achievement of your goals.

Evaluating goals – This element of goal setting is crucially important and contributes highly towards the athletes' ability to improve performance as well as ensuring a greater chance of success. In addition to assessing the performance of an athlete, there are other aspects relating to the development of psychological skills, as well as enhanced fun, satisfaction and intrinsic motivation that are important to assess. Evaluating goals will help athletes understand their level of progress and furthermore understand where they sit with regard to their path toward performance success.

Be flexible and willing to adjust goals – It is crucially important for goal setting that you remain slightly flexible with your goals so that they can be adjusted if needed. Various variables can come into play that may be unavoidable or inevitable that you

may not have considered when setting goals and that are now out of your control. In situations like this there is no point just giving up, instead just prepare yourself mentally right from the beginning that you may have to, at some point along your goal achieving journey, adjust your goals and bench marks. However it is VERY important to understand that this idea of flexibility is by no means an excuse for not working hard in achieving your goals. Remain committed, dedicated, motivated and keep your „eyes on the prize“. Remember, your blueprint for succeeding is a long range commitment plan built to help you reach your dreams and minor bumps in the road are inevitable and often unavoidable and are not a valid excuse for not achieving your goals.

Setup a reward system – A reward system should be setup for reinforcement for climbing the ladders to reach each lower level platform. The rewards should be compatible with your goals. In other words don't work hard for weeks, sticking to a rigid training routine and following a strict healthy diet and then reward yourself with a week off of training eating fast foods. These rewards will add a sense of motivation to reaching your goals and will make the journey a little more interesting.

Kieran Perkins is one of the world's greatest long distance swimmers and he once said that

Being your best is not so much about overcoming the barriers other people place in front of you as it is about overcoming the barriers we place in front of ourselves. It has nothing to do with how many times you win or lose. It has no relation to where you finish in a race or whether you break world records. But it does have everything to do with having the vision to dream, the courage to recover from adversity, and the determination never to be shifted from your goals" (Etnier, 2009, p. 63)

PROBLEMS IN GOAL SETTING

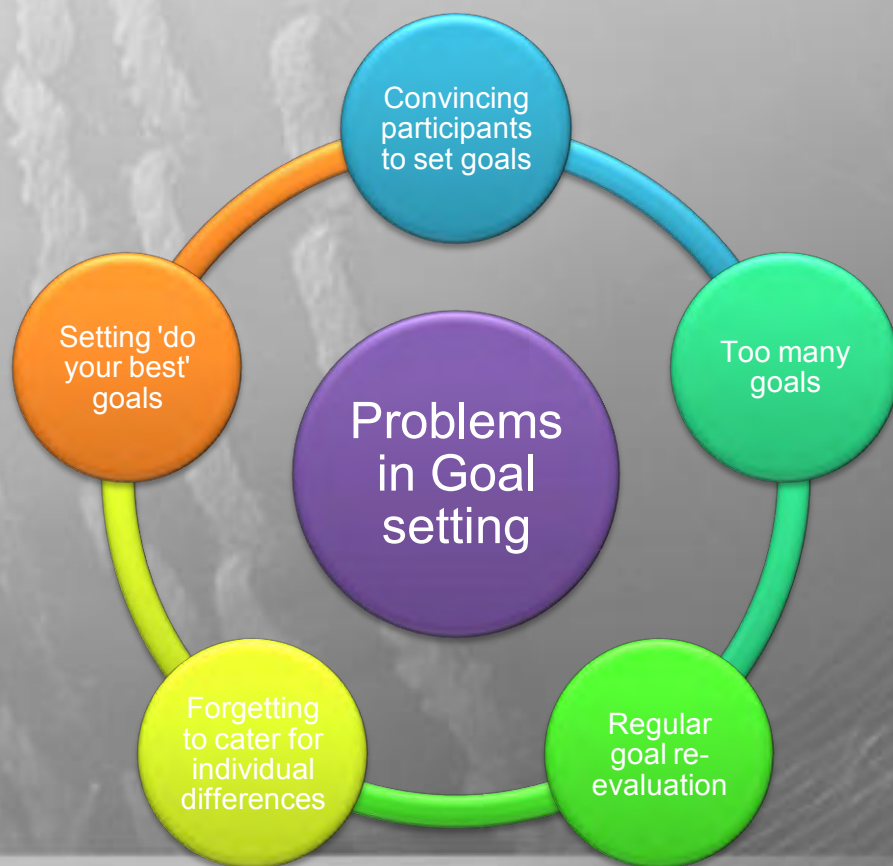
It is clear that goals can enhance performance and other responses such as satisfaction, enjoyment and intrinsic motivation. However they need to be set in such

a way as to maximise positive outcomes. Knowledge of the goal setting process is essential, but common pitfalls and problems faced by practitioners also need to be recognised if effective goals are to be set. If practitioners understand and anticipate these problems, then the potential drawbacks of goal setting can be avoided. Some common problems involve the following.

Coaches often have to convince participants to set goals. Although in some cases this may work it is more beneficial if athletes are motivated to set goals on their own. This way the athletes will be internally and intrinsically motivated to achieve the goals rather than having a sense of obligation to achieve them. If athletes set goals themselves and are motivated to achieve them with little pressure from external sources then they will exert more effort and focus into their performance as the achievement of these goals is more personal to them now. Many athletes are highly ambitious and will therefore set a multitude of goals. Although the ambition and confidence is great for performance, athletes must be sure that they do not set too many goals. This will add unnecessary pressure on the athlete to perform at a high level and if goals are not met, simply because of their magnitude, then the athlete may become de-motivated and thus lose focus, drive and determination.

In addition to this athletes must be weary of constant re-evaluation. If athletes find themselves engaging in constant re-evaluation of goals it may be an indication that they are not performing well enough or at the expected level or that they may have set goals that are too high and unrealistic. If constant re-evaluation is occurring athletes must re-evaluate the nature of their goals and perhaps analyse their performance levels and try establishing where the discrepancies lie. As already mentioned earlier in this report coaches must take into account individual differences when assisting athletes in setting goals. Forgetting to consider this can result in unrealistic, meaningful goals being set. Finally, although athletes are encouraged to always do their best in their sport and although this encouragement is positive and beneficial towards an athletes' moral and spirit, this type of mindset should be avoided when setting goals. A „do your best“ goal is ambiguous and un-measurable.

Goals need to be specific and setup in a way that provides athletes with drive and motivation to do better than their best.



BLOCKS TO ACHIEVING GOALS

There are many blocks or barriers that can get in the way of achieving goals. Athletes can be insufficiently prepared or have insufficient knowledge, they can have a poor time management ethos, they may set unrealistic goals and they may be scared of both failure and success. The fear of success is an odd and misunderstood barrier. Athletes will be thinking that success is the goal so why be scared of it. This element refers to athletes being afraid that success sets them up for future devastation. A common quote can describe this element well and that is “*the higher you climb the further you fall*”. Therefore it is important to consider the tips for goal setting and ensure that you are well prepared, have sufficient knowledge about and surrounding your goals, set good and disciplined time frames, be realistic, avoid letting the failure scare you and be willing to take risk and make big decisions and enjoy the success when it comes.



DEFINING SUCCESS OR FAILURE THROUGH ACHIEVEMENT GOALS

A psychologist by the name of John Nicholas was the first to argue that success and failure are not concrete events but instead depend on an athlete's perception of whether he or she has reached his or her personal goals (Murphy, 2005). In other words, whether an athlete perceives an outcome as a success or failure depends on how he or she defines success or failure in the first place. This perception has implications for an athlete's confidence, interest, effort, and persistence – all factors that ultimately determine how well he or she performs and how long he or she stays in the sport (Murphy, 2005).

TIGER WOODS EXAMPLE

"Tiger Woods effectively used goal setting to help him reach his dream. He provides the perfect example of how posting goals and looking at them daily can contribute to reaching dreams. As a young athlete, Tiger used another highly accomplished golfer's achievements to set a benchmark for what he wanted to accomplish. When Tiger was setting his goals, Jack Nicklaus was the best player in the world and was considered to be the best golfer who ever played the game. Tiger decided that beating the best was his goal, and he used the age at which Jack accomplished each one of his personal achievements to help guide his own goals. Tiger wrote down Jack's achievements and the age at which Jack accomplished each one of them and posted the list next to his bathroom mirror. Then tiger set his own short-term goals designed to help him achieve each of these feats. It is a tribute to Tiger's talent, goal setting attributes, work ethic, Mental Toughness, and commitment that he has achieved many of these same goals, and at younger ages than Jack did" (Etnier, 2009, p. 57).



DECISION MAKING

WHAT IS DECISION MAKING?

Decision making is the mental and cognitive process that we engage in which results in the selection of a particular action from several different alternatives. Every decision that we make will end in a final choice. Decision making in sport is vital and is present in so many different situations and circumstances. Below are a few instances where decision making occurs.

- Coaches have to make decisions about each training session and how to motivate and drive their athletes.
- Coaches have to make decisions about team selection, strategy and tactics for up and coming games.
- Coaches have to make decisions about substitution tactics during the game.
- As athletes your decisions will occur mostly on the playing field.
- You will make decisions about shot selection, game strategy and the intensity of your own performance.
- You will make decision about short, medium and long term goals and how to plan to reach these goals.
- You will make decision about training outside the expected hours of training.

I have only named a very few of the decisions that sports people are faced with. In reality there are hundreds of decisions that need to be made and the nature of these decisions will depend on so many factors such as the specific sport, the level of performance, your own personal involvement in that sport etc. However, the decisions that are made within these sporting environments and situations are very influential on performance and possible success. Athletes and coaches need to ensure that the right decision is made. In sport we don't often have ample time to consider options before making decisions. There are many cases where decision need to be made on the spot in an instant of time. The ability to make effective and successful decisions during these situations will improve with experience and as your knowledge about your own performance, the intricacies of your individual sport

and the environments in which you perform increases then the decision making process will become easier and quicker. If there are ever circumstances where you are given time to consider decision before making them, here are a few tips to consider before making your final decision.



DECISION MAKING AND GOAL ORIENTATION EXERCISES

Exercise 1: RED/YELLOW/GREEN LIGHT SKITS

Objective:

The objective of this exercise is to help you as players recognise that you can choose how you want to respond to difficult and adverse situations and that your choice will ultimately dictate your success.

Setup:

Introduce players to the mental game traffic light analogy. A green light mindset means a player is confident, aggressive, composed, focused and in control. A yellow light mindset means a player is hesitant, distracted, nervous, and unsure. A red light mindset means a player is angry, frustrated, out of control, feeling helpless, and wanting to give up.

Directions:

Arrange yourselves into three groups. Using the following challenging scenarios each group must act out a red, a yellow and a green mindset or response for these situations.

- Not getting the playing time you would have liked.
- Making a mistake or an error during the game.
- Receiving criticism from a coach or a teammate.
- Getting a poor call from an official.
- Getting injured or having to sit out for a period of time.

Discussion:

- How do you think each response would affect individual and team's success?
- What are the repercussions on potential success for each attitude adopted?
- How do you think a person's response can influence a teammate's, as well as the team as a whole, mental game? How might a person's response affect an opponent, official, spectator, or an impressionable child?

Exercise 2: TAKING CARE OF THE PROCESS

Objective:

The objective of this exercise is to help you as athletes understand the simple things that you can do to achieve the goals and outcomes that you have set yourselves. It is a great way to break down a big game and big goals into more manageable shorter term goals.

Setup:

Each athlete must receive a copy of the taking care of the process worksheet.

Directions:

List some of the goals you are striving for for the up and coming season and perhaps the seasons to still come and write these under the „outcome“ section of the „taking care of the process“ worksheet. List three of five of the most important things you can do which will make the outcome you want much more likely to be achieved and list these under the „process“ section. In other words list 3 or 5 ways you believe will help you achieve these goals.

Discussion:

- The important part of this exercise is to shift players focus from outcomes that may seem difficult, overwhelming, and out of their control, to concentrating on simple actions or goals that they can control and concentrate on that will dramatically increase the odds of getting the outcomes they desire.
- Players should focus on these process factors before the game and focus energies and goals in these areas.
- During breaks in the game, you can use these 3 to 5 areas as checkpoints to keep focused on the process and quickly evaluate their progress.
- The process factors provide a great way to evaluate a competition outside of just winning or losing.
- When players fail to achieve the outcomes they want, it is most often because they did not take care of the process goals.

Worksheet 9

Taking Care of the Process

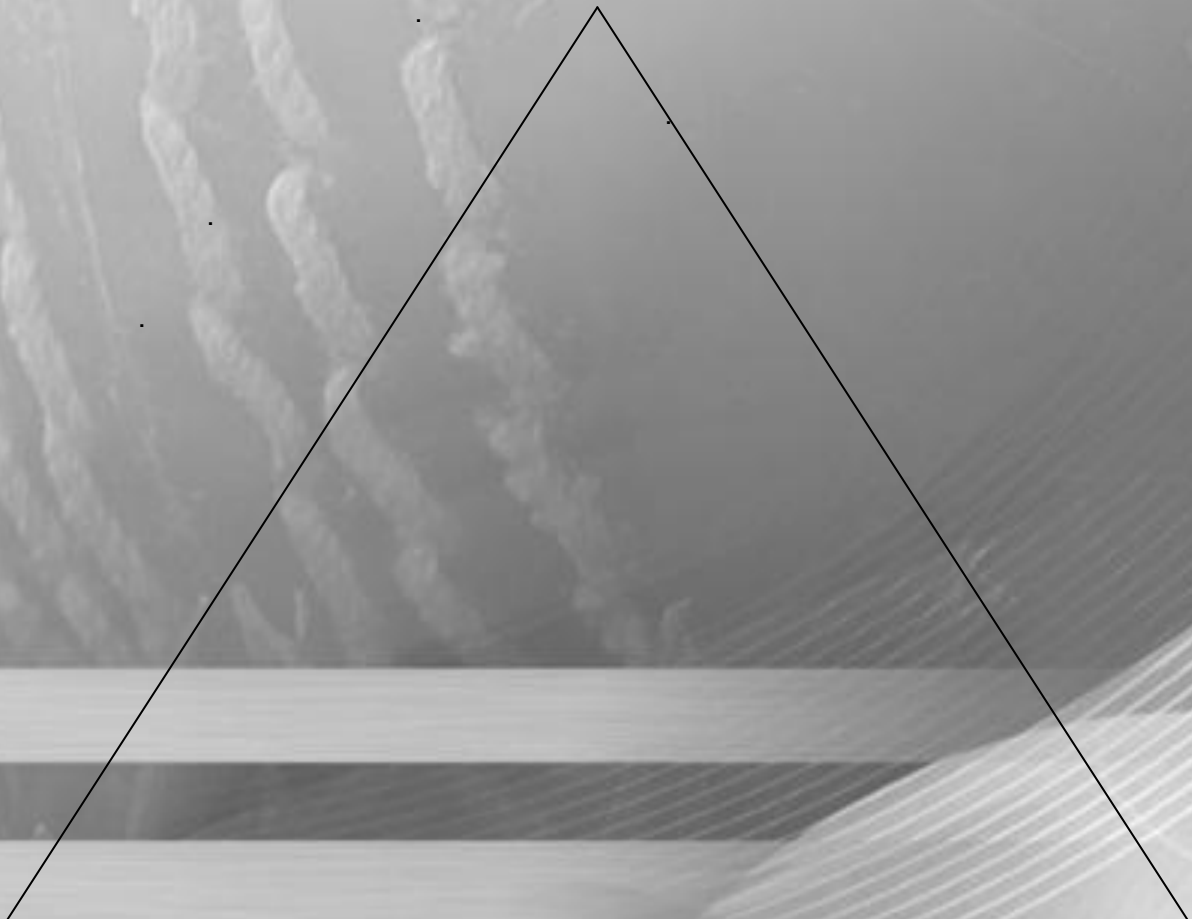
PROCESS

What are the 3 to 5 things you can do within your control that will put you in the best possible position to achieve your outcome

OUTCOME

What future outcomes you hoping to achieve?

PROCESS



Exercise 3: GOAL DARES

Objective:

A very simple exercise to help you practice with a purpose and meaning as well as provide you with the motivation and determination to improve.

Directions:

Athletes must pair up and one of the players must draft up a goal that can easily be measured and verified by the end of the week. Be sure that the goal is realistic yet challenging at the same time. To make it fun the partners can set up a consequence if the goal is or is not met.

Discussion:

- Goal dares add a little fun and incentive to practice because something is riding on the outcome of drills.
- This also sets up a competitive environment and each athlete will be focusing on improving their performance in order to win the exercise against their partner.

Exercise 4: CREATING A BLUEPRINT TO HELP YOU REACH YOUR GOALS

Objective:

The objective of this exercise is to help you as athletes build and create a blueprint to help you more successfully and effectively achieve your goals.

Directions:

Make sure every athlete has a copy of the Organising Sheet and the Goal Setting Sheet. On both worksheets write your ULTIMATE goal at the top. At the bottom of the Organising Sheet write down the people who will be supporting you during this goal achievement journey. If possible try and speak to them with regard to your dreams and gather some suggestions and advice from them. Write these suggestions and advice next to their names. On the Organising Sheet fill in the first level, second level and third level platforms. Remember these are levels or smaller goals that you want to achieve in order to reach your ultimate goals. So for example:

First Level Platform = Improve technical skills

Second Level Platform = Play on a competitive cricket team

Third Level Platform = Play in the 1st team cricket team

Ultimate Goal = Play for the University 1st team

Now that the Organising Sheet is complete move over to the Goal Setting Sheet. This sheet is designed to help you set out more specific and smaller goals to first achieve the First Level platforms and then the Second and Third level platforms after that. Fill in specific goals in the boxes under the First Level platform. These goals must be designed to assist you achieve the First Level platform. Once you have completed this form and have performed and achieved the smaller goals and therefore have reached the First Level platform repeat the process of writing down smaller and more specific goals for the Second Level platform and then the Third Level platform once you have achieved the Second Level.

Discussion:

- The BLUEPRINT provides a solid plan for achieving your goals and designing and writing it in this way will help you stay focused, committed and determined.
- It allows you to set out a clear path to follow for achieving your desired outcomes.
- Furthermore, planning in such a way allows you to take responsibility and ownership of what you are doing and writing out your plans creates a sense of accountability.

Worksheet 10

Organising Sheet

MY ULTIMATE GOAL: _____

Third Level Platform

1. _____ 2. _____ 3. _____ 4. _____

Second Level Platform

1. _____ 2. _____ 3. _____ 4. _____

First Level Platform

1. _____ 2. _____ 3. _____ 4. _____

Supporters

Supporters Suggestions / Advice

1. _____

2. _____

3. _____

4. _____

5. _____

Goal Setting Sheet

MY ULTIMATE GOAL: _____

First Level Platform

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Specific Smaller Goals / Ladders

Exercise 5 IDENTIFYING YOUR BALANCE BETWEEN OUTCOME AND PROCESS GOALS
(Duda, 1989)

Objective:

This Task and Ego Orientation Questionnaire was developed to assess process (task) and outcome (ego) orientation in athletes

Directions:

Using a scale of 1-5 answer the following questions

Discussion:

- Once the questionnaire is complete compare scores among yourselves.
- The average scores for outcome and process are 4.0 for process and 2.8 for outcome.
- If your process score is 4.0 or higher and your outcome score is 2.8 or higher then you have a good balance between the two aspects.
- If you are low on either of these then it is advised that you increase your orientation in both aspects.
- If your process score is less than 4.0 then it is advised that you review your goal setting to adjust your focus and thinking more towards process orientation.
- If your outcome score is lower than 2.8 then it is evident that you are not very focused on winning or outperforming others. Although this is not as serious as the other aspects it is advised that you try and develop a stronger outcome orientation. This drive to win will be necessary at certain stages of your sporting career.

Task and Ego Orientation Questionnaire

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

I feel most successful in sport when:

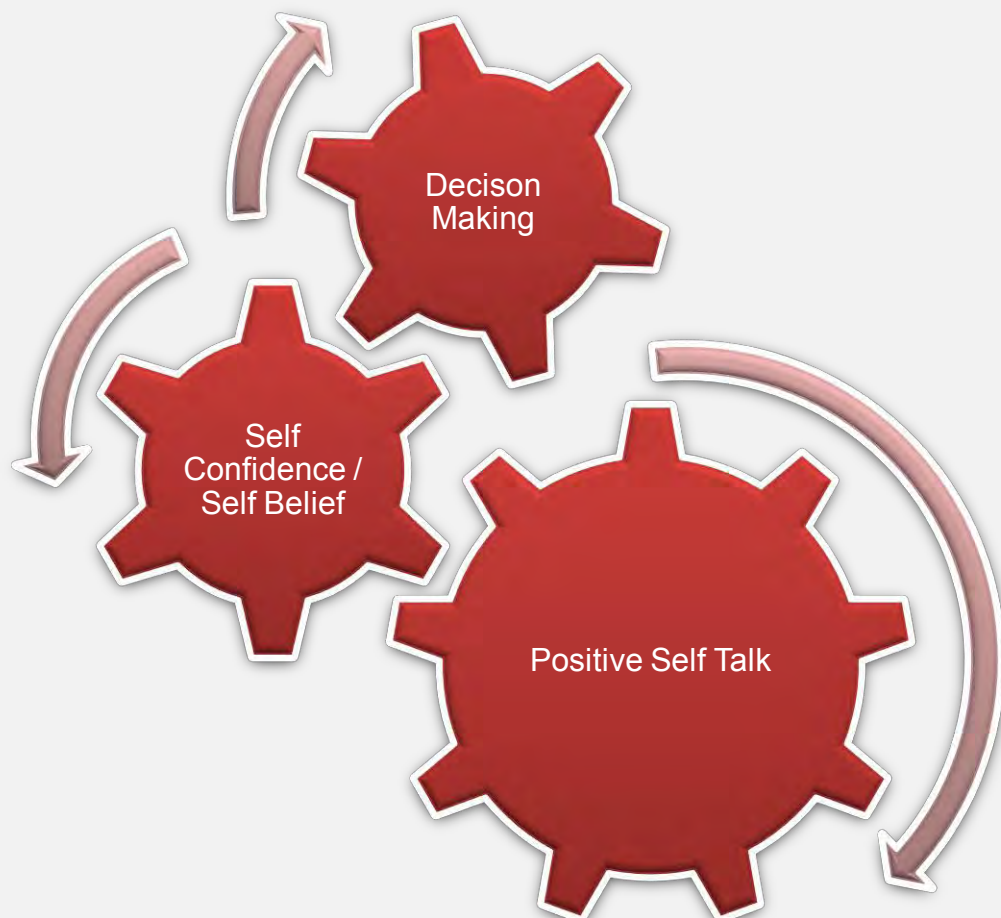
1. I am the only one who can perform the play or skill. _____
2. I learn a new skill and it makes me want to practice more. _____
3. I can do better than my friends. _____
4. The others cannot do as well as me. _____
5. I learn something that is fun to do. _____
6. Others mess up and I do not. _____
7. I learn a new skill by trying hard. _____
8. I work really hard. _____
9. I score the most points. _____
10. Something I learn makes me want to go practice more. _____
11. I am the best. _____
12. A skill I learn really feels right. _____
13. I do my very best. _____

Add the values for questions 1, 3, 4, 6, 9 and 11 and divide the total by 6
OUTCOME SCORE = _____

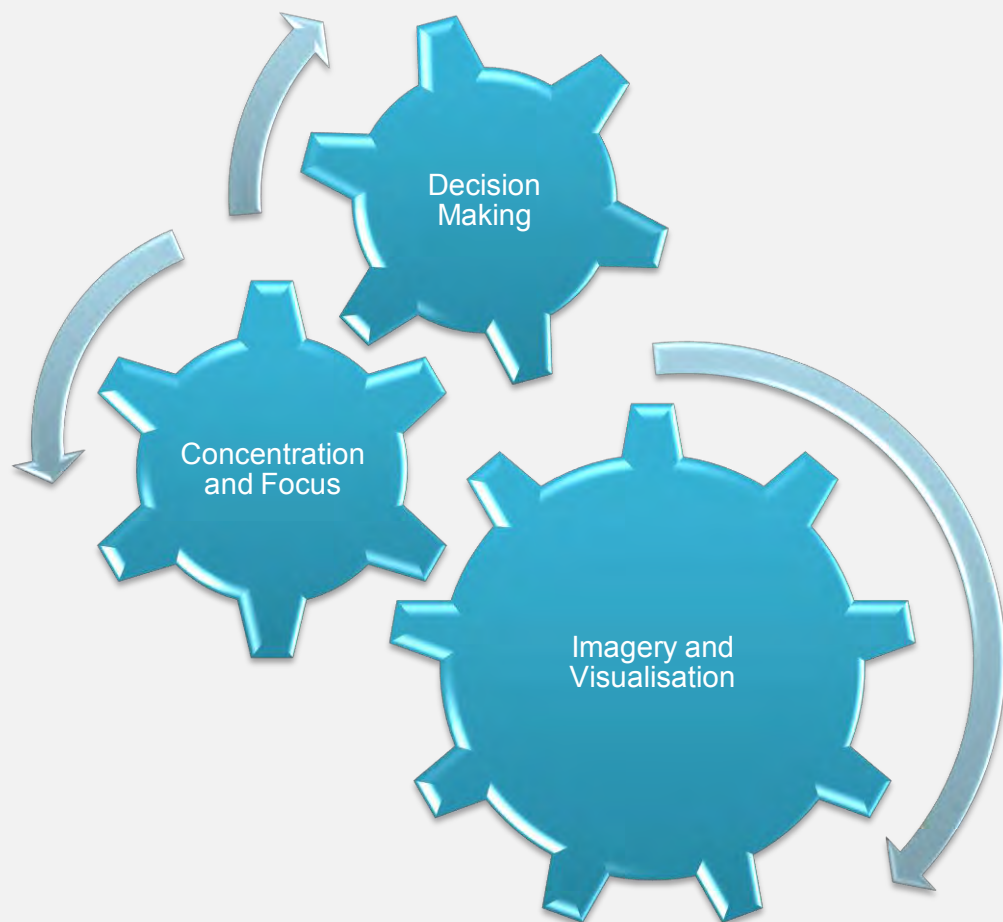
Add the values for questions 2,5,7,8,10,12 and 13 and divide the total by 7
PROCESS SCORE = _____

SESSION 7: CONCLUSION – “CONNECTING THE DOTS”

Developing a Mental Toughness programme does not just involve the simple act of improving specific mental skills. Developing one’s Mental Toughness goes much deeper than this. It does involve psychological interventions such as Mental Skills Training and Psychological Skills Training programmes where specific mental skills are taught, but it further incorporates other aspects such as environmental settings, contextual application as well as social surroundings and support. One of the most prominent characteristics defining a Mental Toughness programme is the nature by which each mental skill interlinks and correlates with the others. There are a multiple of interacting relationships that exist between the different mental skills and this co-dependent and somewhat symbiotic nature of the skills is what makes up the gears of a Mental Toughness programme. Some of the relationships and the ripple effect they cause are described below:

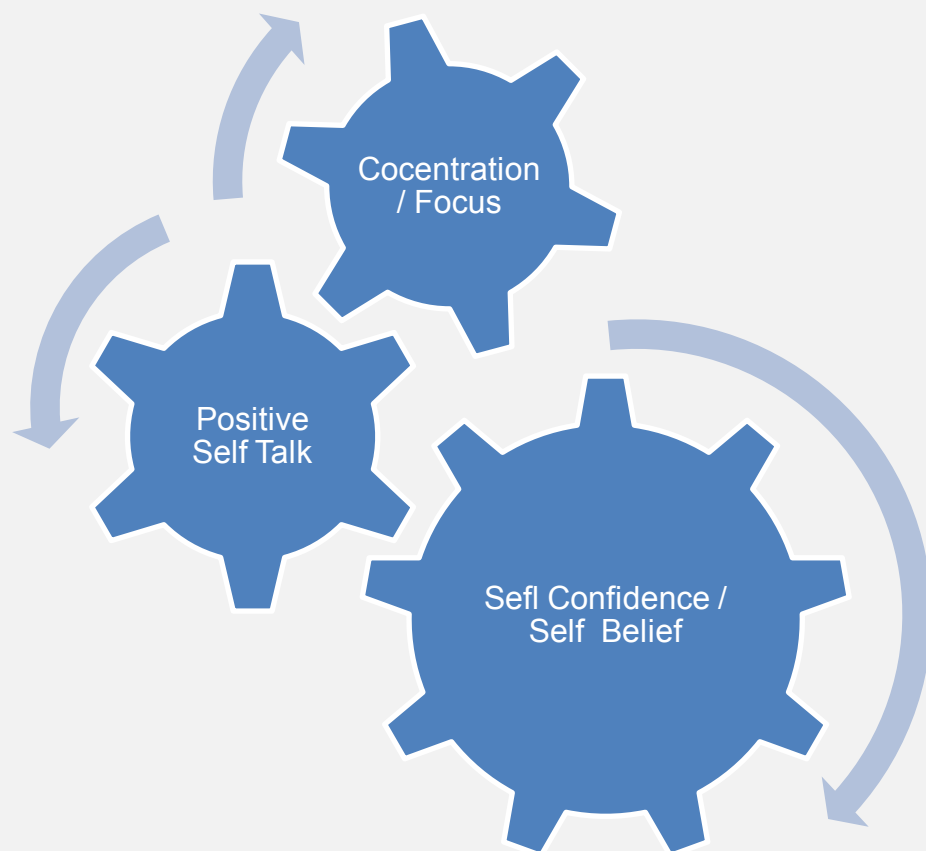


When an athlete engages in positive self talk and incorporates this into their performance routines during practice and competition there are benefits and positive ripple effects. Positive self talk leads to the athlete having a heightened sense of self belief and confidence as they start believing more in their abilities and potential as a competitor. This heightened sense of self belief and self worth will lead to the athlete making better decisions and they will furthermore be more inclined to take risks and chances. This inclination to take risks and engage in greater opportunities will stem from the faith and trust that the athlete has in themselves and their ability to achieve victory.



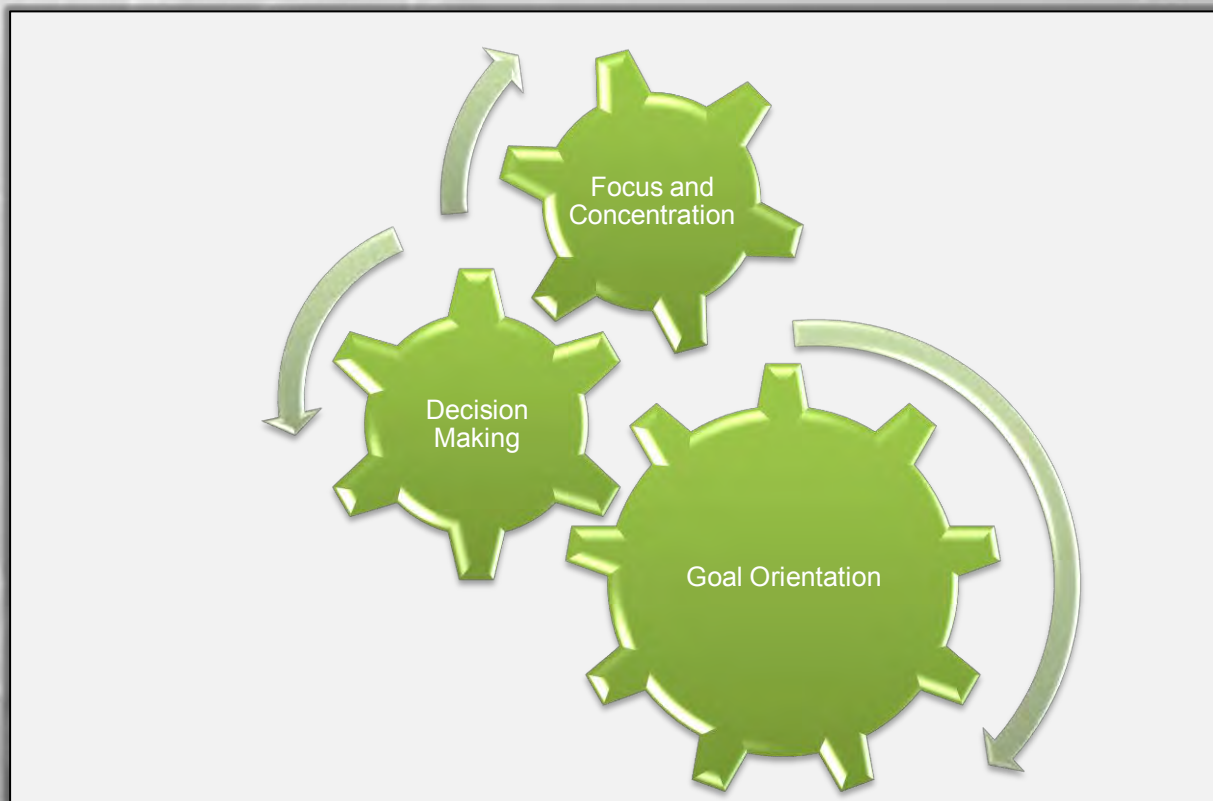
Imagery and visualisation are very powerful psychological tools and an athlete who becomes consistent at visualising effectively will see great benefits. Quality preparation by means of engaging in visualisations will help athletes get into the correct mindset before training and competition. This heightened sense of

awareness will lead to a more refined sense of focus and concentration. When athletes are more focused and their minds are highly concentrated on tasks ahead their performance inevitably become better. In addition to an improved performance, decision making becomes more calculated. As athletes learn to visualise effectively and thus create environments in their minds that closely imitate the real competitive environments they are able to understand their context more thoroughly and therefore understand the level of risk taking that they can engage in.



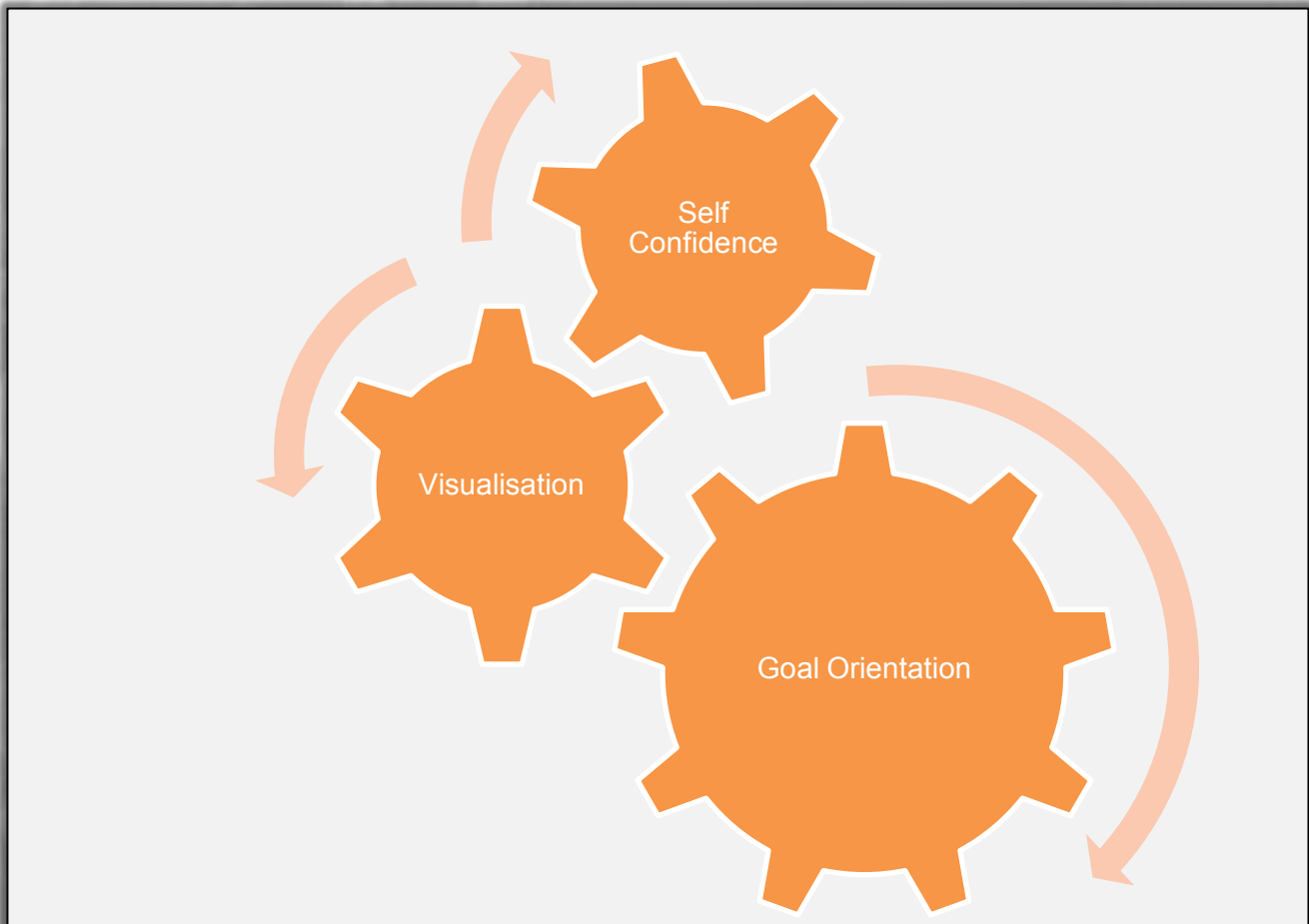
Athletes who are more self confident and have a higher value of self-belief and self worth will by nature have a more optimistic mindset, outlook and attitude. As a result of this positive demeanour these athletes are more likely to involve themselves in and apply positive self talk during their performances in practice and competition. These two mindsets will therefore lead to athletes achieving greater concentration and a better and more specific and refined focus. As a result of the optimism the

athletes will become increasingly more motivated, driven and determined striving to reach various competitive goals.



Incorporating the act of setting goals in one's routine is a great way to lay the ground work for achieving greater concentration and focus. Athletes who take the time to set realistic yet challenging long term goals, coupled with mini short term goals designed to help achieve ultimate desires, are laying good foundations for achieving potential success. As was suggested earlier in this booklet, goals provide direction and structure for the athlete. They provide guidelines for the athlete to abide by and essentially set out „stepping stones“ for the athlete to follow and achieve toward their ultimate goal. Having this structure set in place will help the athlete make logical and rationale decision that will be best suited toward meeting goal requirements. This rational thinking and logical decision making leads to a more controlled and specific sense of focus and concentration. With the assistance of the goals the athlete will become highly focused on

achieving what has been set ahead and this will result in a more professional approach to performance and competing



As with the previous model this model too begins with an effective goal orientation. If athletes have a well structured plan set out this will ultimately affect their visualisation quality. Athletes with specific goals set in place will be able to use these goals to make their visualisation and mental imagery more vivid and we know from the section on visualisation that improving the vividness of visions -will benefit the quality of this mental image preparation. Having visualisation that are guided by specific goals will instil in athletes a greater sense of control over their sporting context and this heightened sense of control will result in increased and self confidence and self belief.



MENTAL TOUGHNESS WATER DEMONSTRATION

Objective:

The objective of this exercise is to illustrate to the athletes the importance of filtering out all the negative aspects of their sporting performance and the benefits of maintaining Mental Toughness training.

Directions:

Get a large glass and a jug of water to fill the glass with. Get a small black object that will fit into the glass and that will float. Use the small black object as a representation of all the negative aspects of sporting performance. These negative aspects may be negative self talk, lack in confidence or self belief, injuries etc (All the aspects that will negatively affect an athletes" performance levels). Discuss amongst the team as to what the black object represents. Put the black object into the glass (Glass must be empty at this point). Now present to the athletes how the clear water represents all the positive aspects of sporting performance such as confidence, self belief, concentration and focus, goal orientation etc. Slowly start filling the glass with this water until the black object reaches the top.

Discussion:

- Discuss with the athletes how the positive aspects will push out the negative aspects.
- As the black object is sitting at the top explain the idea that if athletes leave the glass now the water will slowly evaporate and the black object will slowly start making its way back into the glass.
- Try demonstrate to the athletes that if you continually pour the water in (continually include positive aspects to sporting performance and maintain Mental Toughness training) the black object will eventually fall out of the glass (the negative aspects of sporting performance will eventually be filtered out).
- This will demonstrate to the athletes the importance of continually engaging in Mental Toughness training.

CONCLUDING THOUGHTS

Although a Mental Toughness programme such as this one is highly beneficial to athletes, there are a number of considerations that must be mentioned. Engaging in such a programme is by no means a quick fix to any psychological or mental barriers that athletes may be facing. Due to time constraints this programme was designed to run for a couple weeks only. Mental Toughness programmes should be designed to run for months, perhaps even throughout the entire season and the contents of a Mental Toughness programme should be explicitly structured into regular training routines, just the same as physical training is. This programme was designed to present a surface area idea of what athletes should be engaging in. It was designed to identify to you as athletes the importance of mental training and present a few ideas as to how you can begin the mental fitness training. It is very important to remember the following points when developing and partaking in a Mental Toughness training process.

- ✓ A winning mind and a winning environment must be adopted before progressing as discussed at the beginning of this document. A positive and determined attitude is needed coupled with an open mind and a desire and willingness to learn and adapt!
- ✓ Coaches and athletes should work closely together in developing a Mental Toughness training programme that will suit their sporting context and their competitive environments and that will help them prepare effectively and appropriately.
- ✓ Coaches and athletes must set out specific goals to be attained as a result of mental training.
- ✓ Allowance must be made for mental training to be a part of regular training routines and ample time should be devoted to the development process.
- ✓ Both the coaches and athletes must “buy” into the idea that Mental Toughness training is not only important but effective in offering a competitive advantage and must be a continuous training consideration.

Consider closely the lessons taught here and the theory that has been presented. Try incorporating these aspects into your daily training routines. Make a conscious

and concerted effort at making mental training an intricate and substantial component of your preparation procedures and routines. Remember that mental training begins with the right attitude, a winning attitude, a winning environment and a positive and optimistic heart. Constantly be on the lookout for new and improved techniques for mental training so you can stay on top of your game and always be at least one step ahead of your competitors. I have enjoyed designing and implementing this programme with you and I hope that you too have enjoyed it and have found the content interesting, useful and applicable. It is time to further unlock your sporting performance potential. Mental training opens up new dimensions, new levels of performance potential and ultimately new levels of success. Having the right vision, the right knowledge and the right mind-set will give you something that no other athlete has. Mental Toughness training provides you with „clear eyes“ and coupled with adopting a heightened sense of passion and determination in whatever you do, success becomes so much more inevitable. I leave you with one of my favourites quotes from the popular television series Friday Night Lights

CLEAR EYES, FULL HEARTS, CAN'T LOSE!