UNIVERSITY *of the*
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FACULTY OF COMMUNITY AND HEALTH SCIENCES
DEPARTMENT OF SPORT, RECREATION AND EXERCISE SCIENCE

DEVELOPMENT OF MENTAL SKILLS TRAINING PROGRAMMES FOR COMPETITIVE COLLEGIATE NETBALL PLAYERS IN ZIMBABWE

By

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A Thesis submitted in fulfilment of the requirements for the Doctor of Philosophy Degree

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DECLARATION

I declare that: *Development of mental skills training Programmme for competitive collegiate netball players in Zimbabwe* is my own work, that it has not been submitted for any degree or Examination in any other university, and that all the sources l have used have been indicated and acknowledged by complete references.

Gondo Thembelihle Date: 22 November 2021

Signed 

DEDICATION

This study is dedicated to my beloved mother Simangaliphi Mpofu. Mama this one is for you!

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ABSTRACT

Introduction: Mental skills are critical to the development of a positive mind-set in the athlete in order to develop the ability to concentrate more, focus attention, manage arousal, develop self-esteem and thereby enhance self-confidence in competitive sport. This study was an exploratory study to investigate how well Zimbabwean inter-collegiate athletes were prepared mentally and how this was handled during their participation in inter-collegiate games. The study focused specifically on just one group of athletes, netballers.

Aim: The aim of the study was to explore current mental skills training programmes and to use this information to develop an appropriate mental skills training programme for netball players in tertiary institutions in Zimbabwe.

Methodology: This study employed a multi-method sequential explanatory design. The study was conducted in four phases: (1) A systematic review of previous studies that have used goal setting and self-talk to enhance general performance levels of athletes in team sports, especially netball players; (2) Explore mental skills utilised by netball coaches to enhance netball players' performance; (3) Explore mental skills utilised by netball players; and (4) Develop an appropriate mental skills programme that could be used to improve mental skills training. Data were collected from five coaches (n=5) using semi-structured interviews. Quantitative data for players was collected from a cluster sample of fifty (n=50) netball players using the Test of Performance Strategies (TOPS). Qualitative data was also collected from netball players through focus group interviews. Based on the results from Phases 1, 2 and 3, the researcher then used the information to develop a mental skills training programme.

Results: Findings of this study revealed that effectiveness of mental skills depends on their utilisation. The study offered new insights into netball mental skills training programmes in Zimbabwe and facilitated the integration of mental skills training in the coaching programme at tertiary level. The study used goal setting and self-talk to develop a mental skills training programme to that would foster insights.

Recommendations: The study made the following recommendations: A bigger sample be used with netball players so as to be able to better generalize the results; sample to be extended to other sports at tertiary level; mental skills training be extended to other disciplines that are competitively played by tertiary institutions in Zimbabwe; coaches should go through a formal mental skills training programme so that they can adequately assist collegiate student athletes in their preparation and training.

Future research: Future research may be conducted with different demographic variables so that findings could be generalized. Research can also be designed with different sporting disciplines involving team sports at tertiary level.

Key words: Performance enhancement, Mental toughness, Mental skills, Mental skills training, Mental techniques, Mental preparation, Strategies, Collegiate netball players, Tertiary institutions, Goal setting, Self-talk

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AMSSE	Achievement Motivations Scale for Sporting Environment
AMSSQ	Athlete Mental Skills Survey Questionnaire
ANOVA	Analysis of Variance
C	Centre
CBT	Cognitive Behavioural Theory
CSAI-2	Competitive State Anxiety Inventory -2
CUCSA	Confederation of University and Colleges Association
FGD	Focus group discussion
GA	Goal Attack
GK	Goalkeeper
GS	Goal Shooter
GS	Goal Setting
IUQ – SP	Imagery Questionnaire for Soccer Players
IZOL	Individual Zone of Optimal Level
IZOF	Individual zone of optimal functioning
LDI	Life Development Intervention
LSRMD	Latin Square Repeated Measures
MIQ-R	Movement Imagery Questionnaire - Revised
MST	Mental Skills Training
MTP	Mental Training Programme
PETTLEP	Physical; Environment; Task; Timing; Learning; Emotion and Perspective
RCT	Randomized Controlled Trials
SADC	Southern African Development Community

S-C	Self- Confidence Questionnaire
SIQ	Sport Imagery Questionnaire
SMARTER	Specific; Measurable; Attainable; Relevant/Realistic; Time framed/Time Bound; Evaluated and Reviewed
SSI	State Sport Inventory
ST	Self-Talk
SUPER	Sports United to Promote Education and Recreation
TOPS	Test of Performance Strategies
UNIFORM	Use goal setting; No mistakes, only learning opportunities; Imagery; Full focus; Overtly positive; Relaxation and Make routines
WA	Wing Attack
WD	Wing Defence
ZITCOSA	Zimbabwe Teachers' College Sports Association
ZIZAMA	Zimbabwe Zambia Malawi
ZTISU	Zimbabwe Tertiary Institutions Sports Union
ZUSA	Zimbabwe University Sports Association

Chapter 1

INTRODUCTION AND BACKGROUND

1.1 Introduction

In tough competitive sport, supremacy over rivals cannot be attributable to tactical or physical strength alone but is rather intertwined with mental skills, resulting in athletes achieving peak performance. Research has shown that psychological skills or innate characteristics of athletes that make it possible, or even likely, for them to succeed in sport, are learned (Cox, 2007). The reason why coaches focus on mental skills is that they enable an athlete to reach a state of mind that will prevent negative thoughts from interfering with their physical performance (Bull et al., 2005). Many factors separate the overall skill performance levels of athletes. These may include natural talent, technical prowess or mental state of the athlete. According to Greenleaf et al. (2001) it is therefore important to identify the necessary skills for successful performance, and the only way athletes can be exposed to mental skills is through integration of these skills during daily training. Athletes may possess excellent physical fitness attributes but still fail to perform during competitions due to the lack of the required mental skills, making it necessary to emphasise physical, tactical and technical aspects (Krane & Williams, 2010). This chapter introduces and contextualises this study through exploring the problem, research questions, aim and objectives and the significance of the study.

1.2 Background

Mental Skills Training (MST) generally helps athletes to psychologically prepare to be, and to stay motivated, as well as to be able to work under pressure during events. It keeps them in the zone of performance during competition and includes skills such as concentration, motivation, performance anxiety, confidence, goal setting and self-talk (Behncke, 2004). These skills are all designed to enhance individual athletic performance, as well as overall team performance in sport (Behncke, 2004; Thelwell et al., 2001; Wild, 2002; Williams & Straub, 2001). These mental skills are critical to the overall development of a positive mind-set in an athlete while developing a general ability to focus their concentration on the tasks at hand while enhancing self-confidence in competitive sports. Thus, mental preparation is critical to high performance in sport, even though it is not the only aspect that determines success (Gould et al., 2009). Mental aspects can therefore be developed to achieve optimal success in athlete's performance through reduction of excessive emotional reactions of self-defeating behaviours. Recently, majority of research has been more focused on developing the physical, technical or tactical components within general sports development Durand-Bush et al. (2013), with very a few studies being done on the use of MST in netball (Einarsson et al., 2019; Khan et al., 2018; Shaari et al., 2019).

Mental skills training is the psychological intervention that is designed to help in developing, improving and maintaining levels of MS that can enhance individual athletic performance and help individuals self-regulate with targeted behaviour (Zarkrajsek & Blanton, 2017). Mental skills training encompasses the use of strategies and techniques to develop MS, enhance performance as well as facilitate positive approach towards competition by athletes (Zarkrajsek & Blanton, 2017). Mental skills training has therefore been at the centre of critical sporting research for several decades where researchers have developed various models of performance enhancement in

different sporting activities. Contemporary studies in Sports Science and Development have shown that MS interventions are an effective method of enhancing the psychological component of competitive athletes, increasing physical activity and self-regulation (Brown & Fletcher, 2017; Buckwork et al., 2013; Vealey, 2007). Conversely, MS are very often neglected by many sporting practitioners at the expense of developing physical, technical or tactical skills within general sports development due to lack of knowledge (Durand-Bush & Salmela, 2002; Navin, 2012). This neglect of MS affects optimum level of performance in competitive sports, regardless of the other physical and physiological skills that an athlete may possess or experience (Wang & Zhang, 2010). However, it is also known that possession of MS alone does not automatically mean that one can reach optimum performance level as other aspects are also related to enhancing individual performance. This means that, for peak performance, the individual athlete must successfully combine both physical and mental skills training (Krane & Williams, 2010).

Several studies have been done on MST and mental toughness, especially in individual sports (Birrier & Morgan, 2010; Diefenbach et al., 2016; Gucciardi et al., 2008; Hanton & Connaughton 2002; Jaeschke et al., 2016; Krane & Williams, 2010; Mamassis & Doganis, 2004; Samson et al., 2017; Sheard & Golby, 2006; Thelwell & Greenlees, 2003). These studies indicate that MST is widely practiced in sports and has been shown to enhance competitive sport performance. Whilst MS are individual skills, it is important to mention that, in team sports, both individual and team aspects become centrally important. For instance, in goal setting, athletes may be assisted in setting their own individual goals while team goal setting (GS) is also an important aspect of team success. A sport like netball, which is a fast-moving team sport, is unique in the sense that not all players can score, unlike in many other team sports, and has its own unique challenges. Players are confined to their positions and they depend on each other to win a match. It is therefore important

to prioritise both individual and team MST since an individual may be affected by how other members of the team perform. When a centre player in netball plays extremely well, and the shooters fail to shoot, it is likely to affect the other team members in terms of stress, in which case the coach must work harder to ensure that all players are not adversely affected by how their teammates are playing (McKenzie et al., 2019; Munroe-Chandler et al., 2014).

Williams (2010) stated that athletes need to be mentally prepared to be strong in sport. This means that mental skills can encourage individual players' reflection and awareness of their ultimate performance in a sporting game. This does not only enhance the overall performance of each player, but also enhances the general sporting experience of each athlete (McKenzie et al., 2019; Farres, 2000). Mental skills, therefore, help individual athletes to deal with pressures of unexpected events during both training and competition and they become used to assisting other individual players to overcome their own obstacles, which may prevent them from reaching their optimum level of performance (Sharp et al., 2013). These MS help to psychologically assist athletes who use them to motivate themselves and other players to avoid being negatively affected by game pressures and to keep themselves in their optimum zone of performance during competitions. However, MS must be taught, learned, developed, and practiced for athletes to get the full benefit (Behncke, 2004; Hodge, 2007; Munroe-Chandler et al., 2014; McKenzie et al., 2019). This is because athletes need to learn to self-regulate and control mental processes that will help them to bring about the desired behaviour change and to enhance their performance (Balk & Englert, 2020). Thus, athletes will endeavour to constrain all unwanted behaviours, thoughts and feelings to discontinue activity and fight to succeed and produce positive outcomes.

Brown and Fletcher (2017) confirmed the large effect that interventions can have on performance, especially using mental practice, goal setting (GS), team building as well as ST. In their review,

they observed that there were significant differences between unimodal and multimodal interventions, but argued that multimodal interventions could only be effective if the selected techniques were relevant and the coach was also knowledgeable of how to implement the interventions. A unimodal intervention adopts an approach whereby a technique is applied singly to address MS of selected players, using ST only or imagery only for example, (Gregg et al., 2004; Roggissart & Martinent, 2017; Vealey, 2007; Rogerson & Hrycaiko, 2002). Recent research in sports has established that multiple MS techniques can increase an athletes' behaviour to cope with emotions and anxiety (Gustafsson et al., 2017). Again, the timing of when exactly to introduce these MST could be influenced by how the technique itself is to be used (Williams et al., 2013).

Most studies that were done on team sports, for example, basketball, soccer, bowling, volleyball, lacrosse and ice hockey, focused on individual performance aspects and not necessarily on team sports performance aspects (Einarsson et al., 2019; Khan, et al., 2018; Shaari, et al., 2019; Wakefield & Smith, 2009). Brown and Fletcher (2017) established current trends in the efficacy of MST interventions and concluded that there was a significant efficacy of psychological interventions on performance with large effects observed compared to previous reviews especially on mental practice, GS, team building and ST.

In South Africa, some studies have also been conducted on the MS of rugby players Edwards and Edwards (2012), Andrew et al. (2007), on hockey Edwards and Steyn (2008), Eloff et al. (2011), and on long-distance runners Jaeschecke et al. (2016), Thelwell and Greenlees (2003). Despite all this evidence in various sporting activities, netball has generally been neglected, except for shooting skills, which has received some attention (Khan et al., 2018; Shaari et al., 2019; Wakefield & Smith, 2009). The limited studies that were found on netball included, Van den Heaver et al. (2007a, 2007b), who looked at the role of netball coaches, while Grobbelaar (2007)

and Grobbelaar and Eloff (2011) both looked at mental skills in netball players. These authors alluded to the need for the development of netball specific education programmes. There is no doubt that the study of netball has largely remained limited, prompting Grobbelaar and Eloff (2012) to note that the only information available on netball is on psychological skills in different netball playing positions, conducted by Shape (1993) and on netball shooting performance, conducted by Shaari et al. (2019) and Khan et al. (2018). All this shows the paucity and scarcity of research regarding MS specifically in the sport of netball. There is a need for more research on the effectiveness of MST programmes that are netball-specific and not necessarily based on selected athletes' positions. The current thesis attempted to provide such knowledge for netball players in tertiary institutions in Zimbabwe.

A combination of MS programmes has shown to produce better results when compared to the isolation of mental performance interventions. Researchers have argued that, for athletes to benefit from these cognitive strategies, there is a need to use multiple MS within a package Behncke (2004), Brookfield (2009), Mamassis and Doganis (2004), Masciana et al. (2001), Patrick and Hrycaiko (1998), Thelwell and Greenlees (2003), Thelwell and Maynard (2003). All these authors argue that it would be improbable to use a single method and that the selection should be guided by each sporting discipline. In the thesis of men's artistic gymnasts, for example, to improve self-efficacy and emotional control, the MS tools used included GS, imagery and relaxation (Brookfield, 2009). However, in their study on gymnasium triathlon, the intervention package included GS, relaxation, imagery and ST, and the findings provided evidence of effectiveness of the package (Thelwell & Greenlees, 2001). It is, therefore, not one intervention that can enhance performance, but a combination of these tools used to develop MS for athletes and appears to be sport related.

In Zimbabwe, there are no known research studies that have been found on the assessment of MS and MST and it is against this lack of apparent research that the researcher was motivated to embark on this thesis to avail a MST programme for netball that can be extended to other sports codes that specifically relates to Zimbabwean sports. Perhaps this is why few sporting disciplines prioritize an MS trainer. This leaves a large gap and need to embark in this kind of research study, with the goal to document vital information on MST as well as assist players and coaches to enhance performance in netball in collegiate athletes. The winner at the end of the day becomes the athlete who is strongest mentally (Navin, 2012; Williams, 2010). The current study focused on the assessment of MS of netball players in developing the MS that can be used by coaches to enhance maximum performance during practice and competitive games. However, since netball is a team game, both individual and team skills needed to be fully developed in each athlete, to enhance maximum performance levels. Although most research has looked at one mental skill to enhance performance, the current study investigated the use of goal setting and self-talk MST for collegiate netball players. Research has shown that using more than one skill may be more effective, especially when used together Blakeslee and Goff (2007), Mamassis and Doganis (2004), Thelwell and Greenlees (2001), Turner and Barker (2013).

1.3 Statement of the problem

Mental skills are used to prepare individual athletes and sporting teams to consistently perform at their optimum level. There has been a large amount of research on players' performances as individuals or as teams on technical, tactical and physical aspects, which have eluded that players may be beaten by athletes who have the stronger MS levels (Singh & Singh, 2014). Limited research has been done on players in Zimbabwe's tertiary institutions, who are involved in sporting games at zonal, provincial, national and international games levels. Yet such levels of competition

require properly instituted athlete preparations for games. Whilst some research has been conducted for team sports in other disciplines like rugby Golby et al. (2003), swimming Sheard and Golby, (2006), Hamstra et al. (2004) and netball shooting performance Wakefield and Smith (2009), there has not been any known research that could be found that focused on netball as a team sport specifically.

This thesis, therefore, sought to explore and evaluate what MST is being used currently and what is its use in netball at tertiary level in Zimbabwe. The focus of this thesis was specifically on integrating GS, ST, relaxation and imagery mental tools to improve self-confidence, concentration skill, commitment, team cohesion, coordination and freedom of worry, as ways to enhance performance of netball players during collegiate netball practice and competitive games in Zimbabwe. Further, an appropriate training programme was developed that would hopefully enhance the performance of collegiate netball players in these games.

1.3.1 Main Research Question

What is the extent and effect of MST programmes being used by netball players to enhance the sporting performance levels at collegiate netball games in Zimbabwe?

1.3.2 Minor Research Questions

1.3.2.1 What are the best practices of using MST programmes to enhance performance in team sports globally?

1.3.2.2 What MS programmes are used by netball coaches to train their players in Zimbabwe?

1.3.2.3 What are the current levels of MS performance of netball players at tertiary institutions in Zimbabwe?

1.3.2.4 What further programmes can be developed to improve MST of netball players in tertiary-level games in Zimbabwe?

1.4 Aim of the Study

The main aim of this thesis was to ascertain the current MST programmes and to use this information to develop an appropriate MST programme for netball players in tertiary institutions in Zimbabwe.

1.5 Objectives

The objectives of the thesis were to:

1.5.1 Establish, from the literature, successful MST programmes that are used in team sports globally, particularly in netball, to improve the performance levels of players in competitions. (Phase 1)

1.5.2 Explore the MS that are utilised in netball by coaches to enhance their players' performance in tertiary institutions in Zimbabwe. (Phase 2)

1.5.3 Determine the current levels of MS of netball players at tertiary institutions in Zimbabwe. (Phase 3)

1.5.4 Develop an appropriate MS programme that could be used to improve MST for collegiate netball players in Zimbabwe. (Phase 4)

1.6 Significance of the Study

No research could be found on Mental Skills Training (MST) for competitive players, and its implementation in the schools and tertiary institutions, for the elite professional players in all the sporting disciplines in Zimbabwe. It is not known how players and coaches currently prepare for

the highly competitive games in Zimbabwe. This thesis will contribute significantly to the building of literature on the use of MST in collegiate netball players in Zimbabwe and internationally. The thesis developed strategies for MST, which can be used by collegiate netball players in Zimbabwe and elsewhere, with the hope of ensuring successful use of MS strategies to enhance the performance of athletes in their games at various levels. Such a thesis can help to improve the general success rate of competitive collegiate netball players while creating the knowledge of the game, which can be extrapolated to other sports and athletes wishing to gain the proverbial "sporting edge" over their rivals. The results of the thesis can therefore be helpful to both netball players and coaches to improve performance levels the game through the use of MS strategies. Players and coaches can then utilise the suggested strategies as the basis of appropriate training and mental preparation of collegiate netballers and other levels.

It was also envisaged that this thesis would help to improve the general success rate of competitive collegiate netball players, and the sport of netball, by employing correct MST strategies that will enhance netball and other players' performances during sporting games. This can easily be replicated in other countries for the same benefits. It is also hoped that the thesis will enable coaches and players to work towards greater achievement of player performances, which will result in institutional and national success in netball. Thus, this thesis can essentially help netball players to realise their optimum performance levels through use of appropriate MST processes for competitive games, which will eventually help to improve the quality of netball play in Zimbabwe and elsewhere. The identification and suggested improvement of MS used by netball players may lend itself to a better understanding of what the netball sporting discipline requires in order to enhance performance levels of players and teams. Thus, it is hoped that the thesis will further motivate other scholars to conduct research on mental preparation for netball and in other

competitive games played at collegiate levels in Zimbabwe and internationally. Thus, it will help to inform general sports development policies at tertiary institutions within the country and beyond.

1.7 Limitations of the study

The study interviewed a total of five coaches and, of these, only one was a female coach in a female-dominated sport. Therefore the views expressed in this study may be limited to a majority of male coaches, which was beyond the control of the researcher. The thesis did not focus on all cognitive MS for performance enhancement and mental skills for different playing positions in netball. Another limitation was funding for the thesis is that the research was self-funded, and the study was concentrated in one district of Masvingo province where many of the institutions of higher learning are concentrated. These results can only be generalised in one section of the country and a bigger sample must be used for results to be generalisable both inside and outside Zimbabwe.

1.8 Delimitations of the Study

The thesis was delimited to only eligible students who were registered at Technical Colleges, Teachers' Colleges and Universities in Zimbabwe who participated in competitive tertiary inter-collegiate netball games for their institutions.

Specifically, inclusion criteria included:

i) all-year groups of students who were currently registered at tertiary institutions of higher learning in teachers' colleges, technical/vocational colleges and universities (both state and private) who were involved in tertiary inter-collegiate games by virtue of their affiliation;

ii) all collegiate students who were active in competitive netball at these tertiary institutions of learning in Zimbabwe;

iii) all registered students who were invited by their colleges to participate in inter-collegiate games; and

iv) students available for netball training sessions for their institutions during the preparation period for the tertiary inter-collegiate games in 2018.

The following exclusion criteria were applied to the thesis:

i) injured netball players;

ii) netball players without any known psychological disorder, illness or ailment;

iii) players who were at high risk for any disease infection that may hinder their performance in netball; and

iv) participants who failed to give their written consent.

1.9 Definition of Concepts

Performance enhancement can be viewed as concepts or techniques that can be used to encourage individuals to remove limiting mental and social barriers that can prevent them from reaching peak performance and improve their abilities through knowledge and understanding of decreasing anxiety (Kaufman et al., 2019).

Mental toughness is the ability to improve an individual's performance against adverse athletic conditions and stressors in order to satisfy specific performance requirements through focusing on areas like confidence-building, motivation, concentration, emotional balance and communication strategies (Gucciardi, 2017; Gucciardi et al., 2008; Hardy et al., 2014; Jones et al., 2002).

Mental skills are internal capabilities that help an athlete improve performance by learning to efficiently control their minds and include relaxation, imagery, attentional focus, self-talk, goal setting and confidence (Graham et al., 2011; Nicholls et al., 2016).

Mental skills training can be defined as a systematic and consistent process that provides methods and techniques which can be used to enhance performance of athletes through goal setting, self-talk, visualization and imagery (Graham et al., 2011).

Mental techniques are the strategies and tools that an individual can engage in e.g. goal setting, imagery and self-talk (Vealey, 2007).

Mental preparation refers to the cognitive, emotional and behaviour strategies that athletes and teams use to arrive at psychological states of peak performance in readiness for competitions and practice (Vealey, 2007).

Strategies are a means, or the plan of action used to achieve the enhancement of psychological skills by using one or more psychological techniques (Birrer & Morgan, 2010).

Collegiate netball players are student participants who have graduated from high school who play in an organized sport at an institution where they are enrolled and engaged in full time academic courses in formal training (Gamble, 2016).

Tertiary institutions are places where both academic and occupational post-secondary education pursuits are undertaken by students in life-long skills, such as technical colleges, teachers' colleges, nursing schools and universities (Grubb, 2003; UNESCO, 2011).

Goal setting is a motivational technique or process of deciding on what to achieve through the devising of a plan of action to accomplish and attain the desired result (Graham et al., 2011).

Self-talk is the inner dialogue directed at self, can be expressed internally or aloud when an individual verbalizes, interprets, receives messages and alters existing thought patterns, feelings and perceptions to enhance positive feelings and reduce unpleasant mood states to influence desired behaviour (Hardy, 2006; Van Raalte et al., 2016; Van Raalte et al., 2017).

'In the zone' sometimes referred to as flow, is the harmonious and intrinsically rewarding individual state characterized by intense supreme heightened focus to the exclusion of irrelevant thoughts and emotions where athlete is completely and totally connected to perform to the best of one's ability (Anderson et al., 2014; Csikszentmihalyi, 2009; Weinberg & Gould, 2018).

1.10 Chapter outline

The thesis will have nine chapters in all, and each chapter outline will be as follows;

Chapter 1

The chapter introduces and outlines the major aspects of the research. It describes issues like the background to the study, its purpose, the statement of the study, research objectives, research questions, the significance, the limitations and delimitations of the thesis.

Chapter 2

Chapter Two presents a systematic review of the literature while focusing on various mental skills programmes that have been used before. The researcher identified completed research studies and analysed information that is relevant to the research topic. The chapter attempted to bring out the research gaps in mental skills training programmes in netball and link the reading to the intended research thesis.

Chapter 3

This chapter presents a description of the major research methodologies that were used in the process of doing the thesis and collecting data. The chapter describes the research design and the major methodology used to address the research questions of the research study. It outlines the thesis's design, sampling procedure, data collection and analysis approaches. Multimethod data collection procedures of the study are described. It describes data collection instruments and techniques used to analyse data. Ethical issues are also discussed.

Chapter 4

This chapter presents and analyses the data in Phase 1 of the study that was collected in the thesis and tests the validity and reliability of the results. It analyses and interprets the data obtained in conjunction with available literature to answer the study's research questions. Implications of the findings are then given. The chapter integrates the findings with the study's theoretical framework and available literature.

Chapter 5

This chapter presents and analyses findings for Phase 2 netball coaches and draws relevant conclusions based on findings. Literature was used to support findings in this phase of the thesis. Th echapter draws conclusions based on findings from interviews. The next chapter presented findings from FGDs of players.

Chapter 6

The chapter presents findings for quantitative and qualitative for netball players Phase 3. Established themes are used to guide the presentation of data. The next chapter will synthesize and discuss findinings from quantitative and qualitative phases of the thesis.

Chapter 7

This chapter focuses on the discussion of findings integrating overall results from Phase 2-3 that constitutes both coaches and players. The chapter strengthens the argument and builds on strategies already possessed by players and how coaches can help them to get 'in the zone' and achive their set goals. The chapter further extends knowledge for both coaches and players and uses the information to develop a structured program based on the CBT theory for behaviour modification.

Chapter 8

This chapter proposes a MST programme that could be used to enhance performance of netball players. The chapter developed the proposed MST programme based on literature reviewed and findings from the three phases of the study. The next chapter looked at summary of thesis findings conclusions and recommendations. The summary of the thesis was also given.

Chapter 9

This chapter of the research thesis by gives a summary of research findings and based on findings draws relevant conclusions. Key terms used in the thesis were defined. The chapter also presents the limitations and recommendations of the thesis for further research

1.11 Summary

This chapter has outlined study and how it was conducted. It gave the synopsis of study on MST Programmes in netball. The chapter also outlined the research questions and study objectives. The significance of the study was also outlined followed by delimation and limitation of the thesis. Key terms as used in the thesis were defined. This was followed by the brief outline of the nine chapters in this thesis. The next chapter will provide an overview of related literature on MST.

Chapter 2

REVIEW OF LITERATURE

2.1 Introduction

This chapter focuses on the overview of Mental Skills Training (MST) and looks at goal setting (GS) and self-talk (ST) skills that were used to develop a MST programme for netball players. The conceptual framework that was used to guide the MST programme is discussed and explained. Furthermore, the chapter also highlights and explains diverse literature that is related to MST and lastly, key issues that were relevant to this thesis in terms of MST and development of MST programmes are discussed. Mental skills training could be used to separate more successful athletes from less successful ones, making it crucial to have a deeper understanding of the role of MST in expert performance. It is therefore important to explore numerous learned strategies that, can help individual players improve not only their performance but their personal development as well.

2.2 Mental Skills Training

Competitive sport is well known for placing extremely high demands on athletes as well as bringing various emotions and arousal. Generally, competition has become so important that expectations are placed on competing athletes regardless of competitor's abilities and skill level. Sport competition is well known for placing extremely high demands on athletes resulting in competitions demanding a diverse set of both physical and MS (Krane & Williams, 2010). Thus, athletes and coaches find themselves constantly searching for different ways of enhancing performance due to the demanding nature of the sport. In many instances results of these matches are decided by small differences that are attributable to skill and the process of preparation between competitors. Results from all top level collegiate competitive games are perceived to be important

for coaches and players and coaches tend to be in high arousal states if not stressed during the game like their players. Again, it is often an athlete's mental capabilities during competition that sets athletes apart in their level of performance, although they may possess similar training levels and innate physical capabilities. This is because competitor's training, abilities and utilization of physical and mental skills or lack thereof that results in extraordinary level of performance or failure to perform at expected level can decide the winner.

According to Gucciardi et al. (2008), sporting prowess in the technical and physical domain alone does not guarantee success but rather, it is mental toughness that has been seen to be an important attribute that can guarantee excellence in sport, resulting in less talented athletes even becoming champions through the good use of MS (Gucciardi et al., 2008). A clear understanding of sporting MS and what they can do to athletic performance is always a good starting point for enhancing individual and team sporting performances. Mental Skills Training is a complex phenomenon that was first designed by Vealey (2007) to understand better the framework for skills enhancement training in sport. Vealey (2007) concluded that this framework could tremendously help to understand the complicated process of sporting performance. Vealey (2007) based her framework on a comprehensive review of literature on sporting performance. Vealey's (2007) argument was that MST is a complex process that is multi-layered and integrative in its approach to the development of MS in athletes and includes the four layers of philosophy, model, strategies and techniques. According to Vealey (2007), these MS are the main targets of MST in individual and team sport in which team skills include leadership, communication, team cohesion and confidence. The framework aids understanding of MST in sport, provides an increase in the overall effectiveness of MS and makes a clear distinction between skills and methods (Cox, 2007). Mental

skills can be understood by using the framework proposed by Vealey (2007) for understanding MS (Figure 2.1: p.20).

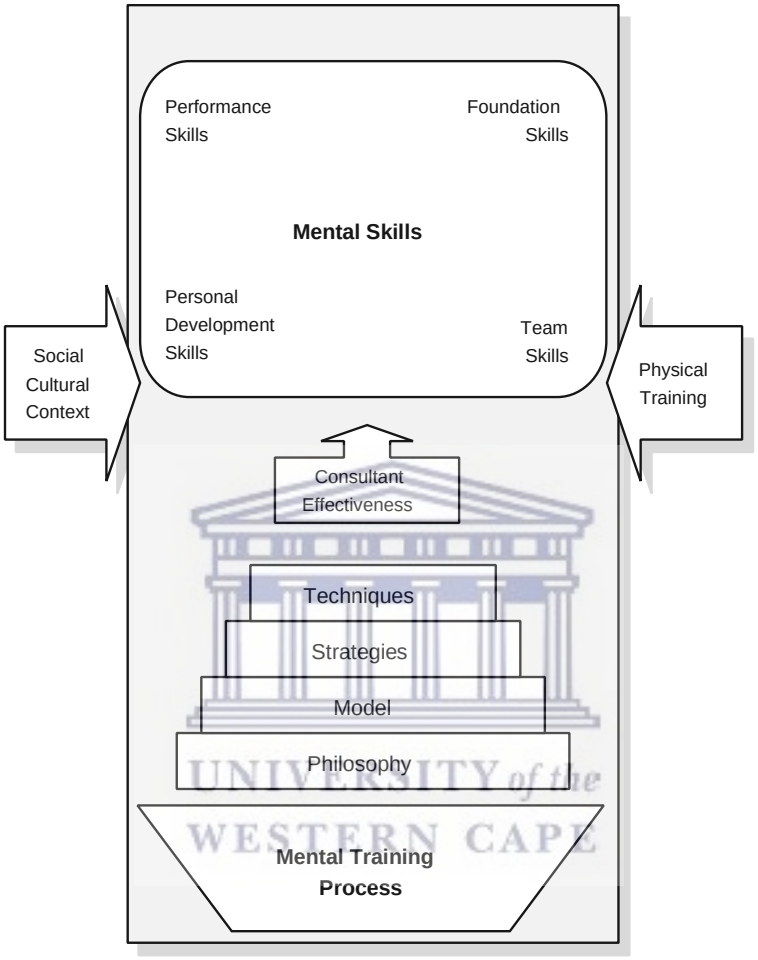


Figure 2.1: Framework for understanding Mental Skills Training in sport (Vealey, 2007:291)

At the bottom of the hierarchical layers of the MS framework is philosophy, which is the starting point for MS process generation (Vealey, 2007). This model is based on the ideal situation that the applied sporting techniques are often poorly linked to an overall theoretical framework when it comes to their implementation. Thus, Vealey's (2007) framework proposed that most popular MST techniques include imagery, GS, thought management, physical relaxation and arousal generation approaches. Based on this model, MST is seen as a process that includes a philosophy, model, strategies and techniques, which can be used to enhance MS in sportspersons. In this

framework, there are two arrows on the other side of the framework design that represent the influences of society and physical training on MST processes in sporting performance. The effectiveness of these specific techniques can then be studied according to strategies and models. MST, therefore, occurs when the sporting processes are conducted within the objective of mental functioning. For example, training of cognitive processes can be realised by employing certain techniques such as attention control and concentration (Hackfort & Munzert, 2005). Thus, ultimately, MST might eventually involve affective domain processes, such as emotional and anxiety controlling strategies, or motivational processes through GS and control volition.

Mental skills in sport have been categorised into four distinct basic types according to Vealey (2007), which are:

i) foundation skills which embrace individual skills like self-awareness and self-confidence,

ii) performance skills which are mental abilities that are crucial during sporting performance like attentional focus and energy management,

iii) personal development skills which allow high psychological functioning in athletes such as identity achievement and interpersonal competence, and

iv) team skills which are collective qualities of a team such as team confidence, leadership, cohesion and communication.

Mental skills target aspects like concentration, motivation, performance anxiety, confidence, GS, ST and these goals control the behaviour of athletes (Behncke, 2004). They help individuals to deal with all kinds of pressures and unexpected events during training and during competitions.

Mental skills are therefore used to assist individuals to refine their mental strategies to overcome obstacles that may prevent them from reaching their optimal performance levels.

According to Behncke (2004), MS in sport have also been categorised into four distinct basic types which are i) foundation skills which embrace individual skills such as self-awareness, self-confidence; ii) performance skills; iii) personal development skills such as clarity of self-concept, well-being, relatedness to others and iv) team skills such as team confidence, leadership, cohesion and team environment (Vealey, 1988). Mental skills are developed because of the use of mental tools, techniques and strategies to enhance performance. These MS can therefore be viewed as qualities that result from the use of mental training tools (Halim & Ismail, 2016; Sharp et al., 2013). These MS are there to psychologically assist athletes who use them to motivate them, avoid working under pressure and keep them at their zone of performance during completions. If athletes can use them during practice sessions, it means they will transfer them to their competitive environment.

Research has shown that many University level athletes currently use MS to enhance their performance and improve their knowledge and skills in various sports. However, it is important to mention that a strong mentally trained mind can never substitute fitness and physical skills and again, mental toughness may not lead to success by athletes. Coaches should ensure that they integrate selected MS in the training programmes of their athletes at the same time athletes themselves need to focus on their thoughts, if they want to reach peak performance (McKenzie et al., 2019; Vernacchia & Statler, 2005). Mental skills toughness normally targets areas such as concentration, motivation, performance anxiety, confidence, GS, ST and control the behaviour of athletes (Behncke, 2004; McKenzie et al., 2019). Mental skills help individuals deal with pressures and unexpected events during training and competition. Mental skills are used to assist individuals

in refining their mental strategies and in overcoming obstacles that may be preventing them from reaching their optimal level.

Mental skills strategies are techniques or interventions such as GS, imagery, ST and relaxation used to assist strengthen MS such as motivation, confidence, anxiety, stress and arousal Jarvis (2006), Taylor (1995), Vealey (2007), Weinberg and Gould (2018). These strategies emanate from one's philosophy and model of the self, and operationalise how a coach can implement the interventions needed In most cases MST strategies involve packaging of MS techniques into coherent integrative programmes of using either unimodal or multimodal approaches. Interventions may include ST, visualisation, relaxation, GS and imagery either singularly or in combination (Behncke, 2004; Howland, 2007; Thelwell et al., 2006; Vealey, 2007). These strategies have been seen to be central towards improving individual and team sports performance by increasing greater focus and confidence when dealing with pressure and improving general performance in athletes. In team sports, it is feasible to combine single skills into multimodal packages for successful performance enhancement. This essentially involves several psychological techniques being combined into a package when delivering MS intervention in sports (Fournier et al., 2005) the advantage is that the multimodal approach can provide conditions in which athletes may be able to further explore and address numerous issues that may not be possible or may be limited with the single MS approach. Thus, there are several multimodal interventions that comprise two or more MS, such as GS and ST Papaioannou et al. (2004), imagery and GS Hughes (1990), and a combination of GS, imagery, relaxation, and ST Blakeslee and Goff (2007), Brewer et al. (1995), Horn et al. (2011). Multimodal packages have been found to be more effective in improving sports performance when compared to single skill-based interventions. This is because multimodal interventions can target numerous performance outcome measures, such as

motivation, energy and anger management, self-confidence, attentional focus, and productive thinking (Vealey, 2007).

Research has supported use of these strategies in combination to maximise significant results Calmels et al. (2004), Hanton and Jones (1999), Kendall et al. (1990), Patrick and Hyrcaiko (1998), Thelwell et al. (2010), Thelwell et al. (2006), Thelwell and Greenlees (2003), Thelwell and Maynard (2002, 2003), Thelwell and Greenlees (2001). Several strategies have been used and these have proved that it is possible to enhance sporting performance. These include:

i) competition focus plans (Orlick, 1986),

ii) four-phase psychological skill program for closed skill performance enhancement (Boutcher & Rotella, 1987),

iii) five-step strategy (Singer, (1988),

iv) visuomotor behavioural rehearsal, (Suinn, 1993), and

v) five-step approach to mental training using Biofeedback, (Blummenstein et al., 2006).

Mental skills strategies that athletic coaches focus on should always assist athletes to be able to use imagery, ST, relaxation and GS on their own (Krane & Williams, 2010). The argument that this thesis has been making is that when athletes are exposed to multimodal MST, they are able to select what they can use and what not to use and whether to use the same tools all the time. It is a question of the timing of when or when to use a skill.

Research has also shown that most coaches claim that at least 40-90% of sporting peoples success can be attributed to some mental factors (Krane & Williams, 2010). Cases exist where athletes have won matches, not necessarily because they were physically prepared for it, but because they had the upper hand in terms of the mental aspect of the game. Assessment of mental strategies

becomes crucial when one wants to implement MS processes, as this enables one to decide how and when to assess the MST needs of athletes (Vealey & Garner-Holman, 1998). Specific techniques of assessing these strategies can therefore be finalised before one decides on the instruments to be used in the assessment techniques of athletes.

Mental skills practice is a repetitive rehearsal of physical movements of persons in the absence of actual, avert physical movement rehearsal that is created to enhance performance (van Meer & Theunissen, 2009; Driskell et al., 1994). The cognitive rehearsal of the physical skill is performed without movement and can be key to successful performance as it facilitates skill acquisition and preparation for competition, making it an automatic rather than voluntary strategy. Mental practices can be implemented to facilitate the learning process of acquisition or to improve execution of motor skills performance (Hackfort & Munzert, 2005). The use of imagery and ST strategies of self-regulation, self-instructions and self-suggestion may be of great help to improve performance. For excellent results, mental practice should be combined with physical practice for performance enhancement (Murphy & Martin, 2002). Holmes and Collins (2001) developed the most systematic approach to mental practice and practical consideration for devising an imagery intervention named Physical, Environment, Task, Timing, learning, Emotion and Perspective (PETTLEP) and it is for skills enhancement in athletes so that they can focus more on their positive emotions which enhance motivation and self-confidence in sports performance.

Mental Skills preparation focuses on the improvement of attitude, motivation, mood and other aspects before any sporting competition by fine-tuning individual or team performance (Krane & Williams, 2010). This strategy is situation-oriented and mainly emphasizes the environment and any other issues within the environment that may disturb a player's or team's performance. In some cases the temperament of the crowd may negatively affect how players perfom during

competition. Mental preparation is an individual experience that is complex and needs to be taught and practised following the unique characteristics of the sport. Mental preparation should be practised prior to competition as it helps athletes gain confidence, achieve focus to compete at their highest level. Mental preparation is important for athletes as it increases their mental toughness, enabling them to play at full potential when under immense pressure.

It has been well established that mental skill factors affect the athletic performance of a participant while practicing or competing in sport events (Weinberg & Gould, 2015). Mental stressors can be different for each athlete, depending on the gender, the sport and the level of performance (Arnold et al., 2016). Additionally, cognitions are assumed to affect emotions and behaviours. This is because events, thoughts and emotions can be experienced and interpreted in different ways by different athletes, due to their previous experiences and expectations (Beck, 2011). Mental skills, although less tangible than other aspects of sport, can be used by an athlete to combine physical and MS for improving one's performances and abilities to successfully compete at the highest levels (Gee, 2010; Krane & Williams, 2010). Effective mental training programmes complement physical training to move athletes closer to performing more consistently near their optimal level (Krane & Williams, 2010; Vealey & Greenleaf, 2010). One common way that athlete performance may be inhibited, or fail to reach the expected level of achievement, is due to a weakness in or failure to utilize the MS that help enhance performance. Overall, MS must be implemented and utilized in the correct manner to reap the performance benefits. Moran (2014 p.83) noted that "although sport is played with the body, it is mainly won in the mind". This becomes a very important observation when looking at MST and performance enhancement as regular and systematic use of MS will help athletes to learn and practice selected techniques to control their thoughts resulting in optimal performance (Weinberg & Gould, 2018). Again, if athletes can

acquire skills and techniques to regulate their thoughts and intensity it can result with change in their behaviours, actions including other aspects of their life.

Gucciardi et al. (2008) posit that MST is a systematic training programme that is used on athletes to enhance their sporting performance. Vealey (2007 p.287) also stated that MST is the learning and implementation of traditional cognitive behavioural techniques "with the objective of assisting sports participants in the development of mental skills to achieve performance success and personal well-being". Mental Skills Training differ from other traditional resources by switching focus from fixing problems to taking a proactive educational approach to learning mental strategies that benefit performance and well-being. Athletes and coaches who are drawn to MST and seek out the training do so because of the enhancements observed in performance and the seamless integration of the training into the sporting environment (Fortin-Guichard et al., 2017). Coaches are now implementing MST because of their known benefits (Anton & Stefanidis, 2016; Author et al., 2017; Mathers, 2017). This means that MS are an important aspect of overall athletic development that should be practised by athletes if they are to be successful and benefit from it. They can be practised anywhere, without restrictions and at any time, to benefit both the coach and the players.

Mental Skills Training includes many different techniques which are efficient strategies that improve performance and perception in different sports and include techniques such as mental imagery, GS, ST which can be applied by athletes either in unimodal or multimodal interventions (Blakeslee & Goff, 2007). Thus, as athletes build competence and attain their goals, they also build their confidence, and this is the essence of MST. This newfound confidence will help improve focus and performance since confidence builds competence. Competence builds confidence. The goal behind the regular and systematic training of MS for athletes is to learn and practice

techniques to control their thoughts and feeling states to produce optimal performance (Weinberg & Gould, 2018).

Greenspan and Feltz (1989) conducted a comprehensive review, and in that review, there were only forty-five published studies that employed MST interventions in competitive settings before 1980. Of these identified studies, only twenty-three met the inclusion criteria. Vealey (1994) proceeded with another review focussing on intervention studies that were published since Greenspan and Feltz's review. Vealey's review found an additional eleven that included interventions. Again, Weinberg and Comar (1994) conducted a review and used the same criteria as previous reviews and added ten additional published studies. From a total of 45 studies, 38 of them concluded that there were positive effects from the use of MST interventions. Martin et al. (2004) examined studies between 1974-2003, and findings concluded that there were positive effects with goal setting being a prominent feature followed by ST.

A review conducted on psychological interventions with athletes from psychology sports journals by Martin et al. (2005) on studies from 1972 to 2002 had an interesting revelation of findings of only one or two such studies in two years, while a total of 15 studies were assessed. Martin and colleagues re-analysed 19 studies that were reviewed by Greenspan and Feltz (1989), and 14 of the studies reviewed reported a positive effect on MS usage by athletes. This situation was a result of the fact that only a few studies met their inclusion criteria although they concluded that there is a need to institute supporting psychologically-based sporting interventions to effectively assist athletes to achieve maximum levels of performance (Martin et al., 2005). In a most recent meta-analysis by Brown and Fletcher (2017), a total of 35 studies met the inclusion criteria of high internal and external validity component and the view reported efficacy of MS interventions in 26 studies.

Mental Skills Training should be viewed as a systematic and consistent practice of mental or psychological skills to enhance sporting performance (Frey et al., 2003; Weinberg & Gould, 2018). This is evident in the mental preparation theory of sporting performance. Mental athletic preparation refers to the cognitive thoughts, emotions and behavioural strategies that athletes and their teams use to in order arrive at optimal psychological sporting performance states and increase their peak performances during both practice and competitive games (Vealey, 2007). Mental preparation demands a lot of effort from athletes who are involved in both practice and competitive game sessions since it aims to enhance an automatic reaction to sporting play through the introduction of a systematic programme designed to suit the athlete's sporting situation. Some of the mental preparation principles advanced by Gould et al. (2009) include the following:

i) performance goals,

ii) fostering a level of competition

iii) developing emotional management skills,

iv) fostering confidence building,

v) adhering to competitive and practice routines, and

vi) team and individual preparation

However, it is crucial to remember that MS must always be learnt, developed and practised by athletes who want to experience a higher degree of success in their sport (Chee, 2010). They are as important as the physical, technical and tactical aspects of MST. Besides developing skills like concentration, MST also fosters personal characteristics such as self-esteem and positive competitive skills and behaviour in athletes (Singh & Singh, 2014). Individual athletes need to be mentally prepared to be able to adjust their actions, thoughts, feelings and physical sensations

during sports play so that they can try to consistently perform at their maximum performance level against the background of increased pressures during practice and competitive games. Mental Skills Training, therefore, tries to address the mental, emotional, social and meta-cognitive factors that are likely to influence performance in sporting exercise and physical activity (Farres, 2000).

Essentially, the principles of MST should be systematically integrated into the routines and procedures of sporting performance studies to assess how athletes can realise their most successful sporting participation (Gould et al., 2009). They argue psyching up players cannot be done at the same level for every player in the team since considerations should also be made for team efficacy and cohesion, setting team goals, role clarity and facilitation for good support. Mental Skills preparation is critical for sporting success even though it is not the only aspect that determines sporting performance success (Gould et al., 2009). According to Gould et al. (2009), MS preparation can be critical in preparing athletes for both practice and game competition. Gould et al. (2009) proceeded to acknowledge the importance of MS preparation and to identify one's zone of optimal functioning to develop emotional management skills for the athletes. They go further to say that there is a need to ensure that MS preparation routines enhance athletes' confidence so that that they focus on both the process and performance goals during mental preparation for games. Athletes must develop and adhere to competition and practice routines and team preparation should be important as individual preparation (Gould et al., 2009).

There are two approaches or experiences which may be adopted to allow athletes to acquire and develop MS which are educational intervention experiences via PST program, Vealey (1994), Weinberg and Comar (1994) and natural learning experiences (Gould et al., 2002). These are important considerations for research. This study will adopt the educational intervention strategy since it uses the cognitive-behavioural model (Murphy, 2005). The educational approach is

premised on the philosophy that, all athletes possess the MS that are needed for general success in sporting performance and that all athletes may need assistance to optimise their sporting performance skills. Educational Approach of MST uses a three-phase program (Horn, 2002; Gill, 2000).

The coach may then choose an approach to ensure that acquisition of MS is achieved through short training sessions, conducting brief team meetings and training sessions where players remain concentrated on the task, by using simple verbal instructions and turn exercises into small games to provide fun during the coaching sessions (Smith & Bar Eli, 2007). Where it is possible, athletes may be given homework tasks to work on their own to enable them to individually practise on the assignments given to them on some MS. The coach can also facilitate player discussions on it and encourage athletes to help each other to cope with stressful strategies or situations during such practices or competitive games. It is also important for the coach to deal with situations of athletes' adaptation to training strategies and cater for individual differences whilst working on establishing good relationships (Butt et al., 2010; Campo et al., 2012; Smith & Bar Eli, 2007).

Weinberg and Gould (1997) talk of the Education Approach having the last practice phase where athletes test the new skills and now focus on the automaticity of the training routines. The objectives for this phase have been simplified into three important aspects which are:

i) to automate MST through over-learning

ii) to teach players to systematically integrate MS in their performance, and,

iii) to stimulate MS that athletes will apply during the actual competition.

This phase gives athletes the time for athletes to effectively select, integrate and implement MS strategies during game practices and competition. In this phase, athletes are taught to be self-

efficacy and use the skills so given to them on their own and not wait until they are referred to relevant specialists like sports psychologists when playing under immense pressure during competitions. Athletes need to understand and incorporate those desired skills so that they can be able to automate the integration of the skills through over-learning them.

Burton and Raedeke (2008) say that athletes must include and apply critical MS in real settings and get to a stage where they can simulate the selected MS, they wish to apply in actual game settings. At this stage, there is no need for athletes to consciously think of how they can use the mental strategies but can use the coach's role to ensure that they practice the correct skills until they over-learn them. The coach can constantly revise the program to improve and modify it according to the individual needs of players (Burton & Raedeke, 2008). It is also important for coaches to continually encourage players to automate the MS learnt and systematically include them in their game practice or competition to manage stress levels and levels of motivation.

2.2.1 Mental Skills and Female Athletes

Historically, competitive physical activity for women has been very limited because societies the world over have not fully recognised the role of women in sport, relegating their most significant role as child-bearers (Hogshead et al., 2007). Physical activity has always been damaging to their health, especially their reproductive system (Edwards, 2010; Shattuck, 2011). This left men to dominate in all forms of sport throughout the world until very recently when deliberate efforts have been taken to promote women in sport. Thus, gender-biased cultural beliefs, traits, behaviours and stereotypes have tended to negatively affect female athletes and this has generally been extended to coaching roles for female athletes (Edwards, 2010; Shattuck, 2011). What is worse, there have been many stories of sexual harassment of female athletes by their coaches. All this has tended to adversely affect most women's participation and performance in sport as their self-worth

and self-esteem have been badly affected by these historical narratives of women in sport. Many psychological factors like personality, concept, motivation and emotional well-being have been noted to have affected the female athlete in leisure and competitive sport (Edwards, 2010; Shattuck, 2011). The Female Athlete Triad (FAT) is a co-occurrence of the three conditions that have been greatly associated with female participation in sports such as disordered eating habits, amenorrhea and osteoporosis (Manore, 2002). Thus, today many female athletes are said to be prone to the female athlete 'triad" and are thought to have disordered eating habits that tend to affect the energy availability in their bodies and this energy drain is seen as likely to affect female athletes' menstrual cycle, all leading to negative influences on the bone formation and density (Manore, 2002). Disordered eating habits have been noted in females who participate in sport, such as bulimia or anorexia nervosa, menstrual dysfunction like amenorrhea, oligomenorrhea and low bone mass like osteoporosis (Brewer, 2009). The combination of this triad and cultural beliefs about women may have greatly contributed to a lot of negative thinking about female athletes in the sport, leaving many of them at risk of musculoskeletal injury (Brewer, 2009).

Recent research has shown that MS preparation is an important factor in the training of female athletes despite the gender balance efforts that have been initiated throughout the world. This means that female athletes may immensely benefit from deliberate psychological MS preparation programmes, especially those that lead to the upliftment of self-esteem and goal setting in female athletes (Orlick, 1980; Orlick, 1986). Orlick (1986) further observes that a clear strategy needs to be devised to improve self-confidence in sporting female athletes so that they may end up better able to achieve their sporting performance goals. To date, no known study has come up with a clear MS model that assists female athletes in sporting participation, particularly to improve their self-confidence in setting realistic performance goals. It has also been observed that a true model

of psychological female athletes sporting programmes that look at the application of sports psychology for women in sport has yet to be generated and help to define a truly useful female sporting model (Brewer, 2009). Thus, this thesis finds it interesting to work with female netball players in tertiary institutions in Zimbabwe and hopes that it will come up with a female athletes' model that would assist female athlete's coaches to enhance women's sporting performance in netball. Coaches are central to changing attitudes towards MST programmes of female athletes in competitive netball games. There is no doubt that female athletes, especially netball players, need a lot of psychological interventions to overcome stereotyped sporting ideas on female athletes (Manore, 2002).

It has been generally observed that female athletes are under-represented in sports research (Costello et al., 2014; Costello & Lawler, 2014). Again, there is limited information on their MST programmes for court-based team sports, including in netball. This lack of research on court-based team sports can be attributed to the existence of many limitations for female athletes, especially like games to date. No known study has examined in depth the MST programmes for female athletes in netball for individual and team sports.

When a coach embarks on MST for athletes, it is important to ensure that he adopts a coaching philosophy that will bring about positive changes in the athletes' sporting performance (Carless & Douglas, 2011). A coaching philosophy is a general set of principles that are used to carry out an activity with the potential to apply it to a wide range of contexts and scenarios (Carless & Douglas, 2011). It means that right from the start, the coach can choose to emphasize the main principles of playing a sporting game so that he/she does not merely target the inculcation of MS on the athletes. They should not just target those athletes with peculiar problems but instead offer an all-inclusive

philosophical methodology appropriate for everyone first to achieve better sporting performance by their athletes.

The philosophy of MS is important when one intends to embark on developing a programme for MST for sporting athletes (Hacker, 2000; Harmison, 2006; Robins & Judge, 2009; Weinberg & Williams, 2006). Research has since shown that peak performance by athletes can be explored, controlled, developed and refined easily with consistent training (Hacker, 2000; Harmison, 2006; Robins & Judge, 2009; Weinberg & Williams, 2006). Nonetheless, Wells (2010) argues that peak performance is rather elusive. This tells us that both physical and MS should be looked at from a holistic point of view, that is and treated the same and should be simultaneously used when training athletes if they are to achieve their optimum overall athletic performance. These MS are trainable in athletes who resist the observation that MS contribute towards attaining peak athletic performance, and that ideal performance states can be achieved. Athletes themselves should not view MS as only targeting those athletes who have performance problems but should rather be for every athlete who has the desire to improve his or her performance levels. Thus, the condition is always that athletes should be willing to be taught MS and should have the ability to select and successfully use them to enhance their sporting performances.

The coach can choose to emphasize general opportunities and possibilities of engaging in women sports as opposed to merely focusing on the problems, obstacles and barriers that may be observed in the athletes. Thus, there is a need to recognise the importance of the philosophical rather than only the psychological state of athletes for this to contribute towards optimal performance by the athletes (Loehr, 1986). The psychological state of athletes can vary from one individual to the other but the philosophy of playing the sport should be the same for all the players (Loehr, 1986). Athletes themselves must gain self-belief and enough knowledge that is necessary for each athlete

to identify his/her personal beliefs and ideals in playing the sport. Usually, athletes tend to end at the psychological state of playing the sport without extending it to the deep philosophical reasoning of playing the game.

It is within the athlete's prerogative to know why it is necessary to make changes to the game and why he/she must change their behaviour, emotions, or thoughts during play. These specific actions must be identified clearly by both the coach and athlete, and meaningfully rehearsed during practices so that they become automatic behavioural activities during sporting competitions. Players must know why they need to play for each other during the game and why they should play to the last whistle, whether they are tied or are behind or are winning the game to understand the techniques being adopted and eventually feel to be in control of their game. Every coach desires to ensure that all athletes reach their ideal or best performance states and to maintain this throughout the game by employing various strategies that will result in sporting performance enhancement. Thus, coaches must bear in mind that peak performance by the players should be explored, controlled and developed through the use of relevant philosophical and psychological that combine to produce an all-round player.

The purpose of coaching is to prepare and direct players towards successful performances. Coaching plays a major role in shaping a player's performance through the development of tactical, technical decision making, physical and MS. Thus, techniques that are chosen by the coach may be influenced by several factors such as one's previous experience, habit and coaching influence. Coaches are therefore considered as one of the most influential motivational factors for players as they take the role of shaping athletes' sporting environment (Côté et al., 2010; Ntoumanis, 2012; Reimer, 2007). Locke and Latham (2009) contended that an individual's level of success in athletic competition is primarily dependent upon skill and motivation. Diverse skills and wide knowledge

are essential attributes for a coach in order to successfully motivate, discipline, physically train and tactically advise performers. The primary responsibility of coaches in MST is to ensure that they motivate the athletes to perform at optimal levels. Harwood & Woolway (2015) noted that most research in sports has focused on the coach creating the motivational climate. Several factors affect effective coaching which must be taken into consideration when evaluating a particular coaching philosophy. Generally, the effective coach is one whose capacity for effective coaching performance has been demonstrated over time and circumstance.

In most tertiary institutions of higher learning, coaches are often volunteers, who might not have received the prerequisite coaching skills or trained and certified as a coach (Howells & Lucassen, 2018). Many of these coaches do not have an explicit pedagogical coaching framework, basing their practices on what they saw their own coaches and PE teachers do, on their feelings and intuition and love of sport, and their own experiences either as athletes or as coaches (Cushion et al., 2003; Cushion, 2010; Werthner & Trudel, 2006). It is therefore envisaged that this lack of formal coach education may shape the ability of coaches to engage in or influence how they react to situations such as feedback and conflict. Coaches traditionally use mainly physical skills practice, yet it ought to be the combination of physical and MST, which seems to be lacking in the coaching and training which coaches give to collegiate athletes. There have been some observations that, when MST is guided by a specialist, it is more effective in helping athletes to learn, practice and master the techniques, giving them a greater chance of achieving their goals (Arnold & Sarkar, 2015). These observations are therefore crucial and cannot be ignored, as they tend to determine the outcome of athletes as individuals or team members.

Research has shown that some sports coaches have stated that they think the mental component to performance is a by-product of sport and, as such, they do not view deliberate training of MS as

necessary (Orlick, 2016). Pain and Harwood (2004) also concluded that lack of knowledge about sports psychology and the benefits of MS are a significant barrier for coaches in general. Athletes, on the other hand, have reported they do not want to be labelled as a problem because the term psychology implies an individual is dealing with psychological issues (Fortin-Guichard et al., 2017). It has since been observed that, in many situations, once an athlete is engaged in participating in competitive sport, they will spend much of their time with the coach who must take charge of certain roles. The coach does not only have the responsibility of taking an authoritative role over an individual or team, teaching technical skills, motivating and supporting athletes as well as enabling them to reach their full potential (Hyun-Duck & Cruz, 2016). A coach is considered someone who trains, instructs, and gives advice to an athlete to improve their physical and mental performance in their sport. Moen et al. (2014) note the primary role of the coach is to help his or her athletes to improve their performance. The coach is the architect, the definer, the creator, and the provider of each athletes' experiences in sport. In this role, the coach can make or break the quality of each athlete's experience.

The central role that sports coaches are assumed to play in shaping athletes' experiences has stimulated several lines of research on the coach-athlete relationship, and athlete outcomes have received much attention in sport psychology research. and coaches give feedback to athletes to help them in subsequent attempts toward task mastery. Coaches, therefore, fulfil different roles such as teacher, motivator, strategist and when working with young people, as an educator, leader, psychologist, personal manager, administrator and last but not least, a role model (Carter & Bloom, 2009; Côté, 2006). The coach's role in tertiary institutions remains complicated and not as straightforward as it may seem. This is because, for a coach to positively affect the performance of players, there is a need to assess and identify both the physical and mental abilities of players

before any decision can be taken to with regards to performance modifications. The other important role for the coach is to give feedback to players. Coach's feedback depending on what was said, when it was said, how it was said and how they behaved and expressed themselves can be an important aspect that can be related to perceived motivation by athletes (Pensgaard & Roberts, 2002). Positive feedback has a positive influence on athletes motivation at the same time negative feedback may have a negative impact. Desirable behaviour should be acknowledged by the coach since they result in athletes' positive experiences whereas being punitive to negative behaviours will result in negative effect which may lead to avoidance behaviours (Keegan et al., 2009; Keegan, 2010).

The coach's role is also to guarantee that individual athletes and teams develop MS, for instance through an MST program, for enhancing athletic performance both in practice and competition (Weinberg & Gould, 2015). Sharp and Hodge (2014) have acknowledged the effectiveness of applied sport psychology use by individual athletes and teams. Furthermore, Sharp and Hodge (2014) have also evaluated athletes' perceptions of their sports psychologist and how this has enhanced their performance. However, there have been annotations that athletes and coaches often use MT techniques without a sport psychologist or MT consultant (Barker et al., 2011; Vealey, 2007). This is frequently the case in tertiary institutions and where there is no psychologist, the coach should take over that role and assist players accordingly. Successful coaches need to have an excellent grasp of the technical, tactical and physical training requirements of the sport so that the strategies can have a greater impact. Moreover, coaches commonly have a significant influence over their athletes and repeated exposure to the coach designed program could improve MS abilities (Shaffer et al., 2015). Consequently, researchers Freitas (2012) and Vealey (2007) are calling for coaches to deliver programs to their athletes as opposed to sports psychologist doing

that role. Vealey (2007) further suggested that MS are more easily taught and learned by athletes if integrated into their normal training program and this can only be successful if done by a coach who spends more time with players. Integrating MST into athletes' normal training program would minimise the impact of time constraints. Athletes would be able to use the MS in combination with their physical training rather than allocating separate isolated time.

For the coach's role to be successful, a dyad coach-athlete relationship must exist. This unique coach-athlete interpersonal relationship means that both athletes and coach's emotions, thoughts and behaviours must be mutually interconnected (Jowett & Ntoumanis, 2004). From the existence of this strong relationship, both athletes and coaches work together and combine their efforts to come up with improved performance. Through the existence of this relationship, the coach might celebrate his/her good mentorship as athletes are successfully trained physically and nurtured in other life situations (Mageau & Vallerand, 2003). Furthermore, this complex dyad relationship significantly contributes to positive and healthy results if it considers the varied characteristics and personal qualities of all those involved. Reciprocity is key to both parties if this relationship is to be positively achieved with each half of the dyad sharing respect trust and effective communication (Gillet et al., 2009; Jowett & Cockerill, 2003). Both parties must be committed to the relationship and be prepared to meet each other halfway to achieve set goals and tasks.

The coach-athlete relationship is not simply one of the most important influences on athlete motivation, it is also one of the most important influences on athlete performance as well (Mageau & Vallerand, 2003). Both athletes and coaches are likely to adopt a more positive approach to a training program that would increase the use of mental strategies and enhance consistent optimal performance (Foster, 2017). Team skills are collective qualities of the team that determine the overall performance success and include team confidence; belief that the team has the ability for

successful performance, cohesion; team's ability to remain united in pursuit of their goals, communication (interaction within the team for team success), and leadership (ability to influence others in the team for team success (Vealey, 2007).

Emotional connectedness and autonomy-supportive behaviours can create a unique bond that results in desirable behaviours, although in cases where coaches value winning more than their athletes may result in aggressive behaviour towards teammates referees and other officials (Beardly & Kavussanu, 2009). However, some authoritarian coaches may tend to use favouritism, especially regarding team selection and this may negatively affect the dyad relationship. This same idea of coach favouritism is not a new phenomenon as it has been previously identified across multiple sports including baseball, football, netball and softball (Gearity & Murray, 2011; Norman & French, 2013).

In any competition, the content and intensity of emotions are associated with both successful and poor performances (Ruiz et al., 2017). Thus, internal and external events and thoughts are likely to trigger players' emotions together with other various other environmental factors and players need to devise ways of how to manage them (Friesen et al., 2013). Again, emotions can influence and negatively affect even umpires during competitions. As such, the seriousness that the individual attaches to an event, together with characteristics such as stress, anxiety, arousal levels and emotional states, ultimately influence an individual's concentration and accuracy. It then lies in the hands of the coach to ensure that athletes are helped to achieve consistent high levels of performance (Harmison, 2011). Since anxiety, thoughts and emotions have an influence on performance, a self-regulation intervention can be used to increase the chances of performance enhancement in the sports context (Didymus & Fletcher, 2017; Ruiz et al., 2017). Coaches need to take note that anxiety and fatigue are common in sport and can be worse with student-athletes,

who may end up having dysfunctional thoughts as well as unpleasant emotions (Moran, 2012). The coach should therefore try to establish if athletes themselves are conscious and aware of their thoughts and emotions and whether this distracts them from optimal athletic performance. The coach can also try to establish techniques that athletes use or have used to control these thoughts and emotions for optimal performance during practice and competition. Generally, competitions generate anxiety in athletes, triggering irrepressible reactions that may result in athletes making several faults (Clark & Beck, 2011). The coach must measure and assess their athletes' emotional status and anxiety levels to establish their readiness to engage in MST.

Mental Skills Training has been criticized for the fact that most studies investigating the efficacy do not meet the criteria for evidence-based empirical support (Gardner & Moore, 2006). Many studies conceded not to use adequate design and methodology, and hardly any studies used a control group. Another problem in this area is that many studies of PST have used non-competitive athletes and have therefore been unable to generalize the results to elite athletes (Gardner & Moore, 2006). Despite all the knowledge of psychological factors and MS as characteristics of top-level athletes, not every athlete is involved in MST is able to reach peak performance level (MacNamara et al., 2010). Mental Skills Training programs have been increasingly used in professional and college sports to teach MS to athletes. The MS practitioners commonly included in an MST program are self-talk (ST), goal setting (GS), imagery, and strategies for emotion regulation (Weinberg & Williams, 2010). Research has revealed that lesser skilled athletes do not naturally demonstrate the components of self-regulated learning in the same way that expert performers do (Bartulovic et al., 2017). The practice of sport psychology and the implementation of MST programmes has not been standardized (Portenga et al., 2017), however, comprehensive MST programmes typically include the strategies of ST, imagery, GS, and emotion regulation.

2.2.2 Mental Toughness

Generally speaking, sporting opponents tend to try and intimidate other players, therefore it is crucial for players to understand the principles of mental skills to be able to deal with these situations and to not let it affect their performance. Having a psychological edge over their opponents, which is called mental toughness. Jones et al., (2002) defined mental toughness as having "the natural or developed psychological edge that enables one to generally cope better than one's opponents in a game situation by remaining determined, focused, confident and in control of the pressure generated in the game." Mental toughness is one pre-requisite skill that competitive athletes like netball players need to play successfully in all the quarters of the game, despite being confined to their playing areas.

There has been some research that has shown that players who are equal in terms of technical, tactical and physical aspects may sometimes be beaten by athletes who might be strongest in their MS levels (Singh & Singh, 2014). Jones et al. (2002) have suggested that there are several attributes that can result in an athlete being said to be mentally tough, which include the following, among others:

i) ability to bounce back from setbacks,

ii) unshakeable athlete self-belief in unique qualities that make you better than the rest,

iii) self-belief to achieve competition goals,

iv) thrive on pressure,

v) accept anxiety is inevitable,

vi) not affected by the performance of others,

vii) remain focused despite persona issues,

viii) push physical or emotional pain boundaries while maintaining technique and effort,

ix) regaining psychological control while following an unexpected, uncontrollable desire to succeed

In any competitive game situation, athletes may end up matching each other in terms of physical, tactical ability and fitness levels. However, the better team will be decided by the team with the best mental ability support. Where physical, technical and tactical skills match, mentally tough athletes will prevail and win the competition since mental toughness is said to positively influence athlete's performance in competitions Gucciardi et al. (2008). Sinclair and Sinclair's (1994) mental management model advocates for the full development of mental skills of players alongside the physical, technical and tactical skills and not as an 'add-on aspect'. Whilst MS were found to be beneficial in enhancing sporting performance, they can only be best developed once players' problems have been noted and observed. Thus, MS toughness encourages a lot of self-reflection and awareness by players about their performance and personal improvements within a game situation that is meant to improve the overall performance and sports experience of the athlete.

Gucciardi et al. (2008) agree that mentally tough athletes possess superior athletic characteristics when compared to their opponents, as they tend to excel in practice and competitive games They suggested that the characteristics of mentally tough athletes include:

i) self-belief,

ii) positive attitude,

iii) thriving on competition, and

iv) enjoying the pressure and quality preparation.

Jones et al. (2002) note that mentally tough athletes are determined, focused, confident and in control of their game, even when under pressure and identified four attributes of mentally tough performers as follows:

i) having unshakable self-belief to achieve goals,

ii) having an inner arrogance,

iii) having a belief that you can get over any obstacle, and

iv) having a belief that your desire will ultimately result in fulfilling your potential.

As already mentioned, mentally tough athletes are said to able to regulate their play and to adhere to their use of MS whenever they see the need. Mental toughness results in players having a unique ability to exert control over varying demands placed upon them.

Mental training and preparation, however, demands a lot of effort from athletes, who are involved in both practice and competitive sporting games. Some of the mental preparation principles, according to Gould et al. (2009) include:

i) setting performance goals,

ii) fostering a level of emotional management skills,

iii) development of emotional management skills,

iv) fostering confidence-building,

v) adhering to competition and practise routines, and

vi) preparing the team and individual athletes.

The principles of mental preparation are systematically integrated into sporting routines and procedures as MST programs. Some researchers have, therefore, focused on the mental toughness

approaches that may be acquired and adopted by some athletes (Gould et al., 2002; Vealey, 1994; Weinberg & Comar, 1994). These are cognitive techniques like goal setting and self talk.

2.2.3 Cognitive Techniques

Cognitive techniques such as goal setting and self-talk, among others, are effective for various individuals in certain sporting situations. Cognitive training techniques are designed to modify or influence existing thoughts in people and may result in the creation of affect patterns in them at particular times and moments. Mental Skills Training is the use of certain cognitive behavioural sporting strategies and techniques that enhances athletes' mental sporting skills such as confidence, concentration and dealing with pressure. The various techniques focus on helping athletes to perform better and more consistently by inculcating those necessary mental skills that they can be used during their training and sporting competitions. Calder (2007) observed that athletes lacking MS might fail to perform as well as those athletes who have been through MST.

There have been some studies that have established that most successful athletes make use of cognitive strategies in their sporting preparations (Gould et al., 1992). These include ST and GS cognitive techniques that are known to enhance sporting performance. In this thesis, two cognitive techniques of GS and ST, MS will be used on collegiate netball players in Zimbabwe. Self-talk is seen as a cognitive self-regulatory sporting technique that can be employed by athletes to influence individuals or teams' athletes to think more solidly and positively about their behaviour and actions during a practice session or competitive game.

Cognitive behaviour approaches generally include factors such as cognition, thoughts and emotions when trying to precipitate or maintain human behaviour (Kadden, 2001). Thus, the use of cognitive behavioural methods/techniques that modify emotional processes in a person at a specific time may be recommended. The present study advocates for the use of a cognitive

behavioural framework as the basis for developing sporting strategies that focus players on developing their mental skills for their best performance enhancement in netball in collegiate games in Zimbabwe. Two critical types of sport learning techniques of GS and ST are recommended to be incorporated in the study.

2.2.3.1 Goal Setting

Latham and Locke (2006 p.332) define a goal as "a level of performance proficiency that we wish to attain, usually within specified time period". Moran (2004) defines GS as a process by which people establish desirable objectives for their actions. Thus, GS is the endpoint product of an induced action or an accomplishment sought after by athletes to influence their performance levels. Goal setting is a motivational tool to enhance performance and assumes that a person can perform the task whilst an individual can endeavour to accomplish set goals by attempting to attain a specific standard of proficiency (Brown, 1999; Locke & Latham, 2002; Weinberg, 2014). A goal is therefore a specific target that one strives to achieve (Vealey, 2007) and has been widely and effectively used in organisational and clinical settings to enhance performance and productivity (Maitland & Gervis, 2010). Athletes' success in acquiring new or added skills has sometimes been linked to GS strategies since GS is seen as a powerful motivational sporting strategy that elicits newer commitment in sporting performance by athletes. The use of goals by athletes is essential in serving to increase their focus and direct their attention towards the required and relevant sporting and also to help them accomplish a certain standard of proficiency (Dension & Winsdale, 2006; Locke & Latham, 2002; Weinberg, 2014).

Goals in sports settings are a successful technique that help athletes to elicit more effort and commitment and serve as incentives to foster persistent achievements leading to improved sports performance in athletes. These set goals work efficiently when used systematically because they

focus attention on specific tasks, increase effort and persistence when adversity is encountered, and promote the development of strategies and problem solving to achieve the goal (Vealey, 2007; Wikman et al., 2014). Athletes, therefore, get all the help they need to tackle sporting problems or challenges by developing appropriate action plans to achieve their sporting goals. At times, athletes need to be motivated by their coach who would encourage them to improve their performance levels. Dension and Winsdale (2006) contend that the sporting tool of GS allows players to appreciate more the fact that they can do more as individuals to inspire others within the team to perform at peak. Thus, GS raises self-efficacy in players and results in individuals setting even higher personal goals.

Goals are used in MST to ensure that they can help athletes cope with competitive pressures (Gould et al., 2009). Focused athletes may want to refer to set goals during and after play as a way of checking their performance achievements. In most cases, coaches may want to emphasize GS in their players to help them to fine-tune their levels of mental skills awareness, as this is needed to ensure their optimal sporting performance. All athletes work within a sporting environment that many distractions to their attention on and goals for the game (Gould et al., 2009). Goal setting can be used to help athletes to stay focused on the game at hand and to 'shut out' unnecessary distractions from the environment, such as the behaviour of the crowd or music around the sporting arena. Setting individual goals may enable players to consistently perform at their optimal level as they can refine their mental strategies to overcome any obstacles that may prevent them from achieving their optimal performance level (Gould et al., 2009). Thus, these authors suggest that individual players need to set achievable goals to deal with the pressures of the game or any other unexpected events that may arise during practice or sporting competition. When athletes set these goals for themselves or their team, they need to adhere to their routines during practice and sporting

competition. Both the team and the coach must, therefore, work together to emphasize the importance of both individual and team goals during training or competition (Gould et al., 2009).

Goal setting in MST enables athletes to manage stress, anxiety and to cope with competitive pressure that may overpower athletes during play. As players, they need to continue to reflect on their current performances and how they can best improve that performance (Gould et al., 2009). These researchers believe that individual players should know how to manage stress and pressure levels in order to grow in confidence and improve their performance. They argued that athletes who set realistic goals are better able to integrate MST principles into game preparation routines and procedures and can cope better with pressure and thereby improve their self-regulation and overall sporting performance (Gould et al., 2009).

There is some consensus in GS research that it should be the most effective performance enhancement technique that is available to sporting athletes. Again, athletes' self-confidence and sense of satisfaction are likely to be enhanced when goals are set and are achieved (Moran, 2004). Goal setting is commonly used by athletes to enhance their motivation and focus during play as aspects that increase performance levels when that general improvement is most needed, therefore GS is seen as a motivational tool that can be used to enhance performance (Maitland & Garvis, 2010). The establishment of a GS program often includes several common components, including identifying target dates for attaining the goals, identifying goal achievement strategies and providing regular goal evaluation strategies (Zizzi et al., 2009). Goal setting brings a sharper focus to players for them to set tasks for themselves that include the details of how to achieving them, while at the same time mobilizing all individual efforts towards enhanced sporting performance (Robinson, 2007; Weinberg & Gould, 2007). Players who struggle with self-motivation can then benefit from having set goals, thus bringing purpose and the spirit of competition to them.

Goal setting is a widely used powerful motivational sporting technique that adds direction to the practice and competition of athletes by enhancing their performance (Weinberg & Gould, 2015). It is a behaviourist construct that can be used by athletes to give focus to their game and improve their performance in sports. It sets long term motivation for the athletes by eliciting more commitment, dedication and effort while playing sports. Locke (1968) (in Locke & Latham, 1985) introduced goal setting, arguing that goals directly and consciously regulate the task performance of athletes (Locke & Latham, 2002). This agrees with Weinberg (1994) who says goals regulate human action almost immediately in whatever one is doing. Thus, GS strategies are one of the most effective performance enhancement techniques in the behavioural sciences (Vidic & Burton, 2010). Research on intervention studies using GS, Mullen et al. (2015) ST, Barwood et al. (2015) and multimodal strategies, Horn et al. (2011) have reported improvement in sports performance as a result of exposure to mental strategies.

It is important to ensure that set goals are made clear to the athletes so they can focus on the process more than the product (Vidic & Burton, 2010). Multiple GS strategies may include the process, performance and outcome of the goals most beneficial to athletes (Filby et al., 1999). These multiple GS strategies require the athletes to own their goals and be responsible for their achievement. Coaches and athletes can put their strategies in place and work together to ensure that the desired goals are realised. They motivate athletes to become more focused on their behaviour during a game whilst also monitoring their progress towards the attainment of those goals (Burton, 1992). Thus, good goals can positively change the psychological state of athletes during play by improving aspects such as anxiety, motivation and confidence (Gould, 2001; Thelwell, 2008). Where optimal performance is needed in players, GS should be one of the most important skills taught to the athletes (Kornspan, 2009). This ensures that they have prolonged

mental endurance and persistence during play as they develop new strategies to cope with their game (Arthur et al., 2017; Weinberg & Gould, 2007).

Coaches must emphasise the importance of incorporating long term and short-term goals, and both individual and team goals during game preparations so that they keep focused on their target (Gould et al., 2009; Weinberg, 2014). This enables athletes to manage their stress, anxiety and pressure levels and to reflect on how best they can improve their future performance (Gould et al., 2009). Athletes who systematically set realistic goals can integrate the principles of mental preparation routines and procedures, can overcome adversities and cope better with all sorts of game pressure to improve their overall self-regulation and sports performance (Gould et al., 2009; Vealey, 2007). Creating complex tasks through setting difficult goals might affect persistence and commitment to goal achievement and higher rates of performance improvement. Goals must therefore be incorporated into a systematic MST program to manage their behaviours towards achieving them through self-regulation (Gould, 2006; Vealey, 2007; Wikman et al., 2014).

A substantial amount of literature has, therefore, shown that GS is an effective strategy to improve performance outcomes in players Horn (2009) and Meyers et al. (1995) and thus considered to be a valuable cornerstone of performance enhancement strategies. Many authors have argued for the use of GS, even though their findings are methodologically flawed and internal validity is problematic (Locke, 1991; Weinberg & Gould 1994). Mellalieu et al. (2006) have been critical of GS strategies, arguing that most of the studies have used multimodal skills and not unimodal skills where GS has been packaged together with other mental training strategies to be able to conclude the enhanced performance. These same authors have based their conclusions on a non-representative sample and a number of studies that have shown a lack of demonstrated maintenance and effects of GS performance. Munroe-Chandler et al. (2004) posit that the GS process for

competition focused primarily on execution while in training it was primarily for skill development. Setting sporting goals, therefore, hinges on self-efficacy and skill development and always affect the performance levels of athletes in different disciplines, including in netball players' MS attainment.

Coaches at tertiary institutions train individuals who engage in a specific activity due to their interest in the activity itself as stated by Hodge and Lonsdale (2011) and if this is the case, it then means that students who are willing to engage in activities will do so through the assistance of the coach's expertise. But student-athletes may face various outside pressures that may diminish their motivation to fully participate in sports. It then becomes the role of the coach to help them improve their performance as well as motivate and support them to reach their potential (Horn et al., 2011; Hyun-Duck & Cruz, 2016; Moen et al., 2011). Coaches play a pivotal role in the development of players' mental toughness and coaches conducting these interventions need to be patient and assess their needs through GS and performance profiling and largely play a pivotal role in enhancing athletes' performance (Jowett, 2017). It has been observed that coaches have been key elements of the complex social environment that may potentially influence stress and the development of exhaustion in athletes (Arnold et al., 2013; Fletcher et al., 2006). In their review, Brown and Fletcher (2017) recommended that coaches should gain the greatest effects from MST during interventions for their players.

Therefore, goal setting must aim to establish set behavioural targets that athletes can attempt to achieve. These set goals must correspond to specific, measurable behaviours whilst at the same time being realistic. Set goals must also be within the athlete's control if they are to be acceptable and achievable (Locke & Latham 2002; Weinberg et al., 2001). This means that coaches for sporting disciplines must emphasise the setting of both individual and team goals, including both

in the short term and the long term and encourage athletes to record these set goals mentally or in writing, so that the athletes can easily evaluate them. Coaches may need to set goals together with their athletes for both training sessions and competitions of the team (Locke & Latham 2002; Weinberg et al., 2001). In their study, Thelwell et al. (2008) found that goal setting was the least employed sporting skill even though research has also shown that GS helps players to focus more on their sporting sessions, to visualise the aims of those sessions, to generate their motivation to the sessions and help them to correct their frame of mind accordingly. The coach needs to set goals for the athletes without being overzealous. These goals should be physical, technical and mental (Locke & Latham 2002; Weinberg et al., 2001). When players display specific behaviours when they are losing a match the coach should assist with reminding them of the set strategies to improve their play. There are three types of goals that can be used by athletes to enhance their performance levels. These include performance goals, process goals and outcome goals.

2.2.3.2 Performance Goals

Performance goals are progress-focussed goals that form the building blocks that help athletes to reach their outcome goals through attributes like motivation, focus and confidence. Setting goals that are independent of each other may sometimes help an individual athlete's overall sporting performance and to obtain the best match results. Performance goals are always related to the individual athlete, independent of the other athletes to enhance one's performance levels to attain the best outcome of his/her goals (Weinberg, 2002). Bandura (1977) observed that performance accomplishments improve and increase self-efficacy through controllable and flexible goals that should be a combination of both short- and long-term goals (Horn, 2002). This is the most effective way of improving individual and team performances through the influence of behaviour change in

athletes during gameplay (Weinberg et al., 2001). The general performance of athletes is therefore improved through the use of these goals.

2.2.3.3 Process Goals

Specific process goals help athletes to practice behaviours needed for successful performance (Filby et al., 1999). Process goals tend to focus on improving the form and technical aspects of critical skills for each athlete (Filby et al., 1999). They argue that performance goals are mostly related to performance goals since they focus the athlete on the key steps that enable one to achieve optimal sporting performance. These are goals that mainly involve the activity itself, which can be controllable, and this is where athletes focus on what they need to achieve in their performances. Thus, athletes use these process goals for skill development and, as a result, they tend to improve concentration and self-efficacy.

2.2.3.4 Outcome Goals

Outcome goals are product-oriented and related to specific results or the objective outcome, like winning a match during competition (Weinberg, 2002). These goals mostly emphasize the outcome of the games during competitions, whether they win or lose the games while helping athletes to maintain both focus and effort. Outcome goals are less desirable because an athlete cannot predict or determine whether he/she will lose or win the games, no matter how hard they train. Weinberg (2002) believes that athletes should not rely entirely on outcome goals, as these may demotivate them should they fail to attain them. Again, achievement or attainment of the goals depends on the players' ability and the strengths of opponents (Weinberg, 2002). Thus, athletes who work within goal setting learn to perform these skills with ease.

2.2.3.5 Effectiveness of Goal Setting

Effective GS might be a daunting task for some athletes, especially where it takes them longer to come up with their own specific performance goals. Athletes need assistance from their coaches to set achievable goals for their performance enhancement plan (Locke, 1991). Research has shown that GS is one of the most frequently used intervention strategies to enhance elite sporting performance, especially with Olympic athletes. There is no point in setting a goal that can be achieved by only 10% of the participants, so the goals must not be too difficult to achieve (Locke, 1991). Difficult goals tend to lead to the repeated failure of individual athletes and teams and only serve to demotivate the players and eventually can adversely affect the whole performance of the athletes (Locke & Latham, 1985, 2002). Rather, goals must be challenging yet still be realistic.

Goal setting techniques have been reported to improve overall athletic performance by increasing athletes' motivation and confidence levels (Burton et al., 2001; Gould, 1998). Sadeghi et al. (2010) concluded in their study that the use of realistic goal setting before the competition had a positive influence on players' motivation and self-confidence. Thus, proper GS techniques can enhance physical and MS and strengthen athletes' focus and concentration (Vealey, 2007). A meta-analysis done by Kyllo and Landers (1995) supported the efficacy of GS.

Acceptable goals must be Specific, Measurable, Attainable, Relevant/Realistic, Time-Framed/Time-Bound, Evaluated and Reviewed (SMARTER). Such objectives must be used as a guide for setting sporting goals as this will guide individual players, team players and the coach to realise the goals. Setting SMARTER objective goals may result in overall effective performance enhancement by the athletes. As a result of setting realistic goals, athletes will tend to focus on their attainment. The training programme that has specific and attainable goals becomes easy to manage, as there is likely to be no time-wasting by athletes and coaches.

In a team sports, such as netball, the attainment of goals is also dependent on the other teammates and their performance. Thus, the goals will depend on how they are interconnected within the team. Bandura (1982) declared that when athletes use short term goals, they are likely to result in longer-lasting and self-regulated behavioural changes, which are an important aspect of sporting performance enhancement. On the contrary, long term goals aiming at future maintenance of effort and attention of athletes and at the same time may yield substantial underperformance.

There are core elements of goal setting, which the coach should be aware of, and these include the following:

i) the establishment of specific performance goals for both training and competition

ii) developing a training regime leading to achieving desired outcomes, and

iii) reinforcing goal-directed behaviour through rewards and punishment (Ryska, 1998)

2.2.3.6 Benefits of Goal Setting

Goal setting has been touted as "a highly consistent and robust performance enhancement strategy" (Burton & Naylor, 2002). According to Mellalieu et al. (2006), GS is one of the most thoroughly researched areas in management and organisational sporting environments and their findings can be summarised as concluding that specific, difficult and self-generated goals generally have more benefits and effects on the overall performance athletes as compared to easy goals or having no goals, or the 'do your best goals (Mellalieu, et al., 2006; Mellalieu et al., 2009). A combination of the outcome, performance and process goals is therefore seen as crucial for athletes as it is likely to benefit the athlete to stay focussed, to increase personal motivation levels as well as to help in the structuring of the training regime. Research has since shown that GS is particularly effective in enhancing sporting performance and positively affects the behaviour of players in cases where

focus combines outcome, performance and progress goals (Filby et al., 1999 Gould, 2001; Locke & Latham 2002). Thus, principles of GS theory need to be applied to both the competitive and the training environment.

Effective GS allows individuals to set performance goals rather than outcome goals to control the outcome (Burton & Naylor, 2002). When players set these goals, they are likely to be committed to them and that way, they can be allowed to practice and excel and thereby reach their potential. Goals that go beyond one's control depend on other people's actions. Thus, there must be team consensus in the setting of goals so that players together create targets they can achieve. This enables the team to focus on appropriate strategies to achieve the set goals (Burton & Naylor, 2002; Locke & Latham, 2002). At times, these goals need to be written down as this will help some players grasp and share the goals with others and makes it easier to be able to track progress towards their fulfilment. Thus, it is recommended that players are not too rigid to see through the set goals, but rather, are flexible to allow for changes to the implementation of those set goals (Burton & Naylor, 2002; Locke & Latham 2002). Intrinsically motivating goals can build the behaviour of the players and makes it easy for them to focus on the set tasks at hand meant to result in performance enhancement. For this study, netball players need to be committed to setting their own goals to improve their game performance by raising their feelings of the game's value and becoming more motivated to achieve their goals. Personal commitment to one's goals always helps to improve one's sporting performance so that there is a general progression of the game from when the goals started to be implemented. Individual motivation is likely to occur as one continues to improve whilst creating good enjoyment of the activity and muscles are relaxed. Athletes need to calm down their nerves as play continues to reduce arousal levels and result in a limited impact of over-arousal (Burton & Naylor, 2002; Locke & Latham 2002). Therefore, there is a need for

players to take control of their goals during practice and during actual competition as this will lower down stress levels and calm athletes for better performance.

2.2.3.7 Goal Setting as Performance Enhancement

Specific goals are likely to be effective and any athlete must set their own specific, challenging and yet realistic goals if they are to achieve their sporting goals. Athletes may find it easier to have written down goals for compliance and as coaches ensure that players write down both practice and competition goals (Weinberg, 2002). When setting these goals, it is important for athletes to separate goals for practice sessions from goals for competitions and to regularly check and evaluate the progress of the realisation of these goals for optimal performance and benefits (Weinberg, 2002; Locke & Latham 2002). Self-set goals have higher self-efficacy and will ensure reasonable commitment and increased confidence on the part of the athletes like netball players. Self-efficacy must be considered as vital for netball players who are likely to set higher goals than those athletes with lower self-efficacy (Locke & Latham, 2002).

Commitment to goal set by netball players can improve their performance tremendously by raising their feelings and emotions of the value of the sport and game, resulting in the athletes becoming much more motivated to achieve their set goals. All goals should be considered based on the acronym 'SMARTER'. Generally, for netball players, shooting needs a lot of concentration, good positioning as well as appropriate techniques (Weinberg, 2002). Imagery can be used through one's confidence to mentally see how to perform a move to increase one's performance (Locke & Latham 2002; Weinberg, 2002). Relaxation techniques can also be necessary to maintain good control of the game so that one's performance is not hindered. This can be very effective when players are playing under pressure. Thus, personal commitment to one's goals helps to improve

one's performance so that you progress well in the game from when the goals were set and remain motivated throughout the game, whilst creating general enjoyment of the sporting activity.

2.2.4 Self-talk (ST)

Self-talk was developed within the cognitive behaviour therapies and it aims at changing individuals' thoughts, interpretations and behaviours (Hatzigeorgiadis et al., 2011). Several words have been used by different authorities to refer to the idea of 'self-talk', such as inner speech, private speech, internal dialogue, internal monologue, verbal rehearsal and self-statements (Duncan et al., 2010). Self-talk has been defined as "an internal dialogue in which the individual interprets feelings and perception, regulates and changes evaluations and convictions and gives himself/herself new instructions and reinforcement" (Hardy et al., 2001). Hardy (2006) also defined ST as verbalisations or statements that are addressed to the self that is multi-dimensional in nature with interpretive elements associated with the content of statements employed. Hardy (2006) sees ST as statements to the self which use focus or mood words and is seen as an effective strategy that positively influences sports performance (Weinberg & Forlenza., 2012; Coulter et al., 2010; Hamilton et al., 2007; Hardy, 2006). This is similar to Anshel (2007) who also defines ST as the internal statements that enhance positive feelings and emotions within the self while reducing the unpleasant mood states. Thus, ST involves focusing on desired thoughts and giving self-instruction to initiate an action or series of actions that lead to the desired behaviours (Hatzigeorgiadis et al., 2007; Johnson et al., 2004). On the other hand, Tannenbaun (2008) sees ST as a necessary mental coping strategy. It is meant to balance a lot of issues while selecting the best options available. Again, Hardy et al. (2005), observed that the definition of ST is still evolving as there is no universal definition to it that has been agreed upon by all. Thus, ST can be described as a MS strategy that is utilised by athletes to promote self-confidence and belief in

athletes. Three phases can ignite ST, and these begin with the environmental stimulation that ignites a perception or evaluation which results in certain emotional, physiological and behavioural responses to a situation that can either be helpful or defeating (Ungerleider, 2005). Research has shown that ST effects on performance enhancement have been predominant in the sport psychology literature for some time (Edwards et al., 2008; Landin & Hebert, 1999; Son et al., 2011; Weinberg & Forlenza, 2012). For most athletes, ST can be a helpful response to a difficult game situation can sometimes result in the need to re-focus the self, whilst a defeating response may result in a player being unsatisfactory for the game. It has been suggested that athletes must use positive ST to correct their responses to different game situations in the environment (Van Raalte et al., 2016; Ungerleider, 2005).

According to Zizzi et al. (2009), most ST patterns are related to how people feel and respond to game situations when considering how to influence a reaction to a game situation. Changing strategy ST has been commonly used by many sportspersons to fulfil the following:

i) prompting a specific behaviour,

ii) improving self-confidence

iii) attention control,

iv) motivation, and

v) arousal control

The most common components of these strategies include the identification of negative or irrelevant individual thoughts about a game situation and challenging these thoughts to create positive thoughts about the situation. Self-talk is, therefore, one of the most used mental techniques for performance enhancement in sports. When used well, it can influence how athletes think, feel

and behave and control themselves, calm their nerves in game situations (Van Raalte et al., 2016; Weinberg & Gould, 2007). Thus, positive ST can be used to maintain athletes' self-confidence with an ingredient of mental toughness in athletes. Foster and Gibson (2007) acknowledged that ST can be spoken out loudly or can be a subvocal activity that involves the voice as if communicating to oneself or the sub-conscious. Self-talk can be used to improve confidence and motivation. Self-talk can, therefore, be manifested in verbal or non-verbal ways like smiling, frowning, thoughtfulness or through words (Chroni, 1997). Thus, ST can either be positive or negative but is rarely neutral. When negative, it affects the individual who produces unwanted sporting performances. Self-talk is employed by those athletes who want to enhance their motivation, build confidence and even prepare themselves for remarkable performances in practice and competition games. Research has assessed whether ST brings about the intended performance gains for skilful athletes (Hardy et al., 2014). Tod et al. (2011) and Hatzigeorgiadis et al. (2011) reported the same, that approximately one-fifth of all research examining the effect on athletic performance has employed skilful participants. Hardy et al. (2005) concluded that when it comes to team sports, athletes tend to use more ST techniques than individual sports techniques.

Self-talk has mostly been used to control athletes' emotions in training and competition games as this help them to get into the correct frame of mind that boosts their confidence and help to rationalise their thinking or relaxation level as would benefit them and the game (Hatzigeorgiadis et al. 2011; Thelwell et al., 2008). Motivational ST has been found to help with increasing the endurance of athletes and maintenance of their drive to do well as well and to get psyched up or be relaxed for good performance of the game (Arthur et al., 2017; Thelwell & Greenlees, 2003). This is since ST can be used to maintain the high self-confidence levels needed for one to be

considered mentally tough and suitable for the game. Thus, during games and competitions, ST can be used for the following:

i) prepare the in-competition talk,

ii) help athletes get the correct frame of mind,

iii) help to boost the athlete's confidence,

iv) help rational thinking of athletes,

v) help athletes to cope with tough situations,

vi) help in the relaxation of athletes, and

vii) help control athletes' motions (Thelwell et al., 2008).

Self-talk can be used by the coach to evaluate the performance levels of players during practice or competition games and even in post-competition talk with players to give them more focus on what lies ahead of them in the next training session.

2.2.4.1 Characteristics of Self-talk

Hardy (2006) has identified multiple characteristics that can be associated with ST. According to Hardy (2006), one characteristic of ST is that it is multi-dimensional in nature with interpretive elements that are normally associated with ST techniques. The other characteristic is that it is dynamic and serves both instructive and motivational functions for the athlete. Self-talk is also seen as malleable to stimuli received from the social environment (Zourbanos et al., 2010). There are three types of ST and these include instructional, motivational and positive. Each one of these types has its benefits and sportspersons need to be aware of them. The different types of ST are explained below.

2.2.4.2 Instructional Self-talk

Instructional ST focuses on the technical, tactical or kinaesthetic demands of the athlete's sporting performance (McDonnell, 2013). In disciplines such as netball, such ST strategies are mostly used to offer positive and technical feedback to athletes. Technical strategies of ST are used to help athletes to improve themselves and their level of play in game situations, and to identify what exactly needs to be improved in the athletes (McDonnell, 2013). Instructional techniques are used by the coaches to instruct athletes on what needs to be done and how this can be done. It is a unidirectional strategy of motivating athletes that can then be used to enhance the performance of athletes by basing all actions and behaviour on the general improvement of cognitive motivational behavioural and affective domain factors (Tod et al., 2011).

2.2.4.3 Motivational Self-talk

Motivational ST is associated with controlling, arousal, preparing for mastery and increasing sports performance efforts that are devoted to the sporting task at hand (Hardy, 2001; Hardy, 2006). Kolovenis et al. (2012) indicate that motivational ST of any type or that is combined with other psychological mental skills can be an effective cognitive strategy to enhance performance among students in sport settings.

2.2.4.4 Positive Self-talk

According to Hardy et al. (2001), positive ST aims at the cognitive motivational domains of sporting performance of an individual athlete or a team that is used to sort out key challenges affecting the athlete and his/her mindset in coping with the game processes. Whilst the cognitive function mostly focuses on the athletes' learning and performing sporting skills through the development of appropriate strategies to play more successfully. The motivational aspect of the

athlete aims at increasing focus, self-encouragement, self-confidence, mental readiness, arousal regulation and coping (Zervas & Psychountaki, 2007). Thus, athletes and their coaches may use positive utterances that develop self-confidence and positivity in them. Thus, positive ST involves elements of self-assurance in the athletes by inculcating positive and rational thoughts and statements in the mind of the athlete. The positive ST utterances are mainly used to trigger the desired attitudes and actions in the athlete by providing self-reward, increased effort and control of attention, reduce anxiety, increase arousal and reduce aid injury rehabilitation (Hardy et al., 1996). These pronouncements also facilitate successful effects and efforts on sporting performance. Sadeghi et al. (2010) posit that positive ST increases self-confidence and motivation in players that helps athletes to focus more on their strengths and weaknesses during sporting performances. Positive ST is, therefore, meant to activate in individual players cognitive behaviour that enhances sporting performances at training as well as in competitive performances. It instils in the players a sense of optimism and directs athletes towards task fulfilment by activating appropriate cognitive behaviour that helps to foster competitive behaviour and performance by athletes. Athletes who incorporate ST strategies before or during sporting performances often yield higher sporting performances due to increased focus, concentration and motivation for the achievement of the task at hand (Araki et al., 2006; Hardy et al., 2005). Self-talk strategies are used to enhance attentional focus on a task by a player during both training and competition as they cope better with stressors and the associated emotions (Theodorakis et al., 2008). Self-talk should be used during training and game competitions to ensure that motivation by athletes is maintained up to the end of the session (Thelwell et al., 2008).

Positive ST helps individual sporting persons to counterbalance the negative energy in the playing strategy of players whilst helping the athletes to focus more correctly on how to achieve previously

set goals (Thelwell & Greenlees, 2001). Athletes develop personal cues that enable them to stop any negative thoughts and actions to reduce the enhancement of performance. That way, athletes will remain focussed on set tasks for a longer time as they can maintain a positive state of mind to achieve excellence of play during their sporting performance (Blakeslees & Goff, 2007; Hardy & Oliver, 2011; Mamassis & Doganis 2004; Turner & Barker, 2013). Athletes focus more on their strengths rather than on the opponent's strengths while working to reduce their weaknesses through increased concentration and self-control. Thus, athletes increase their desire to win or achieve targeted results. While ST has been researched mostly in unimodal interventions, it is, therefore, important to note that intentional ST can be used along with other techniques like GS and imagery (Van Raalte et al., 2016).

2.2.4.5 Pitfalls of Self-talk

It is not always the case that ST produces positive performance results all the time. Hardy (2006) observes that over-analysis of the self through ST may sometimes cause failure to respond to situational sporting demands. It has also been observed that instructional ST can result in athletes performing under too much pressure (Masters, 2000). However, Geranto (2011) has refuted the above by positing that there is no evidence that motivational ST can have some pitfalls on the athletes' sporting performance. This would have been truthful were it not for the fact that both winning and losing player-sides are exposed to motivational ST, despite it not working well for other players. In other words, ST does not always guarantee successful sporting performance by athletes.

Landin's (1994) recommendation on ST is crucial as he asserts that:

i) self-talk must be brief and phonetically simple,

ii) logical and associated with the specific element of the skill,

iii) they conform to the sequence and timing of the skills targeted by instructional self-talk, and

iv) utterances must be similar in length and cognitive load.

2.2.5 Self-efficacy

Bandura (1977) sees self-efficacy as the belief in one's capacity and capability to organise and execute the course (s) of action as required at a given time and circumstances to achieve certain goals. Furthermore, Bandura (1995 p.2) sees self-efficacy as "the belief to execute certain courses of action that are required for managing specific prospective situations". Thus, an individual athlete will need to have personal beliefs and have self-confidence in his or her ability to succeed in a situation to accomplish set sporting tasks in various sporting situations. She/he must have self-persuasion that hinges on cognitive processes that enable one to perform better in whatever they do. Bandura's self-efficacy theory states that performers get a sense of self-efficacy and confidence through seeing themselves as successful in their minds (Short & Ross-Stewart, 2009).

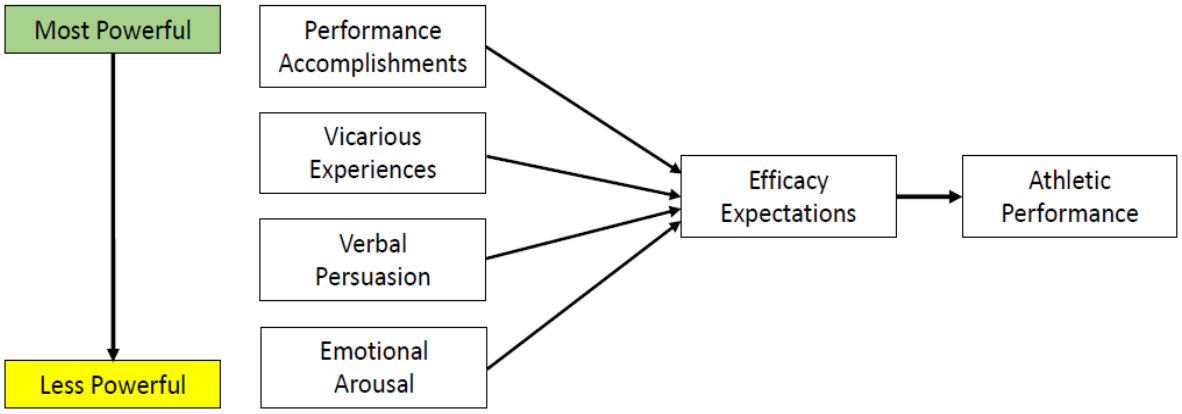


Figure 2.2: Self-Efficacy Theory (Bandura, 1987)

Bandura (1997) further observes that self-efficacy can be affected by four major aspects

i) past performance achievement or accomplishments,

ii) vicarious experience, (dependent on observing performance from an outside source),

iii) verbal persuasion, (utilisation of positive ST), and

iv) physiological state, that is the view that anxiety is helping performance.

The sources of self-efficacy, as shown in Figure 2.2 (p.67), are self-sustaining traits that may shed more light on confidence-building of different athletes during sporting performances, as athletes consider their ability to positively adapt their sporting behaviour and to stop negative behaviour or thinking. In this case, ST becomes relevant to a player's verbal and no-verbal sporting choice and persuasion. Self-efficacy is not static but rather dynamic, fluctuating in nature and in the sporting results. Feltz and Lirgg (2001) stated that one's beliefs enables individuals to execute a specific task and this is through individual's experiences that affect self-efficacy through cognitive

processing of information related to performance. Thus, successfully experienced past performance tasks will increase one's self-efficacy.

Thelwell et al. (2008) say that coaches and athletes need to appreciate and understand the concept of self-efficacy if sporting psychological results and performances are to be positive. Coaches also need to acknowledge that athletes learn different things at different rates and times. They should, therefore, endeavour to help athletes to plan their training sessions (Thelwell et al., 2008). Self-efficacy can be attained by having coaches working through different strategies during training and competition games to strengthen the self-belief in players for them to cope well with difficulty situations in playing the game. In doing so they need to keep things clear and simple for athletes. Harnessing self-efficacy in players is not always easy but the impact and effect of it is phenomenal for helping athletes' to reach peak sporting performances (Thelwell et al., 2008).

Self-efficacy is also crucial, even after athletes' training in mental skills, as it enables them to monitor their own progression in the sport and to self-regulate their own emotional state. Athletes who self-regulate themselves develop the ability to work towards their own short-term as well as long-term goals by effectively monitoring and balancing their thoughts, feelings and behaviours appropriately (Thelwell et al., 2008). In the case of team sports, important skills can be harnessed since skills are mostly dependent on the contribution of other members and the way they deal with sport conflicts and team-cohesion. According to Feltz and Lirgg (2001) the most influential psychological qualities of self-efficacy factors are believed to influence achievement strivings in sport. It then follows that those individual athletes who have a high level of self-efficacy can demonstrate positively and readily cognitive and behavioural patterns that include consistency, elevated effort and enthusiasm for players to approach realisation of set tasks, persistence in adversity, positive goal intentions, reduced worry and internal responsibility-oriented attributions.

Athletes generally exhibiting a high level of self-efficacy tend to naturally work harder, persist more in realising the tasks and achieve the tasks at a higher-level play than athletes who tend to doubt their capabilities (Barker & Jones, 2006). Bandura (1997) therefore, sees self-efficacy as a key psychological construct that is linked to ST and its use to achieve best results. Bandura, (1982; Bandura, 1977) observes that in the self-efficacy theory, an individual athlete's belief in his or her ability to successfully perform a particular sporting task or behaviour is strongly related to that individual athlete's actual ability to perform it successfully and may mediate future attempts to perform that task again. Hardy et al. (2005) describe self-efficacy as being positively correlated to ST, suggesting that the relationship may be mediated by self-efficacy. Athletes, therefore, need to perform within their self-efficacy framework if they are to achieve great results.

Self-efficacy has been used as an effective self-building strategy (Hardy et al., 2005b; Weinberg, et al., 1992). Thus, the theory of self-efficacy can also be used to explain how ST works and can be said to be based on the same theory because ST impacts on sporting performance by helping to increase an athlete's individual self-belief and self-confidence. Sporting performance is said to occur through increased ST (Theodorakis et al., 2012). Hardy et al. (2009) support this idea by suggesting that increasing self-awareness of one's self-talk can change how athletes use it, resulting in more positive effects on their sporting performance. It means that once netball players are committed enough to their GS, their choice of learning MS will increase exponentially if they are prepared to self-regulate themselves. One important aspect to be aware of is that building and developing self-efficacy through stimulating thoughts and feelings, leads to the belief that a person can fulfil the task efficiently and effectively.

It is known that netball players are actively involved with the learning process of using mental skills. This process will be facilitated through the combination and use of individual athlete's

thoughts, feelings and actions. Another observation by Balk and Englert (2020) is that self-regulated learners are intrinsically motivated to perform well. This is likely to be the same for netball players since goals are important elements within which to realise self-regulation. Netball players tend to continuously assess their own sporting progress during play and try to attain higher standards of the expected outcome as demanded by their coach. As such, there is general belief that netball players need to feel self-efficacy about goal accomplishment and tend to thrive to engage themselves in more self-regulating behaviours to achieve their set goals (Balk & Englert , 2020; Englert et al., 2020). It is crucial to ensure that timely, specific and valid feedback is given to players in training and competitive play to ensure that they adjust appropriately and in good time in their actions during both practice and competitive games.

2.3 Mental Skills Models

Several models have been used by researchers in MST models for performance enhancement. These include the following: GOAL (Going for the Goal), and Mental Toughness Plan, Bull et al. (1996), SUPER (Sports United to Promote Education and Recreation) Danish and Nellen (1997), Wheel of Excellence, Orlick (2000) and Inner Edge,Vealey (2005). When the coach chooses to select a model that she/he can use for performance enhancement, he/she should bear in mind that these MS models may only contribute successfully up to certain levels of performance. According to Vealey (2007), the model emanates from the coach's philosophy and she goes on to mention models like the family systems models Hellstedt (1995), Zimmerman et al. (1994), self-regulatory/cognitive-behavioural models, Boutcher and Rotella (1987), Hanin (2000), Kirschenbaum and Wiltrock, (1984) and Moore and Stevenson (1994). Vealey (2007) also mentions behavioural management models by Leslie-Toogood and Martin (2003), Martin and Toogood (1997), Thomson and McKnight, 1998). Furthermore, Educational MS model by Orlick

(2000), Vealey (1988, 2005), Development models Danish and Nellen (1997), Weiss (1995), Greenspan and Anderson (1995) Danish et al. (1992), Danish and Hale (1981) and Sport-specific MS models, Smith and Johnson (1990), Thomas and Over (1994) and Ravizza and Hanson (1994).

Boucher and Rotella (1987) proposed a four-phase psychological skills model that could be used for closed skills, which included:

i) sport analysis,

ii) individual assessment,

iii) conceptualisation/motivation,

iv) mental skills development

Thomas (1990) went a step further to extend Boutcher and Rotella's (1987) programme to develop a Seven-phase PST programme:

i) orientation,

ii) sport analysis,

iii) individual and team analysis,

iv) conceptualisation,

v) psychological skills training

vi) implementation and,

vii) evaluation

Whilst the model looked good, as it was an improvement, Hardy et al. (2010) went on to criticise it, commenting that it was rigid and did not reflect the dynamic nature of athletes, but could be suitable to use in the early stages of peak performance.

2.4 Netball

Netball is an invasion game played between two teams of seven players on each side who try to invade each other's territory with the aim of shooting the ball their opponent's net. The sport is a fast attacking, high-goal scoring, non-contact sporting game that demands high levels of sport-specific skills which include accurate running, passing, dodging, balancing, catching the ball as well as shooting for goals (Waterman et al., 2004). The aim of netball is for a team to outscore the opposition by shooting a ball through a ring atop a 3.05 m high pole. It is important to note that, during general play, a player can take not more than one step before passing or shooting the ball within three seconds. Those aspects which matter in a game of netball should be understood by both players and coaches for them to be successful. In netball, winners are the teams that score most goals, hence it follows that goal scoring is paramount to success. However, the rules stipulate that, in order to attempt a shot at goal, the ball must be passed to either the goal shooter or goal attack, within the bounds of the shooting circle (Thomas et al., 2017). As a non-contact game, players can therefore not be directly interfered with, suggesting that there is far less opportunity to dispossess opponents or snatch the ball from players' hands in netball compared to other contact games. On reception of a pass, players have only three seconds in which to pass to another player or take a shot at goal, this ruling can make for fast attacking moves in teams with good skills (Thomas et al., 2017). Thus, the movement of the ball within the permissible thirds of the court and in the correct number of times across thirds is critical to winning chances of scoring goals. Consequently, every attack has the potential to provide a team with the measure of success being

the number of goals scored, and the the winning team is the one to score the most within the defined period of play. A netball player can only be dispossessed of the ball through interception of a pass or rebound of a missed shot and errors or infringements contribute to a team losing possession. Thus, goal scoring is therefore a result of teams creating a shooting opportunity and successfully converting that opportunity to a goal.

The game involves a lot of jumping, sudden and rapid sprints and stopping, sudden change in direction, leaping high into the air to receive a pass or to intercept a ball or a rebound ball after an attempt to shoot at the goal has been unsuccessful (Neal & Sydney-Smith, 1992; Steele & Milburn, 1987). This makes the game physically demanding for the players. In most cases, it involves an explosive activity that may last just a few seconds, while at times the movements can last up to a minute (Drinkwater, 1986). This is the context in which netball performance enhancement strategies must be assessed and considered in order to improve individual and team athletic performances.

Netball is a highly mobile and a very competitive sporting game that requires players to move at high speed from point to point while constantly cutting and weaving through other players to create a tactical advantage, whilst maintaining accurate passes to each other. It brings together a combination of speed, skill, agility, tactics and balance as it is contested by two teams of seven players. It requires athletes to concentrate and to stay focussed on the game while taking care of the physical to acert injuries (Sinclair et al., 217; Waterman et al., 2004). All this requires the athlete be physically and mentally fit and alert to overcome momentary pressures that come with playing the game. Players are constantly under pressure to perform competitively and to make correct tactical decisions and not to falter when executing various playing skills on or off the ball

(Davids et al., 2008; Navin, 2012; Passos et al., 2008). This is the context in which mental skills performance enhancement strategies were studied in this research.

Netball is a unique sport that occupies a significant place among all other games, that gives enjoyment and pleasure to players. It is a game that requires both physical and mental attitudes to tackle all eventualities in a match. In netball, it is important to educate athletes so that they can distinguish their thoughts from their emotions to have functional behaviour. Coaches, therefore, need to train performers through all the aspects that are demanded by the game of netball. Therefore, it is important for coaches to blend players' physical abilities with their mental abilities for players to perform well while under pressure. Suffice it to say that superior performance comes with a combination of factors that are responsible for ultimate success. Since netball is a team game, limitations in one player may adversely and negatively impact on team performance. Thus, lack of mental skills preparation might limit factors that enhance performance levels in players.

Netball has unique characteristics in that players must pass or shoot the ball within three seconds of catching it (Navin, 2012; Waterman et al., 2004). Players are only allowed to take one step in any direction when in possession of the ball whilst pivoting on the other foot. Netball players continuously engage in both offensive and defensive manoeuvres within their confined spaces, changing direction and speed throughout the game and this requires high levels of concentration. Thus, players are therefore constantly involved in demands that should keep them alert all the time and hence the expectation for them to cope with the demands of the game at any given time. Performance pressure may increase during competition situations and this maty result in good players underperforming or performing below their expected levels or abilities and this therefore requires them to learn to cope with pressure. Generally, lack of preparation has been said to affect performance in all sports (Davidson & Trewartha, 2008; McKenzie et al., 2019). This is where the

coach is needed to assess movements and player performance during practice and competition and to tailor make a suitable tactical and training programme (Stares et al., 2015; Thomas et al., 2017). Netball players are constricted to play in one-third of the court or, in certain positions, in two thirds, save for the centre players, attackers and defenders. Netball matches consist of 15-minute quarters that are contested on a court measuring 30.5 m by 15.25 m and divided lengthwise into even thirds (Thomas, et al., 2017). The court setup is shown in Figure 2.3 (p.75):

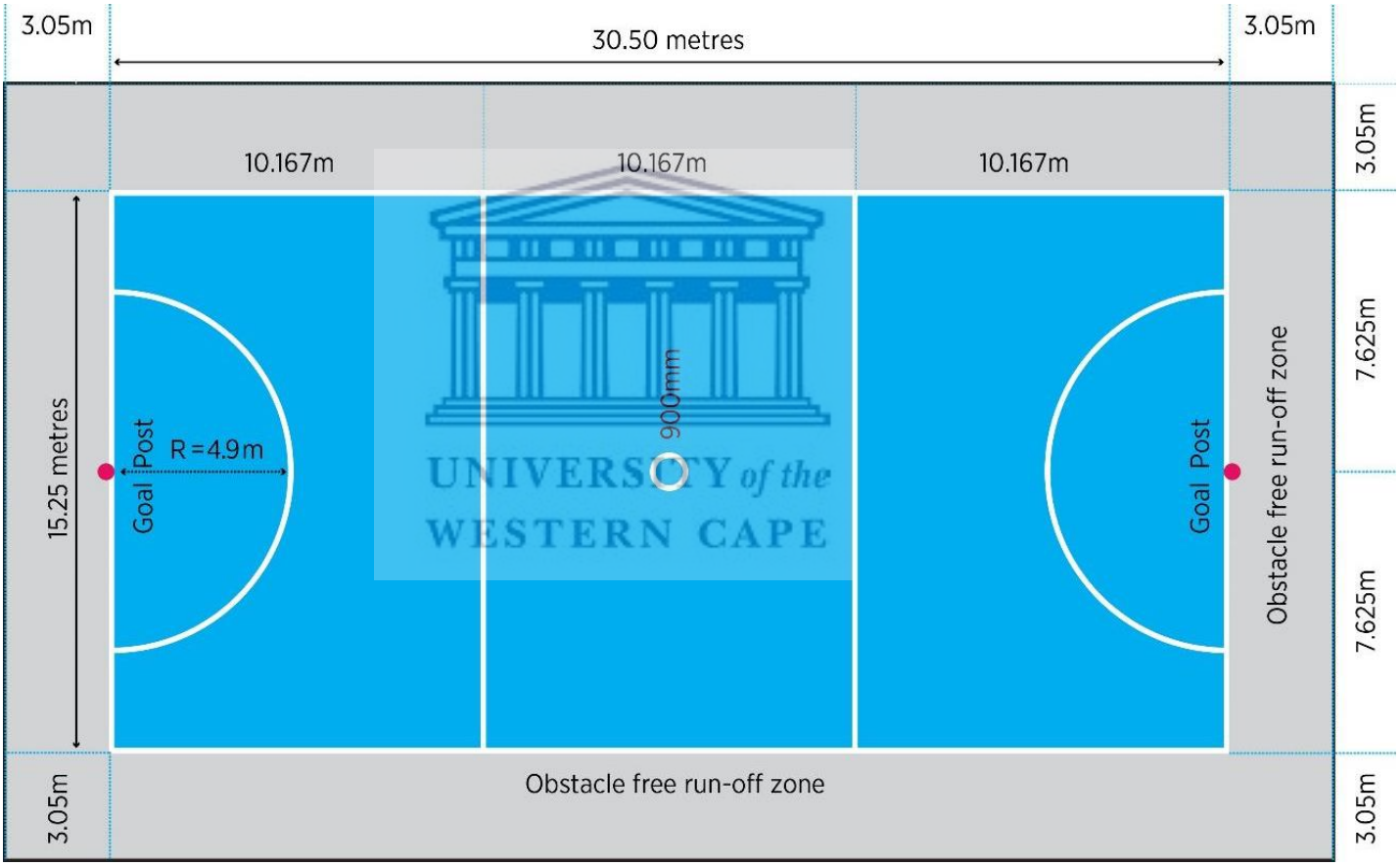


Figure 2.3: Netball court International Rules of Netball 2018:7

According to the rules of the game, players can bounce the ball only once when they receive it, although they are also allowed to pivot on one foot while they look for a free player to pass the ball tohowever, all this must be done within three seconds. A player who is holding the ball is only allowed three of these movements before passing it to the next player from her/his team. Since the

expectation is that the player must strive to always make a successful pass to a teammate, or she/he risks losing the ball for the whole team, thus accuracy becomes an important factor that requires focus all the time. Thus, netball players find themselves almost always under pressure to do the right thing, such as making legitimate decisions, passing the ball accurately, and not faltering when expected to while both on and off the ball. These expectations are that players must always attack well and defend well when they are not in possession of the ball and must pass and shoot successfully when they get the ball (Davids et al., 2008; McKenzie et al., 2019; Passos et al., 2008). During play, the ball is moved up and down the court through passes in adjacent court thirds and one of the rules demands that the ball must be caught at least in each third. Since the ball must be released within three seconds, the player must ensure that this is accomplished before the landing foot is not moved but can be used to pivot before the ball touches the ground again. Again, players should ensure that no contact that is likely to impede the opponent is made as this attracts a penalty.

In netball, play starts with the centre player positioned in the Centre who should pass the ball from the centre and it should be caught within the same centre third. Also, the centre passes are alternated between the teams notwithstanding the team that has scored a goal. This is also recorded by the recorder so that each centre pass goes to the deserving team all the time. It is prudent to mention that, during competitions, players' decisions are influenced by individual and team performance strategies (Marcora, 2019). It is under such circumstances that athletes may be required to use relevant MS to circumvent these pressures, which may cost the team (Thelwell et al., 2008). Therefore, some researchers have shown that some sports are considered stressors McKay et al. (2008) and McKenzie, et al. (2019), while some playing positions are said to stress some athletes Thelwell et al. (2008). In the end, we see that netball is unique in that it is both a stressful individual and team sport that requires strong MS to perform successfully (Davids et al.,

2008; McKenzie et al, 2019; Passos et al., 2008). Thus, both players and coaches need to train for the physical, tactical and mental aspects of the game through proper and appropriate programmes.

When playing netball, there are a lot of sudden bursts of speed and sudden stops during play, so players need to be physically and mentally fit, sharp and alert all the times (Davids et al., 2008; McKenzie et al., 2019; Passos et al., 2008). Players are expected to remain in their court positions during play at all times so, if they get the ball when they are outside their position, they lose it to their opponents (Davids et al., 2008; Passos et al., 2008). The fact that players are required to pass the ball within three seconds of receiving it can create a lot of pressure on them to quickly make the right decisions and, similarly, to be in the right position to receive the ball. This is what makes netball a highly mobile game, in which players movearound the court at high speed, constantly trying to create space for the pass. All this requires MT, to train players to be able to focus and to overcome momentary pressures that come with playing the game.

2.4.1 Playing Positions in Netball

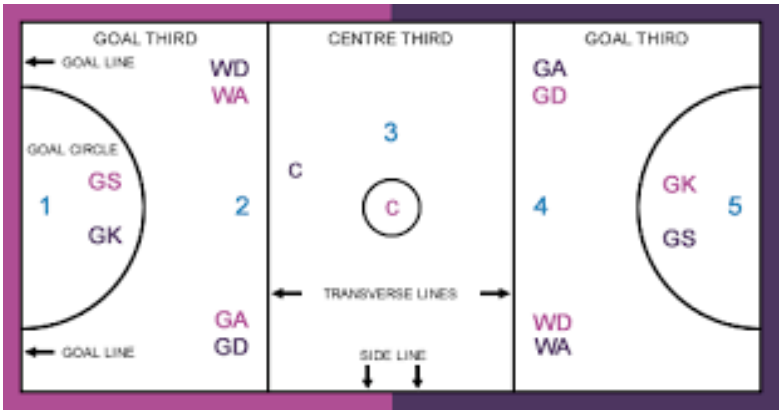
According to Woodlands (2013), playing positions are specific in netball and as such, all skills and attributes are meant to suit each position in netball. Although netball is an invasion game like other sports, it becomes different to most invasion games in the sense that the court is broken into different sections with players' positions in the team being affected by the areas they are only allowed to play in. There is a need to understand each position and skill demands which might be peculiar to netball positions so that individual skills can be programmed according to individual players as well as the team. Thus, different teams have slightly different job specifications for each of their positions. The objective of each position should be clearly defined according to playing areas and their boundaries for each player. However, there is need for players to be adaptive so that they can cover another position in the area and have sound mechanics of own position. Each

position in netball has markedly different demands and movement patterns (Navin, 2012; Woodlands, 2013). Netball players therefore need to be outstanding in their assigned positions and specialise in one position, although during training these positions can be changed so that all players understand the demands of various positions. Athletes should be strong in their assigned positions, and the coach can balance time that is spent developing general game skills with specific positions and common injuries knee injuries are avoided (Sinclair et al., 2017).

Netball players are assigned one of seven positions, each with a unique role. There are seven positions that have dictated roles and responsibilities and boundaries indicated by court markings (McKenzie et al., 2019; Woodlands, 2013). Playing positions are indicated in Fig 2.4 below. The main role of the goal shooter (GS) is to score. Goal and scoring responsibilities are shared with the goal attack (GA) who assists by feeding the ball to the goal circle. The wing attack (WA) is primarily responsible for delivering the ball to the GS and GA whilst assisting the centre (C). The C has a crucial role to play since she must deliver the pass and contribute to attack and defence. The wing defence (WD) is required to defend the opponents. WA and C support by ensuring that the ball gets to the scoring end. The goal defence (GD) has the primary task of encountering the opponents' GA moves as well as preventing goals from being scored. Goal Defence also assists the goalkeeper (GK), whose main role is to prevent opponents' GS from scoring. Assigned skills for each position should be clear and specific. Thus, the object of the game is to score more goals than opponents and this is only done by two players in the team. Team members facilitate movement of the ball to those two players positioned in the attacking shooting circle who then shoot the ball through the ring.

According to Thomas et al. (2017), these netball positions are typically grouped into shooter (goal-shooter and goal-attack), mid-court (wing-attack, centre, wing-defence) and defender (goal-

defence and goalkeeper). These restrictions encourage specific skill sets, as well as body composition and positional-specific physical capacities, acceleration and change-of-direction ability, whilst defenders jump higher than other positions (Thomas et al., 2017). Shooters and defenders are typically taller than mid-court athletes, likely due to requirements of shooting and defending opposition passes in the shooting/defensive circle (Thomas et al., 2017). The combined factors of possession being alternately awarded to teams following a goal and the non-contact rule which ensures that players cannot be directly dispossessed, would suggest that stress due to factors of possession and other factors may affect players. Although netball is an intermittent high-intensity sport, the movement patterns demonstrate that positions with greater movement restrictions (e.g., goal shooter and goalkeeper), demand repeat high-intensity efforts with extended rest periods, while centre positions have less rest and often perform these movements under a fatigued state. According to Davidson and Trewartha (2008) and Fox et al. (2013) the average demands may provide an inadequate representation for this high-intensity intermittent sport, as reporting average demands across a match will likely include breaks in play such as time-outs and injuries (Delaney et al., 2015; Duthie et al., 2018). Changing direction forcefully and rapidly is an important quality identified in netball (Davidson & Trewartha 2008; Fox et al., 2013; Sweeting et al., 2017). The ability to react to a sport-specific stimulus (i.e., reactive agility) is greater in higher level netball athletes compared to their lower level counterparts Farrow et al. (2005) and Tanner and Gore (2012) which may be an important training variable for improving match performance. This will often monitor the performance in training and competition of athletes, with the goal of procuring data to help inform future training that will enhance competitive performance outcomes. Wellness monitoring can include several aspects designed to gauge how an athlete feels before, during and after exercise (Saw et al., 2015).



Position	Playing Areas				
Goal Shooter	1	2			
Goal Attack	1	2	3		
Wing Attack		2	3		
Centre		2	3	4	
Wing Defence			3	4	
Goal Defence			3	4	5
Goal Keeper				4	5

Figure 2.4: Playing Positions in Netball - International Rules of Netball 2018:11

At any given time seven players from each team are allowed and expected to be on the court in their specific positions as shown in figure 2.4 (p.80). Again, each player is expected to wear a bib with the abbreviation of her position since they are restricted by their positions the umpire can identify those players who porch balls beyond their area of jurisdiction. Centre can move through all the thirds except the shooting circles. Goal Shooter is restricted to the third that includes the shooting circle while GA is also allowed in the central third. Goal Keeper and GD are the only players allowed in the defensive shooting circle and their role is to try and prevent the opposition from shooting goals. Goal Keeper is restricted to the defensive third and tends to mark GS while

GD can also move into the central third at the same time marking GA. Wing Defence is also restricted to the defensive two thirds of the court and WA to the attacking two thirds. All other players try to move the ball within their jurisdiction so that they can shoot or prevent opponent from shooting.

Thus, according to Woodlands (2013), the playing area available for netball players to move within is restricted according to their playing position, as indicated in Fig 2.4 (p.80). Thus, these specific roles restrict activity to certain specific zones within the rules of the game. Netball as a court-based team sport is therefore contested in confined spaces within the small court size compelling athletes to change direction and complete high-intensity movements or create space. This then requires players to be mentally alert all the time during play. These players are therefore required to be responsive to movements of the ball in a small area thus creating pressure on players. The small confined playing areas may also mean that the ball may frequently and chaotically change direction in instances where players are not permitted to move more than one step with the ball and when in possession must shoot or pass to a teammate within three seconds might result in pressure for players that requires use of mental skills to avert any potential danger of losing focus. Netball is also a game of great physical control involving both tactical and decision-making skills as well hence the need to also cater for the mental aspect so that players can make quick decisions.

2.4.2 Nature and Structure of Competitive Netball Games for Tertiary Institutions in Zimbabwe

Tertiary institutions in Zimbabwe strive to be as competitive as possible in the tertiary institutions' games in order for them to qualify in the zonal, provincial, national and international levels of the games that always end with the Confederation of Universities and Colleges Sports Association

(CUCSA) in Southern Africa, which are held bi-annually. These games are mostly played over three days with some teams having to play several highly competitive matches in one day, which all requires players to be thoroughly prepared. In 2014 Zimbabwe Teachers' College Sports Association (ZITCOSA) Games, the format consisted of three Zones of 3-5 institutions, based on the geographical location of each tertiary institution. After the Zonal competitions, teams were then selected to compete at the Zimbabwe Tertiary Institutions Sports Union (ZTISU) games that are held later at one of the tertiary institutions. From here, successful teams are selected to represent Zimbabwe at the CUCSA games in one of the Southern African countries, held bi-annually. All these games and competitions make it imperative that players maintain a very high level of physical and mental fitness to realise optimum sporting performances. Such level of competition requires high levels of preparation for the netballers to avoid injuries and fatigue. This is the background against which this study was undertaken.

2.5 Mental Skills Training in netball

Naturally, netball as a dynamic team sport will require different mental skills for each individual player due to sport specific demands that characterize the game like the three-minute rule, jumping and agility based movements, change of direction and breaks in between the game (Taylor et al., 2020). Thus, the nature of the sport becomes crucial in MST and this will depend on whether it will be individual or team skills. Which ever way, netball MS will be needed to strengthen and condition one's mind to enhance performance and emphasis should be on practice, repletion as well as consistent application of selected skills for building self-confidence as well as motivating individuals during performance. This consistent application and performance will result in mental toughness and guarantee performance excellence during completion in netball (Cowden, 2017). Bruce et al. (2018) see netball as a game that has several restraints to players in as far as their

movement on the court is concerned and this naturally creates pressure on players. Therefore, players need to increase their motivation as a team through social inclusiveness and supportive opportunities to increase their competence development (Cronin et al., 2018). Netball as a team sport will require different MS for everyone linked to sport demands.

Although there are observations that netball as a competitive sport has had limited attention in research despite being a having been Commonwealth game team, cohesion has remained part of mental toughness in netball and team unity can help players enhance performance (Stoker et al., 2017). Competitive anxiety is part of competition and can be detrimental to one's performance and anxiety can negatively affect players in team sport like netball. This may be exacerbated by pressure on players due to anxiety resulting in players losing focus and concentration and making a lot of errors. Pressure can also be due to time left and this can negatively affect players (Harris et al., 2019; Stoker et al., 2017). Mental skills training therefore become crucial in netball to avert pressure that may fluctuate throughout competitions resulting in reduced performance by players.

MST needs one to identify the nature and demands of the sport in question and to establish whether individual, or team based. Mental skills are a key factor in achieving success and, consequently, participants learn more about themselves, how to deal with failure and how to overcome setbacks. Mental skills help athletes to deal with obstacles and pressure and consistently perform at optimal level during both practice and competition. Developing a conceptual framework is important in the development of an MST programme, as it helps the programmes to take shape and be accepted by end-users and implementation will be based on both coaches and athletes coming together. Athletes also learn how to prepare for difficult times and deal with stress and anxiety. Mental skills can help the coach integrate mental and physical aspects of performance for a proper mindset during competitions as this is likely to involve every player. Sporting prowess has been seen not

to guarantee success, but rather mental toughness is an important attribute that drives coaches and trainers to train athletes through MST (Gucciardi et al., 2008).

Knowledge and ability to identify MS suitable for a particular sport then becomes important for both the player and the coach Fortes et al. (2018) as this will enable players to also prioritize pre-competition routines once the relevant skills are learnt. Another reflection is that this knowledge will aid team cohesion and self-regulation by athletes (Balk & Englert, 2020; Englert et al., 2020). Therefore, specific MS identified to suit a particular sport, in this case netball, need to be fully grasped if players are to successfully deal with any unnecessary pressure that may affect their play. For the coach, selection of these MS in netball will be guided by players' needs, identified through profiling. After selection the coach will work towards selection of mental tools and methods to be used to teach players to attain self-mastery of skills and enhance performance. Ultimately these MS will be important for netball players to learn to cope with their specific roles in the team and use learned skills in their daily routines (Balk & Englert, 2020; Englert et al., 2020).

2.6 Developing Mental Skills Training Programmes

Several studies in the field of sport psychology that have shown significant improvements in the performance of athletes who participate in MST programs Sheard and Golby (2006), Thelwell et al. (2006), Thelwell and Greenlees (2003), Mamassis and Doganis (2004). Mental Skills Training programs may therefore include cognitive-somatic strategies focused on ST, GS, imagery, and emotion regulation (Weinberg & Williams, 2001). It is important to note that athletes should possess not only a single specific psychological skill, but a set of MS that are often associated with optimal performance with athletes being able to reach peak performance in their preferred sport (Hammermeister et al., 2010).

A good and well-structured MST program will enable an athlete to perform under pressure and remain confident and resilient when competition conditions get tough (Gucciardi et al., 2008; Gucciardi et al., 2009). Developing MST Programme is the ability to create a systematic way of responding to training requirements for individual or team athletes. This is required for both practice and competitive game routines. All competitions raise systematic MS demands on the part of players and teams. This may result in high pressure demands for players to respond to sporting inadequacies which threaten to hinder achievement of set goals by players, thereby forcing coaches engaging in MST strategies to manage stress and combat burnout (Wood, 2010). It means that coaches must possess the ability to prepare athletes adequately so that they can focus more on their peak performance and to feel sharper and mentally renewed.

Many coaches have been seen that avoiding MST for their athletes is suicidal sports psychology (Wood, 2010; Creasy et al., 2009). Therefore, many coaches have put more emphasis on physical skills training and conditioning which requires that athletes become more receptive to the use of MST programmes to improve their sporting performances. In most instances, athletes believe that a coach's assessment and subsequent team selection can easily be swayed by favouritism of certain players amongst other potential confounding variables (Gearity & Murray, 2011; Norman & French, 2013). This alleged favouritism may influence how coaches prepare their netballers for subsequent competition (Halson, 2014; Saw et al., 2015). Mental skills training rehearsal strategies, pre-competition preparation routines and mental performance all contribute towards successful goal attainment in sports. This means that sports coaches need to be clear on the athletes' recovery plans whilst making it mandatory to be able to evaluate their sporting performance goals.

For one to do this, they need to be able to make major adjustments to their MST programmes. Taylor (1995) suggested that when examining which psychological skills to include in a program, practitioners must consider the physical, technical, and tactical demands of the both the sport and position, as well as integrating the specific needs of an athlete. It is important that PST interventions become task specific and tailored to the demands of the task and selected sport. Although tailoring interventions to everyone for specific performance concerns would be ideal, it is unlikely that athletes have ready access to mental performance consultants at collegiate levels.

There are common problems to instituting reasonably good MST programmes which reduce the effectiveness of implementing such programmes (Weinberg & Williams, 2006). Some of the problems include among others are the following:

i) overcoming player reluctance about participating in MS program,

ii) lack of time spent with individual athletes in team setting,

iii) gaining athletes' trust,

iv) ensuring athletes systematically practice MS,

v) lack of consultant knowledge about specific sport demands,

vi) maintaining consistent athlete contact throughout the season,

vii) getting complete co-operation from the coaching staff and organisation.

Furthermore, other MST effectiveness have been identified by the same authors as including the following:

i) integrating mental and physical training to promote better mental practice and more consistent transfer from training to competitive situations,

ii) building in optional variety and challenge to prevent boredom and enhance enjoyment,

iii) promoting maximal long-term gains, by ensuring that each workout systematically contributes to athletes' long-term development,

iv) minimising performance plateaus and slumps,

v) avoiding burnout due to trying to maintain excessively demanding practice schedules,

vi) ensuring athletes are ready to play their best in major competitions and,

vii) enticing mental training adherence over time.

The development of the MST programmes should be guided by both the athletes and the coaches. When one is developing a MST programme, one can use focus group discussions from coaches and players to guide the development of the requisite MS to be promoted. In this case, athletes will need to be aware of the MS to be learnt, acquired or converted according to daily goal settings. Thus, it seems every sport has unique sporting environmental demands which should be reflected in the development of MST programmes, catering for individual player differences if players have to improve their MS in practice and competitive games (Duda, 1998; Dugdale et al., 2002). Mental skills programmes must, therefore, focus on optimising sporting performances through improvement of self-efficacy.

The process of MST programmes always begins with the assessment of players' abilities and capabilities to perform at their utmost best while establishing the strengths as well as areas weaknesses in the players. This information is profiled for each of the players before the programme can start (Farres, 2000). In doing so, it is also important to determine the mental

demands of the sport since each sport has different MS demands that affect the MST preparations for each individual player and for the team (Farres, 2000). These demands can serve to differentiate sporting disciplines and can equally affect the type of MST preparation programme that can eventually be used by the coach (Farres, 2000). This means that a coach needs to balance the sporting discipline's demands with the individual athletes' needs as identified during the assessment programme. It means that the coach should have a well-informed picture about his/her athletes, the sporting discipline and the environment in which the game is played. Collecting and collating such information is vital for the coach as it will be a strong starting point in as far as designing the MST programme is concerned. That information can be used as an excellent monitoring technique of the programme by the coach, helping him/her to understand areas where there are discrepancies of understanding and interpreting the training techniques to be included in the programme.

Athletes can also have an opportunity to clarify their own understanding and interpretation of the training techniques and programme to the coach before its implementation. This means the relationship between the coach and players should be strong before the implementation of the training programme (Butt et al., 2010; Farres, 2000). However, it is coaches who determine which MST areas will be focused on first or are critical in the athlete or the sport, they also determine best learning style for players and to create a sporting environment that encourages athletes to engage in productive MT sessions that encourage them to reach their peak performance. In that case, the coach supports them the players through self-directing to make them responsible for their own learning success of acquiring the MS (Farres, 2000). The coach is there to guide the players to come up with clear and achievable goals and objectives which they will keep on checking and assessing on a regular basis. Athletes are encouraged to have MST knowledge, strategies and

experiences on the nature of specific sporting demands so that they use identified training techniques during practice and competition. Through the guidance of their coach, athletes should be able to practice MST elements. It should be noted that athletes learn these sporting skills at different rates and paces.

Thus, the process of evaluation and modification can be ongoing and cyclic in nature. The competitive nature should yield adequate information during evaluation as this information will be critically used in conjunction with knowledge from previous performances of players. The coach can then plan coaching programmes utilizing gained information so that the quality of preparation to enhance performance can also depend on the coach's ability to efficiently function within the prepared program.

Farres (2000) suggests that the coach must consider the MST goals as follows:

i) Prepare individual athletes to consistently perform at their optimal level during practice and competitions.

ii) Assist individual athletes to refine their MS strategies and be able to overcome obstacles preventing them from reaching their optimal level of performance.

iii) Help individual athletes to deal with sporting pressures as well as unexpected eventualities that may arise during training and competitions.

iv) Encourage self-reflection and awareness in athletes regarding their performance and personal improvement.

v) To improve overall sporting experiences for individual athletes.

Looking at the objectives, it is therefore every coach's wish to see his or her athletes reaching their optimal level and playing well throughout the competitions without being affected by pressures.

The coach should create a conducive sporting performance environment that will allow athletes to optimally focus on their set tasks with minimal challenges and disruptions so that athletes can perform at their best (Farres, 2000). On their part, athletes should aim to refine and adjust their programmes to horn their skills well and perform consistently to the best of their abilities of their MS for practice or competition games.

Mental skills training programmes can benefit and be guided by an intervention using such a model to direct the successful programme implementation process. Approaches to the requisite designing of an appropriate MST programme may be guided by the works by Balague (2000), Poczwardowski et al. (2004) and Taylor (1995). In this study, the designing of a MST programme was mostly guided by Balague (2000) while incorporating Taylor's 1995 conceptual model of integrating athletes' needs and sporting demands in the development of appropriate MST preparation strategies that incorporate GS and ST for netball players in tertiary institutions in Zimbabwe. Mental Skills Training programme interventions are most effective when presented in a systematic and automative delivery programme that may include multiple interventions which focus on behavioural and cognitive development skills. For this study, there is need to identify and recognise the MST programme needs for individual and team players (Weinberg & Gould, 2018; Taylor, 1995). Taylor (1995) has made a pertinent observation that not all individual athletes and sporting disciplines can use the same MS in the same manner. Again, MST programme strategies for each athlete should be based on specific athletic skill demand of the specific sport (Gross et al., 2018; Janssen, 2002; Taylor, 1995; Wood, 2010). This is critical for collegiate netball players.

It is however proper for sporting developers to target the promotion of psychological demands of different athletes in each sport in order to enable the athletes to realise optimal efficacy intervention (Birrer & Morgan, 2010; Simons, 2012; Taylor, 1995). When developing a MST programme, the

starting point for a sporting developer is to establish the exact level of performance where the athlete is in terms of their critical MS because this determines their strengths and limitations in the sport. Of importance to this study is the need to address psychological concerns of individual athletes in netball games as is suggested by Hill (2001). This always starts with correct assessment of the athletes' deficiencies that has adverse effects on athletes' improvement of sporting performances. Contrary to these observations, Vealey (2007) argues that the whole process of MST programmes begins with the clear delineation of the philosophy and nature of players' MS and MT requirements from the coach.

According to Balague (2000), MST programmes should assist athletes to maximise their potential skills development through learning of new skills and strategies of play, hence, it increases their consistency and control of player's sporting performance together with MS improvement of physical skills (Balague, 2000). Researchers have observed that the period for MST programme interventions range from one year or more to short periods of several minutes that are based on momentary effectiveness of MS techniques (Savoy, 1993; Theodorakis, 1996). The education approach to MST programmes is usually a preferred approach because it is said to get athletes into self-regulation mode whereby, they end up using MS without constant direction of how this can be done by a coach or sports psychologist (Barker et al., 2011; Weinberg & Gould, 2007). Focus on MST has however of late increased tremendously with coaches systematically training players with proper requirements of the game (Gross et al., 2018).

There are principles of MST programmes that were identified by Farres (2000) which could help coaches in their implementation. One of them is that coaches should approach MST the same way as they would approach physical skills training during regular practise and competitions as this helps athletes to learn about MS and perseverance in sports in order to yield better performances.

Mental skills importance should not be underestimated as athletes who use MS tend to perform better than their counterparts (Johnson et al., 2004; Rogerson & Hrycaiko, 2004; Thelwell et al., 2010). Thus, for the coaches, proper teaching of MST programmes is essential for athletes to achieve higher MS results. The inner thought processes of athletes can be successfully changed and result in changed behaviour that ultimately improves their sporting performances.

Individualisation is another principle that can assist coaches to select the most appropriate MS suitable for the players and to design and customize them in the programmes that will be used to help individual athletes and their teams achieve the best performance results (Farres, 2000). Coaches can therefore use trial and error methods as well as knowledge of MST gained through exposure to coaching and not training (Gould et al., 2015). This allows coaches to be able to expose their athletes to a wide range of critical MS that will change their cognitive behaviour in the game during practice and during competitions. This means that coaches will be able to inculcate and instil the right individual skills and responsibilities during the implementation of the MST programme (Martens, 2004). This will encourage players to develop a sense of ownership of the MST programme for their own benefit.

Another principle that is used in MST programme is that players continuously practise the MS so identified as suitable for them by simulating them during practice and competition games. This can be done by organising practice games such as friendly games involving one or two that should expose the players to same stress levels and physical demands as the actual game situation (Dalen et al., 2020; Farres, 2000; Martens, 2004). It is, therefore, important that the coach ensures the players to adapt well to sporting conditions that is meant to facilitated by the new MST methods of the specific sport. According to Gross et al. (2018), MST programmes have increased tremendously and the final MST programme principle the the coach to create an active learning

environment and conditions for the players that are suitable for the identified MS inadequacies which may require to be addressed. The MST programme principle directs coaches to find appropriate training methods which lead towards self-direction, adaptation and reflexivity by athletes (Munroe-Chandler & Morris 2011; Farres, 2000; Johnson et al., 2004). Such a programme puts the whole training agenda solely in the hands of the coaches. For the coaches to successfully implement it, they will require them to be knowledgeable on the issues of content and methods. This is despite the fact that coaches profess lack of time and finances to successfully implement these programmes (Pain & Harwood, 2004). These are the principles on which this study is based but instead coaches have difficulties understanding MS and they therefore neglect their implementation due to lack of knowledge (Vealey, 2007).

Mental Skills Training programmes are contextualised and tailor-made to meet the specific needs of individual athletes and team of a specific sport at a specific time and place (Farres, 2000; Williams & Straub, 2001). They consider the demands of each player and team as unique and different for each athlete. The coach needs to discover these unique qualities and needs which influence choosing of the most appropriate training strategies and techniques for each individual athlete or team (Henschen & Newton, 2004). Thus, conducting MST programmes is always starts with the identification of individual rather than group qualities and attentional characteristics that impact on the overall performance of sporting athletes. Another important factor to be considered when implementing the MST programme is that it needs to be systematically implemented and that both athletes and the coach should be proactive to the whole implementation process. Athletes need to be motivated and committed to the adherence of this MST programme and use principles that enable them to improve their MS during practice and competition sessions (Holliday et al.,

2008). This puts a lot of responsibilities on both the coach and the players. The study also uses the same principles and approaches of MST programmes.

Integrating MS into a comprehensive MST programme package include seeing that coaches and players completely understand the nature of the training programme, together with its relationship with physical training aspects (Poczwardowski et al., 2004). Reid et al. (2004) further support this idea by alluding that the integration of MS and physicality aspects of the game should, in the end, have a good balance to enhance athletes' performances. In such a scenario, coaches must possess relevant expertise and experience to a MST programme successfully using an identified model. Timely introduction or interventions of implementing of such a programme is critical. Therefore, Holliday et al. (2008) argue MST programmes must seek to maximise athletes' performance and their achievement of set goals. It means that GS goes together with the identification of player deficiencies and their suggested new strategies to realise goal attainment in practice and competition games using the education programmes (Holliday et al., 2008).

There seems to exist a direct relationship between MST and the resultant GS practices. The GS theory itself is based on the premise that much human action is purposeful in that it is mostly directed by conscious goals (O'Neil & Drillings, 1994). Since there is an inductive relationship between GS and athletes' performances, establishing the levels of performance is likely to result in desirable outcomes (Locke & Latham, 2006). The GS theory states that the source of motivation for human action is a function of the requisite desire and intention to achieve set goals. The theory, therefore, assumes that people are prepared to change their efforts if the accomplishment of those goals can be linked to existing performance levels (Locke & Latham, 1990). It means that setting goals is a factor of behavioural and motivational change and vice versa. This is the reason why Weinberg & Gould (2007) suggest that MST programmes must be done using three important

phases which are: i) the education phase, ii) the acquisition phase, and iii) the practice and competition phase. These phases will be further illustrated below:

2.6.1 Education Phase

The Education Phase consists of players' familiarisation of the knowledge and practices of selected MS so that they can learn to understand required MS and their importance to the improved performance levels in a sport (Weinberg & Gould, 2018). During this phase, players need to be educated well on the type of MS required and how they can be fully learnt and developed as techniques and strategies of performance enhancement. These techniques or strategies can be learnt individually as a team to realise both individual and the team's athletic needs (Weinberg & Gould, 2018). The Education Phase benefits athletes by identifying, understanding, becoming aware and recognising the importance of learning MS so that they can adopt their own MS patterns as a way of enhancing sporting performance (Weinberg & Gould, 2018). Through this, athletes realise the importance of their teammates and how they can affect their own performance in team sports. This phase helps athletes identify their own psychological skills and how they can maximise them. Athletes, therefore, become aware of the role that MS play during their sporting performance as well as in their own individual experiences. This forms a system to train athletes to deal with different game situations. Mental skills identification therefore becomes a basic strategy to be learnt by athletes for improving athletic skills.

Weinberg and Gould (2018) argued that participants quickly recognise the importance of acquiring MS as well as the importance and effect these skills have on performance. Thus, this phase of MST programmes needs to be taught and learnt by individual and team athletes, just like what happens with the physical training skills. Players are introduced to new and sometimes unfamiliar MS concepts and devise how they can learn them to assist them to realise their sporting endeavours

(Weinberg & Gould, 2007). In this phase, all participants recognise the importance of acquisition of the MS and how they affect the athletes' sporting performance. Thus, during the education phase, athletes learn and practice the MS given to them. Whilst it might just last between one to several hours to learn the MS over a few days, it is also assumed that it takes time to develop and refine these MS (Weinberg & Gould, 2018).

The best way to integrate MST programmes into a sporting department of an institution is to use coaches. Bacon (2001) argues that training programmes must try to consider periodisation of the teaching of the basic MS, for individual athletes or for teams until these can be integrated into regular sporting training routines. On the other hand, a top mental consultant Ravizza (2001) emphasized that during this phase athletes' awareness of the role played by MS in enhancing performance is very important as it leads to self-awareness by athletes on interferences that hider their performance. Athletes may then be assisted with coping strategies resulting in self-monitoring of mental states (Weinberg & Gould, 2018). Thus, ideally, an athletic sporting director can conduct training sessions that can be directed towards individual players or to the whole for the upcoming year. Initial steps should include describing the training programme and holding a session with athletes to implement the programme.

2.6.2 Acquisition Phase

The acquisition phase involves transferring of MS that athletes learn to game situations to show best they can be implemented. This phase focuses more on the strategies and techniques that can be used by athletes of different levels to learn different MS, using tailor-made training programmes that meet individual and team needs for the athletes (Weinberg & Gould, 2007). This acquisition phase is where strategies and techniques of learning sporting skills become important. In this phase, individual players learn new methods on how best they can competently implement MST

according to individual needs (Weinberg & Gould, 2018). At this stage athletes learn to make their own adjustments on the appropriate strategies and techniques that can enhance their MS (Weinberg & Gould, 2007). It is important to individualise the learnt techniques to each player's needs to help them learn faster and relate them to team participation (Weinberg & Gould, 2007). These strategies can aid athletes to learn about the required MS in a game situation (Burton & Raedeke, 2008). The coach can use different learning methods or techniques for the purpose of developing MS in the athletes during practice or competition games.

2.6.3 Practice Phase

This practice phase consists of the idea of transferring MS from one practice and simulated sporting situations to another, difficult where actual competitive games are used to horn the skills learnt by automating the MS taught (Brookfield, 2009). This phase mainly consists of three objectives that are primarily important and these are; i) to simulate skills athletes would apply during actual competition, ii) to teach athletes to systematically integrate MS in their performance and iii) to automate MS through overlearning (Weinberg & Gould, 2018). In this situation, athletes learn to incorporate the learnt strategies and techniques and use them in actual game performance situations. Over-learning MS can progress from practice to simulations of actual competition situations. Automating skills through over-learning and integrating them with MS while simulating actual games enables the athletes to horn their skills by applying the theory to real practice and competition situations (Brookfield, 2009). This is the longest phase of the mental skills training programmes which should see athletes practising skills until they can automate them and use them through over-learning. Mental skills for each particular individual player are entered in logbooks to help individual athletes to create personal progress and charts that provide some feedback for coach and player on the athlete's improvement. Thus, right from the start of the programme,

athletes should be taught how to systematically integrate the new MS into their whole performance schedule in competitive situations (Brookfield, 2009). The main aim of this final phase is to transfer the MS learnt from a programme into practice or actual simulated contexts. This is the phase whereby athletes should continually re-evaluate themselves to ensure they see and understand the MS that will be developing in them (Hodge, 2007; Weinberg & Gould, 1999).

These three MST programme phases are important, even though Crust (2007) argues that it is important to include a motivational climate aspect that will enable individual athletes to engage fully with the MST programme. Thus, coaches need to bear in mind that sports performance psychology generally addresses both the content and the processes involved in developing performers' knowledge, skills and abilities and the whole execution of the skills during a discrete sporting performance (Aoyagi & Portenga, 2010). Self-directed training techniques or strategies by athletes are an important skill to develop in athletes at this stage as this will ensure that they apply the requisite skills during practice and competition games. The effectiveness of the training techniques or strategies is measured by athletes themselves and thus, repetition of routines will only help to ensure that they accomplish and understand learning of the techniques (Weinberg & Gould, 2007). However, it should be noted that MST does not necessarily lead to expert knowledge of the performer but rather helps athletes to be trained to approximate their absolute level of sporting performance (Hambrick et al., 2016). It is idealistic. On the other hand, Ericsson and Pool (2016) argue that in reality it is possible for an individual athlete to reach an 'acceptable' level of absolute performance and that what may come from additional time of training and practice will not necessarily lead to further improvement by some athletes.

2.6.4 Evaluation Phase

The final stage of an MST programme is the evaluation phase, in which coaches monitor the progress of their athletes through several avenues. The evaluation also helps by providing relevant feedback related to the effectiveness of the program and how it can be modified should there be a need. The evaluation of MST programme phase cannot be ignored since it provides an insight into the overall implementation of the three phases and allows for the creation of an adjustment to the programme, if need be. One of the avenues is by having athletes complete feedback forms after the initial education sessions at the mid-point of the season and at the close of the sessions. A second tool is also used is the weekly comments and observation sheets where athletes share how the programme is working for them and what specific help they may require becoming more proficient in the use of the identified MS (Weinberg & Gould, 2007). Thus, coaches keep a log of athletes' thoughts, successes and challenges that will allow both the athletes and their coaches to gain some awareness towards the improvement of their MS because of their training programmes.

Athletes may also suggest strengths and weaknesses as well as suggest changes they think may improve the programme and all the processes related to its implementation. Thus, the coach may then make objective judgements on the implementation of the programme based on the initial set objectives to see if they have been achieved. The goal of this basic MST programme is for the athletes to acquire the framework of following up on their progress concerning MS development. Furthermore, such a programme will also help players to become much more self-activated and invested in their personal sporting activities and growth or improvement in the field of play. Weinberg and Gould (2018) posit that the goal of a MST programme is self-regulation and this is also supported by Blummenstein et al. (2007), who concluded that MST programmes increase an athlete's performance self-regulation arousal, leading up to performance enhancement.

2.6.5 Team building and team cohesion

Team Building is the process of helping members of a group of athletes to enhance their ability to work cohesively through a sporting programme, improving among players' communication, group objectives, trust and respect (Eys & Jeemin, 2017; Myers & Twenge, 2018). Team building strategies or techniques are often used at the beginning of a programme in order to help individual players or group of players to become more familiar with the requirements to change their sporting behaviour and increasing elements of trust of each other, especially during game play. These are the attributes that are often evaluated on the players and the common techniques that are commonly used include individual or group instructions and team GS (Birrer & Morgan, 2010; Zizzi et al., 2009). In team sports such as netball, it is important to bear in mind that MS for the team increase elements of togetherness of the players and even of the team with the coach, in as far as planning together to improve sporting performance for the benefit of the whole team. Team cohesion is, therefore, an important aspect that is often evaluated within the context of team performance, including in netball (McLaren et al., 2017; Myers et al., 2018). Thus, from a cognitive perspective athletes' attributions regarding team performance are said to hinge on task cohesion and their failures are attributable to controllable and changeable causes (Birrer & Morgan, 2010; Bruner et al., 2014; Shapcott & Carron, 2010).

According to Hawkins et al. (2014), the coach can singly-handedly build a safe environment in which players can train and successfully function. All it takes is for players to hold each other accountable and establish trust among team members to create a stress free and conducive motivational environment where players feel appreciated as this would ensure team cohesion is achieved (Ntoumanis & Vazou, 2005). It is therefore important for netball players to develop good team cohesion and communication in order to reach higher levels of performance (Asamoah &

Grobbelaar, 2017). Team cohesion is, therefore, seen as the foundation of any successful athletics team (Jones & Standage, 2006). In this situation, players work towards the common good and purpose of the team (Moran, 2004). Players want to achieve success through team cohesion which makes players to stick together cohesively to realise team goals (Jones, 2010; Weinberg & Gould, 2018).

According to Blumenstein and Bar-Eli (2005), the physical, technical, tactical and mental preparation techniques all exist in order to help the athletes achieve proficiency in their sporting performance. However, it is not always smooth with teams as there are instances when teams break up through cliques and these cliques need to be broken up if teams are to improve team cohesion and enhance performance (Martin et al., 2014). Again, it is not only team cohesiveness that matters but individual athlete effort and skill also contributes to team success (Backer et al., 2011). This is also supported by Gucciardi et al. (2008) who say that in cases where physical, technical as well as tactical skills are present in a player during a match, whether innate or learned, only mentally tough athletes will prevail and win the competition. It is on this basis that the coach should not take it for granted that peak performance for individual players and teams is automatically achieved but is continuously worked on for each athlete. Thus, the coach can integrate these MST programmes with the physical training schedules to ensure quality practice or competition results through the transfer of mental skills (Davenport, 2006). Teams have a task of learning to work together by creating team cohesion as there is no team that can be in existence without conformity although this conformity can at times result with lack of diversity (Myers & Twenge, 2018).

2.7 Theoretical Framework

A theoretical framework that is well-defined guides the researcher to make the study more meaningful in its intention and purpose by informing the rest of the study design (Poczwardowski

et al., 2004). The Cognitive-Behavioural Theory (CBT) has been selected as a guide to this study. Research has shown that (CBT) is an accepted therapy approach that has successfully been used for the treatment of different anxiety types, because of its characteristics and empirical results reporting its effectiveness with the prevention and intervention of various anxieties (Birrer et al., 2017; Didymus & Fletcher, 2017; Gustafsson et al., 2017). The CBT is a theory that combines both the psychological behaviour and the cognitive thoughts of an individual and can be used successfully in self-enhancing behaviours. It involves self-regulation for enhanced performance, using ST, visualisation, breathing control and muscle relaxation (Hill, 2001). The CBT theory can be used to assess and correct individual athletes' sporting behaviour, using athletes' abilities, specific circumstances and the sporting environment that can be created by a coach or sport psychologist to change sporting behaviour and performance (Rothlin & Birrer, 2020). It is therefore important for this thesis to use this framework for the development of an MST programme for collegiate netball players in Zimbabwe, using both the cognitive and behavioural aspects of individual athletes and teams. These frameworks are inter-linked and become important when engaging in assessments and correction of MS. Several researchers who have used the CBT theory of human behaviour change before having used the educational approach of CBT to the teaching of psychological skills to different athletes Birrer et al., 2017). Readiness and motivation to engage in MST are either individually based or team based (Clancy et al., 2017). Where the MST is individualised, each player can monitor his/her use of MS and only request the assistance of the coach when it is necessary to bring in interventions to improve sporting performance.

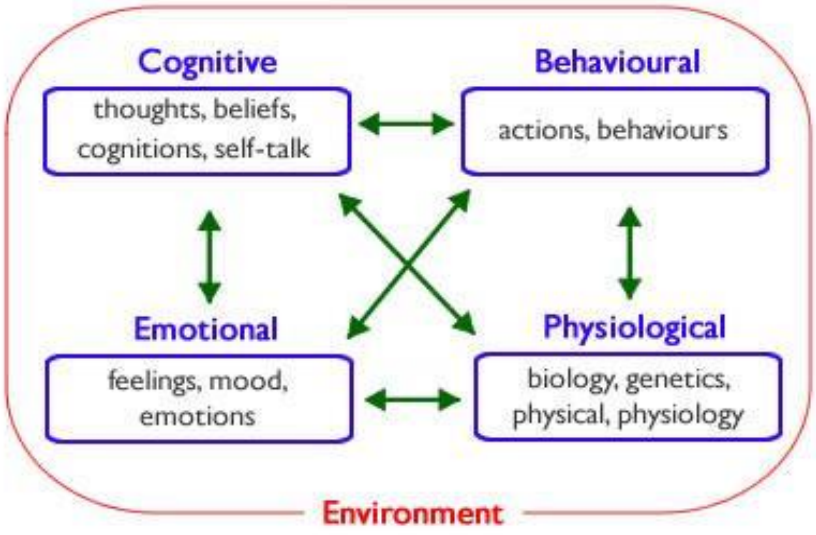


Figure 2.5: CBT Model (Beck, 1964)

The model in Figure 2.5 (p.103) shows that there is an inter-dependence of thoughts, feelings, physiological states and behaviours between individuals who are exposed to an environment of both current and past situations, which might have stressors that may affect the behaviour of individuals. Due to these linkages between the four areas, changes that may occur in any of the four areas in CBT may, in turn, result in changes in the other areas as well as these four systems interact (McArdle & Moore, 2012; Rothlin & Birrer, 2020). The model, therefore, uses a combination of cognitive and behavioural strategies to solve both behavioural and psychological problems. Thus, cognition plays an important role in behavioural change and cognitions or thoughts impact the behaviour of the individual. This means that negative thoughts can never result in positive behavioural change and an individual is, therefore, educated to reinforce positive experiences leading to fundamental changes. For athletes, this is the case because they shift their thinking processes from one mind-setting to another, resulting in positive or negative behavioural changes. It is appropriate for this study. According to Miller and Rollnick (2002), the CBT approach assumes that individuals are generally ready to change human behaviour for better or for

worse. When dealing with competitive athletes, one may want to assess those activities that can have a positive impact on the general improvement of athletes, especially when different MS strategies and techniques are used to enhance athletes' sporting performance and realise ulterior goals of playing the sport.

Key to the CBT theory is how constructs tend to affect human behaviour towards positive change and enhanced performance through self-regulation (Brown, 2011; Hill, 2001). It means that cognitive-behavioural constructs are critical to this thesis because they explain how changed human behaviour affects individuals and team members as MS and further elucidate to us some of the implementation strategies or techniques in the performance enhancement of athletes in different sporting disciplines such as netball. It is, therefore, useful to use a cognitive, behavioural, emotional and psychological theory in order to understand how MS affect athletes in the netball sporting discipline (Behncke, 2004). This thesis tries to integrate this theory with MS strategies or techniques to reconstruct athletic behaviour change towards a more positive outcome that can eventually influence positive sporting performances in netball. Thus, in this research thesis, cognitive and behavioural techniques of goal setting and ST will be used as giving a sharper focus in the whole development of appropriate MST programmes for netball players in selected tertiary institutions in Zimbabwe.

Proponents of CBT propose that human behaviour is a reciprocal process of cognition, feelings and behaviours (Corey, 2009; Rothlin & Birrer, 2020). Massey (2013) also argues that cognitive theorists contend that dysfunctional thinking can sometimes result in distressful behaviour, which makes it important for one to look for the most effective techniques to overcome distressful game situations. In such situations, athletes require to change their thought patterns processes during play to influence the results of the game positively. Based on the CBT model, some relationship

exists between players' thoughts, feelings and behaviours when playing and efforts and patterns to change the results in a game by increasing players' performance levels. Thus, use of CBT is applicable in the sporting domain (Brown, 2011).

The CBT theory is appropriate in this thesis because it allows for the combination the cognitive, behavioural, psychological and emotional aspects of cognitive thoughts and mental habitual aspects of an individual person in sport. The theory can be used to an in-depth understanding of self-enhancing behaviours of athletes that involve self-regulation for the purpose of enhancing sporting performance using ST, visualisation, breathing, muscle relaxation (Hill, 2001; Rothlin & Birrer, 2020). This theory has also been associated with GS, imagery, ST, intensity regulation and cognitive training (Massey, 2013). For example, the CBT principles of ST activate mental processes in an individual resulting in the change of existing thought patterns to influence behaviour (Johnson et al., 2004). Luisseli and Reed (2014) noted that GS is a key cognitive behavioural method that can be used to enhance performance. Therefore CBT is, applicable when assessing sporting behaviour and thought processes among athletes for goal attainment, since it can be used to strengthen positively athletic behaviour whilst it is reducing negative behaviour (Behnke, 2004). Both the cognitive and behavioural aspects emphasized in the CBT theory are inter-linked and become important when engaging in the assessment and corrective measures of MST among individual athletes and team sport like netball. It is useful when used to observe individual athletes with behaviour problems of stress, disorientation and lack of focus (Hill, 2001) Mental strategies and techniques can use cognitive and behavioural approaches to change behaviour in sporting performances while modifying distorted mental processes (Murphy, 2005; Hill, 2001).

One can therefore conclude that CBT techniques can be integrated and used in intervention programmes during MST and adherence to the use of mental skills should be monitored so that athletes are taught to change their thoughts and behaviours that are likely to interfere with their normal functioning (Beck, 2011). Athletes are therefore able to reduce excessive emotional reactions, resulting in them being more functional. Athletes can only learn and practice self-regulatory techniques if they are aware of their emotional psychological states (Ravizza, 2001).

Mental skills are said to be learnable just like the physical skills, and once they have been leant, they can impact more positively on athletes who seek to improve their performances in practice or competition games. This thesis will adopt this kind of theoretical approach to assess the individual and team netball players in order to decide whether the changes can influence positive behavioural changes on athletes, based on the athletes' ability, specific circumstances and the sporting environment. According to Cox (2007), adopting a cognitive-behavioural model of MS reflects the areas that related to personal development and subjective well-being of athletes as performance enhancement strategies. It is, therefore, important for this thesis to use this kind of theoretical framework for the assessment of MST intervention strategies for collegiate netball players in Zimbabwe. Several researchers who have used this theory before together with the educational approach to teaching of psychological skills to sporting athletes. Readiness and motivation to engage in MST programmes is either individually based or is team-based. Where the MST is individually based, each player can be monitored on his/her MS in a specific sport like netball.

2.8 Summary

This chapter has provided a summary of the available body of literature on MST. The chapter has looked at the gaps that have emerged in the literature as there is limited research that has been done on netball MS, especially in Zimbabwe, as most studies have tended to focus on a particular

skill in netball, such as shooting. This chapter was able to review the literature related to MST as a strategy to enhance performance. The ensuing chapter will look at the methodology used in this thesis.

Chapter 3

RESEARCH METHODS

3.1 Introduction

The focus of this chapter is to present methodological issues pertaining to how the research study was carried out by mapping the way data were collected and analysed. The chapter looks at data collection procedures and the analysis process. It justifies the way the research study was done to ensure reliability and validity of the results.

3.2 Research Design

This thesis employed a multi-method sequential explanatory design study with multiple phases and approaches that enabled the researcher to explore and evaluate mental skills programmes in selected competitive collegiate netball players in Zimbabwe. A multi-method sequential explanatory design was, therefore, used in this thesis. This design was conducted with quantitative and qualitative data being collected sequentially (Creswell, 2007). Tasharokkori and Teddlie (2003 p.11) define multiple methods as "… research in which more than one worldview of perceptions is used". A multi-method design, according to Morse (2003 p.190), is "the conduct of two or more research methods, each conducted rigorously and complete, which are done in one project and the results are triangulated to form a complete whole". Bazeley (2006) argues that multi-methods research is when different methods are used in parallel or are used sequentially but are not integrated until inferences are made. Therefore, multi-methods combine different types of methods within the same investigation and can be used developmentally with one method being used to inform the next phase (Clarke, 2005). Thus, Phase 1 of this thesis consisted of extraction of strategies and best practices from available literature and this informed the type of questions that

the researcher asked coaches of selected netball teams in this study. Phase 2 involved semi-structured interviews with coaches, and this informed the type of questions the researcher asked netball players in selected netball teams. In Phase 3, players completed the Test of Performance Questionnaire (TOPS) in which data were collected and used to inform the focus group discussions of netball players. In Phase 4, data collected were draw upon to develop an appropriate mental skills training programme to be used in netball.

A Delphi technique is a systematic step-by-step consensus-based method that relies on knowledge from experts (Woodcock et al., 2020). In this research a Delphi study was conducted after a summative report from existing mental skills training programmes was sourced from available literature and from Phases 1 to 3 which had been compiled, and a mental skills training programme was subsequently developed. The programme that was developed was then circulated to five international experts in mental skills training in sports science for their comments. At least three rounds of these consultations were made to ensure that all the comments about the designed training programme were ultimately included and addressed. A final training programme was then designed and recommendations made for its implementation.

3.2.1 Multi-methods

Different research methods look at different aspects of reality and have different strengths and weaknesses, making the findings from the different methods resulting in data reinforcement of each other. In most cases, where multi-methods are used, rarely does one find contradictions. Rather, findings tend to complement each other (Bazeley, 2018). This is what was positive about the methods used in this study. Some researchers have argued that the use of multiple methods enhances the validity of the research study (Meetoo & Temple, 2003). Thus, it is possible for different methods to pick up the same kinds of information that can be placed together from one

unproblematic view of social reality (Meetoo & Temple, 2003). Qualitative and quantitative projects, in this case, are relatively complete but are used to form essential components of one research project (Morse, 2003). Results of the study are not necessarily dependant on each other, although they may still be used to inform the next phase of the research study. Tashakkori and Teddlie (2003) refer to multi-methods as those combinations where more than one data collection method is used together with the associated analysis, but this is restricted within either a quantitative or qualitative world view of the research.

Teddlie and Tashakkori (2003) suggest that multi-methods is actually where the research questions are answered by using two or more data collection procedures or research methods from the same qualitative or quantitative traditions of carrying out research. Teddlie and Tashakkori (2009), therefore, continue to see multi-methods as a combination of several methods which all aim to yield data of the same kind, and thus, can adopt the paradigm that is appropriate for the single type of data being collected. Thus, different methods may be used to verify or cross-validate each other, or even to complement each other. A multi-methods design was chosen for this study to help to explore the different narratives that were used later in the phases of the thesis. The researcher attempted to guard against forms of bias during the process of collection of data. Where a researcher requires self-reflection from the researcher, it was seen as important to look at how to derive data and interpret correctly the findings. In this study, analysing multiple sources of data required the researcher to cross-reference the data sources in order to look for similarities and differences within and between the same data texts.

Furthermore, Hesse-Biber & Leavey (2011) argue that multi-method research strategies normally involve a method in which the researcher uses a set of only qualitative or quantitative methods in a single study. Therefore, multi-method strategies entail the use of a combination of the same

methodological approach, which brings about a broader understanding of the main research question, whilst also observing the richness and complexity of human behaviour. Furthermore, Tashakkori and Teddlie (2003) argue that multi-methods are useful, provided that they give better opportunities for one to answer his/her research questions or objectives and they allow one to evaluate the extent to which the research findings can be trusted and inferences meaningfully made from them. This thesis's research methods combine different qualitative research methods that provide different perspectives of a phenomenon. This type of multi-method approach depends upon four factors namely theoretical perspective, priority of strategy, sequence of data collection and the point at which data are integrated (Hall, 2012).

The strength of multi-method is that one form of the data supports and strengthens the other through cross-validation (Creswell, 2009). That process means that qualitative data was analysed separately from the quantitative data before the databases were combined. Data sets were then integrated and used to develop MST strategies for competitive netball players in tertiary institutions in Zimbabwe.

3.3 Research Setting

Since gaining its independence in 1980, Zimbabwe has witnessed a phenomenal expansion of tertiary institutions offering diplomas, degrees and post-graduate qualifications. From nine Teachers' colleges, two polytechnic colleges and two universities in 1980, Zimbabwe now has a total of thirty-five tertiary institutions, of which fourteen Teachers' colleges, six are polytechnic colleges and fifteen are universities. All the universities, Teachers' Training colleges and polytechnic colleges participate in the competitive Zimbabwe Tertiary Institutions Sports Union (ZTISU) games on an annual basis where they compete in various sporting disciplines like soccer,

tennis, rugby, athletics, basketball, tug-of-war, chess, table-tennis, netball and many other such games. Netball is one of the major events for female athletes.

This thesis was carried out in selected tertiary institutions in Zimbabwe with competitive netball players. Players were selected from the thirty-five affiliated tertiary institutions that are all involved in inter-institutional netball competition games. These include nine state universities, six private universities, eleven government teachers' colleges, three private teachers' colleges and six government technical colleges.

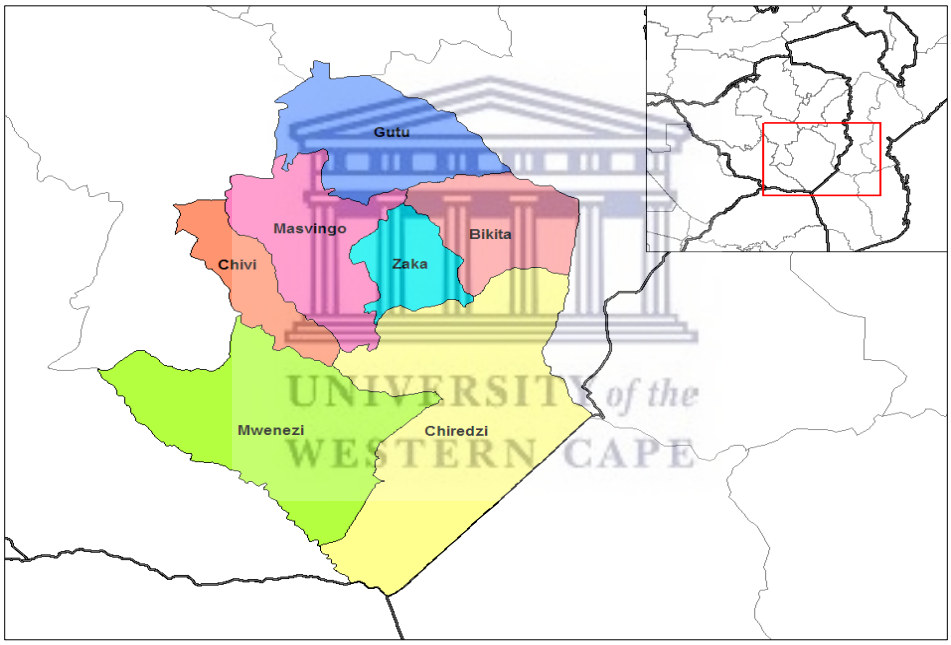


Figure 3.1: Map showing the 7 Districts of Masvingo Province (Surveyor General Office - Zimbabwe)

There are seven districts in Masvingo Province as shown in the map in Figure 3.1 (p.112) and Masvingo is the only district in the province with all the above tertiary institutions, by its nature of being centrally situated. The study, therefore, focused on just this province in Zimbabwe and five tertiary institutions were selected for the study.

3.4 Research Procedure

This thesis used four phases of data collection: Phase 1: Systematic review; Phase 2: Interviews with coaches; Phase 3: Test of Performance Strategies (TOPS) using a questionnaire and focus group interviews for netball players and Phase 4: Development of a mental skills training programme for enhancing sports performance in netball using a Delphi technique. All the netball coaches for the five institutions were interviewed while 50 players from the five institutions completed survey questions. Eight players from each institution participated in focus group discussions. All interviews, focus group discussions and questionnire took place at the institutions in a room carefully selected to be away from any disturbances and participants' identities were not disclosed. It was important for participants to feel safe to talk about the research within a conducive environment where interviews and focus group discussions were private and confidential. The thesis focused on female netball players only who were playing competitive games for their tertiary institutions.

The researcher developed a multi-method research strategy in an attempt to address the minor research questions and objectives of the study. Patton (2002) asserts that the use of multiple sources of data enables the researcher to improve the quality of the data collected as well as that of the research findings. This thesis, therefore, adopted the use of four phases in which one phase informed one or more subsequent phases, all attempting to shed more light on the issues relating to establishing suitable MST programmes in netball. Diagrammatically, the research study followed the steps as shown in Figure 3.2 (p.114).

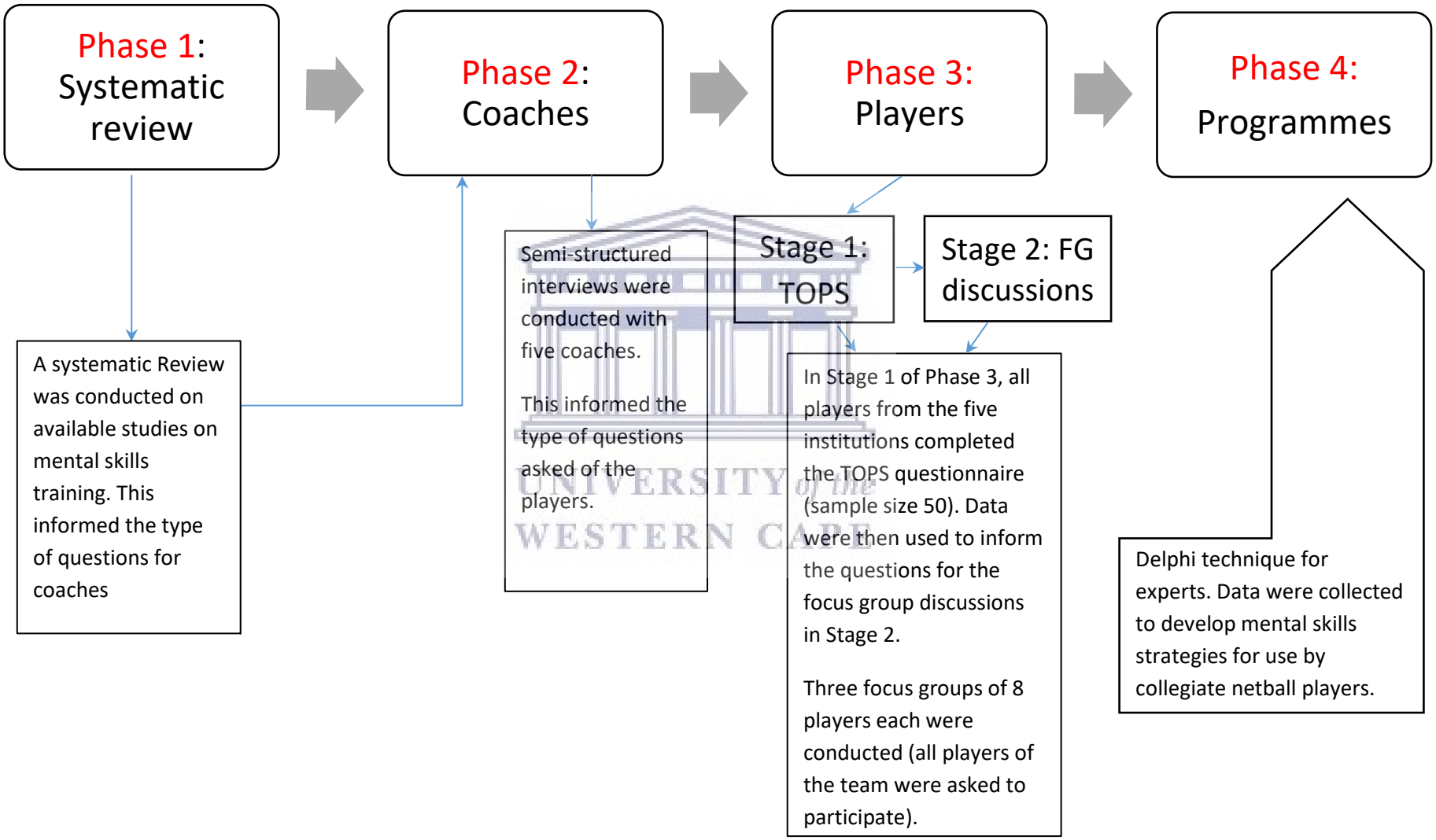


Figure 3.2: Steps followed by the researcher in data collection

3.5 PHASE 1: SYSTEMATIC REVIEW

Objective: Establish, from the literature, successful mental skills training programmes that have been used before in team sports, particularly in netball, to improve the performance of players in competitions.

The purpose of the systematic review in this thesis was to focus on specific MST studies that have been done before and to be guided by the explicit procedures used therein, including semi-structured interviews. The approach was relevant for this thesis because it helped the researcher to ascertain the scope of using the various MS programmes available to ensure the enhancement of performance levels for collegiate netball players in Zimbabwe. The clear research gap identified justified the need for this research study. The review was conducted as a means to find relevant literature that focused on the various MS programmes in team sports, like netball, using a narrative synthesis,. This is a common approach to systematic reviews to synthesise findings that primarily use a textual approach to summarise and explain the findings (Popay et al., 2006; Rodgers et al., 2009). Findings from the systematic review informed both Phases 2 and 3 of this thesis. The systematic review also informed the different aspects to be addressed in the interviews with coaches in Phase 2, and with players in Phase 3. The focus of the review was, therefore, on studies that had looked at the use of MST in team sports, particularly netball.

The systematic review conducted revealed the most prevalent MS used by netball players world wide, and informed the data that were collected in Phase 3. The assessment of netball players in selected tertiary games teams, through the TOPS, tried to establish whether players lacked foundation, mental performance, individual and team skills. Literature from the systematic review also guided the research study on the MS that were being used in netball during both practice and competition games. Only those MS that were prevalent and used the mostwere selected to develop

the appropriate MST training programme for netball players in Zimbabwean tertiary institutions in Phase 4.

3.5.1 Inclusion criteria

Limitations were set to include only those studies that were carried out in English and published between 2006 and 2016 in peer-reviewed journals. Other sources, such as dissertations, books as well as conference proceedings papers, were also scrutinised. The studies used samples of adults, who participated in competitive collegiate netball players and other team sports as well as other competitive players. Randomised studies that reported on MST were selected and included in the review.

3.5.2 Methodological quality appraisal of included studies

Studies meeting the inclusion criteria were assessed within the systematic review period. A methodological quality appraisal tool that is adapted from Roman and Frantz (2013) was used to evaluate the following aspects: Sampling techniques, internal and external validity, reliability, selection bias, attrition bias, selection, allocation in the randomisation process and blinding. If a study fell within the "satisfactory" to "good" category, then it was included in the review.

3.5.5 Data extraction

A data extraction tool by JBI-QARI (Pearson et al., 2007) (Appendix I) was adapted and used in the study. The study also adopted the narrative processes to summarise data findings from the systematic review (Petticrew & Rodgers, 2006). This phase contributed to interview questions that were given to coaches in the next phase.

3.6 PHASE 2: INTERVIEWS OF NETBALL COACHES

Objective: Explore MS utilised by netball coaches to enhance netball players' netball performance in the tertiary games in Zimbabwe.

In this phase, the researcher conducted face-to-face interviews with coaches using both structured and semi-structured questions (qualitative). Kahn and Cannell (1957) defined an interview as. a purposeful discussion between two or more people to gather valid and reliable data that is relevant to an identified research study with research questions and objectives used structured interviews (qualitative) with netball coaches in Zimbabwe. The structured interviews were pre-determined, standardised as well as identical, with the same questions that were written down and answered by all participants. The researcher also held semi-structured interviews on various themes and questions, in an attempt to solicit data from a variety of answers to some questions. The researcher mostly allowed conversations to flow, asking additional questions that further explored issues sought by the research questions and objectives of the study (King, 2004).

Interviews were conducted with five netball team coaches. An interview guide was developed from the information gathered in Phase 1 of the study. Phase 2 determined the various MST programmes that were used by the coaches and this information was then used as the basis for developing a suitable MST programme for the netball players (Phase 4), highlighting the strengths and weaknesses that were identified in the intervention period. The findings of this phase were then used to inform the questions to be asked in the focus group discussions with the netball players in Phase 3.

3.6.1 Population

The population for this study was 35 affiliated tertiary institutions that were involved in the inter-institutional collegiate netball games competitions in Zimbabwe. In total this translated to 35 coaches, one from each tertiary institution. Thus, a total of 5 coaches were purposefully selected and interviewed to explore the type of MS that were previously utilised by the netball coaches to enhance their netball player's performance levels in practice and in competitive games.

3.6.2 Sampling and sampling procedure

The researcher purposively sampled five tertiary institutions in Masvingo that formed part of the core of the study. A total of five coaches were targeted from a specific province of Masvingo and these were then purposively selected from each of the institutions to participate in the semi-structured interview of the study. The selected netball coaches were head coaches in charge of netball teams at each of these institutions in Masvingo. All five coaches were invited to take part in the study.

3.6.3 Purposive sampling for coaches

Purposive sampling involves the use of judgement on sample elements that are typical of the population (Fraenkel & Wallen, 2000). This sampling method is seen as the most satisfactory non-random sampling method for this particular study. Netball coaches were therefore selected for face-to-face interviews because it was felt that they had rich information on the issues of mental skills training programmes. Information-rich cases are those from which one can learn a great deal about the issues that are central to the study's investigation (White, 2005).

Having identified the target population, the next step involved selecting a geographically accessible population to the researcher from each cluster, to minimise costs and to make it possible

to reach the targeted number. Therefore, it was feasible for the researcher to carry out the research in only one district, Masvingo, as this is where all the eight tertiary institutions in Masvingo Province are located. Since the cluster was small enough, the researcher included all five coaches in the entire cluster of netball coaches. The researcher therefore conveniently selected five netball coaches (n=5) from these eight tertiary institutions who were interviewed. The coaches were all informed about the study's research intentions and their informed written consent was obtained.

3.6.4 Research instrument

A semi-structured interview schedule was developed after Phase 1 of the study, and contained open-ended questions, was flexible and allowed the researcher the freedom to probe further and seek clarifications of key concepts (Edwards & Holland, 2013).

3.6.5 Validity and trustworthiness

According to Brink and Woods (2001), qualitative data is assessed based on its trustworthiness or its true value. Validity is "the integrity of the conclusions that are generated from a piece of research" (Bryman, 2008 p.31). Thus, qualitative validity and trustworthiness of data ensure accuracy of research findings using step-by-step procedures which should reflect on the transferability, confirmability, dependability and credibility of the data collected (Guba & Lincoln, 1981, 1982 & 1985). In this study, transferability was ensured through in-depth information that the researcher obtained from participants. Conclusions were then generalised to the other netball players within the whole country. Dependability was made possible in this study through notes that were taken during the data collection procedures and a journal that was kept throughout the data collection period. Findings were then compared to reflective summaries of participants to ensure that correct interpretation of data was achieved. To ensure validity, rich, thick descriptions of data was used to convey the meaning of the findings. Peer de-briefing, checking and validation

was employed to ensure accuracy of the findings and confirmation of transcripts. Participant checks and confirmation of results was done after coding was employed. Credibility was ensured through data reduction and conclusions were drawn based on the findings.

In order to ensure that there were quality data in this study, the researcher established reasonable trustworthiness and the true value of the data by ensuring the following: Credibility through multi-prolonged engagement in data collection and interpretation and dependability was achieved by keeping detailed records of the research processes. Transferability was achieved by producing a thick, rich and detailed description of the methods used in data collection, analysis as well as the setting of where the study was conducted. Reflexivity was another important aspect where the researcher needed to consistently self-reflect to reduce values, perceptions, behaviours and beliefs that were likely to affect data analysis. The researcher needed to accurately portray the phenomenon under study and to 'situate self' out completely so as not to influence the whole process of the study (Lambert et al., 2010). Thus, the researcher took note of her continuous self-examination and self-awareness throughout the study to avoid data distortion. Bias avoided because the researcher was afraid that it could affect the results of the study, and therefore, strove to avoid deviating from the true values of the research, carefully selecting participants to avoided personal beliefs and interferences through peer review and critical appraisal. Conformability was enhanced by bracketing and maintaining a flexible journal of the thesis. Finally, bracketing, where any pre-conceived beliefs and opinions could take place, was identified and put aside.

3.6.6 Data Collection Procedures

As has already been alluded to, interviews were used to collect data for Phase 2. An interview guide was developed, which was based on the information gathered in Phase 1 of this current thesis. The researcher used a semi-structured interview guide to collect all the necessary

information from the identified coaches. The researcher wanted to determine the programmes that were used by the coaches to implement a MST programme for collegiate netball players in Zimbabwe. This enabled the researcher to observe the strengths and weaknesses of the existing MST programmes and eventually strive to address them using suggested interventions in the given period. The findings from this Phase were used to inform the type of questions that were asked to collegiate netball players in Zimbabwe Phase 3.

Coaches were informed of the thesis's intentions and methods and scheduling of the interviews was negotiated with the coaches in that they indicated free slots in their timetables, where they were not committed to their other activities. Interviews were conducted at the interviewees' workstations. The researcher made use of digital recorders during interviews so that transcription of interviews was possible for the analysis phase. Participants were assured that their identities were protected through the use of pseudonyms, to ensure anonymity, and they were asked to sign a consent form to participate in the study and to allowed the researcher to record the interview.

3.6.7 Data analysis

The researcher followed the steps indicated by Creswell (2009). First, the researcher organised and prepared the collected data into different types, depending on the information generated. Once the researcher had made sure that things were done according to step one, then the researcher read through the collected data to gain a general insight into the results and to get a sense of what the data were implying and later, reflected on its overall meaning. The third step involved the researcher collecting the data, transcribing and analysing it by coding the raw data. Coding is the process of organising the material into chunks or segments of related texts before bringing in elements of meaning to the information (Creswell, 2009). Once the researcher had coded all the data, meaningful units were then derived. The researcher made use of the coding process to

generate detailed descriptions of the participants and/or their setting and categories emerging from the data. This fell under step four of the linear hierarchical approach as again suggested by Creswell (2009). Meaningful units refer to the data collected being scrutinised and certain patterns being established in order to answer the research questions or objectives of the study and themes were identified.

Thus, the researcher followed the thematic analysis method to interpret the data. Thematic analysis is described as a method for identifying, analysing, and reporting patterns (themes) meaning from the data. This method also makes it easier for the data that was collected to be organised and described in detail (Braun & Clarke, 2006, 2013, 2019). For example, the thematic analysis is a realist method that reports the experiences, meanings and reality of the participants (Braun & Clarke, 2006, 2013, 2019). All inter-related data was then connected, interpreted and given explanatory accounts that were created to provide their meaning. The next phase involved administration of a questionnaire and the focus group discussions with the netball players.

3.7 PHASE 3: QUESTIONNAIRES AND FOCUS GROUP DISCUSSIONS (NETBALL PLAYERS)

Objective: Explore MS utilised by netball players in tertiary institutions in Zimbabwe.

In this phase, both qualitative and quantitative methods of data collection were used. In Stage 1, data were collected from the Test of Performance Strategies (TOPS) (quantitative) questionnaire and focus group interviews (qualitative) with netball players. The discussion questions used in the focus groups were derived from the outcomes of the interviews with the coaches.

3.7.1 Stage 1: TOPS Questionnaire

Research has shown that those involved in MST normally advocate for use of oral interviews and written psychological inventories when designing programmes to optimise performance (Weinberg & Gould, 2018). An example of such an instrument is the Test of Performance Strategies (TOPS) Thomas et al. (1999), which is a self-reported questionnaire consisting of 64 Likert-scale type questions that can measure eight competition and eight practice sub-scales. The skills consist of GS, relaxation activation, imagery, ST, attentional control, emotional control and automaticity strategies. The TOPS questionnaire is designed to measure these comprehensive psychological skills and techniques used by athletes during competition and practice (Hardy et al., 2010). Questions for the focus group interviews consisting of 8 netball players each, were informed by findings from TOPS in Phase 2 of this thesis.

3.7.1.1 Population and Sampling

The population comprised of students from a cluster of eight institutions. Fifty athletes were given the TOPS questionnaire and there was a 100% return of questionnaires given out, since most were hand-delivered to respondents. It was ensured that the research instrument was clearly understood by respondents. Data collection was unfortunately delayed due to time spent securing a clearance letter from the Zimbabwe ministry to collect data.

3.7.1.2 Methods

Research has shown that those involved in MST normally advocate for the use of oral interviews as well as written psychological inventories when designing programmes that can be used to optimise sporting performance (Weinberg & Gould, 2018). The TOPS sports inventory has been used in previous studies to assess the use of MS by athletes. It allows for comparisons to be made

between existing findings (Williams et al., 2008; Hardy et al., 2002; Gould et al., 2002). The comparisons are inevitable as they allow current research study's results to be explained viz-à-viz similar previous studies that have been done on athletes in different sporting disciplines. This inventory is said to offer good support as an instrument that assesses athletes' psychological mental skills, and hence its selection and use in this study (Fletcher & Hanton, 2001; Gould et al., 2002; Williams et al., 2008). The strength of the use of the TOPS inventory is that it has been frequently employed before in previous research studies to assess those factors that enhance sporting performance in athletes (Gould et al., 2002; Hardy, 2010).

The TOPS questionnaire Thomas et al. (1999) was distributed to fifty (n=50) respondents. On analysis, the researcher felt that the TOPS questionnaire would provide objective data on the capabilities and needs of netball athletes in a variety of psychological domains. It was selected since it has separate scales to measure practice and competitive MS usage. Thus, TOPS is a self-reported questionnaire that consisted of sixty-four self-reported questions that were designed to measure the netball athletes' use MS and strategies. The TOPS questionnaire was used to measure and assess MS usage by netball athletes during both practice and competitions. It consists of seven sub-scales of activation, relaxation, automaticity, emotional control, GS, imagery and ST. Items in the questionnaire were rated on a 5-point Likert scale range from 1 (never) to 5 (always). The TOPS questionnaire assisted the researcher in the identification of primary goals and MS that required to be addressed, use systematic GS as an integral component of a MST programme and consideration of GS as a consistently powerful performance enhancement tool (Burton et al., 2001).

Findings from Phase 2 and ontput from the TOPS questionnaire were used to identify possible areas needing further clarification in the MST programme being used by collegiate netball players

in Zimbabwe at that time. This, in turn, informed the type of questions that were asked during the focus group discussions that were held with the netball players to further explore those matters that needed further investigation on their sporting performance. Furthermore, the findings helped to inform the researcher as to how to get a deeper understanding of certain aspects of MS that were used by players before the research interventions. This was a useful guide in the next phase.

3.7.1.3 Validity and Reliability of TOPS questionnaire

Reliability deals with the consistency of data collected. Reliability of a measure can be obtained if participants get the same score on a measure when the test was repeated (Evans & Rooney, 2011). Thus, results from a research study should be consistent over time, and when using the same instrument, yielding the same results when used with a similar population. For this research, in order to improve reliability, the conditions under which measurements occurred were standardised. The internal consistency ranged from 0.66 to 0.81.

Validity is the extent to which a test measures what it purports to measure. Researcher consistency was maintained throughout the study and the researcher particularly attempted to monitor non-return of questionnaires. Several researchers who have used the TOPS questionnaire found it to have good construct validity and internal consistency, hence its use in this thesis (Fletcher & Hanton, 2001; Hardy et al., 2010; Thomas et al., 1999; Weinberg & Gould, 2003; Williams & Krane, 2001).

3.7.1.4 Analysis of TOPS questionnaire

For quantitative data from the TOPS questionnaire, all data were transferred in duplicate into an MS Office 2010 Excel (version 12) spreadsheet, while maintaining anonymity, cleaned and cross checked. In this study, the SPSS (version 22) software was used with descriptive and correlational

statistics computed. For internal validity of various TOPS sub-scales, Cronbach's alpha reliability coefficients were calculated. using the following: 0.90 = highly reliable; 0.80 = moderately reliable; 0.70 = low. Correlations among TOPS sub-scales were also conducted. Descriptive data consisting of means, frequencies, and standard deviations were calculated for all the sub-scales in the TOPS questionnaire. Statistical significance was set at $p<0.05$.

3.7.2 Stage 2: Focus group discussions

Focus groups are forms of group interviews that capitalise on the discussions between targeted participants in order to generate free data on an issue or aspect of research (Zikmund, 2003). These group interviews are often used as quick and convenient ways to collect data from several people simultaneously, using group interactions as part of the elicitation of information. The aim is to gather valuable information through highly engaging and productive discussions amongst the informants where the information is normally free flowing from the participants (Zikmund, 2003). A topic for the focus group is given in the form of a question and the participants try to provide explanations on the issue concerned. The interactive discussions between participants were recorded to make it easy for the researcher to analyse later (Carson et al., 2001). Participants gave their points of view on issues under discussion as they attempted to answer the questions given to them whilst the researcher recorded their discussions. Rich information was obtained from the participants which was triggered by the free discussions. The researcher acted as the moderator, explaining issues to guide the discussions and inhibiting participants who tried to dominate the discussions, endorsing consensus views (Stakes & Bergin, 2006).

The focus group was selected based on the premise that the data were obtained using a flexible technique involving collegiate netball players who freely expressed their concerns, feelings and ideas. It gave the researcher valuable insights into the netball players' views on different sporting

behaviours, attitudes and ideas with regards to MST programmes. Collective views by netball players were generated from the participants about their sporting experiences and beliefs. Thus, this evidence offered many voices on the same aspect as participants freely expressed their views in a conducive environment. The focus group discussions brought out participants' underlying feelings, attitudes, behaviours and opinions on MS and allowed the researcher to get even deeper insights and meaning of the players' concerns. In this case, the focus group discussions allowed the researcher to elicit the uncommon respondents' perceptions, attitudes and feelings as the players argued against each other. This produced invaluable data at a very reasonable cost. Focus group discussions encouraged self-disclosure from among the participants and allowed the researcher to explore the main ideas that emerged from the respondents using key questions that were discussed. Thus, focus group interviews revealed consensus views of participants as the researcher elicited free responses from participants on MS and their relevance to their sporting performance. The focus group interviews were conducted after individual players had filled in the TOPS questionnaire for the researcher to measure their MS. This enabled clarification of some details which could not be investigated through the TOPS questionnaire.

3.7.2.1 Methods

The three focus groups in this thesis contained about eight subjects per group, which is considered appropriate (Maughan, 2003). In a focus group, the topic must be precisely and clearly defined, since a focus group discussion enables the researcher to record the interactive discussions between participants (Carson et al., 2001). The researcher acted as the moderator, guiding participants to remain focused on the issues under discussion and clarifying some of the issues. Overall, participants had the opportunity to state their point of view as freely as possible and to answer questions to the satisfaction of the researcher, whilst she also captured the data.

3.7.2.2 Advantages of focus group interviews

A focus group discussion is a dynamic and interactive approach that seeks to stimulate participants to discuss something and bring out their thoughts much more freely than would be otherwise possible in individual interviews. Participants are given opportunities to freely talk around the questions that build up towards a certain direction. There could be possibilities of building towards a certain answer simultaneously whilst others in the same group make their own claims on the issue. Again, there are opportunities to clarify issues of conflict between the participants, especially in cases where views of participants may differ (Holloway & Wheeler, 2002). Focus group discussions are useful for exploring participant's knowledge and experiences and can be used to examine not only the way people think, but also what they think and why they think that way. Rich data emerged through interaction within the groups and group members were freely expressed.

Focus group discussions are normally sensitive to issues of cultural variables, making it possible to use in cross-cultural research and work strategies. There are also some potential sampling advantages with focus groups that they are not discriminating against participants who cannot read or write. Focus groups can encourage more participation from those who are normally reluctant to be interviewed on their own or those who may feel intimidated by the formality of interviews or being isolated in a one-to-one interview. Focus groups can encourage contributions from people who mostly feel they have nothing to say or who are deemed 'unresponsive' to engage in discussions generated by other group members.

3.7.2.3 Disadvantages of focus group interviews

The researcher sometimes faced difficulties in managing and controlling discussions among participants in order to remain focused on the issues at hand. This was despite the appeals she

made to interviewees to respect each other's opinions. Introvert participants hardly made their contributions as they were overshadowed by extrovert participants. However, the researcher was able to protect such informants by asking the groups to talk in turns. The group discussion climate mostly influenced the outcome of the discussions and the results. Data recording during sessions was also a problem as the number of participants cutting through conversations was high. The focus group discussions were not replicable as they were a one-off event, and this may have caused validity and reliability to be difficult to ascertain. Data analysis proved to be a daunting task to the researcher as there was a lot of data that was produced in any one such discussion when it was now being analysed (Holloway & Wheeler, 2002). It was not easy to have a proper order or structure for the groups as members made the discussions informal. There was social pressure, individual domination, the Halo effect and social undesirability elements in the discussions. The presence of other research participants could have also limited the issue of confidentiality for those participants who may have felt it difficult to say everything in the discussions. However, the researcher continued to encourage participants to bring out all the issues into the discussion. Such group dynamics may have raised ethical issues, especially when working with 'captive' populations, which may, at times, limited the usefulness of the data for certain purposes.

3.7.2.4 Population

The thesis population included netball players from the 35 institutions of higher learning in Zimbabwe. All 5 institutions are located in the Masvingo Province in Zimbabwe, with each institution having at least one netball team. The thesis's population for this Phase, therefore, was all collegiate netball players who attended any of the institutions of higher learning located in the Masvingo Province. Taking the number of competitive netball players to be ten (10) per institution, this gave a total number of 350 competitive players from which to draw the sample for this study..

3.7.2.5 Sample and sampling procedure

A sample as a small proportion of participants drawn from a population that is selected for observation and analysis (Polit & Tatano Beck 2008; Zina, 2004). An adequate sample should result in some characteristics of the population emerging (Zikmund, 2003). A sample reduces the population to a manageable size, making it easy and possible for the researcher to conduct the study on a smaller number of the population sample (Saunders et al., 2009). The findings of the selected sample can then be used to draw conclusions about the views of the population sample studied (Field, 2009). The sample size influences the findings and how accurately they represent the population (Burn & Bush, 2010). The sample size can also be dependent on many factors such as time and adequate resources to collect the data and to engage in statistical analyses.

Eligible participants with similar characteristics were then identified and both the inclusion and exclusion criteria were clarified. Those included in the thesis were netball players who were registered students and playing netball competitively. All those collegiate students who were not playing netball were excluded. In this case participants included all students who were registered at each of the selected tertiary institutions as forming the netball team.

In this thesis, the sample was chosen from the total number of netball players and coaches affiliated to a tertiary institution in Zimbabwe and who take part in competitive tertiary games. A sample of 50 players for this phase was drawn from the target population of 350 players. All selected players completed the TOPS psychometrics inventory and there was a group that participated in the focus group discussions. It was envisaged that all ten participants from each institution would agree to participate in the study. The focus group discussions in this study contained eight participants from the selected institutions, using cluster sampling.

3.7.3.1 Cluster sampling

The cluster sampling method which was used by the researcher divides the population into discrete groups prior to the sampling (Henry, 1990). In several cases, the sample was taken from a naturally occurring group or a geographical area that is likely to give the researcher adequate information on the research area.

3.7.3.2 Advantages of cluster sampling

With this type of sampling method, it is possible to allocate resources to the few selected clusters. It is possible to have a larger sample size when using random sampling since more subjects can be selected from the cluster (Zikmund, 2003). Thus, generating a sampling frame for the clusters is economical and the sampling frame is often readily available at the cluster level. It is, therefore, cheap, quick and easy to use a cluster sample since it is the most economical form of sampling. There is less time involved for listing as well as implementation. It is considered a suitable sampling method, especially where surveys are being carried out at the institutions. Using cluster sampling methods ensures that the researcher collects maximum data using the face-to-face method within the available resources. The sample may also ensure that the number of sub-areas is maximised to the extent that it allows for more variations in the population within the available resources.

3.7.3.3 Disadvantages of cluster sampling

This method of sampling may not reflect the whole diversity of the population that is being investigated by the researcher (Zikmund, 2003). Other elements in the same cluster might show similar characteristics which would have been different if the other forms of sampling methods were used. This method provides less information per observation than would be the case for the

same size and may result in redundant information that can be similar from the other cluster. Similar characteristics within the cluster may be obtained, making it either over-representative or under-representative of the cluster in terms of its characteristics. Thus, results obtained can be skewed when one uses this sampling method. The method can also result in a high sampling error, which is caused by limited clusters included in the sample, leaving a significant proportion of the population unsampled. Such standard errors of the estimates are considered high when compared to other sampling designs with similar sample sizes. When compared to other sampling methods, the method is least representative of the population out of all the types of probability sampling methods. Similar characteristics within the cluster may be obtained, making it either over-representative or under-representative of the cluster in terms of its characteristics

3.7.8 Qualitative data analysis

For qualitative data analysis, the same principle analysis methods guided by Creswell's model used for coaches was also used here for players.

3.7.8.1 Reflexivity

The primary goal of reflexivity is to reduce the likelihood of researcher bias. Parahoo (1997) defined reflexivity as "a continuous process whereby researchers reflect on their pre-conceived values and those of the participants". It is an "on-going process of self-awareness adopted by researchers in their attempt to demonstrate the trustworthiness of their findings" Kingdon, (2005 p. 622). Thus, in this study, reflexivity was a continuous process throughout the entire study in the qualitative sections where the researcher reflected on her pre-conceived values and those of the participants. For example, reflecting on how data collected may have been influenced by how participants perceived the researcher herself. As such, the researcher reflected on her own actions, feelings and conflicts that she experienced during the research. To achieve credibility of the thesis,

the researcher adopted a self-critical stance to the study, participants, their role, relationships and assumptions. However, it is worth mentioning that reflectivity was not always easy since it affects one's pre-conceptions and this was not always easy to examine. For validation of the data collected, the researcher went back to participants afterwards to confirm correct interpretation of the data they presented. Thus, data validation confirmed and clarified whether any prejudices existed in the participants and the researcher. Parahoo (1997 p.56) states that there are three reasons for reflexivity which that should be considered:

i. assisting the researcher with self-monitoring to spot anything that is going wrong and to correct it,

ii. analysis of data and having a systematic way to analyse large amounts of data,

iii. self-injunction and showing others to believe in the researcher's interpretation.

Reflexivity, therefore, helped the researcher in as much as there was self-monitoring on the part of the researcher throughout the processes of the research, including analysis of data, so that interpretation became credible.

3.7.8.2 Bracketing

Bracketing involves the process of ensuring that the steps that are taken by the researcher during data collection and analysis are warranted and justified (Ahern, 1999). Bracketing is a process that can be used to improve rigour while reducing bias in a research study. In this study, the researcher suspended her own pre-conceptions, prejudices and beliefs on mental skills to avoid interfering and influencing participants' experience. However, Kothari (2004) argues that methodological decisions are never completely free of one's own values. Thus, in this thesis, the researcher avoided

making certain judgements about what she was observing, hearing and remained neutral to all data that were revealed by the thesis.

3.7.8.3 Trustworthiness

Trustworthiness is a measure of quality of a research study, the extent to which data and data analysis are believable, trustworthy and consistent (Lincoln & Guba 1985). Trustworthiness can be established through use of four strategies of credibility, transferability, dependability and confirmability (Creswell, 1998**).** In this thesis, all information that was collected was verified by the researcher to ensure its accuracy and believability by having players listen to recorded sessions while the researcher also acknowledged as a witness. The information collected by the researcher remained verifiable by those participants who were willing and free to look at it and verify it.

3.7.8.3.1 Credibility

Toma (2006 p.413) defines credibility as the accuracy and authenticity of the findings that can be established "if participants agree with constructions and interpretations of the research". This is the extent to which data and data analysis are believable and trustworthy. Credibility can be established through multi-prolonged engagement like participants checking into the findings, triangulation of results and checking for the interpretations and conclusions of the participants themselves by verifying the results so as to increase the credibility of those results (Lincoln & Guba, 1985). This thesis attempted to use the same multi-prolonged engagement process with the participants to check on misinformation and to establish complete trust of the participants and get credible responses. The researcher did this by way of carrying out discussions with the participants, where she explained her history and the concept of the study. She played netball with some of the participants to increase familiarity. It is, therefore, envisaged that participants establish good trust with the researcher to make the results credible. Participants were also given a chance to check

and review the data that was collected for its accuracy and authenticity and for the researcher to make relevant adjustments if need be. This was done by replaying some the tapes to participants for them to confirm transcriptions.

3.7.8.3.2 Transferability

Shenton (2004) sees transferability as concerned with the provision of adequate, rich and thick descriptions of the processes, events and phenomenon that is under study in order to allow the applications to other similar cases or settings and contexts. Generalisability of results is the extent to which one can extend the account of a situation or population to other persons, times and settings other than those directly studied. Findings become transferable and generalisable if they can fit into new contexts outside the actual thesis context (Maxwell, 2002). There is likely to be some subjectivity from the researcher as the key instrument, which may result in some threat to making valid inferences. Transferability may be enhanced by detailing the research methods, contexts and assumptions underlying the study (Seale, 1999). It can also be achieved by providing a detailed, rich description of the settings studied to provide the reader with enough information to judge the applicability of the findings to other settings that he/she knows about. In this thesis, transferability was achieved by identifying the information that is related to the research question and making use of it during the whole process of systematic data coding and storage. Samples that were used in the research study are representative samples of a larger population and could be applied widely in other similar contexts and circumstances.

3.7.8.3.3 Dependability

Merriam (1998) describes dependability as the extent to which research findings can be replicated with similar subjects in a similar context. Dependability can also be described as the process of identifying how the research was planned and conducted, the situations which arose during the

collection of data in the field as well methods of how the data met its goals and objectives (Shenton, 2004). This may be achieved using multiple methods of data collection and analysis whilst providing detailed explanations of how data was collected to allow for an audit trail, if necessary. Merriam (1998) asserts that there are six strategies that can be used to enhance internal validity, and these are:

i. triangulation,

ii. member checks,

iii. long term observation,

iv. peer examination,

v. participatory and collaborative modes of research, and

vi. clarifying researcher's biases, assumptions, worldview and theoretical orientation at the onset of the study.

In this thesis, the researcher ensured that there is dependability by not overlooking situations that could have arisen during data collection while keeping a close check on the different data collection strategies during the whole process of the research.

3.7.8.3.4 Confirmability

Confirmability entails reporting the findings from the participants accurately and not necessarily the predictions of the researcher (Shenton, 2004). On the other hand, Guba and Lincoln (1985) see confirmability as mostly concerned with validating of the data to ensure that the relationship between the results, findings and interpretations is proper and accurate by having them properly substantiated and guaranteed. Confirmability, therefore, focuses on the attributes that are normally associated with data collection, interpretation and analysis. In this thesis, data was organised,

managed and analysed in a rigorous and systematic way that led to the confirmability of the findings. Thus, the degree to which the research findings were confirmed and corroborated by participants was ensured in this research. The researcher ensured that all collected data was well-organised and in a retrievable form so that it could be availed to others to validate it if findings were to be challenged. Achieving this confirmability can, therefore, be attributed to the researcher being able to disclose some of her own biases and beliefs about the topic under investigation (Miles & Huberman, 1994).

The Delphi technique in the next phase was guided by questions from the TOPS questionnaire and the focus group interview questions from netball players.

3.8 PHASE 4: DEVELOPMENT OF A MENTAL SKILLS PROGRAMME

Objective: Develop an appropriate MST programme that could be used to improve MST for collegiate netball players in Zimbabwe.

3.8.1 Population and Sampling

A sample of four was intended for this phase of the study which the researcher was not able to do. Convenient sampling after identifying experts in the area of netball. The programme was done without the input of specialists.

3.8.2 Methods

3.8.2.1 Delphi technique

This is a tool that is used in research for planning short-term forecasting procedures, which include the distribution of questionnaires to the identified set of participants. Responses from participants would be summarised, tabulated and the results, in the form of a second set of questions, formulated and distributed back to the panel of participants to seek clarification in areas of some

disagreement. Generally, completion of follow-up rounds typically takes three rounds with the whole aim of trying to achieve consensus (Williams & Lipport, 2003).

In this thesis, a Delphi technique was meant to solicit group participants' input on the suggested model that was proposed for MST strategies with netball players and coaches to ascertain how they could enhance the sporting performance of the netball players in tertiary games in Zimbabwe. A Delphi technique is known to be a systematic and structured method that uses group communication processes to gather data for the purpose of producing consensus opinions from the participants within their domain of sporting expertise (Linstone et al., 2002). This technique relies on the judgements of a selected panel of participants without coming together face-to-face in one, two or more rounds. For the Delphi technique in this Phase, a set of open-ended questions were developed on specific issues of mental training, which were then distributed to netball experts. Responses were summarised before they were again re-distributed to the same group of participants for the second and third cycles, seeking clarification in the areas of possible agreement or disagreement. Thus, the interaction between participants was repeated until that consensus was reached. All divergent opinions and congruent opinions were then collated and analysed to form group opinions and produce thematic content from the respondents.

The appropriately selected participants, therefore, determine the quality of Delphi results. Valuable information collected from the contributions by the different participants is then used by the researcher of the study to develop an MST programme for netball players and coaches in competitive collegiate games in Zimbabwe. The expert participants can be found through literature searches on published work, even though this could still leave out other authorities who might be knowledgeable in the area of study. Gordon et al. (2014) have suggested that expertise criteria should consider the following:

i) Knowledge and expertise with the issue,

ii) Capacity and willingness to participate.

iii) Enough time to participate in the Delphi, and

iv) Effective communication skills.

Thus, the choice of expert participants, instruments used, and their response rate became crucial for the success of the application of the Delphi technique. Miller (2001) states that the credibility of the Delphi technique relies on its ability to draw on expertise, purposeful selection of 'experts' for inclusion and willingness to make a valid contribution to subject under study. This needs to be emphasized by the researcher in the study. The researcher can therefore deliberately avoid the tendency to select respondents who are easily available and whose reputation is known to her.

3.8.2.2 Advantages of Delphi technique

The Delphi technique recognises and acknowledges the contribution of each participant and their inputs are used to build the next cycle or consensus of the study. Individual feedback becomes available to each respondent about their group opinions, which influenced opportunities to change one's position on the issues discussed based on that feedback. The technique can be conducted in writing and did not require face-to-face interactions or meetings with respondents or online. Responses are made at the convenience of the participants. Each individual participant from whatever background or location, is encouraged to work together with the others on the same issue that under investigation of the study. The technique is freed from any social pressures, personality influences and individual dominance and is, therefore, seen as conducive to independent thinking and the gradual formulation of reliable judgements of the results. The Delphi technique helps the researcher to keep close attention to the issues being investigated and allow many 'expert

participants' to provide a broad range of their views on the topics being covered which became the basis of the study's analysis process. There is a high chance that participants could share information and reasoning during the interactions, which enabled the participants to review, re-evaluate and revise their previous statements considering the comments made by their peers. The technique is thought to be inexpensive (Dennington & Storm, 2011).

3.8.2.3 Disadvantages of the Delphi technique

Reliability, validity and credibility can sometimes be questioned when one uses the Delphi technique in research, especially when responses can not be tracked back to the individual participants, leading to lack of fuller accountability. Information gathered using this technique may only come from a selected group of people within a group, making it less representative in nature. There is a tendency to eliminate extreme positions of views, making a middle-of-the-road consensus difficult to achieve, and discarding the divergent opinions. It is believed to be, at times, time-consuming, labour-intensive and expensive since it relies on the rate of responding from respondents, and thus requires adequate time and the participants' commitment to respond accordingly (Dennington & Storm, 2011). Powell (2003) adds that the Delphi technique may result in the diluted version of the best opinions and requires one to be in possession of good written communication skills. All these observations can also be easily noted by the researcher, making it suitable for the study.

Taylor (1995) believes that a psychological intervention strategy should take into account the following Delphi aspects:

i) physical, technical and logistical demands,

ii) physiological demands of the sport.

iii) Specific needs of the athlete, and

iv) The distinction between mental techniques, MS and mental qualities and then tailor according to their needs

The observations by Taylor (1995) was seen as true in this study, especially in the sense that the researcher selected particular individual players from teams such as shooters in netball (Pates et al. (2003), penalty takers in hockey Smith et al. (2001), penalty takers in soccer Ramsey et al. (2010) and volleyball servers Velentzas et al. (2015). Although individual differences were an important factors when the researcher was dealing with the issue of MS, it was noted that the responses of netball athletes differed from one athlete to another and it was also seen as important to look at these MS in the whole team since players play as an entity and not as individuals in netball teams.

A Delphi study was conducted after a summative report from existing MST programmes from the literature and results from Phases 1-3 had been compiled, and an MST programme had been developed. This programme was then circulated to local and international experts in MST in sport for their comments and input. These experts were purposively identified based on their availability and ranked based on their years of experience and publications in the field. At least three rounds were conducted would ensure that all comments on the programme were included and addressed. The final programme was then designed and recommended for implementation after the input of experts.

3.9 Limitations of the study

Ellis and Levy (2009) posit that limitations in any study are the unintended consequences that impact on the internal validity of a study. According to Thomas et al. (2015), all research studies

have limitations which can be referred to as 'possible shortcomings or influence that either cannot be controlled or is the result of the delimitations imposed by the investigator (Ellis & Levy, 2009). The limitations of this thesis were that if there was a dearth of literature on MST in netball the researcher would focus on other team sports as well. These results were based on tertiary institutions in one province of Masvingo and not based on the whole country of Zimbabwe. Thus, generalisations of findings may not be the situation that obtains in other provinces of Zimbabwe.

3.10 ETHICS

Ethics clearance was obtained from the University of the Western Cape's Research Ethics Committee prior to any data collection (Ethics Clearance Reference Number HS16/6/10). Ethics clearance was also requested and gained from the Ministry of Higher Education and Technology in Zimbabwe. Once identified, participants were invited to be part of the thesis and were informed (Appendix A) as to the research aims and objectives, the reason why they were being asked to volunteer to participate, the importance of their participation and how their input would be valued. It was then explained to them that their participation in the project was purely voluntary and that they were free to withdraw at any time without penalty. Having agreed to participate in the study, they were then invited to sign a consent form (Appendix B) before the commencement of any data collection. Participants were also asked to consent to the audiotaping of interviews and focus group discussions and requested to sign a confidentiality agreement regarding participation in the focus group discussions (Appendix C).

All information was treated with the strictest possible anonymity and the identity of participants were protected through the use of pseudonyms and any personal information was not included in any of the questionnaires and in the reporting of the findings. The names of participants were not recorded on the audiotapes, transcripts, and will not be used in the dissemination of any research

findings. Confidentiality was ensured by conducting focus group discussions in a private setting and encrypting collected data with access to authorised users only. Researcher also stored data in secure systems and information was not shared to unauthorised users.

Participants were given access to their transcribed information to make amendments where necessary or to retract their transcripts. The researcher kept a journal to track and store information from the interviews and focus group discussions. This journal would only be available to the researcher and would be securely stored in a locked filing cabinet for five years before it is destroyed. The rest of the data would also be kept for five years before it is destroyed. Participants were assured that all questionnaires, audiotapes and transcripts would be destroyed after five years. Dissemination of results was guaranteed to participants, both players and coaches, prior to publication of results in journals.

3.11 Summary

This chapter presented the methodology and research design. The multi-methods were used in this study, which was done in four phases. The chapter explained the steps for data collection in this study for all the Phases. Data collection procedures and analysis were also discussed in this chapter. The next chapter focuses on data presentation, and conclusion for the systematic review.

Chapter 4

FINDINGS

PHASE 1: SYSTEMATIC REVIEW

4.1 Introduction

Mental skills training has been primarily developed as a necessity rather than an option for athletes who now need to learn more about their individual and teams MS (Birrer & Morgan, 2010; Gardener & Moore, 2012; Gould et al., 2014; Rothlin et al., 2016; Rothlin et al., 2020). This then allows for life skills to be learn and leads to a considerable increase in the amount of control and coordination of their agility in-game movement after employing different psychological strategies and techniques of performance enhancement. Developing these MS require different sporting psychological methods of realising task performance during training and competition (Gould et al., 2014; Rothlin et al., 2016; Rothlin et al., 2020). These can be divided into two different basic systems somatic and cognitive strategies. Cognitive is the thought process of preventing anxiety and is the mental element of the anxiety management whereas, somatic is the physical element of anxiety management and an element that allows athletes to show their anxiety through actions within their sport (Parnabas, 2014). Somatic is behavioural while cognitive are affective responses associated with stress. Although these two are completely different, the main purpose of having the two systems is to realise the attainment of self-mastery, which is the desire to control or direct the individual athlete. In team sports, MS is utilised as one of the best ways of enhancing team performances.

4.2 Conceptual framework

A psycho-educational model of sports psychology practices informed the systematic review process that was used in this study and is known as the Life Development Intervention (LDI) Model (Danish et al., 1993, 1997). The emphasis of this model is on self-directed change in individual athletes. Thus, individual athletes undergoing MST are expected to be goal-directed and to set the short-term goals that will help them to achieve their long-term goals of performance enhancement. It guides and empowers athletes to understand better what needs to be done to enhance their sporting performances, rather than solely rely on the coaches' programmes. Consequently, coaches may also adopt this model to optimise the learning of MS of their athletes as it focuses on performance enhancement (Danish et al., 1992; Lavalee et al., 2010). Athletes should find it possible to freely transfer or apply their newly learnt MS to their current sporting contextual performances. This process is likely to positively change athletes' sporting performances since it is based on the psycho-educational approach. Afterwards, players are expected to efficiently use their skills to lift team performance through such techniques as GS and ST.

4.3 Research questions

Therefore, this systematic review sought to show support or evidence by systematically assessing available literature regarding interventions that have been successfully done to enhance performance in sport. The primary aim of this section was to review previous studies on mental skills that have been used on sports performance enhancement of athletes for collegiate athletes. The following questions guided the review: What MS strategies have been successfully used to enhance performance in sport? What are the MST interventions that could be used to achieve maximum athletic performances?

4.4 Inclusion criteria

Limitations were set to include only peer-reviewed, full-text studies carried out in English and published between 2006 and 2016 when the researcher completed the systematic review. Additional sources such as dissertations, books as well as conference proceedings papers were also scrutinised and included. The selected studies used samples of adults and especially of competitive collegiate players. Randomised studies that reported on MST were also selected and included in the review. Empirical studies reviewed looked at studies that have focused on the use of MST or psychological skills training. More importantly, the study included studies that utilised both qualitative and quantitative methods, enhancing the validity of the review. In terms of participants for empirical studies, the quantitative component of this review considered studies that had participants who were adults or collegiate athletes from team sports, both male and female. The qualitative component of the review considered studies where the participants were just collegiate athletes. This was to enhance the specificity of the review itself and make sure that the review had dates falling within the review period.

4.5 Excluded studies

Any studies that looked at MS on children or adults with disabilities, were excluded from the review. Besides, studies that focussed on risk sports or studies done before the year 2006 were excluded from the review. Studies with inappropriate and incomplete methods were excluded, including those wth irrelevant age groups. Again, those studies that were not original researches and those with ineligible study sample size were excluded. Those studies that contained text that were not relevant as well as systematic scoping and other reviews were excluded from this review.

4.6 Search strategy

The search strategy was aimed at finding published studies, and in doing so, a three-step strategy was utilised in this review. An initial search was undertaken, guided by analysing text words in the title abstract and the index terms used to describe the article. Additionally, a second search that identified keywords was undertaken across the database. The database search included Ebscohost, PsycINFO and CINAHL, Google Scholar, although some of the articles were denied access and excluded from the study. A reference list of all the identified studies used to identify additional studies was also drawn up.

4.7 Methodological quality appraisal of included studies

Studies meeting the inclusion selection criteria were assessed within the systematic review period. A methodological quality appraisal tool adapted from Roman and Frantz (2013) was used to evaluate the sampling techniques, internal and external validity, reliability, selection bias, attrition bias, selection, allocation in the randomisation process and blinding (see Appendix I p.328). Studies that rated "satisfactory" to "good" category were included in the review. The researcher was engaged in the process of assessing each study using a quality assessment tool. The assessment tool evaluated the following elements using a codified system for each domain with a yes/no question and ratings; study design, population and sample size, measuring tools for data collection and outcome measurement. A total of 2196 potential records were identified from Ebscohost, PsychInfo, CINAHL and Google Scholar. Additional sources were also identified through other sources and these were 120 making the total studies screened by title and abstract 2316. Duplicated papers that were excluded from the study were 240. Articles excluded were 148 and these were excluded from the study due to the following reasons; text not relevant, inappropriate/incomplete

methods, systematic scoping and other reviews, irrelevant age groups, not original research and ineligible study size. Summary of screening articles is in Figure 4.1 (p.148).

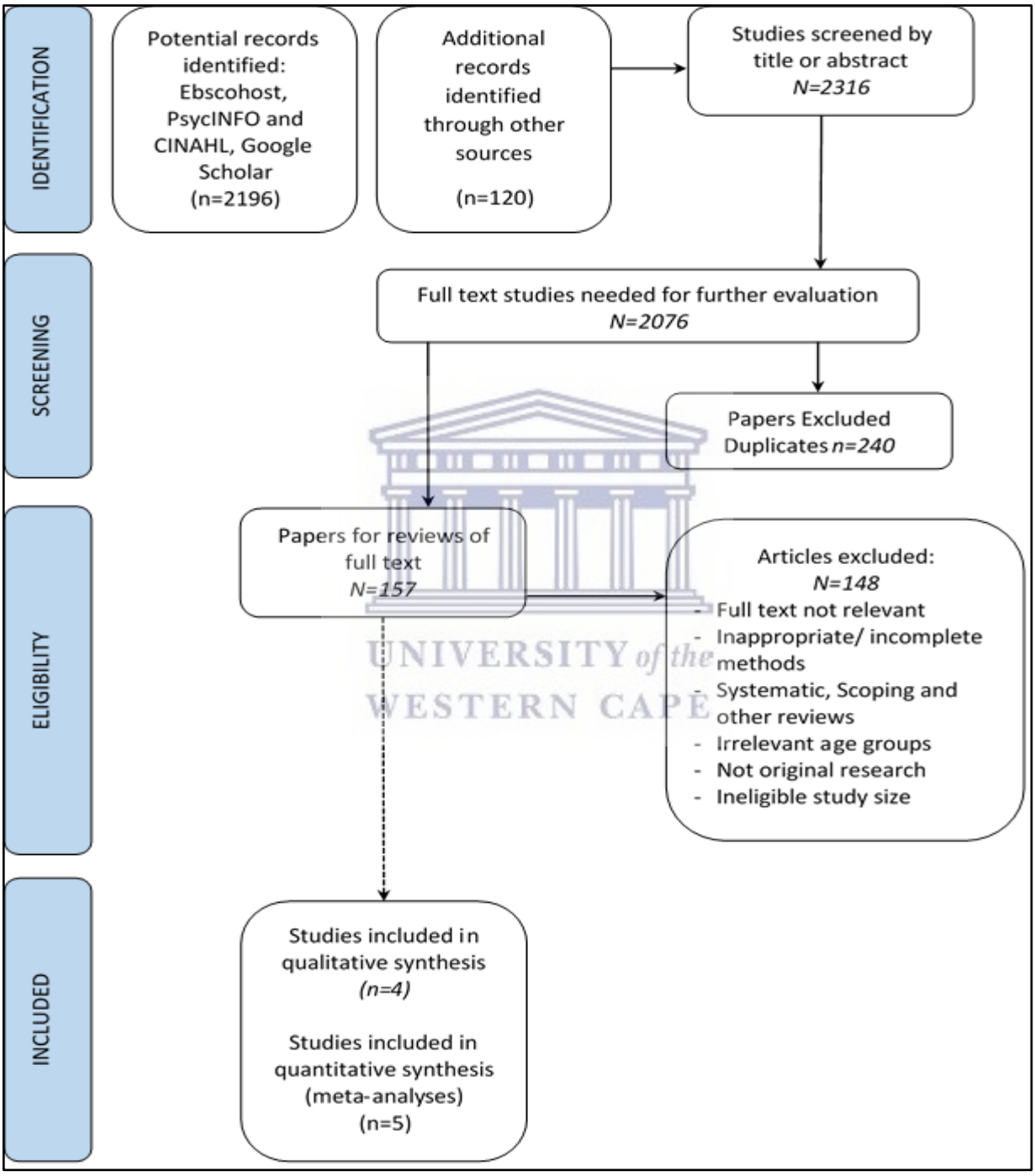


Figure 4.1: Screening of Articles

4.8 Data extraction

4.8.1 Data Extraction tool

A data extraction sheet was designed to identify relevant individual authors, population and sample size as well as outcomes scored and graded in terms of quality Table 4.1 (p.149). The researcher assessed the strength of the current research evidence by using methods established in the Evidence-Based Practice Centers' methods' guide for effectiveness review and comparative effectiveness review. The search was conducted by the researcher who also reviewed the selected 9 articles. The screening process on selected and available databases using key words which were netball, MS, MST, collegiate netball players. Assessments in the methods of extraction were based on consideration of domains that included: field of study, sampling process and design clarity, explicit methods, drop out, ethical consideration and rigorous analysis of data. The researcher determined the strength of the evidence of each study separately and scored it according to a range of poor (0-33%), satisfactory (34-66%) and good (66-99%).

Based on the PICO criteria for this study, with a population of students a total of 9 relevant articles were finally selected from Ebscohost, PsychInfo, CINAHL and Google Scholar as already mentioned before. The comparisons made it possible for the researcher to establish MST patterns by making global comparisons and outcomes.

Table 4.1: Scoring sheet for the critical appraisal

Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	*TS	%
1. Dewiggins, 2012	1	1	1	0	1	0	0	0	0	1	1	1	1	8	61.5
2. Hassan & Saadi, 2014	0	1	1	1	1	1	1	0	0	0	1	1	1	9	69.2
3. Horn et al., 2011	1	1	1	0	1	1	1	0	0	1	1	1	1	10	76.9

4. Krishanan, 2008	0	1	1	1	1	1	1	0	0	0	1	1	1	9	69.2
5. Sadeghi et al. 2010	1	1	1	1	1	0	1	1	0	1	1	1	1	11	84.6
6. Sharp et al., 2013	0	1	1	1	1	0	1	1	1	1	1	1	1	11	84.6
7. Golby & Wood 2016	1	1	1	1	1	1	1	0	0	1	1	1	1	11	84.6
8. Woodcock et al., 2011	0	1	1	1	1	1	1	1	0	0	1	1	1	10	76.9
9. Wadey & Hanton 2008	0	1	1	1	1	1	1	0	1	1	1	1	1	11	84.6
Scoring method (*TS) Total score divided by the number of items															

An extraction tool (Appendix J) using the logical model by JBI-QARI was adapted and used. The study then adopted the narrative processes to summarise data findings from the Systematic Review (Petticrew & Roberts, 2006). Once a study was identified for inclusion, data were extracted and entered a normalised database which looked at two levels. Firstly, the study level variables included the authors, year of publication and site of the extraction. Secondly, the middle-level variables included the age group, case finding and the diagnostic criteria. Utilising standardised forms, the researcher meticulously extracted data regarding the study designs and descriptions of the study populations, baseline and outcome data. This review also captured data on the timing of assessments to inform quality. Principal outcomes of interest included the impact of psychological training on performance levels and the mental skills utilised by collegiate athletes to improve their sports performance. The scoring sheet used for a critical appraisal is indicated in Table 4.1 (p.149).

4.8.2 Results

From the total articles 9 articles that were initially retrieved and based on PICO criteria for this study ultimately 9 studies met the criteria for inclusion in this study Table 4.2 (p.151). details of the results are therefore contained in the discussion that follows.

Table 4.2: Included articles

Author and Date	Study Design	Population and sample size	Instrument	Country	Intervention	Outcome
Dewiggins (2012)	Experiment	Collegiate female track and field	AMSSE	Australia	Intervention	Positive thinking Improved team performance Accelerated team performance
Hassan & Saadi, 2014	Semi-experimental with pre- & post-test	Semi elite n=12	OMSAT-3	Tehran	12 weeks intervention imagery, relaxation, GS, ST & focus training	Intervention had positive effects on foundation, psychomatic & cognitive skills
Horn et al. (2011)	Experiment with pre- & post test	Female college players n=19 Self-efficacy	UNIFORM	Central California	10-week MST Intervention based on the transtheoretical model Combination of GS, Relaxation, imagery & ST 25min classroom lessons weekly	Necessary skills learnt Increased application of relaxation & GS (practice) Relaxation imagery & ST in competition Significantly increased their application of relaxation and goal setting during practice and their application of relaxation, imagery and self-talk in competition The majority applied & utilised skills during practice and competition, No improvement in the athletes' self-efficacy throughout the programme
Krishnan, 2008	Experiment	n=35 elite n=35novice	MIQ-R	India	12 weeks intervention	Imagery is effective in reducing anxiety Imagery significantly improved self-confidence
Sadeghi et al., 2010	Descriptive	8 male University	Interviews	Kuala Lumpur	Face to face interviews	Imagery, GS, ST & relaxation are most needed & associated

		football players				with football performance
Sharp et al., 2013	Descriptive	male n=21	Focus group	UK	MST program profiling GS, ST, arousal control & imagery	Athletes understanding of MS lacking expectations of MS low increased knowledge of MS, aided team cohesion, transferrable to other sport & life
Wadey & Hanton, 2008	Descriptive	Elite athletes n=15	Semi structured interview 4 TOPS subscales	UK	No intervention usage of GS, ST, Imagery & relaxation	Participants maintained the intensity of anxiety before the competition High level of confidence deployed GS, ST, Imagery, facilitated anxiety-related symptoms
Woodcock et al., 2011	Single case study	Female university	Interview Reflective case notes	UK	Intervention	Efficacy of IZOF framework Enhanced skills in emotion regulation
Golby & Wood 2016	Survey 2 group x 3 time two way	Female rowers n=16	SMT-Q PPI-A	UK	6 months intervention ST, concentration, focus, self-confidence, imagery	MT significantly improved. In addition, self-efficacy, self-esteem & positive affect improved

4.9 Discussion

The findings above from the systematic review show that the mental skills that are mainly used to enhance sporting performances of team sports are imagery, GS, ST and relaxation (Horn et al., 2011; Sadeghi et al., 2010; Wadey & Hanton, 2008). Other commonly utilised MS include, among others, energy management, attentional focus, self-awareness, self-confidence, team confidence, cohesion, communication and leadership. However, the use of imagery by team sports was more prevalent in the players as it was utilised in competition settings (Wadey & Hanton, 2008; Krishnan, 2008). In addition to this, the imagery also enhanced confidence, a trait that also enhanced the sporting performance of athletes. Most literature showed that many training interventions had the effect of significantly increasing athletes' application of relaxation and ST during competitive game situations (DeWiggins, 2012; Hasson & Saadi, 2014; Horn et al., 2011). However, there is no indication from this literature of the best practices in terms of MST in a team sport appropriate for any team sport, let alone netball, used in tertiary institutions performance enhancement.

Results from the review are discussed in terms of the need for coaches to educate athletes on the most appropriate ways of enhancing athletes' sporting performance and that these efforts are sport-specific. At the same time, the objective of this review was to locate the best practices in terms of MST. However, the filtered literature focused more on the impact of psychological training on sporting performance and the application on specific athletes. Effective use of the psychological skills is always targeting the cherished goals through certain intervening variables, which also depend on the type of sport. The reviewed articles revealed that understanding of MS was lacking, and the expectation of MS was also said to be low (Sharp et al., 2013). It was further revealed that intensity of anxiety was maintained before the competition, and imagery facilitated anxiety-related

symptoms and effectively reduced anxiety (Krishnan, 2008; Wadey & Hanton, 2008). Again, the review revealed that increased knowledge of MS aided team cohesion whilst the IZOF framework's efficacy enhanced emotion regulation skills (Krishnan, 2008; Woodcock et al., 2011).

Increased knowledge of MS also results in their efficient application, and results from the review revealed that positive interventions had significant effects on foundation, psychosomatic and cognitive skills (Hassan & Saadi, 2014). When MS is learnt, it can be easily transferred and used in other aspects of human life. The duration of interventions can range from 4-12weeks but can be customized to address specific needs of players. The length of training can be moulded by coaches although suggestions are that coaches can be flexible an allow participants to be flexible in terms of duration and frequency (Morgan, 2006; Rothlin, 2016; Rothlin & Birrier, 2019).

The literature systematically reviewed here shows the impact of mental skills training programmes on the performance enhancement of athletes (DeWiggins, 2012; Horn et al., 2011; Woodcock et al., 2011). The use of imagery and positive thinking impacts team sports performance (Krishnan, 2008). Again, Krishnan (2008) also observed that imagery significantly improved self-confidence, which improved the overall performance of competitive players. Other studies similarly cited exposed athletes to varying psychological skills like positive thinking and ST, GS, concentration and routines, arousal regulation and imagery. From these results, what emerges is that athletes' sporting performance is more significant for those who engage in much intense ST than those who do not. Collegiate student-athletes have pressure to perfom well both in sport and in their academic work and these strenuous demands create pressure on maintaining peak physical fitness levels (Ortega & Wang, 2017; Rothlin & Birrier, 2019). Athletes problems arise from discrepancy between individual's capabilities and environmental demands and skills such as problem-solving are taught during MST and they can enable a player to be in a position to solve diverse problems

(Ortega & Wang 2017; Rothlin & Birrier, 2019). Psychological principles can be extremely effective in modifying behaviour and a player can adapt in response to player's specific problems hence their use in sporting activities. As a result, MS interventions tend to eliminate performance problems in athletes. Overall, all these studies showed that MS is a vital aspect of team sporting performance as it impacts the self-concept of athletes and the athlete's sporting performance. Additionally, the imagery was the most utilised skill imparted to athletes during MST, enhancing sporting performance.

The results obtained in this review showed that the most utilised MS in enhancing sporting performance in netball and other disciplines were imagery, positive ST, GS and relaxation (Horn et al., 2011; Sadeghi et al., 2010; Wadey & Hanton 2008). In addition, Horn et al. (2011) further concluded that there was an increased application of relaxation and GS for practice whilst the significant increase in the application of relaxation, imagery, and ST was prevalent in competition. Most players applied and utilised MS during practice and competition (Horn et al., 2011). Thus, from the data assessed in the review, the most popular concepts that have been used for individual and team sports at tertiary institutions are limited to imagery, ST, relaxation and GS. Contrary to Golby and Wood (2016), who concluded that self-efficacy, self-esteem, and positive affect improved during MST, Horn et al. (2011) concluded that there was no improvement in the athletes' self-efficacy. This means that there is undoubtedly a research gap in the potential of designing new MST programmes.

4.10 Conclusion

Results from the review concluded that MST could enhance players' performance when used in a sports setting. This does not matter whether these skills are unimodal or multimodal in an intervention. Ensuring that the necessary skills are learned to increase their application during

practice and competition is necessary. Team performance can be accelerated by positive thinking, and this will ensure that MS is fully utilised and applied by most athletes during practice and competition. These skills included transcended meditation, cue words, autogenic training, among other methods. There are certainly some gaps in the psychological skills being used to enhance sporting performances. It also emerged that the length of MST is not fully utilised and applied by most athletes in practice and competition games. It is recommended that future research focus more on the impact of these MS in team sports and best practices of imparting these skills using interventions. Again, other techniques that enhance performance can also be considered in team sports to enhance cohesion and team building.

Chapter 5

FINDINGS

PHASE 2: NETBALL COACHES

5.1 Introduction

Phase 1 looked at the extent to which MST was used to enhance the performance of their players using a systematic review. The findings from the systematic review become crucial when focusing on coaches and how they use MS tools to enhance their players' performance. This is fundamental to focus on what and how coaches use MST to improve collegiate players' performance. This phase built up from the previous phase and focused on coaches responsible for MST programmes for their athletes. This would help establish practice and look at how coaches could improve best MST. The chapter begins by looking at the profile demographics of netball coaches. Findings are then discussed using themes that came up from the results.

5.2 Profile of coaches

A total of five coaches were used for this thesis, and all of them were full-time lecturers who volunteer to coach various sporting disciplines at their institutions. Details of their profiles are outlined in Table 5.1 (p.157). Coaches were given pseudonyms throughout the research to ensure confidentiality and anonymity whilst maintaining the researcher's beneficence. Their gender was four males and one female, even though netball is predominantly an all-female sport. Their ages range between 25 and 55 years, with at least a Diploma and above. The coaches had at least a coaching certificate in netball and have between 1 to over 20 years of coaching experience.

Table 5.1: Population demographics for Coaches

Pseudonym	Gender	Age group	Education	Coaching Certificates	Years of Coaching
Andiswa	M	Over 55	Diploma and above	Netball/Soccer	Over 20 years
Mirriam	F	35-44	Diploma and above	Netball	1-5 Years
Denzil	M	25-34	Diploma and above	Netball/Cricket	1-5 Years
Simon	M	35-44	Diploma and above	Netball/Handball	6-10 Years
Timothy	M	45-54	Diploma and above	Netball/Volleyball	6-10 Years

5.3 Findings and Discussion

The following categories of themes emerged from the data collected and can explain coaches' understanding of MS, their characteristics and importance. The main themes that emerged from the study were: i) Knowledge and understanding of MS, ii) Mental skills programmes, iii) Promoting use of MS and iv) Building cohesive team. These themes and sub-themes to be discussed are further outlined in Table 5.2. (p.158).

Table 5.2: Themes for coaches

THEMES	SUBTHEMES
Knowledge and understanding of mental skills	Characteristics & Familiarity Importance of mental skills
Mental skills Programmes	Role of the coach
Promoting the use of mental skills	Assisting players to manage stress
Building cohesive team	Improving mental skills

5.3.1 THEME ONE: KNOWLEDGE AND UNDERSTANDING OF MENTAL SKILLS

Thelwell et al. (2008) argued that coaches are sports performers and must, therefore, integrate their own knowledge and experience with those of the players to achieve the best sports performance results. Respondents in the thesis reported various views on their knowledge and understanding of MS, which will be discussed as part of the findings. Netball coaches from tertiary institutions in this thesis indicated that their understanding of MS meant enhancing sporting performance by improving not just the physique of the athletes but also the state of their minds. Andiswa went on to say that this creates a settled state of mind on the part of athletes, thereby increasing their levels of focus and concentration on the game during play. This is in agreement with Gross et al. (2018), who concluded that MST has of late increased and emphasises the increase of focus by players. Mirriam said MST refers to the preparation of the emotional, social and cognitive factors that influence athletes' performance in sport. Responses from participants are in agreement with Halim and Ismail (2016) and Sharp et al. (2013), who see MS as tools that are used to enhance

performance and help athletes to reach their peak performance (McKenzie et al., 2019). When asked about his knowledge and understanding of MS, Andiswa averred that;

> *Mental skills means enhancing performance by improving not just physique but the state of mind. This creates a settled state of mind, increasing focus on the game. Concentration is also boosted during play (Andiswa)*

Also, Mirriam said that;

> *Mental Skills training refers to the preparation of emotional, social and cognitive factors that influence performance in sport (Mirriam)*

Additionally, when probed further, Mirriam added that;

> *Mental skills training refers to preparation of the emotional social and cognitive factors…(Mirriam)*

Therefore, MST is a programme that sharpens the thinking and reasoning processes of players. Mental skills help athletes keep the game in check by encouraging players to remain focused and committed to the game. This agrees with Weinberg and Gould (2018), who state that athletes improve attitude and motivation and failure to focus can affect performance. In short, MST implies creating a positive mental state in the player's mind before and during the game. It also promotes and increases general coordination among team players of players in a netball game and complements physical training (Krane & Williams, 2010; Vealey & Greenleaf, 2010).

When probed further on their understanding of MST, coaches as implementers of training sessions were expected to understand that proficiency and a good grasp of all aspects and requirements for the sport they were coaching and gave various views on their understanding. Timothy further gave the following understanding of MST;

In short it implies a creation of a positive mental focus to the player especially prior to the game (Timothy)

Denzil responded by mentioning the following on MS and stating that;

Mental Skills Training is a training that sharpens the thinking and reasoning of netball players and this is achieved through GS, ST, Team Goals, Imagery (Denzil)

Nevertheless, Simon did not mention skills but saw MST as;

General preparation and co-ordination of players in a netball game. It can also be an enhancement of sporting performance (Simon)

Again, Simon, further said the following on MST;

Keep the game intact i.e. by encouraging athletes to remain focused and committed to the game (Simon)

The researcher further analysed coaches' views on their understanding of MS. Whilst coaches were able to give some understanding of knowledge of MST, the researcher was not convinced that they fully understood MST and an array of strategies that could be used to enhance performance in netball. However, the coaches did not develop several skills, such as attentional control and concentration arousal, which can be used successfully to enhance performance (Behncke, 2004; McKenzie et al., 2019; Weinberg & Gould, 2018). This can raise a flag on the entire understanding and knowledge of MS that the coaches in this study could use to enhance performance. From the participants' responses, coaches struggled to show their knowledge and understanding of MST clearly, and the explanations did not elucidate how this was achieved through GS, ST, team goals, imagery. Goal setting that coaches mentioned is said to be one of the most effective strategies that coaches can use to enhance players' performance (Bueno et al., 2015; Lochbaum & Gottardy,

2015). At the same time, ST has also increased and enhanced performance and should be used during practice and competition (Hatzigeogiadis et al., 2014). Thus, MS are a complex phenomenon, and undoubtedly those who intend to implement them must have a complete understanding of them as they play a crucial role in predicting the success of athletes in order to enjoy their benefits (Anton & Stefanidis, 2016; Arthur et al., 2017; Mathers, 2017; Weinberg & Forlenza, 2012). This could mean that coaches' mental skills could be a possibility as lots of information was expected to come from them. Generally, some understanding was evident, and a few examples were also given, but this does not necessarily show that implementation is efficaciously taking place.

5.3.1.1 Characteristics and familiarity of Mental Skills

Other characteristics are those which minimise anxiety, and these skills generally promote GS, concentration and focus and resilience in the players. In the current study, coaches came up with several views on what they thought were the characteristics of MS. Mirriam explained the characteristics as;

Creating a positive mental state in the mind of the player (Mirriam)

Nonetheless, Andiswa supposed they were;

Promotion of general coordination among team players (Andiswa)

Denzil also came up with the following notion;

Sharpening reasoning processes of players (Denzil)

Coaches should not have scepticism about the benefits of MS. Instead, they need to clearly express their familiarity with MS to teach their athletes during practice sessions easily. Familiarity is vital

as it will help athletes choose the right skills and techniques to use with their players. There is limited evidence on coach familiarity with MS even when they could be explicitly taught with physical skills or spontaneously integrated (Frey, 2007; Olusoga et al., 2014). Therefore, findings from this study are worth mentioning. They agree with previous studies that lack of knowledge about MS for coaches becomes a barrier to improving the performance of athletes through MST (Pain & Harwood, 2004). Previous research has also shown that coaches were generally reluctant to integrate MST due to lack of knowledge, attitude, and presumed irrelevance of MS in sports (Pain & Harwood, 2004).

On being asked about their familiarity with MST coaches had this to say; Denzil said;

> *Characteristics are those which minimize anxiety and these skills are those which promote GS, they also promote concentration and focus and also resilience among the players (Denzil)*

Contrary to what Denzil said, Andiswa explained how these characteristics could be achieved through assessment, GS, pre- and post- competition.

> *For the characteristics to be achieved, the following phases should be followed, psychological assessment and goal setting, psychological skills training, pre-competition, competition and post competition (Andiswa)*

A closer look at characteristics mention by coaches in this reveal concentration, focus and resilience, which was also mentioned by other researchers (Connaughton et al., 2008; Jones et al., 2007; Thelwell et al., 2005). Besides those mentioned by coaches, other attributes result through the use of mental tools such as improved attitude, Krane and Williams (2010), attaining an optimal level of consistency, composure, motivation composure, determination, Brewer (2009) and sports

excellence, Jones et al. (2002). Thus, understanding these characteristics will help coaches identify these attributes that make players reach peak performance. Gould et al. (2008) observed that athletes typically develop psychological skills because of their interactions with coaches and peers. When coaches were probed further for more details, Mirriam responded by saying;

> *Mental skills give athletes a picture of what constitutes technical efficiency in a particular sporting movement such as demonstrations, analysing athletes' videos or manually assisting athletes to master their psychological and psycho-motor skills. (Mirriam)*

The technical efficiency that Mirriam mentioned is not related to MST, and such a coach may face challenges when implementing MST. However, it encompasses part of the overall training and preparation of athletes.

When probed, Simon expressed that;

> *The athlete can mentally rehearse the movement patterns and learn to transfer to other sporting activities (Simon)*

Furthermore, on characteristics, Timothy remarked that;

> *These help the athlete to perform better and feel appreciated in the team (Timothy)*

From findings in this thesis, it emerged that MS characteristics, if not well understood and taken care of by coaches, as is evident in this study. Coaches can fail to give their athletes quality exposure, but true to conclusions by researchers, there is a paucity of understanding of MS coaching and their understanding (Author et al., 2017; Harwood & Woolway, 2015). Failure to fully understand MS and other cognitions and ambiguity of tools and their characteristics may fail to assist players to perform better under pressure (Moore et al., 2018; Paquette & Sullivan, 2014).

When asked, Simon responded by saying that;

The athlete could mentally rehearse movement patterns and transfer to sport setting. (Simon)

Meanwhile, Timothy went on to add that;

……these helped athletes perform better whilst being appreciated by teammates. (*Timothy)*

Finally, Mirriam responded by saying that;

Mental Skills built confidence and helped players to focus on the same goal. they reduced anxiety and made athletes resilient whilst they also promoted the physique. (Mirriam)

5.3.1.2 Importance of mental skills training

MST is important as it brings about athletic success, especially when conducted under a supportive environment (Hardy et al., 2017; Sarkar et al., 2015). It was important for coaches in this thesis to show understanding and the importance of MS to effectively and efficiently implement them to their players. Coaches came up with different views on the importance of MST Andiswa responded by saying that;

Mental skills apply to most games, especially netball which is a crucial game where players need to operate to the best of their ability, with advanced techniques (like goal shooting and defending) this is likely to facilitate winning matches (Andiswa)

Furthermore, the same coach added that players needed to perform at their best to facilitate winning matches, and in order for this to come to fruition, there was a need for proper guidance. This is in agreement with findings by Lyle and Cushion (2017) who concluded that coaches in charge of sporting experiences should guide them in all aspects, including the psychological aspect.

As for Mirriam, she felt that the importance of MS was that;

> *They build the athletes confidence and promote athletic growth…..Players can therefore feel encouraged to continue to play…..Encourage players to come for training sessions instead of practicing before competitions….. Very important to any game and helps players to be together (Mirriam)*

Denzil felt that;

> *Mental Skills are very important in netball because these are the ones that reduce anxiety and they make athletes resilient and they will be able to play throughout the stipulated time….They promote the thinking they also promote the physique in example. the physical wellness, and social stability among players…..(Denzil)*

Furthermore, Denzil went on to say;

> *It also promotes the coordination among team players (Denzil)*

Mental skills apply to most sporting games like netball, where players need to play to the best of their ability using advanced techniques like goal shooting and goal defending. This facilitates increased sporting performance levels, especially when coaches have confidence and knowledge of MS and its importance and implementation (Callow & Hardy, 2001; Paquette & Sullivan, 2012). Therefore, it was important for coaches to ensure that they build players' confidence through correct selection and use of MS (Collins et al., 2016; Savage et al., 2017).

Simon commented that MS;

> *Help team to win, encourage each other before the game, help to have oneness (Simon)*

Furthermore, Simon commented that;

They are very important in the sense that they actually mold the player into the character that is unique. They help the players get away from the immediate environment…..(Simon)

On the other hand, Andiswa said;.

Mental skills also help the athlete cope with the ups and downs of the game (Andiswa)

Timothy felt that;

They help athletes to always remember to keep meditation on their games…It helps the players to concentrate on the game……It is the effectiveness of changing the mindset of the players, that's the most critical…(Timothy)

Furthermore, Timothy also said;

To induce confidence a sense of superiority when you effectively use them….(Timothy)

Findings from the present thesis show that anxiety and resilience are critical to tertiary education netball players in Zimbabwe because of their ability to reduce anxiety and increase resilience in athletes in the stipulated playing time. This also agrees with findings from Fletcher and Sarkar (2012) who concluded that resilience affected the optimal performance of athletes and stressors like inadequate preparation and relationship problems (Thelwell et al., 2007). Mental skills were seen to promote positive thinking in as much as they also promoted players' physical wellness and social stability among other players and removed barriers to excellence (MacNamara et al., 2010). Mental skills were believed to be important because they moulded the player's unique character whilst helping players get away from their immediate environment and keep meditating on their games. Goal setting, relaxation, energising and imagery, and other MS were key to improved sporting performance as long as they met the demands of athletes (Dugdale et al., 2012).

Hatzigeorgiadis et al. (2014) also concluded that MST increased the players' confidence while it controlled and enhanced sporting performance in athletes. One of the coaches indicated that he promoted strategies to ensure that athletes achieved their set goals.

Andiswa said that;

> *Goal setting is critical in the development of players' sporting growth and development…promotes strategies to ensure players achieve what they set out to attain (Andiswa)*

While Denzil expressed that;

> *Mental skills training promotion is critical in reducing anxiety. Self-talk was found to be crucial since it controlled the player's realisation of goals set to perform better during games. (Denzil)*

Mirriam pointed out that;

> *I sit down with my players to discuss and agree on the targeted goals for competing. I also discuss misconduct by netball players (Mirriam)*

Recent research has shown that ST improves the sporting performance of a player (Hatzigeorgiadis et al., 2014; Theodorakis et al., 2000). Furthermore, findings indicated that promoting physical, emotional and social wellness in combination with MST was again seen as critical in the present study since it enabled athletes to achieve the set goals. Thus, all the MS are critical because an athlete is incomplete without either of them. However, the coach did not explain MS's implementation to cater to the players' inadequacies to reach their peak performances. Coaches pointed out that netball players were expected to be exemplary in their play, and determination to win matches was emphasized without describing how this would be realised on the court. Mental

skills help athletes perform better, especially if they develop the suitable characteristics that will make them mentally tough, resulting in reduced limitations and improved attitudes, coping skills, and confidence and emotional control (Sarkar et al., 2017).

5.3.2 THEME TWO: MENTAL SKILLS PROGRAMMES

Mental Skills Training programmes are now most utilized by coaches to enhance players' athlete performance and cognitive behaviour (Brown & Fletcher, 2017; Gustafsson et al., 2017; Williams & Krane, 2001). However, stigma on the part of coaches sometimes become an impeding factor in the successful implementation (Wrisberg et al., 2012). Coaches can incorporate MS in training for performance enhancement. Generally, lack of proper and adequate knowledge on athletes can negatively affect performance in all sports hence the need to have proper MST programmes for competitive athletes (Davidson & Trewartha, 2000; McKenzie et al., 2019). When coaches were asked questions on MS programmes, and their implementation, Andiswa responded by saying;

> *Effective mental skills programmes focus on competency, capability or ability level, which is complemented by a procedure/technique or drill…..Before competition is reached, the performer must be willing to do the drills set and finish each one completely, as well as aiming to improve their performance….(Andiswa)*

Findings show that before an athlete is involved in competitive games, there is a need to be assessed in terms of MS before receiving training and aims to improve their practice competitive performances. This suggests that the athlete coaches can consider GS in the context of the current selected skills and techniques to play the sport in agreement with several researchers who concluded that goal-setting enhances player development and goal attainment in various sports (Barwood et al., 2015; McCommick et al., 2015). All this enables the individual athlete and the

team to perform more effectively in their sport. For this to be achieved, the following phases should be followed: psychological assessments and GS, psychological MST in pre-competition, competition and post-competition periods.

Mirriam pointed out that;

> *They give an athlete a mental picture of what constitutes technical efficiency in a particular movement such that the athlete can mentally rehearse the movement patterns and learn to transfer them into practical movement. e.g. demonstrations, showing the athletes videos or manually assisting the athlete to master the skills…(Mirriam)*

There is no doubt that understanding of the programmes and what is expected is limited, judging from responses from Mirriam. This might mean that the coach also needs to understand MS programmes and how they can be implemented to competitive collegiate players. When asked to specify the MS she used on her players, Mirriam said

> *I used stress commitment and confidence-building using positive self-talk and imagery which I thought are useful to inculcate accurate passing and visualising successful performances. (Mirriam)*

Mirriam further pointed out that;

> *I hold meetings with my netball players to set goals and ensure their achievement during practice and competitive games. I also personally use videos of previous games and demonstrations to prepare her athletes to improve both mental and physical skills. Furthermore, I use group tasks to promote teamwork, whilst at other times I sometimes use personal and team rewards to motivate them. (Mirriam)*

Denzil expressed that;

During the off-season, I engage my players in minor games to maintain high fitness levels and keep the team glued together whilst continuously reminding them of the task ahead of them. (Denzil)

Again, Denzil was also of the view that;

I normally use GS and ST when doing my MST programmes through a combination of any of the two as this enabled individuals and teams to perform effectively. (Denzil)

Andiswa articulated that;

.....this suggests goal setting in the context of skills and methods which will enable individuals and teams to perform effectively....(Andiswa)

Mirriam suggested that;

They help the athlete feel appreciated in the team....They motivate me to want to participate in team activities and games...(Mirriam).

Timothy pointed out that;

To induce confidence a sense of superiority when you effectively use them....The other one is they induce oneness and a common goal among participants both in good times and bad times and it makes them include their adversaries (Timothy)

While Denzil suggested that;

I also help them to use ST because ST before the match empowers/encourages them to reduce anxiety (Denzil)

Simon pointed out that he resorted to pep talks or inviting outside coaches to help solve problems encountered by the players as women with unique personal and family requirements. Furthermore,

he said he held such discussions with individual players and in focus group discussions, especially after a session or game.

> *Training sessions, pep talks before start of the session and try to solve personal and family issues affecting women ….Call outside coaches to help in problems that might be encountered by a girl child (Simon)*

All coaches agreed that they held physical drills with all players and sometimes involved their players in minor games to identify their skills, concentration levels, reaction time, and time openness. Additionally, coaches highlighted that there were always some challenges when the female netball players were on their monthly periods. One such case was a player expressing that she did not want to play in the presence of family members and her boyfriend. Another coach said there were problems with having supporters and players not travelling together in the same bus or mode of transport. There was a link between players' motivation to play and the supporters during competition games.

Andiswa reported that he:

> *….normally focused on the psychological needs of the individual netball performers in both practice and competition sessions. The same coach further reported that goal setting was one such aspect that the coach found to be key to setting the right MS situation for the team. (Andiswa)*

Mirriam went on to explain that:

> *I usually planned and followed a macro-cycle in each phase of the periodisation cycles of netball play. (Mirriam)*

Denzil explained that;

I usually sat together with the whole team trying to empower the players with relevant MS before and after a game. This was done by having the coach and players together setting their goals. (Denzil)

Denzil further observed that:

I allowed my players to set and attempt to achieve those goals. (Denzil)

Simon resorted to:

...calling outside coaches to help in problems that might be encountered by a girl child and the same coach further explained that he also held self-talk with individual players because it empowered/encouraged players to aim to perform better by reducing anxiety and increasing their skills in the game. (Simon)

Mirriam explained that;

I normally drew up a coaching plan with notes on what to say, what to emphasize and what to demonstrate. (Mirriam)

Timothy reported that;

I concentrate on elements of defending, passing and other player activities such as river/bank or rabbits and rats. (Timothy)

Again, Andiswa mentioned that;

I expose them to activities that improved their concentration and also taught them proper pressure handling through relaxation this was only mentioned and there were no details on how the coach made this possible even when probed further. (Andiswa)

Furthermore, Andiswa further commented that;

I focus on the needs of individual performers first and emphasize importance of both practice and competition sessions (Andiswa) Goal setting is also another aspect l find key to planning mental skills with my team. (Andiswa)

I usually plan and follow a macrocycle and in each phase of the periodization cycle. (Mirriam)

We usually sit together with the team and when we sit together l would be trying to empower them with the skills…I would be trying to help them set their own goals…They will strive to achieve those goals….(Denzil)

Concentration then also teach them handling pressure relaxation (Timothy)

During off-season players must maintain their fitness and also keep together as a team….(Simon)

l actually have a plan, l draw a plan to say what l am concentrating on in this game, or defending and passing such things as river/bank, rabbits and rats…They concentrate and that helps a lot during practice session…Shooting is a marginal skill so l make them do coordinating games like chasing the ball. (Timothy)

This shows that the coaches are not aware of how they can promote MS. River/bank or rabbits and rats techniques mentioned by Timothy have nothing to do with MS promotion. This can just be a game that may assist players in remaining alert, and one wonders if such a game may contribute towards enhancing the MS of players. The games only make players concentrate more on physical play, and coaches believe this usually helps players during practice and competition game sessions. For enhancement of shooting skills, which is a marginal skill, the coach said he normally engaged

players in games that helped coordinate positioning, passing and receiving the ball. All these are not promoting requisite psychological skills in the players.

5.3.2.1 The role of the coach

The coach plays a vital role in athletes' performance to ensure that they shape players' environment so that they become successful. The coach needs to help athletes achieve peak performance levels and reach their potential (Harmison, 2011; Hyun-Duck & Cruz, 2016). When coaches were asked on their role Andiswa highlighted that;

> *My role is to ensure that whilst l emphasize on the physical and technical aspects during training….l also look at the mental aspect at individual and team level through goal setting, self-talk imagery and other mental skills that will ensure players will not lose focus during the game. (Andiswa)*

Mirriam further explained that;

> *My principal role in skill development and being practically being involved in coaching…I facilitate the social and emotional aspect of the team and individual through the tasks that I assign the athletes. (Mirriam)*

Furthermore, Denzil also indicated that;

> *l have noticed that my role is to guide my players and to empower my players with training skills, also help them to reflect and indicate where they are having hardships or where they have their weaknesses as a team or individuals and also feedback….(Denzil)*

Consistent with Denzil Timothy reiterated that;

My biggest role is that l am simply a guide….The rest that you do would under a maturity, independent and assertive players……Role model /relationships to stay together….It must not be a punishable offence to have a phone ringing…..(Timothy)

Whilst Denzil further explained that;

I can encourage them to give feedback after each training session or after each game which we might have played with other team…They are encouraged by what the coach says. They can improve their play if their coach encourages them. (Denzil)

Coaches seem to be aware of the importance of catering for the social and emotional development aspects of individual and team performances through the psychological realisation of the tasks assigned to the athletes. This will also help coaches manage athletes' motions (Cowden et al., 2014; Friessen et al., 2016). Moreover, ensure that coaches adequately cover the mental strategies required to increase MS awareness in the netball players. Both Timothy and Denzil agreed that they were simply guides and made strides to ensure they empowered players with the requisite skills. Timothy further said that the rest of the players depended on their maturity, independent and assertive players and hoped players used him as their role model. Denzil added that coaching netball was more about pin pointing where players were having challenges or weaknesses as a team or as individuals and provided the necessary feedback after training. However, Denzil was not clear on what form the feedback should take and how this would strengthen the MST needs for the athletes, although giving feed ack is consistent with findings from previous research (Pensgaard & Roberts, 2002). It seems coaches are not very clear about it. Denzil could only say that he gave feedback to the players and encouraged them to note their weaknesses and soft play.

Denzil could only mention that his most prominent role was to guide the players while the rest of what the players did was based on their maturity, independence and assertiveness. This was in

agreement with Timothy, who also felt he was just a guide. Coaches need to maintain a dyad coach-athlete relationship as this will guarantee the successful development of MS by the individual athlete (Cowden et al., 2014; Weinberg et al., 2011). Therefore, coaches have a role to make sure that they give their athletes a chance to achieve their goals and value their players to aggression (Arnold & Sarkar, 2015; Beardly & Kavussanu, 2009). Coaches can also acknowledge desirable behaviours from their athletes and avoid favouritism as it can create problems in the relationships (Gearity & Murray, 2011; Keegan et al., 2009; Keegan, 2010; Norman & French, 2013). Coaches were eager to maintain a good relationship with players as they felt it was vital to their coaching success. This was good as healthy relationships between coaches and student-athletes bring about positive developments during practice and competition.

5.3.3 THEME THREE: PROMOTING USE OF MENTAL SKILLS

There is a need for all players to be treated fairly and equally without any favouritism or unprofessional behaviour by the coach (Norman & French, 2013). This is meant to gain players' acceptance and commitment to the sport. The coach needs to listen to the players' plight and requirements that are consistent with the promotion and development of missing critical skills in the players. The coach must open and encourage good lines of communication between himself/herself and the athletes. This continuously improves the court productivity by players as they will become encouraged to perform better and minimise making errors during practice and competition games. The coach must keep the team together and focused on the essential tasks to lead the team and individual players towards higher performance and greater attainment of set goals. The set goal must always be realistic and achievable to keep players focused and motivated towards their achievement.

Mirriam reported that;

The most effective way is to be practically involved, evaluating every strategy used to ensure their effectiveness and to involve athletes in numerous friendly matches. (Mirriam)

The most effective way of teaching the MS would have been to become practically involved with the athletes. Coaches should thus evaluate every MS strategy for each netball player and use this to ensure the skills are effectively imparted to the players with their full knowledge and involvement during practice or competition matches. This coach was not doing this during practice training and in pre-competition.

Andiswa felt that;

Concentration, and use of well-known persons who also play the same game of netball play a big role as they can help players to be motivated. (Andiswa)

Simon suggested that;

Watching other teams play the game of netball can also encourage them to play well. Ask those who know mental skills to help. (Simon)

Watching other teams play and asking those who knew MS to help during practice sessions produced positive results. This sounds like an admission that the concerned coach was not well-versed with MS to implement them effectively.

Furthermore, Andiswa had this to say on promoting the use of MS;

Post-competition evaluation will also make my players look at failures and good experiences and turn obstacles into strengths together as a team. (Andiswa)

5.3.3.1 Assistance of stressed up players

Coaches generally need to be clear on their role in assisting stressed players and be committed to the team to produce the most favourable performance results. This is because self-regulated athletes are said to perform well compared to stressed players (Balk & Englert, 2020). When asked what they did to assist their netball players to manage stress and promote MS use, Andiswa responded by saying that;

> *l encourage players to regard their anxiety as facilitative so as to help them cope with anxiety….. That way l feel my players become mentally tough as they relax…..I also emphasize on positive comments during sessions whilst l emphasize on them improving their mental frame and know how to react in case of defeat. (Andiswa)*

Timothy agreed with Andiswa by mentioning that;

> *I manage stress, those who are not friends/opponents are paired to drain their stress. Game/social difference…..Might be difficult to play whilst mother is in hospital to develop serious positive attitude. (Timothy)*

Generally, stress narrows one's focus and negatively affects athletes (Hanton et al., 2009). Coaches in the study also agreed that anxiety has to be facilitative if athletes perform well during their competition. Thus, stressed athletes need to be identified and helped accordingly to handle adversity and reduce inevitable pressure by setting realistic, achievable goals for each game (Gilbert, 2017; Harwood et al., 2004). Coaches can therefore reduce stress and anxiety by helping athletes overcome fear and help them self-regulate. Consequently, incorporating the CBT by coaches will help athletes deal with all destructive thoughts and emotions hence handle any threats to their performance (Birrer et al., 2019). Coaches can also help athletes focus on controllable

attributes, thoughts, and behaviours that can influence performance to avoid suppressing their inner experience during competition (Hardy & Oliver, 2014; Hayes et al., 2012; Van Raalte et al., 2016). Coaches can teach players to handle adversity through self-awareness, self-focus, mindfulness and stress exposure training to manage stress and anxiety during the competition (Birrer et al., 2017; Driskell et al., 2014; Hayes et al., 2012).

In some cases, coaches failed to deal with players 'social issues at home, which contributed to increased stress levels of the netball players. This is common because, in some cases, collegiate netball players are married, mothers, wives and family people. Although all participants were single in this study, this does not rule out other problems they may face that may cause stress as they are also student-athletes. The background of being a student-athlete brings with it many psychological challenges. It would require a robust training programme to help the players to focus on their play. To promote the use of MS, Mirriam explained that she encouraged her players to talk to each other about their anxieties as facilitative to help them cope with anxiety. However, what was striking as an omission was the coach leaving everything to other players and not becoming involved in reducing the stress levels for his players. It appeared to the researcher that some coaches were using pedestrian strategies to deal with netball players' professional challenges. However, players cannot become mentally tough and relaxed by merely talking to their colleagues about their challenges that affect their performance levels.

Mirriam responded by saying that;

> *I let them watch videos of their opponents in play Players work on watching of videos of their impending opponents' previous games so as to see their strengths and weaknesses and capitalize on them…. (Mirriam)*

Andiswa also said;

Use of imagery, ST and other MS is promoted during practice. (Andiswa)

While Denzil agreed with Andiswa and said;

They do GS and ST because ST helps them to minimize anxiety and also team goals is very critical to assist these players to manage their stress because they will know their goals and they have to tell me how they think they are going to achieve these goals. (Denzil)

Simon indicated that;

I use team goals to assist players to manage their stress and encourage them to use GS and ST to reduce stress. By counselling them through the coach, captain, teammates… (Simon)

Timothy emphasized that;

I identify good players and help them assist each other to work on their strengths and weaknesses…. Quarters that are most critical in netball are 3rd quarter as it decides on winner. (Timothy)

Again, Timothy also mentioned that;

I am not a dictator and as such, I emphasize openness in players and that players were also encouraged to take note of quarters and always consider the most crucial quarter in a game of netball. (Timothy)

Simon also simply said that;

By helping them to play their game well all the time. (Simon)

Thus, coaches do this to see their next opponents' strengths and weaknesses, hoping to capitalise on the crucial information. However, looking at these comments from coaches, the researcher concluded that this does not improve players' mental skills but instead focuses on the tactical

aspects of the game. A competitive edge over opponents can only be conceivable if players improve their mental capabilities to complement their physical and tactical training (Vealey & Greenleaf, 2010; Weinberg & Gould, 2018; Williams, 2010).

Andiswa observed that;

> *Pre-game routines have a significant role in performers as l find them helping performers focus and perform at greater levels. (Andiswa)*

The coaches should explain how critical MS are to the players to adopt a coaching philosophy that will enhance performance (Carless & Douglass, 2011; Robins & Judge, 2009). Before players engaged in final competitive games against other collegiate netball teams, they needed to be motivated to adopt MS, which can be used more in competition (Hays, 2006).

Denzil said;

> *Normally l do this through training and practice and l also do this during pre-competition with my players…..Before we engage in final matches with the other teams we normally have pre-competition also encourage them to do well and relax. (Denzil)*

Denzil added that he held pre-competition talks with the players, encouraging the team to perform well and relax. However, Denzil admitted that there was no attempt to emphasize the personal routines of the players and prepare them well to be ready for the matches, outlining how to manage personal stress.

Simon reported this about players;

> *They must use game situation to practice skills…..They must have guidelines from the coach. (Simon)*

Mirriam indicated that;

> *I expose my players to competitive environments in practice sessions by arranging friendly matches and watching videos of their opponents…(Mirriam)*

Mirriam further said;

> *I expose them to friendly matches and competitive environments in practice sessions….. I psyche them up…(Mirriam)*

Simon emphasized that he encouraged his players to;

> *…practice with teams that are stronger than them. (Simon)*

Timothy said he emphasised having a positive mindset for all the players without singling out individual comments since individual athletes may be dealing with psychological issues affecting their concentration (Fortin-Guichard et al., 2017). Even though such a strategy does not necessarily fully improve the players' mental frame and prepare the players to react accordingly in-game situations.

> *It is the effectiveness of changing the mindset of the players, that's the most critical…(Timothy)*

Mirriam added that there were times when she also let them watch any videos of netball play and not necessarily of their opponents in play since she said at tertiary games, it was hard to film play for any team, let alone all the teams. Mirriam further gave this as one of the challenges of coaching netball players in Zimbabwe. Denzil explained that he sets goals and engages his players in ST before and after a match to minimise anxiety and improve team performance, something he thought was critical to managing stress in the players.

On being probed further by the researcher on how this was done, it became clear that there was no clear coaching plan used and followed. Denzil seemed to understand that GS and ST were essential values and strategies that can be used to improve play and performance in netball players. However, Denzil was not clear about how this was done to realise the professional benefits to the players. It occurred to the researcher that perhaps netball coaching was being done unprofessionally at the tertiary level. This gave the researcher the encouragement to probe further about this coach by finding out what training and qualifications he had. Denzil admitted that he was passionate about netball, but his professional training was in the academic area of Mathematics. The disclosure revealed some netball coaches in tertiary institutions who were not correctly trained in sports science. This created challenges for the proper imparting of MS in netball players.

Tertiary games netball coaches seem to recognise a need to set goals for the players but would not know how to professionally and adequately do this. Again, they are aware that they ought to help their athletes by counselling them as coaches and teammates. They are not fully aware of the entire repertoire of imparting the skills to their players. This is seen by coaches expressing their views that they need to talk about openness with players, guide them, and achieve their set goals. Nevertheless, most coaches do not seem to extricate how this can be done. At the same time, the researcher was surprised to hear from some of the coaches that there were times when players were encouraged to identify good players from among tertiary students and analyse their strengths and weaknesses. This would be the most critical during the third quarter of the current research study, in which there is the potential to change the whole set-up of the MST regimes for the identified netball players. Thus, the netball coaches at tertiary institutions could be using inappropriate MST without the help of trained sports psychologists.

Mirriam talked of;

> *...for instance, there is one talented player who was rude and would walk out of the match whilst the game is on and nothing could be done. The way we are identified as coaches is problematic since we work on a voluntary basis without a contract. (Mirriam)*

Mirriam said he could not do anything to the rude player since there were times when netball players became more potent than the coaches. Probed further on this one event, the same coach admitted that at tertiary institutions, for them to be recognized as coaches was problematic as they worked on a vouluntary basis without contracts. This seems to be an issue for tertiary games to rely on voluntary services to coach sport at tertiary institutions in Zimbabwe. Some coaches seem to volunteer to coach through their love for the game, which can be problematic. This agrees with Howells and Lucassen (2018), who concluded that coaches were volunteers and sometimes lacked the interest to implement MS was not a necessary component in athletes training (Hodge & Lansdale, 2011; Hyun-Duck & Cruz, 2016). Therefore, some coaches who lack the necessary knowledge may feel that MS are better off if guided by experts. (Arnold & Sarkar, 2015). Thus, if tertiary institutions are to use volunteers as coaches, it is essential to consider empowering them through staff development courses so that they can be able to handle the games efficiently.

5.3.4 THEME FOUR: BUILDING A COHESIVE TEAM

In the thesis's results, whilst all players were generally encouraged to be fully aware of psychological skills needs by their coaches, they may not have been able to reach that level as required by the sport. Coaches agreed that they usually stressed and emphasized that players needed to work closely as a well-knit unit as a team. It did not always happen in real terms.

Andiswa expressed that;

By making them work together….(Andiswa)

Andiswa emphasised players working together as a team so that they became a closely knit unit and encouraged individual players to become fully aware of psychological skills.

Timothy mentioned that;

The other observation was that pep-talk induced a sense of oneness among players and this resulted in the setting of a common goal among participants. (Timothy)

To make a cohesive team, he emphasized pep talk as it induced oneness and was, therefore, emphasized all the time for a common goal.

Furthermore, Simon emphasized that he encouraged them to;

Talk to each other all the time. (Simon)

Denzel reported that he;

Encouraged them to up the game and cohesiveness and also induced oneness among participants in both good and bad times. (Denzil)

Mirriam mentioned that;

Whilst individuals are encouraged to become fully aware of psychological skills l also emphasize that they are a team and should become a closely knit unit. (Mirriam)

While Timothy further said that;

The other one is they induce oneness and a common goal among participants both in good times and bad times and it makes them include their adversaries. (Timothy)

Coaches agreed that post-competition evaluation seemed to make players look like failures in most cases, especially if the team did not win. They highlighted that even good experiences by their

members looked at obstacles to individual strengths together and team performance. This means that there seem to be some challenges concerning the handling of mental skills by the tertiary netball coaches and players in Zimbabwe. It is not entirely clear why this is the case. However, there is no doubt that coaches and players are not psychologically prepared for their roles to realise optimum performance levels. All the coaches understand that team chats with their players are essential before, during and after play. All the coaches agreed that they used this psychological MS mechanism, although not standardized.

Mirriam reported that;

> *Read around learn/critical and research as a coach. Technological changes should be taken into consideration to improve the game. (Mirriam)*

A coach must be encouraged to read around on MS and note technological changes to improve performance.

Denzil reported that the best he could do was to;

> *Encourage and concentrate on individual players from early stage even ECD. (Denzil)*

Timothy suggested that;

> *I avail funds and allow players to practice MS minutes before the game. I also use correct facilities when playing the game. (Timothy)*

However, results showed that most coaches were unsure about how they could go through this. It was also evident that most coaches engaged their players in numerous minor games and activities to promote teamwork and improve individual and team performances. One coach said he built a cohesive team through minor games in training. What could not be ascertained were the basic strategies and techniques of doing it. Asked to provide evidence of what he did with the players

and which MS it addressed, it became apparent that the coach was unsure about all this. If the coach is unsure about implementing such an MST programme for his players, then one wonders who could do it for him. Different coaches talked about how they encouraged their players to work as a team, motivate one another, and not look down upon one another.

5.3.4.1 Improving mental skills

Coaches talked about how they encouraged their players to be resilient to achieve their set goals.

Timothy pointed out that he resorted to;

> *Twinning WA and WD to make a cohesive team. (Timothy)*

Players interested in the game looked at how their physical fitness imaged some of their fellow players, especially the twin WA and WD, whom they said were critical in coming up with a cohesive team.

Specifically, Denzil emphasized that;

> *In fact, l would do this through team building in training different training sessions. I will encourage them to be a team which motivates one another, a team which respects one another as they train, as they play and also encourage them to encourage one another and not to look down on one another, and also to be resilient in order to achieve their set goals. (Denzil)*

Mirriam reported that she;

> *Engaged them in numerous minor games and activities that promote teamwork (Mirriam)*

Furthermore, Mirriam respnded by saying that;

> *I team chat with them on the importance of play. (Mirriam)*

Denzil emphasized that;

> *I use of team building during different training sessions so that players learn to motivate each other. I stimulate players to encourage each other and avoid despising teammates and be resilient to achieve set goals. (Denzil)*

Whilst Timothy reported that;

> *I recommend reaction time/agility to be observed. (Timothy)*

The researcher did not find the finer details of the MST programmes from most of these coaches. There seems to be some confusion about emphasizing physical skills when the main issue is about MS. Reaction time and agility of the netball players were also seen as essential aspects of improving sports performance since it increased players' concentrate on their game. What did not come out clearly were the basic strategies to inculcate these skills to the netball players.

This thesis revealed that building a cohesive team tended to increase the psychological aspects of tertiary netball in Zimbabwe. This was in agreement with previous research, which concluded that encouraging self-reflection by players and knowledge of coaches was said to aid team cohesion (Balk & Englert, 2020; Englert et al., 2020). Several coaches confirmed this to the researcher.

Timothy confirmed that;

> *I increase psychological aspect and encourage self-reflection by players. Feedback can also help boost the MS of netball players. (Timothy)*

Coaches thought that feedback to players by their coaches helped boost the acquisition of mental skills by collegiate netball players, primarily through relevant positive feedback. On the other hand, though not related to MST,

Mirriam suggested that she would;

I introduce them to basic biomechanical principles. I also use biomechanics to analyse and correct their movement patterns. I make them understand the importance of correct movements in playing. (Mirriam)

The introduction of biomechanical principles to netball players could be beneficial. Thus, it was noted from the interviews with coaches that the use of biomechanics was believed to help netball players to analyse and correct their netball patterns of movement.

Denzil commented that;

l feel if people could have exchange programmes this could be very helpful and also if players could engage or trainers could engage experts for example, sports psychologists this could go a long way in promoting these MS. (Denzil)

Coaches felt that it could have been good if people could have exchange programmes of players before the competitive tertiary games. The same coach felt that this could be very helpful for players to engage other netball expert trainers. The researcher thought this could also be an admission of the inadequacies of the netball coaches.

Furthermore, Denzil also felt that;

Proper staff development and training in MST is very critical for netball coaches because if they are empowered, they will be able to know what is required of them as they train their teams. (Denzil)

There was a need for staff development on MS to efficiently empower netball coaches to implement MST for performance enhancement. Thus, it underlined the need for engaging sports psychologists in promoting MS in collegiate netball games in Zimbabwe. However, tertiary institutions coaches who are on the ground could implement with the direction from experts.

Again, advocating for some coaching and player staff development and training in MS confirms the desperation of sports coaches in Zimbabwe.

Denzil admitted that although it was necessary to encourage players to take up MST early, there was no structure to implement that since collegiate netball players almost accidentally ended up playing netball at their institutions. This corroborates with previous authors who concluded that age was the most common variable in sport psychology as it was easy for coaches to teach these skills at an early age (Camire et al., 2014; Horn, 2004). Furthermore, McCarthy et al. (2010) and Hays (2006) concluded that MS taught to younger athletes were used more in competition once learnt and properly developed were also transferrable to other coping areas of their lives.

When probed about the structure of MST in Zimbabwe, Mirriam responded by saying that;

> *In Zimbabwe, there is no proper structure to coach athletes MS from a young age student netballers find themselves plying competitively in their institutions. (Mirriam)*

When asked about the perfect timing of introducing MST, Denzil felt that;

> *Mental skills to be taught at an early age, even from ECD through primary and high school. (Denzil)*

When asked what competitive players could be helped to reduce stress, Timothy said;

> *Competitors to be helped to handle stress from netball and pressure of assignments through MS. (Timothy)*

Generally, sports are considered stressors, especially for student-athletes due to pressures mentioned by Timothy in this study in the above excerpt. Coaches must take care of athletes' concerns in terms of adequate preparation so that they can handle pressure well during their performance (McKenzie et al., 2019; Smith & Smoll, 2002).

Therefore, coaches should systematically train student-athletes in all domains with formal requirements that will improve performance. Volunteer coaches who belong to another area of academic study are eventually persuaded to assist with netball coaching. This may affect those coaches who do not think the mental component of training is vital in enhancing performance even at the collegiate level (Hyun-Duck & Cruiz, 2016). Coaches struggle with their stress, especially when their players fail to win games and decision making is essential for their practice in coaching (Olusoga et al., 2009). Thus, collegiate netball coaches are expected to have MST schedules for their teams, meaningfully assisting players in realising their complete performance levels.

5.4 Summary

The objective of this phase was to explore MS that coaches utilise to enhance their players' performance in tertiary institutions in Zimbabwe. Based on findings from coaches, the researcher concluded that there seems to be a skills deficiency in the coaches to conduct successful MST for collegiate netball players. As coaches seemed to lack precise focus on the critical MS to improve the implementation of MST programmes. The other finding was that coaches had a general idea of MS as they could mention a few that they knew, like imagery, GS and ST. The next chapter looks at findings from collegiate players for the TOPS questionnaire and focus group discussion.

Chapter 6

FINDINGS

PHASE 3: NETBALL PLAYERS

6.1 Introduction

The purpose of Phase 3 was to explore current MST programmes used by collegiate netball players and use this information to develop an appropriate MST programme for the collegiate netball players in Zimbabwe. The objective of this phase was to find out the current levels of MS utilised by players in tertiary institutions in Zimbabwe. In this phase, both qualitative and quantitative methods of data collection were used. A Test of Performance Strategies (TOPS) questionnaire (quantitative) with its demographics for participants and focus group interviews (qualitative) also with its demographics for participants were used to collect data in this phase. Findings of Phase 2 and from TOPS informed the type of questions asked during the focus group discussions with the players to explore those matters that needed further investigation. Furthermore, the findings helped the researcher understand certain aspects of MS used by players, and it could be a helpful guide in this phase.

6.2 Demographics for the TOPS Questionnaire

In this thesis, a total of fifty players with demographics in Table 6.1 (p.193) below participated in the TOPS questionnaire, and they were all females (n=50, 100%). All participants' age groups ranged between 18-21 years, and they were all single. The participants were almost evenly spread over between their years of study, with 17 of them being 1st years (n=17, 34%), 14 were 2nd years (n=14, 28%), and 19 were 3rd years (n=19, 38%), as shown in Table 6.1 (p.193).

Table 6.1: Demographic characteristics for players TOPS

Demographics	Category	Number	Percentage
Age group	18-21	50	100 %
Gender	Female	50	100%
Marital status	Single	50	100%
Year group	1st year	17	34%
	2nd year	14	28%
	3rd year	19	38%

6.3 Correlation Analysis Responses from TOPS Questionnaire

Responses revealed the existence of moderate correlations between the TOPS sub-scales. Collegiate netball players reported more use of most of the given psychological skills and strategies. However, it is unclear whether these athletes were high on GS during practice games or scored substantially high on ST use of MS in practice games.

Table 6.2: Correlations between scores on the competition and practice strategies subscales

	Comp GS	Comp EC	Comp Auto	Comp Relax	Comp ST	Comp Image	Comp NT	Comp Act
Prac GS	**0.52**	-0.25	-0.25	**0.34**	**0.32**	0.22	0.21	**0.40**
Prac EC	0.04	0.27	0.27	0.13	0.17	0.46	0.07	0.26
Prac Auto	**0.30**	0.19	0.19	0.27	**0.47**	0.18	0.18	**0.39**
Prac Relax	0.11	0.12	0.12	**0.31**	**0.47**	0.27	0.12	**0.41**
Prac ST	**0.47**	-0.12	-0.12	**0.49**	**0.62**	0.43	**0.47**	**0.60**
Prac Image	0.16	0.09	0.09	**0.36**	0.23	0.03	0.07	0.23
Prac AC	**0.38**	-0.21	-0.21	**0.54**	0.28	0.14	0.22	**0.31**
Prac Acti	0.14	0.26	0.26	**0.33**	**0.38**	-0.07	0.01	**0.34**

***The bolded values indicate significant correlations ranging between 0.31-0.60.**

The results of the current thesis were based on competitive collegiate female athletes that were involved in netball. These results in Table 6.2 (p.194) indicated that self-talk during practice games was significantly and positively correlated with the following variables of competition relaxation (r=0.49), competition goal setting (r=0.47), competition attentional control (r=0.47) and competition self-talk (r=0.62). The results also show a solid and significant correlation between self-talk during practice games and activation during competition games of (r=0.60). A moderate significant relationship was found between practice goal setting and competition goal setting (r=0.52). At the same time, a moderate significant relationship was noted of competition relaxation (r=0.34), competition self-talk (r=0.32) and competition activation (r=0.40). The results also revealed that there was another moderate and significant correlation that existed during practice

between automaticity and competition goal setting of (r=0.30), competition self-talk of (r=0.47), and competition activation of (r=0.39).

Similarly, the results also showed that there was a significant and positive correlation between practice attentional control and competition goal setting of (r=0.38), competition relaxation of (r=0.54), and competition activation of (r=0.31). It was also noted that there was a moderate significant correlation between practice activation and competition relaxation of (r=0.33), competition self-talk of (r=0.38), and competition activation of (r=0.34). Finally, the results also revealed that there was a moderate significant correlation between practice relaxation and competition relaxation of (r=0.31), competition self-talk of (r=0.47) and competition activation of (r=0.41). These results will be further demonstrated in the tables of results below.

Table 6.3: Descriptive statistics for the practice strategies sub-scales

	N	Minimum	Maximum	Mean	Std. Deviation
Goal setting	50	8	20	14.50	2.816
Emotional control	50	5	17	11.92	2.530
Automacity	50	7	19	13.66	2.715
Relaxation	50	8	20	13.34	3.317
Self-talk	50	8	20	14.46	3.259
Imagery	50	6	18	13.70	2.720
Attentional Control	50	8	19	13.64	2.632
Activation	50	7	19	12.42	2.331

It can be noted in Table 6.3 (p.195) that the mean average for practice strategies sub-scales for goal setting and standard deviation were (M=14.50, SD=2.53), while that for emotional control was (M=11.92, SD=2.53). Automaticity mean and standard deviation were (M=13.66, SD=2.71), while that for relaxation was (M=13.34, SD=3.31). Self-talk mean and standard deviation was (M=14.46, SD=3.25), while imagery means and standard deviation was (M=13.70, SD=2.72). Attentional control mean and standard deviation was (M=13.64, SD=2.63), and activation mean, and standard deviation was (M=12.42, SD=2.33). Therefore, these descriptive results indicate that all practice subscales mean ranged between M=11.92 being the lowest in the emotional control subscale and M=14.5 being the highest in the GS subscale.

Table 6.4: Descriptive statistics for the competition strategies sub-scales

	N	Minimum	Maximum	Mean	Std. Deviation
Goal setting	50	9	18	14.22	2.073
Emotional Control	50	5	18	11.36	3.199
Automacity	50	5	18	11.36	3.199
Relaxation	50	7	20	14.58	2.984
Self-Talk	50	8	20	14.38	3.123
Imagery	50	7	20	13.96	3.090
Negative Thinking	50	9	20	14.82	3.082
Activation	50	8	20	14.70	3.183

It can be inferred in Table 6.4 (p.196) that the mean average for competition strategies sub-scales for goal setting and standard deviation was (M=14.22, SD=2.07), whilst that for emotional control was (M=11.36, SD=3.19). Automaticity mean and standard deviation was (M=11.36, SD=3.19), while that for relaxation was (M=14.58, SD=2.98). Self-talk mean and standard deviation was (M=14.38, SD=3.12), while imagery mean and standard deviation was (M=13.96, SD=3.09). The negative thinking mean and standard deviation was (M=14.82, SD=3.08), and the activation mean, and standard deviation was (M=14.70, SD=3.18). These mean differences between each sub-scale are essential to assess and evaluate as they would help during training. Frey et al. (2003) report

that MS at practice games meant to prepare athletes for competition games typically use a lot of MS while practising physical skills sub-scales and tend to show good construct validity Chronbach's alphas of 0.66 and 0.67. These are based on the confirmatory factor analysis and internal consistency reliability of competition levels and reliability of practice levels.

Table 6.5: Factor analysis for practice skills strategies

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.641	33.017	33.017	2.641	33.017	33.017	1.962	24.525	24.525
2	1.278	15.974	48.991	1.278	15.974	48.991	1.550	19.373	43.898
3	1.021	12.764	61.755	1.021	12.764	61.755	1.429	17.857	61.755
4	0.961	12.017	73.772						
5	0.754	9.421	83.193						
6	0.654	8.169	91.362						
7	0.395	4.932	96.294						
8	0.297	3.706	100.000						
Extraction Method: Principal Component Analysis.									

The factor analysis for practice skills strategies in Table 6.5 (p.197) suggests that the initial cumulative eigenvalues for components 1-8 range between 33 -100% for component 8. The cumulative extraction sums of squared loadings for the 1st three components range between 33-61%. Again, the cumulative rotation sums of squared loadings for the first three components range between 24-61%. The diverse factors for practice skills strategies could be linked to performance distractors caused by anxiety and other related factors (Moran & Toner., 2017).

Table 6.6: Component Matrix for Practice

Component Matrix[a]			
	Component		
	1	2	3
PracGoal setting	0.605	-0.570	-0.182
PracEmotional control	0.267	0.652	-0.170
PracAutomacity	0.398	0.203	0.504
PracRelaxation	0.662	-0.009	-0.456
PracSelf-talk	0.765	-0.387	0.008
PracImagery	0.501	0.417	0.229
PracAttentional Control	0.579	-0.123	0.589
PracActivation	0.660	0.385	-0.312
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

The component matrix for practice some subscales, as shown in Table 6.6 (p.198), are -0.009 for the lowest and 0.765 for the ST component. This can extend knowledge on the development of the MST programme as this interesting findings would guide the coaches in implementing MST programmes. The trivial small values for this thesis indicate that respondents possess some understanding of MS they use in their games to a certain extent.

Table 6.7: Rotated Component Matrix for Practice

Rotated Component Matrix[a]			
	Component		
	1	2	3
PracGoal setting	0.845	-0.076	0.064
PracEmotional control	-0.154	0.703	0.081
PracAutomacity	0.002	0.142	0.659
PracRelaxation	0.628	0.498	-0.061
PracSelf-talk	0.787	0.064	0.333
PracImagery	0.032	0.471	0.506
PracAttentional Control	0.306	-0.059	0.775
PracActivation	0.339	0.743	0.117
Extraction Method: Principal Component Analysis.			

Rotation Method: Varimax with Kaiser Normalisation.	
a. Rotation converged in 6 iterations.	

In this current thesis, the Principal Component Analysis selects factors with an eigenvalue in Table 6.7 (p.198) 1 and, factor 1, 2 and 3 are the only factors with an eigenvalue above 1. Thus, the analysis will only use factor 1, 2 and 3. The eigenvalues are associated with each linear component (factor) before extraction and after rotation. The eigenvalues associated with each factor represent the variance explained by that particular linear component in the current thesis. Factor 1 and 2 explain 62% of the variance in the variables, further explaining the practice games strategies. These results make a case for implementing MST for collegiate athletes in Zimbabwe.

Table 6.8: Total variance explained

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.641	33.017	33.017	2.641	33.017	33.017	1.962	24.525	24.525
2	1.278	15.974	48.991	1.278	15.974	48.991	1.550	19.373	43.898
3	1.021	12.764	61.755	1.021	12.764	61.755	1.429	17.857	61.755
4	.961	12.017	73.772						
5	.754	9.421	83.193						
6	.654	8.169	91.362						
7	.395	4.932	96.294						
8	.297	3.706	100.000						
Extraction Method: Principal Component Analysis.									

It can be noted in table 6.8 (p.199) explaining the total variance of eigen values for selected 3 factors. It can be inferred from the table that the variance for all the selected values are positive as

they show values that are not less than 0, with component 1 has the smallest value at 25% versus component 2 at 44% and component 5 at 62%. These results show that these values do not differ from expected values; therefore, it could be inferred that the practice of performance strategies exists in these collegiate institutions. Coaches might need expert help to implement MST successfully.

Table 6.9: Component Matrix for Practice

Component Matrix[a]			
	Component		
	1	2	3
PracGoal setting	0.605	-0.570	-0.182
PracEmotional control	0.267	0.652	-0.170
PracAutomacity	0.398	0.203	0.504
PracRelaxation	0.662	-0.009	-0.456
PracSelf-talk	0.765	-0.387	0.008
PracImagery	0.501	0.417	0.229
PracAttentional Control	0.579	-0.123	0.589
PracActivation	0.660	0.385	-0.312
Extraction Method: Principal Component Analysis.			
a. 3 components extracted.			

The component matrix for practice in Table 6.9 (p.200) has been used to indicate estimates of correlations between the practice components. An interesting observation is that it is vital to understand the interrelationship of components with those that in the minus range values indicating trivially small for GS component 2 (-0.570 and 3 (-0.182) and relaxation 2 (-0.009) and 3 (-0.456)

Table 6.10: Rotated Component Matrix for Practice

Rotated Component Matrix[a]			
	Component		
	1	2	3
PracGoal setting	0.845	-0.076	0.064
PracEmotional control	-0.154	0.703	0.081
PracAutomacity	0.002	0.142	0.659
PracRelaxation	0.628	0.498	-0.061
PracSelf-talk	0.787	0.064	0.333
PracImagery	0.032	0.471	0.506
PracAttentional Control	0.306	-0.059	0.775
PracActivation	0.339	0.743	0.117
Extraction Method: Principal Component Analysis. **Rotation Method: Varimax with Kaiser Normalisation.**			

a. Rotation converged in 6 iterations.	

In this current thesis, the Principal Component Analysis selects factors with an eigenvalue in Table 6.10 (p.200) and, factor 1, 2 and 3 are the only factors with an eigenvalue above 1. Thus, the analysis will only use factor 1, 2 and 3. The eigenvalues are associated with each linear component (factor) before extraction and after rotation. The eigenvalues associated with each factor represent the variance explained by that particular linear component in the current study. Factor 1 and 2 explain 62% of the variance in the variables, further explaining the practice games strategies.

Table 6.11: Factor analysis for competition skills strategies

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.051	38.136	38.136	3.051	38.136	38.136	2.950	36.880	36.880
2	2.035	25.443	63.579	2.035	25.443	63.579	2.136	26.699	63.579
3	.939	11.739	75.318						
4	.733	9.157	84.475						
5	.505	6.311	90.786						
6	.464	5.799	96.584						
7	.273	3.416	100.000						
8	4.825E-17	6.031E-16	100.000						
Extraction Method: Principal Component Analysis									

As indicated in Table 6.11 (p.201) for this current study, the Principal Component Analysis selects factors with an eigenvalue above 1. Only 1 and 2 has an eigenvalue above 1. Thus, the analysis will only use factors 1 and 2. The eigenvalues are associated with each linear component (factor) before extraction and after rotation. The eigenvalues associated with each factor represent the

variance explained by that particular linear component, and factors 1 and 2, therefore, explain 64% of the variance in the variables, further explaining competition strategies. These values will help as a starting point in the development of the MST programme

Table 6.12: Component Matrix for Competition

Component Matrix[a]		
	Component	
	1	2
CompGoal setting	0.658	-0.062
CompEmotionalControl	-0.368	0.919
CompAutomacity	-0.368	0.919
CompRelaxation	0.705	0.287
CompSelf-Talk	0.667	0.406
CompImagery	0.634	9.922E-5
CompNegative Thinking	0.595	-0.011
CompActivation	0.807	0.310
Extraction Method: Principal Component Analysis.		
a. 2 components extracted		

As shown in Table 6.12 (p.202) for components 1 and 2, the component matrix for competition strategies is insignificant except for the competition imagery value of 10.0. these correlations between values indicate an almost comparable level of -0.011 for negative thinking and 0.62 for the GS component. These results indicate that respondents have challenges in almost all the competition components except for imagery for competition components. This may be why players do not adequately mentally prepare for their competitions, rendering them vulnerable to opponents.

Table 6.13: Rotated Component Matrix for Competition

Rotated Component Matrix[a]		
	Component	
	1	2
CompGoal setting	0.605	-0.266
CompEmotionalControl	-0.060	0.988
CompAutomacity	-0.060	0.988
CompRelaxation	0.760	0.051
CompSelf-Talk	0.760	0.175
CompImagery	0.602	-0.199
CompNegative Thinking	0.561	-0.198
CompActivation	0.863	0.040
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation.		
a. Rotation converged in 3 iterations		

It can be noted in Table 6.13 (p.203) for rotated component matrix that respondents in this study that the values show trivial to strong correlations of above 0.3 or 0.4 with the component for GS at -0.266, emotional control component 1 at 0.60. These results from the rotated component matrix may show that players sometimes marginally use the selected components to enhance performance. However, there is still a need to help them overcome the stressful situations of being student-athletes.

Table 6.14: Analysis of variance practice skills strategies

Dependent variable	f-statistic	P
Goal setting	1.342	0.269
Emotional control	0.720	0.582
Automacity	0.734	0.574
Relaxation	1.022	0.406
Imagery	0.748	0.565
Attentional control	1.474	0.226
Activation	0.415	0.797

The results presented in Table 6.14 (p.203) show no significant differences in the mean scores of the practice games measurement strategies for the five institutions under study in this research. Thus, the lack of significant differences was noted for all variables because of the p-value of

p>0.05. Results in this study show that the measurements for the variables were statistically the same between the institutions used in this study.

Table 6.15: Analysis of variance competition skills strategies

Dependent variable	**f-statistic**	**P**
Goal setting	1.604	0.190
Emotional control	0.734	0.579
Automacity	0.816	0.522
Relaxation	1.022	0.406
Imagery	**2.908**	**0.032**
Negative thinking	1.101	0.368
Activation	0.642	0.636

The above results of the current thesis indicated in Table 6.15 (p.204) show significant differences between groups concerning imagery among institutions studied. Thus, there was a need to perform a posthoc test to determine which groups were significantly different from others. The Least Squares Difference (LSD) test determined the significantly different groups as indicated below.

Table 6.16: LSD Test Probabilities for post hoc tests error between MS

LSD test; variable CompImagery Probabilities for Post Hoc Tests Error: Between MS = 8.2622, df = 45.000					
	{A}	**{B}**	**{C}**	**{D}**	**{E}**
A		0.080	0.127	0.317	0.168
B	0.080		0.817	**0.007**	0.699
C	0.127	0.817		**0.014**	0.877
D	0.317	**0.007**	**0.014**		**0.020**
E	0.168	0.699	0.877	**0.020**	

Thus, these results in Table 6.16 (p.204) indicate that institutions B and D have significant differences in scores for imagery (p=0.007) whilst institutions D and C (0.014) also had significant differences. Institutions D and E (0.020) also have significant differences in terms of average scores for imagery. When such sub-scales are compared, they help the coach determine which

categories need to be improved upon most, and these scores can also be compared with other samples such as the Olympic scales scored, which could be either higher or lower.

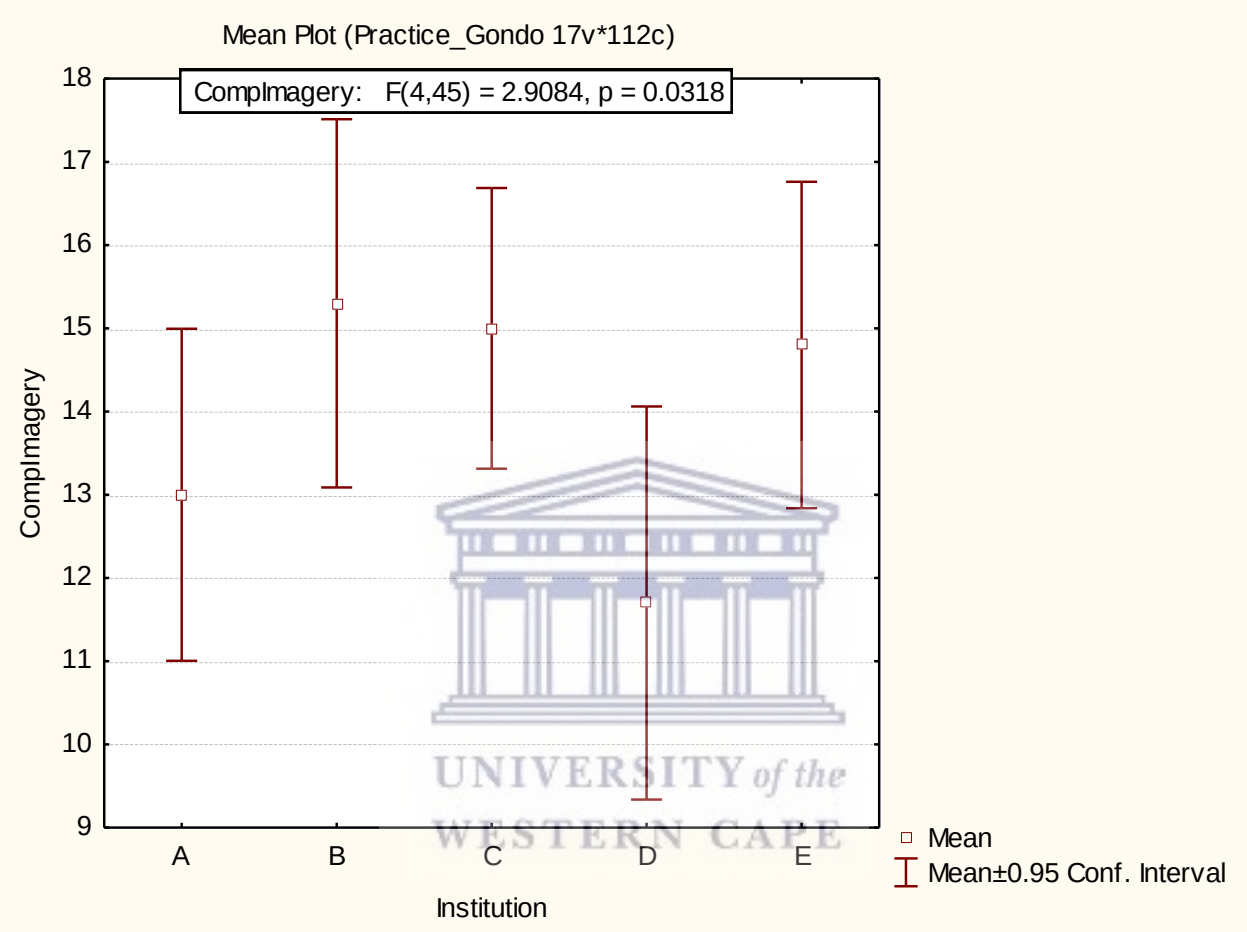


Figure 6.1: Competition imagery comparison among institutions

The above results for imagery in this current study in Figure 6.1 (p.205) show that institutions B and D had significant imagery scores when compared among the five tertiary institutions. This would perhaps be attributable to coaches' training techniques to enhance sporting performance by their collegiate netball players. Successful performance lies in the effective implementation of MST programmes for all the skills and strategies that can be used to enhance performance at collegiate games.

6.4 QUALITATIVE SECTION FOR PLAYERS

This segment will address the qualitative section of the study for players. The section will begin by looking at participants profiles in the FGDs. The researcher felt it was necessary to understand participants, their ages and organization**.** The section will then be followed by a brief discussion of the demographics of players for the FGDs.

6.4.1 Participant Profile for FGDs

A total of 24 participants, eight from each of the three institutions, took part in the focus group discussions with their ages ranging from 18-21. All participants were registered students at either a Teachers' College or Technical College. The researcher used pseudonyms for participants to ensure anonymity. Their organization are listed in Table 6.17 (p.206).

Table 6.17: Profile of participants for FDGs

Pseudonym	Age	FDGs Number	Organization
Sibongile	21	1	Teachers' College
Gladys	18	1	Teachers' College
Thandiwe	20	1	Teachers' College
Evelyn	18	1	Teachers' College
Vimbai	19	1	Teachers' College
Gertrude	18	1	Teachers' College
Sazini	20	1	Teachers' College
Lethiwe	20	1	Teachers' College

Mbalenhle	20	2	Teachers' College
Zongile	20	2	Teachers' College
Nandipa	20	2	Teachers' College
Faith	20	2	Teachers' College
Audrey	20	2	Teachers' College
Mildred	20	2	Teachers' College
Tariro	19	2	Teachers' College
Sengai	19	2	Teachers' College
Sharayi	19	3	Technical College
Rossainne	20	3	Technical College
Khanyisile	18	3	Technical College
Vimbiso	18	3	Technical College
Barbra	20	3	Technical College
Tanaka	18	3	Technical College
Tendai	18	3	Technical College
Lydia	21	3	Technical College

6.4.2 Demographic characteristics for players in the FDGs

The following section in Table 6.18 (p.208) will discuss the demographic characteristics of players in the FDGs.

Table 6.18: Demographic characteristics for players in the FDGs (Qualitative)

Demographics	Category	Number	Percentage
Age group	18-21	24	100 %
Gender	Female	24	100%
Marital status	Single	24	100%
Year group	1st year	7	29.2%
	2nd year	4	16.7%
	3rd year	13	54.1%

A total of 24 netball players were selected for focus group discussions, and their age group ranged between 18-21 years, as indicated in Table 6.18 (p.208). All selected players were female (n=24, 100%) single (n=24, 100%). The group comprised of a total of 7 1st year players (n=7, 29.2%), 4 2nd year players (n=4, 16.7%) and 13 3rd year players (n=13, 54.1%). All participants in the study were female netballers since competitive netball is currently being played by females, ranging from 1st year to 3rd year collegiate students involved in playing competitive netball.

6.5 Findings

Four major themes emerged from the data collected. The first theme was concerned with mental skills knowledge, importance, and contribution to athletes' sporting performance. The second theme looked at the distractions from concentration and peer pressure criticism. The third theme

focused on coach assistance, criticism and pressure on players, while the final theme looked at challenges athletes face in mental preparation. These interviews were transcribed verbatim and the transcripts were checked by the researcher, who listened several times to the audio recordings of the transcripts while simultaneously reading them. The researcher also read the transcripts several times while comparing them with the focus group guide. Different measures were used to ensure the trustworthiness of the findings following recommendations by Thomas et al. (2015). Coded data were then sent to the focus group interviewees for checking by each participant who found it necessary.

6.5.1 THEME ONE: MENTAL SKILLS KNOWLEDGE

From the data collected, it was clear that competition in the tertiary institutions' games makes athletes want to strive to perform better by finding ways of enhancing their performance levels. Based on this, some athletes tend to be keen to improve their sporting performance strategies using techniques like goal setting. Goal setting is a component of mental skills training that effectively enhances players' commitment, effort, self-confidence, perseverance and motivation (Burton & Weiss, 2008). Athletes and coaches all strive to ensure that players accomplish their set goals, get incentives or are motivated to positively change their sporting behaviour. Thus, there should be performance gains that result with athletes showing increased efforts and intensity. Above all, athletes should persist in overcoming obstacles, promoting of self-reflection and developing problem-solving strategies.

I think MST is all about sharpening of the brain as you are playing in a game (Audrey)

I think MST is all about sharpening of the brain as we are playing in a game, it really needs your thinking capacity for you to be able to doge the opponent or pass the ball. (Sibongile)

When playing netball, usually, the focus is on the athlete's activities, such as defending, attacking or shooting. These activities require that the athlete has utmost focus and concentration. Nevertheless, they still should not feel unnecessarily upset. Therefore, mental skills are those skills that athletes can adequately plan to execute well individually and as a team. This calls for the player to be mentally sound while selecting the best mental training strategies. Mental skills preparation aims to enhance the athlete's performance, monitor psychological state, and achieve an empirically well-founded intervention strategy. The primary aspect is to consider the fact that individual athletes are different and, as such, they have specific characteristics that need to be considered during training preparation.

Participants expressed both knowledge and understanding regarding mental skills training. In addition to indicating their level of competition, respondents reported various views on the mental aspect of training during their weekly scheduled practice sessions. The researcher further analysed their views about the training received by players and concluded that whilst MST was mentioned, it remains to be confirmed if they are understood and implemented.

The first central theme emerged from players looked at MS knowledge of netball players and their contribution to sporting performances.

. *When playing netball focus on what you are doing e.g. shooting you need to focus so that you can concentrate on what you will be doing and do not feel upset. (Sibongile)*

Mental skills are those skills you plan as a team mentally for the game strategies you plan as a team telling each other for this game we need to do this, including the coach and the teammates. (Mbalenhle)

l think a netball player must know all the rules of the game. (Sharayi)

I think mental development when it comes to netball is when someone should develop a skill. (Barbra)

Someone should be mentally active so that she can develop a skill quickly. (Lydia)

Someone knows the position of the ground how to touch the ball and how to pass it. (Rossainne)

In the results, the researcher was surprised that one player thought that a netball player was supposed to know all the game's rules. Therefore, it is surprising that players would imagine that they should know everything about the game and not necessarily skills that make them perform better. This is not possible. It means that the players are not adequately knowledgeable about the MS for netball. This explains why some of the players thought that MS helped them keep moving forward to reduce their emotions. Therefore, players said that in cases where their team would be losing, MS motivated them and kept them moving forward.

When asked when they used MS during their game of netball, athletes came up with all sorts of responses. Faith expressed that she used MS whenever she was facing either a ball or an opponent. This does not show that the player in question uses these skills to indicate tactics, especially when faced with a ball or an opponent. Tariro pointed out that she used MS when she was stressed, and suddenly the game changed whilst Zongile commented that she tried to focus.

To be honest, we usually try to focus. (Zongile)

I think you use MS whenever you are facing the ball or whenever you are facing the opponent. (Faith)

I think this is where the MS works when you are stressed and suddenly, your game changes. (Tariro)

When asked about their time on mental skills during practice or competition, players responded with diverse views. They indicated various times they spent on MST, which depended on the player herself and could not be generalized for all players since each player has her demands.

About 1 hour almost every day. (Vimbiso)

Not more than 10 minutes at a time. (Tanaka)

Time spent on MST depends on the player. (Gertrude)

I think you are supposed to spend more time until you can understand that mental skills help you …. (Lydia)

6.5.1.1 Importance of mental skills

Mental development in netball is a skill that needs to be developed. It is not a given. This means that one can plan individually or as a team about how to teach or acquire it. A coach or another player can guide the players through a sporting routine where athletes are told what they need to do and how to do it successfully. Someone should be mentally active so that she/he can systematically develop the requisite skills in netball. A good netball player must be someone who knows how to position herself/himself well within the court, how to catch the ball successfully and how to pass it effectively well. When playing netball, players ought to know that they need to focus on what they will be doing to avoid making unnecessary mistakes, be it defending, positioning, attacking or shooting. To avoid making mistakes, they need to focus and concentrate well on what they will be doing and not feel upset or pressured.

I think it helps you so that you keep moving forward such that if you must keep going forward and reduce your emotions. (Vimbai)

In case of losing it motivates you and keeps you going forward. (Lethiwe)

Value skills…….(Gladys)

Game strategies that are important in netball. (Gertrude)

Make me play netball better. (Evelyn)

Alertness on the part of the players. (Thandiwe)

I think mental skills make the mind very strong will be very strong. (Zongile)

I think MST help the player to make a quick good decision. (Faith)

For me, MTS help players in terms of alertness on the part of the players so that you can focus. (Mbalenhle)

Sengai thought that MS work when you are in a game situation only, and a player is stuck to the team's mental values and does not deviate from their plans.

I think those skills work when you are in a game situation you stick to the values of mental if as a team you so that you value what you have planned together. (Sengai)

It is important to note that this is not true because these skills can be applied in practice and competition games. What is more, these skills are not necessarily advanced by being rigid and inflexible but being adaptive to the contextual situation of the play and game. Mildred said that she believed that netball game strategies helped them beat their opponent team because she thought mental made the mind strong.

Game strategy when playing so that you beat your opponent. (Mildred)

Players felt that MST only helped the players make quick and sound decisions regarding alertness and focus. There seem to be some ideas that more clarification on how the players understood the

role of MS. It indeed improves agility, decision-making, alertness and focus. However, the players do not show clearly how this is the case. Without detailed explanations, one can only conclude that players are evasive on the detail to confirm their complete understanding of these issues and how they impact MS and performance enhancement. Tendai said that she thought that MS made someone fully equipped with knowledge on how to play netball. Vimbiso also thought that MS were critical as it enabled one to play netball without expanding further.

I think MST makes someone fully equipped on how to play netball. (Tendai)

I think MS is important you will be able to play the game of netball. (Vimbiso)

You will be able to teach on how to teach others on how to play netball. (Khanyisile)

6.5.1.2 Contribution to sporting performance

Mental skills can make a massive contribution in playing the game, and players came up with all sorts of views on what they thought. One player felt that it either encouraged her to play well or could discourage her from playing the game while another player felt that one had to think faster using those skills to win a s a team. Another reflection was that there was a positive contribution in that it builds one's confidence and playing skills. Again, another player thought that MS developed creativity on how to develop some skills in netball. This is somewhat vague and does not point out the contributions to the athlete as this might refer to tactical issues and not mental aspects.

MT might encourage me to play well or might discourage me in playing the game,

it can change you positively…..(Gladys)

You have to think faster using those skills to win as a team. (Lethiwe)

It really needs your thinking capacity for you to be able to dodge the opponent or pass the ball using all these skills you must think faster to win as a team. (Nandipa)

It builds confidence. (Barbra)

It builds your playing skills. (Vimbiso)

I think MS develops creativity on skills on how to develop some skills in netball. (Barbra)

It is important to note that MS encourages individual players to play well and never discourages some of them from playing the game. It is meant to change players positively. Thus, it would be correct if a player thought MS was there to equip the players to handle themselves and their game because netball was believed to be a fast game that requires alertness, as Tariro and Gertrude agreed. Vimbiso believed that MS sharpened her brain for the game, for her to think about her capacity to dodge or pass the ball correctly. Furthermore, Vimbiso said that MS helped her build her confidence in the game.

Netball is a very fast game so alertness is there in mental skills then you need to be alert. (Tariro)

Netball is a very fast game so MS equip me handle myself in my game and help you help you to focus. (Gertrude)

Mental skills build my own confidence in the game. (Vimbiso)

All these later annotations are correct about the role and value of MS in developing the skills and performance of the players. However, they were not elaborated to show how this would be realised. It still left the researcher with many questions about the knowledgeability of the netball players about MS.

6.5.2 THEME TWO: DISTRACTIONS FROM CONCENTRATION

When all players were asked whether they were seriously affected by some form of distraction while playing netball, most players responded by saying that almost all noise tended to affect players, irrespective of where it came from. Players acknowledged that what was different was that different people are affected differently by these distractions. For some players, distractions depended on the nature of the game and the mood generated in a game. These players pointed out that if the team was winning the game, they could appreciate more different forms of noise, including loud music, singing and individuals shouting on top of their voices. Nearly all the players seemed to agree that they were not properly told how to handle distractions by their coaches.

Distractions depend on the nature of the game and mood of an individual in a game. (Gladys)

All noise tends to affect me. (Rossaine)

Different people are affected differently by these distractions. (Nandipa)

Distractions depend on the nature of the game. (Gertrude)

If the team is winning the game l appreciate different forms of noise including loud music, singing and individuals shouting on top of their voices. (Khanyisile)

The coach does not teach us how we can handle distractions. (Barbra)

Therefore, most players expressed that they felt that the time spent on drills about handling distractions was usually very little. Even though distractions are a vital aspect of MST, a player mentioned that she was affected by emotions, especially when she had other problems affecting her and felt distracted. Netball players responded by saying that they usually focused on the time spent on the ball or the opponent rather than concentrating on any distractions. Players agreed that

this affected their stress levels and concentration, especially when they were losing a game and someone shouted a negative comment about the individual or their team. Players also pointed out that each player was affected differently, while distractions depended on the nature of the game. Thandiwe expressed that stress issues at home which were brought into the game, affected her concentration resulting in her focusing on faults by teammates. Nandipa said pressure and comments from supporters distracted her even the umpire and made her lose concentration during a game. Contrary to all these comments, Khanyisile felt that all forms of noise, including music, were not a distracter but rather helped her, especially if her team was winning.

. *Maybe stress or issues at home which you bring to your game instead of concentrating on the game you focus on faults done by players/teammates. (Thandiwe)*

Crowd can distract you or even teammates can make you lose concentration and distract you. Pressure can distract you……(Evelyn)

Comments from the supporters can distract me and sometimes the umpire can distract me. (Nandipa)

l think if you panic from the 1st time you get into a competition from playing a fair game like if you fear the opponent team it may distract you from playing a game. (Tariro)

If the coach overloads practices/activities during a sessioning time or practice time l become distracted. (Sengai)

I think emotions affect my game especially when I have other problems affecting me. (Lydia)

I think lack of MS. With the team that lacks team spirit it can distract you. (Tanaka)

The other thing l think is motivation from other players, if someone is playing well other players should appraise you and if they do not appraise me it can distract me. (Tendai)

Most group players agreed that there were sometimes distractions that affected their play. These distractions included stress issues at home, crowd and comments from supporters, fear of opponent, coach overload, emotions, lack of MS and motivation from other players. Again, Evelyn admitted that she was always severely affected when the crowd reacted negatively to her missing the ball or failing to shoot accurately. It also became clear that players naturally panicked the minute they got into a competition, especially when they feared their opponents, which distracted them. At the same time, Sengai felt that coaches who overloaded them during training distracted them, whilst Tanaka felt distracted by lack of MS and teammates who lacked team spirit. Tendai felt that it was important for teammates to motivate them, recognise their effort and appraise them.

Comments from supporters and sometimes opponents can distract you (Lethiwe)

At one time l cried when a spectator commented on my appearance by saying l was ugly and too dark in complexion. (Gertrude)

Lethiwe said some spectators' comments might become a personal attack on players. Gertrude admitted that she cried when a spectator scolded her, saying she was ugly and too dark in complexion. Eventually, Gertrude could not continue with the game and was substituted. On reflection now, she felt that she should have continued with the game and instead pushed herself to play even better and responded physically to the ridiculing.

Mbalenhle talked about umpires who deliberately distracted the attention of players of one team by continually making seemingly incorrect decisions. Players felt that this was one of the worst distractions of the game. Some players cited continuous incorrect decisions signalled by whistling.

Mildred mentioned the case of an opponent playing a very rough game as equally distractive. She admitted that she once played as a defender that she later feared, affecting her performance in the said game. All this is confirming that that distractive and disruptive behaviour is typical in netball. Nevertheless, the same players admit that they have never received direct help from the coaches on dealing with it.

> *When the umpire blows the whistle for foul but sometimes l will feel this is not fair but l feel l have no right to say no to the umpire it is not correct so that is not right as a player. (Mbalenhle)*

> *If my opponent is very rough l become very distracted. If the game is tough. (Mildred)*

6.5.2.1 Peer pressure criticism

The researcher heard from Audrey that her most prominent and feared distraction was an injury to a key player. This player commented that this could destroy the whole game. The same player further said that she did not tolerate teammates with a negative attitude to a game or who dwelt too much on a mistake made by another player. The researcher heard of yet another case of distraction where the coach overloaded the players with activities during a practice session, leaving players with very little time to understand everything. This player said that she thought that one was supposed to spend more time on a MS until she understood it.

> *Injuries may distract you, the attitude of teammates, if you do wrong things during a game or you are not playing well and teammates feel we are going to lose because of you. (Audrey)*

There were athletes in the study who pointed out that issues at home brought their distractions to the play of netball players, leaving them unable to concentrate on their game. This included family

issues and misfortunes that affected their game. These are essential issues that generally affect the players' performances in sporting games. However, playersseem not to be given enough attention in the training programmes worse still, in the mental aspect to deal with these issues. These results seem to confirm the existence of both internal and external distractors to players' performance. The sporting environment seems to be the most significant contributor to distractions of players' games, eroding player concentration and focus on the game.

Players linked emotions of the players to distractions of the players where thought processes become side-tracked during play. Players pointed out that when a netball team lacks team spirit, it will equally lack cohesion, which can distract the players. Another player talked of favouritism or nepotism as a very distractive issue in tertiary games. The player said that sometimes team selection was not genuinely done since the games are linked to students getting a chance for an outing, and good food and monetary allowances were involved.

> *I think on the issue of netball team the coach will show favouritism to some players. (Rossainne)*

6.5.3 THEME THREE: COACH ASSISTANCE

Coaches play a central role in the whole development and growth of an athlete. Coaches are responsible for creating a safe and conducive sporting environment for the athletes during practice and competition games. Coaches can positively or negatively influence the outcome of a match (Hawkins, 2014). A coach integrates the implementation of the sports psychology agenda for all athletes in the team to perform according to expectations. Thus far, the results indicated many incidents where participants referred to coaches affecting the performance and participation of tertiary netball players in Zimbabwe. This agrees with research that concluded that players could form cliques, but the coach's role was to ensure that those cliques are broken, and a motivational

climate is created to improve team performance (Martin et al., 2014; Ntoumanis & Vazou, 2005). Thus, team failures are attributed to controllable and changeable causes that the coach can successfully do to try and help athletes enhance their performance (Bruner et al., 2014).

Sibongile explained that she did not understand what her coach meant by commenting that whilst she felt that the coach supported and encouraged them to perform better, there were occasions when she heard him saying, "*it was just a game, and even if they lost it or won it, it would not really matter (Sibongile).*" The comment by Sibongile on her coach was very different from that of Tariro, who said that she valued the group talk by her coach before and after the games as they assisted the whole team to gain focus, concentration and confidence in the game. Tariro felt that whatever the coach said during pre-competition helped her handle pressure and encouraged her to win the game and reduce pressure and anxiety. Most players felt that the coach encouraged them by giving them all the support needed even when they lost a game. Again, Thandiwe felt that the coach played a vital role in some competitions. Gertrude mentioned that the coach also helped with group talk before playing games, giving players all the support they needed.

> *Coach encourages and gives us support to say it is just a game if you lose or win before game or during the game even when we are losing it gives you support throughout the game. (Sibongile)*
>
> *What the coach says before starting to play the game can help me handle pressure if the coach tells me do not worry girls you are going to win l have faith in you about this team that reduces pressure even anxiety. (Tariro)*
>
> *Coach plays a vital role in some competitions. (Thandiwe)*
>
> *Coach helps with group talk before playing the games. (Gertrude)*

Mildred commented that when the coach gave them tactics and strategies, it made a difference and helped her focus. Barbra also felt that she thought motivation helped her a lot. Still, Rossainne felt that coaches ensured that they helped by supporting her and the team. Khanyisile also commented that they supported the team by providing shoes and attire, which was good. Again, Vimbiso appreciated the coach's presence and commented that by merely being there, she felt loved. Therefore, it is clear that most group members agreed on the significant role played by the coach in trying to assist them to focus on their game.

During practice when there is an assignment that is due. (Sengai)

The coach gives us tactics and strategies and it helps you focus. (Mildred)

I think motivation helps me a lot. (Barbra)

They can do it by supporting you and the team. (Rossainne)

They support the team maybe by providing the shoes, attire so that all players have attire. (Khanyisile)

Just by being there, feel loved with what we are doing…… (Vimbiso)

It becomes clear that such a coach inspires confidence and a higher concentration by the players. Mental skills preparation schedule by this kind of coach will yield better sporting performances by collegiate netball players. This is because MS preparation generally relates to the psyching activities by the coach to produce excellent sporting performance results by athletes, as they are pushed harder to maintain optimum levels of performance states using mental preparation routines like positive ST. Mildred admitted that it is the kind of talk by her coach that always pushed her performances under challenging matches. Contrary to all these comments about the coach, Sengai

felt that being a student-athlete had challenges during practice sessions. It made it difficult to concentrate, especially if there was an outstanding due assignment.

While there is no doubt that most athletes in this thesis see the value and importance of using pre-competition and post-competition routines to improve players' performance levels, the study noted some poor roles by some of the collegiate netball coaches in Zimbabwe. These weak roles exposed the players to poor concentration and focus levels that cannot lead to improved sporting performances by the netball players. They can disrupt and distract players, thereby increasing the pressure before, during and after the games. Several athletes agreed that coaches kept on encouraging players to push up their levels of play, as it helps the players be able to handle pressure and anxiety better. This agrees with the views of one player who said she thought that her coach assisted players to handle all sorts of pressures by continuously praising them or promising them certain rewards if they won.

> *If the coach says you do not compete with opponents' speed I am going to try my best. (Audrey)*
>
> *I think by encouraging you if he keeps on encouraging you to play even better it helps a lot. (Zongile)*
>
> *I think coaches assist players in handling pressure by praising them or promising them something after winning. (Mbalenhle)*

What the coach says before, during, and after the game is always crucial to the players as it prepares them to utilise MS for their own good and the whole team's good. If done correctly, it helps the players to handle pressure, concentration, focus by reducing anxiety. This is where MST becomes crucial to netball players, as it prepares players to compete effectively and play better against their

opponents in terms of improved characteristics like speed, accuracy, dodging, positioning and pace, which are all needed to maintain peak performance in the players.

6.5.3.1 Criticism and pressure on players

As a temperamental player, a player admitted that she often and very quickly felt angry and frustrated if the game was not going her way, ending up shouting at different people, even from her team. Evelyn said she quickly got distracted, which ended up distracting even her teammates as well. However, this player praised her coach for constantly tracking her emotions and attitude during play. Sazini said that there were times when she would ignore the coach and ask for her substitution or go out and leave the game altogether.

I feel angry/ frustrated if the coach shouts at me. (Lethiwe)

In the process l get distracted and end up distracting teammates as well. (Evelyn)

I will ignore and ask for substitution and go out and leave the game. (Sazini)

These are incidences of how a coach should deal with a talented but temperamental player using critical MST. Without a proper grasp of these skills, this said coach failed to intervene appropriately to yield the best performance in this athlete. Unfortunately, this is the same coach highlighted in this study as unqualified in sports science. This may be the reason why he failed to deal with this case and athlete successfully. Brown and Fletcher (2017) argue that there is evidence that sports performance interventions can enhance sporting performance in athletes by giving credibility to the demands of the field of sports psychology. In the results from this study, there was also yet another tertiary netball player who pointed out that she has always found it easy to pour her heart out to her coach about personal issues that seemed to affect her performances in the game. After talking to the coach, Gertrude said that she always found it easier to focus and

concentrate on her game. She further said that she also found it better to politely request team members to understand her and the issues around her so that other players would need to stop using harsh words when she made mistakes. Tanaka felt that talking to her coach made it easy to focus and concentrate on the game. Nevertheless, Audrey reported that she found it better to ask teammates to understand when she made errors since it could be due to issues bothering her. Players seem to agree that what the coach says has a positive impact on their performance.

> *I find it easy to pour my heart out to the coach on personal issues that affect my game. (Gertrude)*
>
> *Talking to my coach makes it easy for me to focus and concentrate on my game. (Tanaka)*
>
> *I also find it better to ask my teammates to understand me when l make mistakes due to issues bothering me. (Audrey)*

Thus, players are highlighting severe insufficiencies of MS that would require a professional approach to them. Unfortunately, the study could not match the player with the actual coach. However, it is not in doubt that the coach would need to have the requisite MS to deal with her emotions and feelings if this athlete is to perform to her maximum in the game. Positive psychological intervention is needed to make such a player confident and focused on her performance. This may be understood better when considered against the example of Tariro, who said she got so discouraged by negative social comments from her coach that she had considered quitting playing netball. Probed further by the researcher about the nature of the coach's comments, Barbra explained that it was a comment almost like demeaning her that she was now in her third year and almost getting out of tertiary and might not continue to play competitively after college.

I get discouraged by negative social comments from my coach to a point of considering quitting. (Tariro)

I feel the comments demean me and being in my final year l might not play competitively after college. (Barbra)

Coach degrades your playing to give you a position knowing that you can play better than a teammate and that can distract someone. (Khanyisile)

Perhaps other people may find it startling and a bit sexist for the coach to say that. What cannot be denied is that such a coach is not using MS to benefit the player or the sport. Players' motivation is very central to good MST during practice or competitions. Hence, it is not surprising that the said player considered quitting the game.

Different players revealed that they thought that being in good physical shape was the most important thing to play netball better. Some of the players also felt that it was essential for them to discuss with their coach the issue of selecting players who would make up the team for each game. These players felt that including an undeserved player in the team tended to disturb the team's spirit. Khanyisile, who happened to be the captain of one of the netball teams, though she would like it as advice from the coach that would eventually improve her play skill. Tanaka added that since there were sometimes issues that affected the focus and concentration of the players, players tended to deal with the issues individually, with herself resorting to practising yoga or taking deep breaths before a game to improve her concentration and focus on the game.

I think when you are in good shape it is the most important thing to play netball.

(Sharayi)

As the captain of the team I think l will take it as an advice as I feel sometimes it will improve my skill. (Khanyisile)

For me it is important for the coach to involve us in team selection so that deserving players are selected. (Barbra)

Personally, I sometimes resort to practising yoga or taking a deep breath because we are different and we react differently. (Tanaka)

I think by making it clear to the teammates so that it will help player, captain or coach can be assisted. (Vimbiso)

Then l will make it clear to them that this is performance and l might improve in the next quarter. (Tendayi)

I resort to practising yoga or taking deep breaths before the game to improve my concentration and focus on the game. (Mildred)

The critical thing to notice here is that players resort to finding individual solutions to their MS challenges. It seems as if some coaches have not been able to take their leadership role in sports psychology seriously, thereby exposing players to ineffectual strategies of dealing with their own MS challenges. Some netball players seem to think that it is essential for them to receive guidance and counselling from their coaches. They agreed that this process is a two-way process that also required the players to accept the advice from their coaches concerning numerous issues. Some of them accepted to be criticised by their coaches for a negative play, attitude, focus and concentration. This means that players are ready and prepared to receive MST if it was implemented or initiated by their coaches. Subsequently, Barbra commented that she accepted

good comments from her coach and other players, typically leaving her much more motivated to perform well in her games.

It is important to receive guidance and counselling from my coach. (Tanaka)

As players, we need to do our part and accept advice from our coach. (Barbra)

If the coach criticizes me for negative play it sometimes helps me. (Khanyisile)

l think you can handle pressure, worry and anxiety. (Faith)

Players in tertiary netball games merely require suitable MST programmes that properly qualified coaches and sports psychologists implement. This would improve the thinking, learning and sporting performance of netball players. It would also increase the interest of other students in the games and sporting disciplines. One player said that she had no problems accepting the coach and his role so that she generally accepted positive coach criticism that made her grow in her game. She went on to add that she would not like it if the coach started criticising her instead of motivating her and the team because they would all lose their confidence.

Firstly, l will just say sorry guys l am going to improve very soon, but if they keep on complaining l will get frustrated now and will be out of the game. (Nandipa)

I think l will air out my views maybe during half time and say guys it is not my day but stop using such words to me because they need to understand the person. (Zongile)

Because a game is for seven people then they will know the person they are dealing with. (Mildred)

The researcher became interested in one view from a player who said that while she had no problems with being criticised by the coach, she noted that in most cases, when the coach does so, it was always not good comments for players to listen to. She added that listening too much to the

comments would frustrate her and make her lose her focus, concentration, and motivation to play the game. Gladys said that she preferred to volunteer for substitution when criticised, especially where she felt she was losing hope. Another player pointed out that she got encouraged by the support she got from the coach. Coaches had good intentions to win, as one player commented that she would do as the coach said even though she felt she was being criticised. Mildred shared the same sentiments and felt that any criticism coming from the coach was meant to make them win their matches.

> *To be honest it is painful and I would rather volunteer to ask for substitution if l feel that l am losing hope. (Gladys)*
>
> *Positive verbal comments that will boost my confidence. (Lethiwe)*
>
> *I get discouraged and at the same time get encouraged by support from the coach and get encouraged to continue in the game. (Vimbai)*
>
> *I think you must know that the coach always has good intentions for us to win. (Nandipa)*
>
> *So whatever criticism is for one goal to win so we must be positive always. (Mildred)*

Lethiwe reported that when the coach criticized her but instructed, she would follow suit and do it. Another player commented that learners improved through praising and felt praised by comments from the coach. It was easy for the team to lose confidence if the coach criticized them. Motivation by the coach was vital as it improved their play and made players feel like doing even more as these competitions sometimes became stressful. While some players felt that criticism failed if the competition was challenging, especially for the decider, as it made players lose confidence.

> *So, when he says do this l have to do it though l am criticized. (Lethiwe)*

As for me I like examples of good comments. I become more motivated and feel like doing more. These competitions can sometimes be stressful. (Sazini)

On my thinking learners improve through praising, so as for verbal comments l will get praised so that l continue doing good. (Gertrude)

In my own point of view coach criticism and if the coach starts criticizing me instead of motivating me and the team we will lose confidence. (Lydia)

In most cases it results in failure if the competition is hard especially if it is the last game. Even if you had potential to win. (Khanyisile)

I support the idea, sometimes the coaches because it may be the last game. (Sharayi)

Coach can be useful or destroy us. (Tanaka)

Comments from one player indicate that it was not always a good thing to listen to coaches who would be barking instructions from outside since this could be disastrous if one listened to them as it tended to frustrate one and make them lose focus. Tendai also supported the idea of ignoring those making remarks or giving instructions outside, even the coach, as this could result in them reacting negatively. Contrary to this, Barbra said she listened to comments from spectators or coaches on the sideline and gave an example of a match she played well where bystanders commented on how she was playing. She was supported by Khanyisile, who felt motivated and even mentioned that it increased her performance. Thus, players react differently to comments from coaches and those outside the court.

Sometimes you are not supposed to listen to outside coaches. (Tendai)

If you listen to them they can frustrate you and make you lose your focus. (Rossainne)

I think it is important not to listen to those outside even the coach as you might react badly so that you can prove them wrong. (Barbra)

I remember this game l played with Marymount and everyone was saying GD and the team we were playing with all ended up supporting me. (Vimbiso)

It motivates someone and increase on the performance of someone. (Khanyisile)

It would appear as if some coaches had a bad image or relationship with their players. Usually, when this happened, it destroyed everything positive about influencing players to play well. Such a coach's mental skills training programmes This happened because players expected their coaches to understand them well and deeply establish a level of relationship where players could allow the coach to support and comfort them (Lethiwe). Lethiwe further mentioned that this encouragement by the coach gave her hope and focused on remaining in the game and was supported by Thandiwe, who mentioned that positive comments helped her have hope and focus in her game. Results show that some coaches were not playing the role of sports psychologists whilst other players felt that comments from their coaches helped them remain focused in their game. Mbalenhle stated that positive comments from the coach helped her whilst another player needed encouragement and was told that they could either win or lose the game, so they needed to focus on the game. Nandipa pointed out the importance of the formation they would use during the game and strategies to use during the game.

Comfort us and tell us that it is only a game and it is either you lose or you win you but you have to hope and focus on what you want in a game. (Lethiwe)

You hope and focus as you play your games. (Thandiwe)

I can say a day before the games we can sit down and have team talk and, on that team, talk we talk about things we will do so that we do not do the opposite like marking skills. (Tariro)

The formation we will use during the game then the strategies. (Nandipa)

As for me the examples of good comments from the coach help me. (Mbalenhle)

Vimbiso pointed out that motivational words increased their trust. This was supported by another player who felt she became motivated and encouraged by verbal comments from the coach during competitions as they made them perform at their best. Zongile felt that verbal comments got her positive feelings towards the game as they improved through learning. Khanyisile also felt that always being there for them increased their confidence and made them feel comfortable whilst building her confidence. For Sharayi, positive comments were vital for her as they helped consider a match as a practice session. Faith added that players improved their performance through practising. At the same time, Sengai felt motivated and encouraged even to perform better if the coach used positive comments for her despite her shortcomings during a game. As a result of positive comments, Sengai mentioned that;

I become more motivated and feel encouraged to do even do more so those verbal comments are good because they make you perform best in these competitions. (Sengai)

On my thinking learners improve through practicing. (Faith)

So as for verbal comments l will get impressed when l get praised so that l keep/continue to do good. (Zongile)

I think to engage in all its like practice. (Sharayi)

I think motivational words for the game we will be having more trust. (Vimbiso)

By making us know the theory. (Tanaka)

Always being there for us it makes us feel comfortable if the coach starts motivating us and being there for us it will build confidence on players. (Khanyisile)

The theme running through the players' views is that most coaches are failing to motivate the players. There seem to be problems of inappropriate training programmes and a deep sense of insincerity from coaches in tertiary netball teams in Zimbabwe. Most players pointed out that they assisted each other on the strategies to use if they had a game in hand to play as they encouraged each other and tried to ensure that they all worked hard for the success of their team. Players could also support each other by providing motivating comments of encouragement. Team talk day before a match helped them discuss on apply to avoid slowing down their game and how they were going to dodge and use strategies for the day. It also helped them to urge each other and make accurate passes even during a game.

l can say a day before the games you can sit down and have a team talk and on that team talk you can have time to talk about the things that you are going to apply so you might have to slow down the game the following day when you are playing this team. (Audrey)

Especially to tell someone during the game that they must try hard and keep running and also make accurate passes. (Lethiwe)

Try to panel beat each other and give each other brief comments and encouragement. (Sibongile)

How you are going to dodge, the formation that you are going to use and strategies for the day. (Faith)

Players preferred the coach to call them soon after their game to discuss how they would have played so that if there were areas that needed attention immediately, these could be discussed soon after the match. Players also thought they needed their coach to give them tips that. Players felt that reviewing the match soon after helped with comments while the game was still fresh. Similarly, it helped athletes review the game and know that discussions were essential even for those observing the match as they could comment on whether the performance was good or bad. Again, one player pointed out that it helped a lot as it could change their game. Nandipa reported that the analysis helped them in their consecutive games. Barbra also emphasized that it was vital since it could change their game. Athletes would be told soon after the game that they did not play well, and the whole team could analyse mistakes made by every team member to perfect and work on weaknesses.

The team can get corrected soon after or there and there soon after the game instead of the following day. (Mbalenhle)

Helps the whole team to analyse the mistakes that everyone was doing during the game and where we have we are going to be perfect to improve and then if there was something we were doing wrong. (Nandipa)

Yesterday you did not play well soon after the game you get corrected so that you improve. (Faith)

Coach can give us game tips. (Sengai)

It helped in the next game on what l will be doing. (Tariro)

It helps you review the game and know like discussions are important and those observing the match will be able to say your performance was good. (Lydia)

Very important as it can change our game. (Barbra)

6.5.4 THEME FOUR: CHALLENGES FACED BY ATHLETES IN MENTAL PREPARATION

The final theme that emerged from the results was the challenges athletes face in their MS preparations. Players indicated that it was vital for them to have feedback from their coach as it improved their next game and kept them motivated. During the discussions held with netball players, some of them claimed that there were times when they felt that they were ignorant of what they needed to do to elevate their game and performance. Furthermore, if done freely, these discussions helped players analyse their mistakes during a game and further helped them to take note of all errors and try to avoid them in their next game. Players said they usually shared their observations amongst themselves as players on their system of play, as seen in some excerpts below;

Ignorance but if you share it then becomes better to understand. (Sibongile)

In the next game you must have a plan. (Tariro)

They will be playing and teach each other as a team and not as individuals. (Tanaka)

I also think the way we teach each other or the way that we express each other helps. (Lydia)

However, they also noticed that some players sometimes ignored comments from another player, even coming from the captain. Players observed that the captain could be listened to if the coach was not there in most cases, while other players quickly dismissed her. Players indicated that it depends on whom the comments came from since this had a considerable bearing on the acceptance of those comments. Sazini and Evelyn mentioned that it depends on the source of the

comments for other players to take them seriously. Meanwhile, Lethiwe mentioned that captains were respected and listed, but other players could easily be dismissed. This scenario might be problematic for players since the coaches might not always be available as they work voluntarily, which may require athletes to learn to do some of their training sessions on their own.

Depends on who says it, ignore if it is an ordinary player and listen to captain. (Sazini)

Captain can be listened to, but other players may be dismissed. (Lethiwe)

Depends on who says what during a game. (Evelyn)

All this shows that there are mistrust and even subversion in some of the tertiary netball teams. This tends to undermine the credibility, confidence and cohesion of the team. Some players felt that comments made by playmates could also affect one's MS preparations whilst fear of victimization was also mentioned as one crucial factor that affected players. Sengai mentioned that peer pressure may also negatively affect players creating some challenges for them on the competition day. Zongile said that negative comments from teammates may also result in a negative outcome for a player. It was further noted that talking too much about other players and the coach could lead to a player losing her place in the team and some players like Audrey were afraid of victimization that could result in them losing their place in the first team. These are the areas that need to be worked on in the new training programmes if the team is to be successful.

I think peer pressure from friends may cause mental challenges like some friends may take you out for beer or drinking a day before the game. (Sengai)

Maybe comments from playmates can also affect your mental preparation. (Zongile)

Fear maybe of victimization. (Audrey)

Thus, some players said they would instead not challenge views from the coach or those from other players. Rossainne felt that coaches could overreact, and this might result in a negative impact on their performance. This could create problems, especially for student-athletes and players dependent on their coaches. Coaches who were hostile were likely to fuel stress on players and have more significant problems of players failing to concentrate during a game. Diplomacy becomes vital so that athletes do not take issues personally, especially where a coach overreacts because a coach is also part of the game and maybe affected the same way with players when the team is losing.

> *I think the way even the coaches react maybe we have been playing and the coach starts criticizing us it affects our mental and performance. (Rossainne)*

Again, the player's sporting environment seems to be poisoned, resulting in poor personal relationships with players and their coaches. Such a scenario will hardly be conducive to producing good sporting results. The implications do not look suitable for collegiate netball teams under these kinds of situations. A critical observation that came from one player was that collegiate netball students wanted to see a close link between the collegiate games and their tertiary academic work in playing netball.

> *As we are tertiary students l want to link tertiary work with playing netball, it is very difficult to prepare my academic work and play netball. (Mbalenhle)*

> *It becomes very difficult when l am under pressure to prepare my work l would be stressed especially when l have a lot of pressure e.g this term my mind would be stuck and I would be trapped. (Nandipa)*

The players wondered why sports psychologists who taught sports were not sometimes involved in the collegiate games. Moreover, they noted that students who participated in these games usually lagged in their academic work, such as assignments. Their concern was that colleges do generally not understand and appreciate that students involved in tertiary games needed time to work on their academic work, adding pressure on netball players when they were involved in these games. Players must never doubt their team spirit in these competitive collegiate games, and all aspects of training should be considered so that athletes do not lack in the physical, technical and mental aspects.

> *Maybe the coach can give us the game tips. you can face challenges in mental preparation if you are not stable or if you are stressed with depression it will disturb your mental. (Mildred)*
>
> *Maybe we as players, we do not have that team spirit. (Tendai)*
>
> *The coach should look at physique. (Sharayi)*

Coaches sometimes put much pressure on the players as they expected them to win the games at all costs. Student-athletes felt that sometimes they got tired because they had other issues they had o attend to, such as their schoolwork. Their play system would be negatively affected, especially when they felt too tired to concentrate on their game fully.

> *When players play the game, they will get tired easily and this will affect our system of play. (Khanyisile)*
>
> *Also, as players we know that the coach expects us to play and win the games. (Vimbiso)*

Such a scenario requires the coach to be proactive and try to assist players so that their fitness issues do not negatively affect their game. Considering the above results from collegiate female

netball participants, one may conclude that the standard performance of the said players on their use of psychological MS in both practice and competition games is low.

6.6 Summary

This chapter focused on the presentation and discussion of Phases 2 findings. The objective of this Phase was to explore MS that are utilised in netball by coaches to enhance their players' performance in tertiary institutions in Zimbabwe. Coaches had a general idea of knowledge of MS, although they lacked a full understanding of the skills that can be used to enhance performance. Coaches were also not clear on the implementation strategies of MST, and there was a need for them to be proactive if they were to implement MST programmes successfully. Again, coaches were also said to put many their players under immense pressure when they showed favouritism in team selection. Coaches acknowledged the importance of team cohesion and team building if they were to maintain their team performance at a high level, and players must never doubt their team spirit.

Chapter 7

DISCUSSION

7.1 Introduction

This chapter aimed to provide a comprehensive synthesis of findings from this study. Furthermore, the chapter discusses explicitly the overall results from Phases 2-3 of qualitative and quantitative studies. The main objective for Phase 2 was to explore the MS that coaches utilize to enhance their players' performance in tertiary institutions in Zimbabwe. The objective for Phase 3 was to determine the current level of MS of netball players at tertiary institutions in Zimbabwe. It was envisaged that the findings would strengthen the argument to build on strategies that players already possess and that coaches are aware of for the development of the MST programme for collegiate athletes. Thus, findings would extend knowledge for both coaches and athletes and will also be used as a starting point to make a structured MST programme for collegiate players. The discussion also focused on CBT theory and how it can be used for behaviour modification for desired behaviour of players in order for them to embrace MST programme (Brown & Fletcher, 2017). Additionally, athletes will be capacitated to increase self-efficacy and self-regulation and increase their performance as players improve their use (Hatzigeorgiadis et al., 2008; Lee & Mao, 2016; McCardle et al., 2017).

7.2 Discussion

The discussion will look at the knowledge and understanding of MS by athletes in a wide range of mental skills techniques for athletes working in various sport settings. Similar studies that have successfully used MST can be adopted and used in pre-MST to evaluate MS usage during practice and competition. the ideas can therefore determine the impact of the selected MST programme

that has to be employed in order to improve performance (Hardy, 2010). Thus, results in this thesis revealed that there was limited understanding of mental skills by both coaches and athletes and implications are that both groups may need to be educated on the MS to increase their effective and efficient use. Studies have shown that it is tough to control players' emotions to consistently maintain their peak sporting performance, especially in tennis (Martinent & Decret, 2015). This opinion means that we can also take a leaf and apply it to both open and closed sports and netball without exception, for the players who need to control their emotions (Calmels et al., 2004, Thelwell et al., 2006). World-class athletes have been found to display better emotional control abilities, and it is, therefore, every coach's desire to get to peak sporting performances for their players (Thomas et al., 2005). This means that MST programmes should endeavour to address the individual athlete's performance differences in the development stages of MST programmes (Mesagno et al., 2009). The themes will be used to discuss the results.

7.2.1 Knowledge and understanding of mental skills

Coaches and athletes knowledge and understanding of MS is key to implementing MST since coaches tend to have a considerable impact on their athletes by ensuring desired goals are achieved by individuals through effective and consistent use of MS. This agrees with the authors who concluded that MS is affected by an individual's personality and that these skills should be taught early for successful performance enhancement (Allen et al., 2011; Gucciardi, 2008; Weinberg & Gould, 2003). Coaches are thus influential on athletes' performance. However, they need to be knowledgeable on how to implement MS techniques to athletes to change athletes' behaviour by discovering their unique qualities and promoting the use of mental states (Crust, 2010; Henschen & Newton, 2004). This thesis found that mental skills and knowledge implementation were vital to student-athletes successful use of it to enhance their performance. This agrees with Horn (2002),

who concluded that coaches influence and motivate athletes through interactional behaviour. This also agrees with Tenenbaum et al. (2007), who concluded that controlling coaches tended to stifle their motivation. Again, coaches also have to be watchful and understand their athletes so that they can pick out elements that may negatively impact their performances (Zieger & Zieger, 2018). Nevertheless, another reflection was that coaches needed to be knowledgeable on MS to create time and invest it in assisting athletes to acquire these skills and efficiently use them for the success of their games (Garvin, 2014; Pain & Harwood, 2004; Vealey, 2007).

Coaches and athletes need to get the correct information about the existing MS levels of players as well as other psychological needs as the starting point for their task to develop appropriate MST programmes. This can facilitate successful sporting performances by their players, which in turn will enhance their well-being as professional athletes (Vealey, 2007). This includes collegiate netball athletes who have also been noted to have many professional and social pressures against better performances. This introduces to the study the role of mental training efficacy as has been previously observed in soccer (Thelwell et al., 2010) and tennis (Hatzigeorgiadis et al., 2008). Positive findings have also been consistent in athletes (Blakeslee & Geoff, 2007; Paquette & Sullivan, 2012). Again, many athletes have been found to have successfully used self-talk (Hatzigeorgiadis et al., 2009) and to have shown positive effects in their sporting performances in terms of reduced anxiety, enhanced attention focus, re-directed negative thoughts and overall creation of positive athletic images (Stephens et al., 2012). It means that coaches should note the excessive levels of stress that are bound to disturb and lower their performance levels of sporting efficacy. Thus, stress levels need to be regulated through suitable mental training programmes that enhance their overall sporting performance (Hill et al., 2010; Lane et al., 2011; Mesagno et al.,

2012). It has also been determined that most psychological factors can either enhance or inhibit the physical performance levels of athletes (Vealey, 2007).

All athletes should improve individual effectiveness and group sporting performances (Foster, 2017; Mooney & Mutrie, 2000; Weinberg et al., 1993). Thus, GS has become one of the most popular and effective MST strategies employed commonly used by athletes (Martin et al., 2009). Results from this study show that student-athletes wanted openness on the part of the coach as they strongly felt that this increased self-regulation and motivation. This agrees with Duda and Ntoumanis (2005), who concluded that openness and self-regulation contributed to task-centred tasks. It became clear that most coaches seem not to attend to this vital skill needed to increase sporting performances as athletes felt that the coach did not teach them how to handle distractions.

Another important finding in this study was that athletes themselves needed to understand strategies that enhanced their performance in netball. Athletes in this study mentioned only a few techniques that could be used to enhance performance, and this shows that there has been a lack of exposure to the use of techniques to enhance their performance. Research has shown that those engaged in MS preparation of athletes should always consider several aspects and factors which optimise sporting performance (Gardener & Moore, 2006; Ward, 2011). Another observation by Sharp et al. (2013) concluded that athletes involved in MST result in raised awareness of its importance amongst athletes. This was also supported by Weinberg and Williams (2001), who concluded that athletes educated in MST improve their sporting performance and well-being. Gucciardi (2017) emphasized that mentally tough athletes are at an advantage as there is a direct link between competitive advantage and success. Thus, student-athletes aware of the existence, importance, and effective and efficient use of MST programmes tend to use the skills accordingly in practice and competition games.

Accordingly, it becomes essential for the coach to make sure that all his/her players are exposed to suitable MST to avoid these distractions and cope in any game situation. Integrating the CBT by the coach on athletes will allow players to deal with all destructive thoughts and emotions affecting them and successfully handle threats while focusing on controllability (Birrer et al., 2019; Smith & Smoll, 2011; Van Raalte et al., 2016). Mental practice is there to ensure that all the issues related to thought processes are taught and learnt by all players to increase their focus and concentration on the tasks that need to be delivered and eventually perform to their best potential in the sporting environment during practice or competitions.

7.2.2 Promoting the use of mental skills and managing constraints

Negative thoughts and emotions quickly affect competitive athletes, leading to poor performance (Didymus & Fletcher, 2012). It is not surprising that collegiate athletes commonly experience very different demands from their non-athlete counterparts (Brewer & Pertrie, 2014; Martin & Anderson, 2014). Thus, athletes in this thesis brought up these pressure issues on student-athletes that affected their practice sessions and total commitment to games. This was in agreement with several other researchers who had studied student-athletes and pressure affecting their performance resulting in difficulties of balancing the different roles of combining sports and studies (Burns et al., 2013; Gayles & Baker, 2015; Golby & Wood, 2016; Surujilal et al., 2013). Student-athletes in this thesis also raised the issue of pressures to be selected in the team and commented that there were times when coaches used favouritism and not merit to select players. Thus, adjusting to college demands was necessary to maintain full loads while focusing on competition and practice. At the same time, successful performance for competitive athletes demands them to possess ability skills to deal with stressors (Nicholls et al., 2009, 2016).

Several constraints may put pressure on student-athletes resulting in them suffering from unwanted stress. These may encompass time stress, the need to maintain health and fitness, lack of motivation, intense exertion (Birky, 2007). External and internal factors and stressors such as time constraints, lack of administrative support, relationships with coach and teammates, cognitions and emotions are bound to negatively affect athletes (Barker & Winter, 2014; Butt et al., 2010; Fletcher et al., 2012). Therefore, competitive collegiate athletes are left with limited choices of prioritizing sporting life and psychological challenges as they accrue pressure to perform college work and sport. This might result in demotivation and a possibility of fatigue on them (Burns et al., 2013; Golby & Wood, 2016; Surujilal et al., 2013). Thus, time management remains a significant challenge as they find themselves in a precarious situation that negatively affects them and leaves them mentally exposed.

It is clear from the results that while most players agree that they get affected by distractions, the effect is different to individual players. Secondly, it is essential to note that while nearly all players accepted that disruptions affected them, there does not seem to have apparent efforts to address it in MST programmes of the different teams. Where there is an attempt to do this, it is weak and ineffectual. Players observed that comments from the opposing supporters distracted them because they almost always were rude and derogatory. The issue is how many coaches seem not to attend to this critical weakness in collegiate netball players. This is true when we consider another observation from another player who felt that sometimes these distractions were unfair. It is also not permissible for a spectator to scold a player using negativities of her actual physical structure or appearance.

Based on these findings from this thesis, some players thought they had witnessed undeserved team selections favouritism that tended to distract and disrupt team cohesion. These are the

external factors of distractive behaviour that are associated with team coaches. This agrees with previous research favouritism influences coach's decision on how to prepare athletes as the choice is not based on skill and merit (Gross et al., 2018; Saw et al., 2015; Wood, 2010). Such issues seem to be handled weakly in MST programmes of netball players. For one to be fully equipped with netball knowledge, it would imply a total understanding of both the sport and the issues surrounding it. If this were to happen, then no player would require a coach or sports psychologist. It seems to be an overstatement of the nature of skill required for the netball sport. This is like another player who thought that MS was necessary since they made one play the game of netball and learn and teach others about it. Combining the coach's role and a good player could be difficult to find in most netball players. This could be one of the misconceptions that players have about MS and netball as a sport. It is correct for a player to point out that MS can help to reduce their emotions while playing the game. However, it is unclear what some other players mean when they say that MS encourages them to play well or might also discourage them when playing the game. This is in agreement with researchers who have concluded that coaches can expose players to the same stress level as that of competition thorough knowledge of MS exposure. Research has shown that athletes who are exposed to MST perform better than their opponents. (Dalen et al., 2020; Gross et al., 2018; Martens 2004). To suggest that MS can exist to discourage players from playing the game or playing well is to show that these players do not fully understand the role and nature of MS in playing netball. At the same time, it is correct for one player to say that mental skills sharpen their game skills and increase their thinking capacity to dodge and pass the ball. This is the truth. It seems as if the results are showing little understanding of these critical skills while some players correctly understand them. Many players indicated that one has to think faster using those skills to win as a team, although other players agreed that the coach developed confidence

and playing skills. and it also left one wondering what the player meant when she mentioned her brain was sharpened in the process of playing the game.

7.2.3 Coach-athlete relationships and performance

Results of this thesis found that coaches and athletes must maintain a good relation. On the other hand, the coach plays a pivotal role in athletes' physical and psychosocial development (Jowett & Cockerill, 2003; Martens, 2012). Coaches also attempt to help athletes remove and overcome mental obstacles that may affect their performance. This is congruent with the view that supporting coaching behaviours results in positive self-talk, increased confidence, anxiety control, and competency (Johnson et al., 2011; Zourbanos et al., 2010). Another observation from the thesis was that the coach-athlete relationship needed to be sound as it tended to produce positive results during the performance. Athletes also specifically stated that the coach had to be someone who understands them and involves them in team selection and post-match discussions. Thus, the coach-athlete relationship creates a climate that influences performance goals and positively affects athletes' emotional state, as observed by other researchers (Campo et al., 2012).

Results from the thesis concluded that verbal dialogue between coach and athlete was critical. It decided on the fate of the outcome of results by either positively or negatively affecting players. Other researchers also observed that verbal dialogue between the coach and individual player becomes vital if the players' performance could be positively changed by giving direct instructions on how to play and calm down the athlete or even motivate her (Weinberg & Gould, 2007).

Results from this thesis concluded that negative feedback from coaches and teammates results in induced negative emotions and perceived stress in athletes. This agreed with another study which concluded that efficacious behavioural interventions involving skills that improve relationships

could be helpful to support athletes (Donohue et al., 2015). Athletes' performance depends on the positive relationship between athlete and team mood (Lowther et al., 2002). Again, teammates who set and attain goals together will depict improved group cohesion, facilitating performance.

7.2.4 Mental skills/tools for performance enhancement

Goal setting is a motivational technique that leads to high performance in sports and is an integral athletic culture proven to offer numerous benefits to performance (Larsen & Engell, 2013; Weinberg & Butt, 2014). Goals increase athletes' focus, resulting in athletes focusing on crucial performance elements (Larsen & Engell, 2013). Achievement of long-term goals results due to the approach to training and competition (Weinberg & Gould, 2014). At the same time, other areas such as public life, school and managing stressors may result. Therefore, personal goals should be collaboratively developed with coaches and teammates (Maitland & Gervis, 2010). Coaches are incredibly influential to athletes (Johnson et al., 2011). Being supportive of teammates can result in goals being accomplished (Donohue et al., 2013).

On the other hand, positive ST may result in performance goal accomplishment (Hardy et al., 2001). Motivation to accomplish performance goals may be improved through cognitive behavioural skill-based interventions (Mattie & Munroe-Chandler, 2012). Performance can be negatively affected by competitive state anxiety before or after competitions (Martens et al., 1995). Anxiety can be induced by fear of injuries, and this may negatively affect players. On the other hand, over-arousal and under arousal can result in tension and negative thoughts (Balague, 2005). However, moderate levels of performance anxiety facilitate performance. Cognitive behavioural strategies help athletes reach optimal functioning (Cox, 2002; Weinberg & Gould, 2014). One athlete in this study confirmed that she used yoga to try and improve her focus and concentration.

This was in agreement with a study by Donahue et al. (2013), who concluded that yoga, motivational, and focus statements could reduce anxiety and improve performance.

Athletes in this thesis mentioned that they used self-talk to enhance their performance. This concurred with another study which concluded that ST and mental preparation were critical factors in practice and competition as they enhanced performance (Hatzigeorgiadis et al., 2011). Self-statements assist performance preparation (Hardy et al., 2001). Self-talk is an aspect of cognitive-behavioural interventions and can improve performance in sport and other life contexts (Wright et al., 2016). Emphasized the optimisation of ST in both practice and competition through the practice of self-statements. Cognitive-behavioural skills could be used as a tool to prevent stress and improve coping and emphasis should be on how thoughts, behaviours and feelings reciprocally influence one another. Once more, thoughts, feelings and behaviours can positively affect performance and should be considered an important aspect when planning MST programmes. Thus, athletes thoughts and behaviours need to be restructured to emphasize optimisation of ST in practice and competition. self statements are likely to have a positive influence on their emotions (Donohue et al. 2015; Wright et al., 2016). Athletes will modify and establish optimum mindsets throughout practice and competition (Hardy et al., 2001; Hatzigeorgiadis et al., 2011). Self-talk and other techniques result in increased self-defence, motivation and anxiety control (Hardy et al., 2001; Zinsser et al., 2006). Positive ST results in a positive attitude leading to successful performance (Donohue et al., 2015). All this information becomes essential in coming up with a programme for athletes to enhance their performance.

Self-regulation was essential as it controlled athletes' cognitions, emotions, and behaviours (McCardle et al., 2017). Therefore, student-athletes with low confidence tended to self-doubt and self-criticize more and dwelt on problems with no solutions in sight. Hatzigeorgiadis et al. (2009)

concluded that it is paramount to teach athletes to self-regulate to improve their performances through the successful use of identified strategies. Additionally, student-athletes who fail to contain pressure may result in behaviour withdrawal or end up either quitting altogether or not coming for practice, resulting in reduced performance. For student-athletes to continue playing, coaches must ensure that their thoughts and behaviours are positively restructured to influence emotions (Wright, 2006). It should be noted that for student-athletes, these thoughts, behaviours and emotions can fluctuate on a dynamic basis and must be in a homeostatic state if they are to assist in performance optimization (Donohue et al., 2015). Other studies concluded that MS enhanced motivation and improved focus and mental toughness in athletes (Fournier et al., 2011; Sheard & Golby, 2006).

Effective GS results from self-set goals where individuals take part in setting these goals to have a sense of ownership are being made. However, the way it is being implemented could be improved. Thus, goal acceptance is likely to result in player commitment to achieving those goals and, consequently, cannot positively affect athletes' sporting performance. Group goals enhance characteristics such as co-operation, improve player morale and elevate collective efficacy (Kleingeld et al., 2011). Nevertheless, the coaches need to be directed appropriately, which tertiary netball coaches do not always do in Zimbabwe. The coaches are not using GS and ST systematically to enhance the performance of netball players. Players were encouraged to play to their best and try to overcome adversaries that could affect their play. By being student-athletes, players were likely to suffer from depression significantly influenced by stress that student-athletes experienced before or during the competition (Yang et al., 2007).

Instructional and motivational ST has been an effective sports enhancement strategy that improves performance (Van Raalte, 2016). On the contrary, this present research was not convinced that

netball coaches in Zimbabwe were imparting MST correctly at other times, even though time was limiting. Although ST has been seen to help athletes tremendously to prepare themselves to play competitively, it has been observed in this research that it is not being used well. Players' focus is sometimes disturbed, and it causes unnecessary or even unpleasant emotions in the players (Van Raalte et al., 2016).

This is in agreement with earlier observations that ST and GS can be used either separately or in combination to enhance the performance of the collegiate netball players on their desired thoughts (Birrier & Morgan, 2010; Hardy et al., 2004; Johnson et al., 2004). Since MS minimised anxiety, and by so doing promoted, encouraged resilience among the players. Researchers have noted that athletes who are educated about the benefits and techniques of MST are more likely to implement the techniques into their practice and competition routines (Bar & Hall, 1992; Frey et al., 2003; Weinberg et al., 2011).

7.2.5 Team building and team cohesion

The thesis found that team cohesion was an important aspect that helped players communicate and work well together. Lack of cohesion resulted in embarrassment and ridicule by athletes, especially where athletes fail to work as a team and teammates end up expressing their sentiments aloud. This agrees with observations that team cohesion is an essential aspect in a team sport, and each member should consider dynamic behaviours of teammates that may be affected by the environment (Evans et al., 2013; McEwan & Beacham, 2014). Thus, team members must bear in mind that they need to systematically pass the ball to their teammates for successful team cohesion can be improved through social skills training and collaborative team GS (Senecal et al., 2008). Cohesion is a dynamic property that reflects participants' perceptions of the general unity and unique attractions to the tasks and social objectives of the group (Eys & Jeemin, 2017). Cohesion is the degree to

which individual athletes try to stick together to achieve the set goals. McEwan and Beauchamp (2014) see cohesion as an emergent state of the athletes in a game resulting from other behavioural processes in which the team is engaged. McEwan and Beauchamp (2014) further argued that this is the same as the process of teambuilding, even though team building goes beyond considering the cohesion of the team by targeting other teamwork behaviours such as coordination, cooperation and communication. McLaren et al. (2017) have shown that team cohesion usually determines team success and that positive team environments foster strong team cohesion. In the thesis, most coaches felt that increased concentration and the use of well-known personalities who have also played the same game could assist netball players to improve their MST techniques to increase their performance levels. The primary target of team-building approaches must include GS since no one is too big for the team (Hallgrimsson, 2016).

This thesis concluded that cohesion in netball players in tertiary institutions in Zimbabwe helped athletes achieve their best performance. This agreed with a previous study which concluded that a cohesive team possesses standard norms, goals, unity, communication and synergy and communication between the coach and athletes increased the likelihood of closeness and enhanced performance through exposure to the same stress level (Smeetan, 2018; Sakar & Jowett, 2012). Thus, a team's objectives should coincide with the personal goals of each team member for synergetic performance to occur. Team building should contribute towards the establishment of utmost cohesion of all members, which results in a positive influence on the whole functioning of the team (Carron et al., 2002; Gross et al., 2018; Holt & Dunn, 2006; Steven & Bloom, 2003). A collegial netball team relationship is cohesive if it produces mature individual players who want to work and reach their peak performances in a sport. It becomes clear that no team can succeed in reaching its full potential if team members work individually without any cohesion.

Interestingly, the common problems identified by both athletes and coaches were on the reluctance of players to gain athletes' trust, especially when it came to team selection. Players felt that sometimes the coach selected favourite players at the expense of those who played well. Naturally, this was bound to psychologically and negatively affect athletes. This can be improved if coaches values, principles, and beliefs help them set priorities that guide their coaching and behaviour (Gould et al., 2017; Gross et al., 2018). This will help athletes develop in all aspects as well as motivate them both on and off-court. Brown and Fletcher (2017) concluded that coaches delivered interventions that were said to be successful, and being receptive to the implementation of the programme solely relied on the coach-athlete relationship. This becomes a crucial observation to note that both parties' good relationship and acceptance of MST breeds success in the implementation (Shaffer et al., 2015).

Weinberg and Gould (1995) pointed out that there are differentials in the levels of interaction among team members in team sports. They argue that there are three types of sports teams, with the first one being highly interactive, with high levels of coordination and communication in all their actions. The second one is where there is co-acting, which involves little or no team interaction and coordination. The third one is mixed co-active and interactive activities, requiring some improvement in interaction and coordination among team players. The coach's main task is to ensure that all team members are assisted to learn the norms, values and roles of the team as expected of them to provide a well-knit structure of the team during play. It means that all team members must be aware of the existence of the other members and must act in a non-judgemental manner during play. Therefore, players must learn about themselves and their strengths and weaknesses as much as they may also need to identify with the strengths and weaknesses of their compatriots and skills to enhance their performance (Birrer & Morgan, 2010). When players

become self-aware and aware of others, they can accept themselves and others, thereby promoting a rare team spirit that all members, in turn, promote a highly synergetic sporting team.

Coaches are the foundation of this goal realisation by athletes. Situations where they are less familiar with MST, can spell disaster for athletes' performance enhancement. Coaches have a role to play, and this research found that coaches were there to support and counsel athletes and not distract them through negative comments and make mental skills a part of regular training (Olusoga, 2009; Frey, 2007). Familiarity with the specialized needs of athletes was also crucial for the coach in order for him/her to effectively assist them. Results of this study concluded that the role of the coach was vital for athletes success. This is supported by researchers who concluded that athletes perceived their coaches and how their feelings and mentality are affected was dependent on the coach's actions towards them as they needed the coach to individualize them and connect with each of them differently (Cranmer & Brann, 2015; West, 2016). While the coach can dictate athletes' thoughts and mindset, it remains vital for a clear relationship to be enhanced by open, transparent communication as interpersonal interactions are said to psychologically affect athletes (Cranmer & Brann, 2015; Martin et al., 2009). Athletes are different and are bound to respond differently to their coach, and knowing their personalities will help the athlete deal with them accordingly. Coaches guide athletes in both successful and unsuccessful situations, and the coach should have the ability to control athletes' frustrations and provide supportive behaviours during their emotional situations. Coaches influence the effectiveness of performance enhancement and can engage in supportive behaviours during MST so that athletes remain composed during continued interaction, and coaches can help athletes reduce anxiety (Eccles et al., 2012; Sakar & Jowett, 2012). On their side, athletes indicated that they preferred positive behaviour immediately after the match and social support during the match.

A comment like '*..it was a game, and even if they lost it or won it, it would not matter'* would suggest that the coach is failing in his duty to inspire the players to aim to achieve good performance results. It can create laziness, *liaise-faire* attitude in the players that can hardly produce the desire and commitment to push themselves more and achieve the required results. It may be the worst signal of the role of a coach on a sporting team. Such an attitude by a coach cannot be expected to take through successfully netball players in a necessary mental skills training programme. West, (2016) concluded that coaches must communicate with athletes to make them feel acknowledged, recognized and valued. However, they need to be appropriately capacitated to impart the necessary mental skills to the netball players. It was observed by the researcher that there were times when both athletes and their coaches often used mental training techniques without the assistance of a sports psychologist (Weinberg & Gould, 2015). There is a need for coaches to ensure proper bonding for netball players to improve team cohesion. Team cohesion will result in better sporting performances, a good rapport among players and better enjoyment of the game while working together productively towards fulfilling a common purpose (Jones, 2010; Jones & Standage, 2006; Moran, 2004; Weinberg & Gould, 2011). This is not precisely what is happening in tertiary institutions concerning the mental skills training for netball players.

7.3 Summary

This chapter discussed findings from Phases 2 and 3. Phase 2 was to explore MS utilised in netball by coaches to enhance their players' performance in tertiary institutions in Zimbabwe. Findings showed that although coaches mentioned some skills, they lacked knowledge on implementation and tended to hide behind not getting adequate time for implementation. The objective for Phase 3 was to determine the current levels of MS of netball players at tertiary institutions in Zimbabwe. Findings showed limited measurements conducted, and players themselves expressed that coaches

sometimes assisted them as they were under pressure due to being student-athletes. They also commented that favouritism and comments from the coach and other players distracted them. The thesis's findings support previous studies that measured psychological, mental skills during practice and competitive games in different sporting games. However, data from the present thesis shows that there is a lot that coaches can do to improve mental skills performances for their collegiate netball players. Athletes also need to learn a lot and be receptive to MST programmes conducted by their coaches to enhance their performance. The design of a new MST programme can assure this once players are assessed for the use of MS during their practice and competitions.

Chapter 8

PHASE 4: DEVELOPMENT OF A MENTAL SKILLS TRAINING STRATEGY

8.1 Introduction

Having established some of the challenges that netball players at tertiary educations in Zimbabwe face in Phase 1 and 2, the study now makes suggestions on initiating appropriate MST programmes. These programmes may be suitable for collegiate netball players as strategies to be used by netball coaches in Zimbabwe to enhance sporting performance at individual and team levels. This MST programme strategy for tertiary education netball players shall be designed and developed, and recommended for use by all netball players in Zimbabwe. There is a need for players' guidance when developing a new MST strategy that will consider the targeted player's holistic personal development and growth. Suffice it to say that it is also essential to incorporate a total understanding of the individual players and the whole sporting environment in which individuals operate. MST programmes generally focused on GS, ST, visualization anxiety and concentration, and there was no doubt that they resulted in enhanced performance and athletes growth both on and off-court (Gilbert, 2017; Gucciardi et al., 2009; Weinberg & Williams, 2001).

8.2 Considerations for conducting Individual and team MST programme

The context of the program and the coach-athlete relationship could increase team members' time to develop a teaching-centred program. Again, it is crucial to consider the needs of athletes and assess them before programme implementation. That way, the program can then be adaptable to athletes' needs to encourage them to implement mental skills during practice and competition. Pre-routine activities that build confidence for individuals and teams should be consistent with athletes'

feelings, thoughts and responses for peak performance (Weinberg & Gould, 2001). Team members should know each other and engage in activities that build team cohesion. Weinberg and Williams (2001) posit that it is not only about well-structured and taught programmes, but mental skills can be taught. Athletes may fail to practise and use them during performance consistently. The coach should endeavour to encourage athletes to engage in usage during practice and competition. Challenges come up if the coach does not subscribe to MST implementation for performance enhancement (Weinberg & Williams 2001). Thus, improved performance after implementation becomes crucial to those who implement the programme to instil self-regulation self-efficacy on the part of players (Schoenfelt & Usry, 2005). Player personal commitment will result in huge benefits for players if consistent usage of MS is maintained during practice and competition (Frey et al., 2003; Morgan, 2006).

8.3 The Intervention and integrating the CBT approach

The intervention can be guided by the whole framework of the CBT approach based on cognitive and behaviour therapy as a technique to teach mental skills for performance enhancement to athletes. For this model, the emphasis is on the interaction between the cognitions, emotions, and behaviour of athletes, which can successfully change the behaviour and enhance players' performance (Hill, 2001). According to this theoretical framework, coaches should teach athletes to modify their thinking patterns to change their behaviour (Hill, 2001; Morgan, 2006; Poczwardowski et al., 2004). The CBT can therefore strengthen the positive behaviour of athletes whilst weakening the negative behaviour. The CBT theory can also change behaviour and lay the foundation for performance enhancement techniques (Behncke, 2004). Incorporating CBT can alter sources of increasing self-efficacy will make athletes create positive desired mental states through thinking positively, to enhance efficacy expectations, leading towards increased

confidence and performance. Thus, the effectiveness of cognitive interventions subsequently increases athletes' ability to control anxiety, cope with stress and improve performance (Hill, 2001). Mental skills practices can modify cognitions as well as self-efficacy (Feltz & Riesinger, 1990). When athletes do not have correct and appropriate sporting interventions, the future of the athletes and the sport can be said to be doomed. Research has concluded that the CBT theory positively affects both coach and athlete relationships, increases hope, goal striving and well-being. Further, it enables individuals to regulate negative cognitive thoughts while incorporating positive cognitions, decrease self-handicapping conditions and decrease performance interfering thoughts while increasing performance-enhancing behaviours (Frodi et al., 2001; Gardiner & Kearns, 2007; O'Broin & Palmer, 2009; Oades et al., 2006).

An educational MS intervention approach to MS predominantly uses the cognitive-behavioural model (Murphy & Murphy, 1992). This consists of three main phases (Gill, 2000; Horn, 2002). The first phase of the educational MS approach is the education phase. Athletes can benefit from identifying, understanding, and recognising the importance of learning MS to adopt individualised patterns as they learn how the MS strategies can enhance athletes sporting performances. Here, the coach introduces the new and unfamiliar concepts to players that they are meant to learn and understand in their various sporting endeavours. The coach must stress the importance of regular practice for successfully implementing the MST strategy, although collegiate netball players need to focus on their studies.

It is crucial to note that when introducing a new MST approach, different techniques are designed, developed and improved upon in order to assist both the coach and the players in the different sporting disciplines (Vealey, 2007). This means that when designing and developing these techniques, it becomes essential to consider the individuality of each athlete and the specificity of

the sporting discipline to correctly guide the way the MST programme is going to be implemented. Coaches need to know that it is not so much about the strategic event itself, but rather how different athletes perceive it and its impact on influencing behavioural and emotional change in the athletes (Beck, 2011).

Vealey (2007) points out that the coach must consider individual athletes' needs and characteristics in the unique sporting environment. Therefore, the efficacy of MST techniques can be realised through an individualised approach that offers a deeper understanding of all the athletes and all the attendant variables that can eventually be seen to influence individual and team sporting performance. Thus, individualising the MST preparation helps athletes understand and appreciate themselves and their sporting discipline (Heys, 2012). Coaches can, therefore, conduct an MST programme that is best to increase the efficacy of the identified sports psychological work and then design, develop and implement an individualised self-regulation intervention strategy (Ruiz, et al., 2017). The coach should also take cognisance that the content and intensity of emotions are always associated with either successful or unsuccessful sporting performances by athletes (Ruiz et al., 2017).

The next phase is the acquisition phase. This is where learning the MST strategies and techniques becomes important since individual athletes differ on competently implementing the identified MS (Weinberg & Gould, 2011). This phase focuses more on strategies and techniques that will be used to acquire the required mental skills. Thus, specific MST strategies are tailor-made to meet each athlete's minimum and unique needs and abilities in each sport.

Lastly, there is the practice phase when the individual athletes acquire the newly identified MS. Here, the athletes focus on automaticity and implementing the identified MS successfully during practice and competitions (Weinberg & Gould, 2018). During this phase, athletes are seen as

having matured in acquiring the identified MS to require automating those skills through over-learning to teach the athletes how to systematically integrate the identified mental skills into their performance sporting situations. In this phase, netball players should be able to simulate those skills and apply them during the actual competition games.

8.4 Mental skills training programme Development

This study's new MST programme is designed, developed and recommended for all netball players who have adapted and followed the process of Balaguer (1994). Implementing the MST programme consists of five key phases. Phase 1 consists of MS assessment and short-, medium and long-term GS. This is followed by phase 2, which is the actual phase of the design and development of the MST programme. Phase 3 focuses on pre-competition aspects of the MST programme, while Phase 4 looks at the actual competition game implementation. Phase 5 focuses on post-competition development of new and requisite MST strategies. This model is cyclic, making it possible to re-start the cycle when necessary and start with the measurement of the actual level of MS in the netball players.

Mental skills training preparation relates to the attempt to realise athletes' excellent or peak performance and maintain this optimum sporting performance state using MST preparation routines such as positive ST. In this strategy, athletes tend to use pre-competition training routines to help them concentrate and focus better on their game without being disturbed by any distractions from both the internal and external sporting environment. The coach needs to be aware that MST programmes are tailor-made skills and activities meant to build mental toughness in individual athletes. Mental toughness will enhance the athlete's athletic ability to thrive in her/his sporting performance while under pressure and choose to regulate themself, no matter the situation.

8.5 Mental Skills Training Programme for Netball Players

The researcher self-developed this MST programme for collegiate netball players from the findings in this thesis and the literature reviewed in this thesis. The suggested MST programme is detailed in Table 8.1 (p.262)

Table 8.1: Mental skills training programme for netball players

Phase & Technique	Activities/Content/Task	Drills & Homework	Session
Session 1 Athlete Profiling	Identify mental weaknesses & areas of importance that need improvement Assess entire team for group profile Check cohesion levels, team relationships, channels of communication Readiness of players Assess psychological skills absent Performance profiling Sport analysis Assessment of MS level Introduction of MST Athlete Education session	Identify the source of distractions Identify positive images Learn to refocus attention Change negative attitudes Demonstrate use of mental rehearsal Assess concerns	1 x 20min Keep a diary and log it
Session 2 Psychological skills training techniques	Conceptualising mental skills Short introduction of performance psychology and psychological skills training techniques, introduced and discussed Implementation procedure	Content orientation	1 x 20min Practice and competition plans Routines Self-regulation strategies
Session 3 Goal setting	Research and theory of goal setting as a foundation of achievement Link performance with outcome goals Short- and long-term goals Goal setting principles Common mistakes when setting goals Set SMARTS goals Reassess goals Regular feedback to adjust goals Set targets for yourself	From the goal setting principles: Principles do you think are the easiest to apply Principles do you think are the most difficult to apply Approaching those difficulties Types of goals you usually set if any Knowledge of outcome, performance or process goals	1 x 20min Familiarity with goals Difficulties faced Preferred goals Write down your goals in your training log and reflect on them Solutions if you encounter a problem Evaluation of goals
Session 4 Self-talk	Research and theory of self-talk Different types of self-talk Strategies to affect your self-talk Common mistakes Common distractions Use keywords/phrases to trigger positive emotional states Replace irrational thoughts Improve mood/Refocus Take deep breaths Manage worry	Reflect on your self-talk in your training log Try to change a negative thought to positive Exercise: how to learn from your negative Try to use the techniques to affect your self-talk during your daily life	1 x 20min Best ST statements Mood management Learning from negative thoughts Change to positive ST
Session 5	Control internal/external environment	Discuss what could improve	1 x 20min

Performance Routines	Familiar routine Systematic routines Refocus Incorporate CBT	Give specific period Work to improve confidence	Practice pre-performance routines Refocus and check confidence
Session 6 Refinement and post-competition development strategies	Refine and maintain changes Pre-competition activities Review performance profiling Revisit selected mental skills usage	Pre-competition activities combining GS & ST	1 x 20min Reflection Maintenance and self-efficacy Evaluation Re-start of the cycle

The coach can then rely on the initial assessment of the identified players' MS strength and create the ability to use unimodal, or even multimodal, skills for the best sporting performance enhancement approach. This is summarised diagrammatically below.

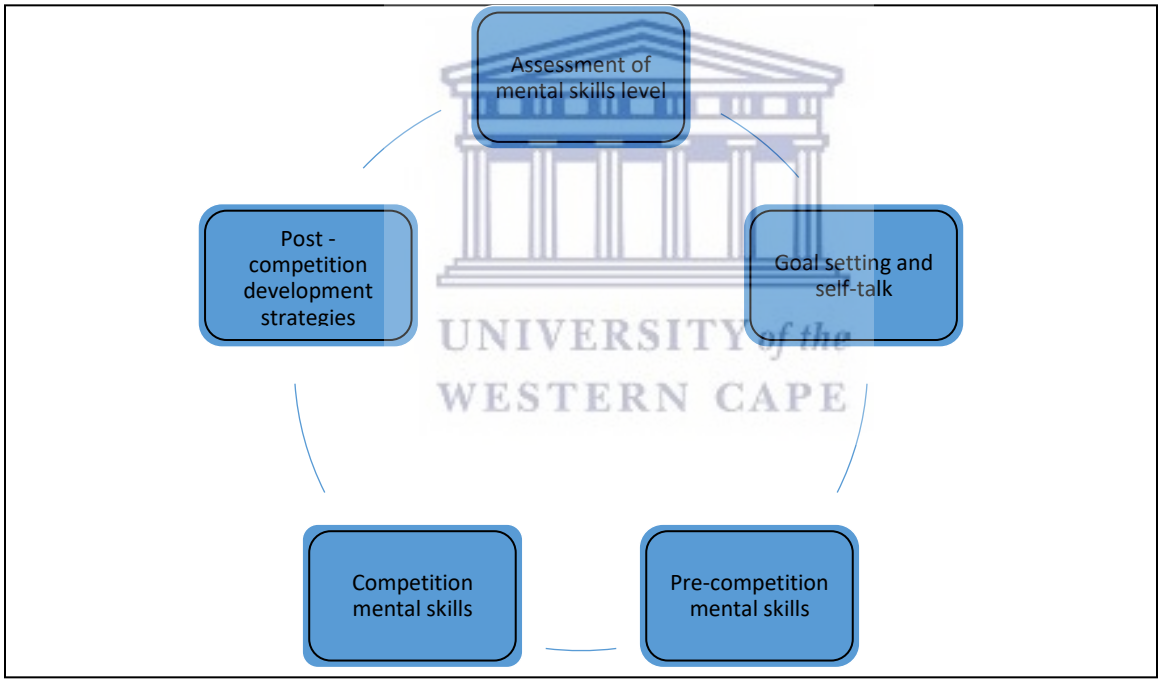


Figure 8.1: Programme for MST

The proposed MST programme will be cyclic, as indicated in Figure 8.1 (p.263). The first step involves assessing the level of athletes' MS to establish where they are before they are put into rigorous training to improve their mental ability to cope with adversaries during training and competition. In this case, GS and ST have been identified as the primary skills coaches can focus

on in the MST programme. Athletes would be exposed to the selected skills through the education technique. Once these skills have been grasped, athletes would proceed to practice pre-competition MS. Athletes then move to the next step of the competition, MS. The final stage is the post-development competition stage, where the coach and players review the use of learning MS. The cycle then starts again to measure assessments and see if there have been any gains and will continue using other selected MS to enhance performance.

8.6 Summary

This chapter has presented and analysed the data from research findings. The objective of this chapter was to develop an appropriate MST programme that could be used to improve MS for collegiate netball players in Zimbabwe. The present thesis examined the proposed MST programme of netball team sports in selected tertiary institutions in Zimbabwe. The proposed programme is cyclic and focuses on assessing MS level, GS and ST, pre-competition MS, competition MS, post-competition development strategies and back to assessment. The programme proposes to use the education approach that uses the cognitive-behavioural model to teach skills. Incorporating the CBT helps change behaviour and increase self-efficacy whilst also creating positive mental states of athletes and improving coach-athlete relationships. The next chapter rounds off the thesis by summarizing findings and discussing conclusions based on findings and study limitations. The chapter ends by making recommendations for further study and practice.

Chapter 9

SUMMARY, CONCLUSION AND RECOMMENDATIONS

9.1 Introduction

The purpose of this thesis was to explore current MST programmes that are being used by tertiary education netball coaches in Zimbabwe and use the information to develop an appropriate MST programme for netball players in Zimbabwe. This thesis offered new insights into the MST programmes in Zimbabwe. It facilitated the integration of MST in the new proposed netball MS coaching programmes that would improve players' sporting performances. It is envisaged that the newly developed MST programme will assist in improving the general success rate of competitive collegiate netball players in Zimbabwe and elsewhere. At the same time, the knowledge gained from the thesis can be extrapolated to other sporting disciplines wishing to gain the proverbial 'sporting edge' over their rivals. The chapter starts by giving an overview of the research questions, aims and objectives of the study. Thesis findings are summarized, and this is followed by conclusions that are drawn based on the findings. The CBT and how it was integrated into the study is also outlined and explained. Recommendations for further research follow before the chapter ends with the thesis conclusion then briefly summarises the thesis.

9.2 Overview of research questions, aims and objectives

This thesis was guided by the following research aim, questions and objectives:

9.2.1 Study aim

This thesis aimed to ascertain the current MST programmes and use this information to develop an appropriate MST programme for netball players at tertiary institutions in Zimbabwe.

9.2.2 Main research question

- What is the extent and effect of MST programmes used by netball players to enhance the sporting performance levels at collegiate netball games in Zimbabwe?

9.2.3 Minor questions

- What are the best practices of using MST programmes to enhance the sporting performance in team sports in netball globally?

9.2.3.1 Research questions

The following research questions guided this thesis:

- What mental skills training programmes are being used in netball by coaches to train their players in Zimbabwe?
- What are the current levels of mental skills performance of netball players at tertiary institutions in Zimbabwe?
- What other programmes can be developed to improve the mental skills training of netball players in tertiary-level games netball in Zimbabwe?

9.2.4 Research objectives

The following objectives guided this thesis:

- Establish, from literature, successful mental skills training programmes used in team sports globally, particularly in netball, to improve the performance levels of players in competitions. (Phase 1)

- Explore the mental skills utilised in netball by coaches to enhance their players' performance in tertiary institutions in Zimbabwe. (Phase 2)
- Determine the current levels of mental skills of netball players at tertiary institutions in Zimbabwe. (Phase 3)
- Develop an appropriate mental skills program that could be used to improve mental skills training for collegiate netball players in Zimbabwe. (Phase 4)

9.3 Summary of findings

From the current thesis, it emerged that netball players felt that sometimes coach decision in team selection was swayed by favouritism and necessarily on how well some players played their game, and previous researchers confirmed this (Gearity & Murray, 2011; Norman & French, 2013; Saw et al., 2015). The CBT informed the study to develop an MST programme that used the GS and ST techniques in collegiate netball players in Zimbabwe. An attempt was made to develop a comprehensive MST programme that could be successfully implemented with collegiate netball teams in Zimbabwe and beyond. The MST programme that was developed incorporated components of CBT and involved Masvingo Province collegiate netball team players in its implementation phase. Having assessed the actual MS levels for these collegiate netball players through the TOPS questionnaire, the researcher saw the need to develop a new MST programme in line with Taylor's (1995) suggestions. Usage of MS by collegiate athletes was revealed during the assessment period, and the MS that needed to be taught identified athletes were encouraged to utilise their practice skills even outside the scheduled practice sessions and sometimes in the absence of their coaches (Savoy & Beitel, 1996; Weinberg & Williams, 2001). Based on Phases 1, 2, and 3, the researcher used the information to design and develop the new netball MST programme.

The thesis's overall results helped the researcher propose an individualised athletic programme that would work towards improving the performance of athletes resulting in the success of the collegiate netball teams during competitive games. Consistency on the part of both the coach and players is crucial for the programme to be successful, and it is meant to cater for both the individual and team netball sport. Collegiate players are encouraged to maintain a high usage level of the identified MS to achieve enhanced sporting performance that is consistent with previous research findings (Fletcher & Hanton, 2001; Schoefelt & Usry, 2005; Weinberg & Comar, 1994; Weinberg et al., 1994). In addition, the MST programme took cognisance of the fact that student-athletes in tertiary institutions in Zimbabwe are playing under extreme pressure arising from the netball game competitions, coaches and their academic work, and yet they voluntarily participate in these games. This stressful experience affects players' confidence, focus and concentration while playing competitive collegiate netball games. The new MST programme is meant to try and identify their levels of anxiety and offer chances of decreasing these levels of anxiety through supporting a suitable programme that aims to maintain their commitment to netball participation (Weinberg & Gould, 2001). The pre-game state of the collegiate athletes was essential to measure. It determined their success and failure rate in competition games and the specific sporting demands. This was used to design and develop a suggested new MST programme (Tyler, 1995).

The other aspect that was also considered in the development of the suggested MST programme was based on the CBT model, which envisaged that it would always help shape the sporting behaviour of players as end-users of the programme. Athletes who want to use the suggested programme should consult their coaches and work together towards its successful implementation. A netball team may consist of ten or more players, including the reserve players. The research thesis has shown how previous research interventions were done in other team games (Martin et

al., 2005). The study is based on Anderson et al. (2014) that the impact of any mental skills training programme lies with relevant participants and the sporting environment in which it is implemented.

9.4 Research Conclusions

Based on the research findings of the thesis, the following conclusions are offered;

- The MST programmes' effectiveness depends on their continued utilisation during practice and competition to reach automaticity. It has been shown that athletes who lack confidence fail even though they are strong in physical fitness and techniques, making MS an essential aspect of competitive sports. MacNamara et al. (2010) argued that psychological factors play a vital role in athlete development and subsequent achievement in sports. Evidence from this thesis shows that there is limited understanding of MS and hence MST programmes should be in place for collegiate netballers.
- Exploration of mental skills also revealed limited knowledgeability on the part of coaches. When coaches lack understanding of mental skills, it becomes difficult for them to succeed. Results from this thesis indicate that players can benefit from the implementation of MST programmes for collegiate athletes. The proposed MST programme was based on the CBT model for behaviour change and self-efficacy, which envisaged that it would always help shape players' sporting behaviour as end-users of the programme. Athletes would use the suggested programme, consult their coaches and work together towards its successful implementing.
- The evidence suggests that the levels of MS for netballers are deficient due to a lack of complete understanding of MS by players. This is further compounded by a lack of complete understanding of coaches and attitudes since they believe volunteers do the

minimum. It seems that student-athletes, although willing to take part in competitive netball, may be hindered by pressure with their studies. Therefore, netball players are sometimes torn apart between competing and their studies, leaving them with stressful situations that require MS to enhance performance.

- While the thesis did not carry out the Delphi technique, it partially came up with a proposed programme substantiated by literature and results from the Phases. Findings from this thesis imply that collegiate netball players could be fully assisted by such programmes that increase their focus and enhance their performance. The thesis has gone some way towards enhancing understanding of MST and contributes to the literature on the topic. The proposed programme may go a long way towards understanding MS and its successful implementation to student-athletes.

9.5 Recommendations for further studies

- In light of the above findings, this research thesis recommends that other studies can be carried out on MST techniques for different sporting disciplines as a way of building a conceptual framework that may guide appropriate interventions in the future in the different areas of sports.

- The thesis recommends that the proposed MST programme be strengthened by conducting a Delphi technique that will have the input of experts.

- Further work is recommended on a broader geographical area as this will help to make meaningful generalizations.

- Further research can be undertaken using an intervention to measure the gains of selected mental skills pre-intervention and post-intervention.

- The same thesis can also be replicated and extended to a broader spectrum of players in the other provinces.
- Further research can be undertaken to explore the multimodal use of other mental tools and their impact on players' performance.

9.6 Recommendations for practice

- The thesis recommends that comprehensive policy guidelines be made, making it compulsory to use the integrated scientific approaches to sports development in the country using suitable MST programmes for all sporting disciplines**.** If this were to be effected, Zimbabwe would have a very bright future in sports development.
- Performance needs psychological states and traits so that coaches can close the gap between one's abilities and performance. Competitive athletes, therefore, must constantly be under a high level of pressure, and psychological characteristics would therefore distinguish successful from less successful athletes.
- Coaches and their athletes should identify together their target goals in the sporting discipline and work to ensure that all athletes constantly and consistently work to achieve the set goals to improve self-efficacy. It is known that it is goals that give direction, motivation and focus to improved sporting performance.
- The researcher was motivated by the absence of literature in the area of MS strategies in netball. It is hoped that the results from this current thesis will add another dimension to this important area of academic study. This should also assist policymakers in sport science to consider supporting different athletes who need a coordinated professional approach to MST development.

- The country should broaden its approach to sports science development by using scientifically proven techniques and strategies in all its sporting activities.
- There have been many instances when the Zimbabwe national teams from various sporting disciplines were involved in stand-off events before crucial games, which shows that policymakers are not aware of the consequences of poor administration of sport. Sports administration of collegiate games should be improved and fully funded to improve practice.
- Mental skills are supposed to be tailor-made to suit the individual athlete's sporting abilities and capabilities. In that case, coaches need to ensure that the required MS are practised over a long period until they are smoothly integrated into the athletes' everyday sporting endeavours.
- All athletes need to ensure that their physical bodies and mindset are correctly and appropriately coordinated to produce the best sporting performance results every time. To do this, coaches should look at those factors that successfully influence players' peak sporting performance in netball and other disciplines. This is possible if they make sure that players remain motivated without undue pressure and are not unnecessarily distracted in their pursuit of fulfilling their sporting goals and performance achievement.
- Coaches need to create a good and conducive sporting environment for all players before, during, and after the games.
- Players' peak sporting performance is always vital for any games that they play. The goal for any sport should be to see players realise their best performance during competitions. Coaches should meticulously produce a conducive sporting environment where players are

most properly focused and their attributes are adequately developed. This can be realised through development workshops and reading widely on MS applications in sport to remain abreast with current sporting demands and trends.

- Lack of conviction on both the coach and players will fail to produce positive results for both coaches and players. Hence, the need for complete sports knowledge and MS to be taught to netball players and other athletes in different sports disciplines. It is recommended that netball coaches must work tirelessly towards the upliftment of MST programmes in order to realise the best results for their athletes while using the suggested training model and repeating its cycle after identifying athletes' MS challenges.

9.7 Specific Recommendation

The author makes a particular recommendation for the MST programme that netball players can use to enhance their performance. The self-developed programme entails individual athlete profiling to identify absent psychological skills, mental weaknesses, and areas of importance that need improvement. Since this is a team sport, the group profile is done to check cohesion levels, readiness for players and channels of communication. Furthermore, identifying distractions and other athlete concerns is done to identify positive images, learn to refocus attention, change negative attitudes, and demonstrate mental rehearsals. The conceptualisation of MS, which involves a short introduction of MST technique performance, is discussed, and the implementation procedure for routines and self-regulation strategies is done. This is followed by linking performance with goal familiarity, principles of achieving goals, re-assessing and reflection and evaluating goals. Subsequently, strategies affecting ST that trigger positive emotional states, improve mood, refocus and manage worry are introduced. Then engage familiar and systematic routines while incorporating the CBT to improve performance. Lastly, refine post-competition

strategies, review performance profiling and re-visit MS combining GS and ST. Reflection, maintenance, self-efficacy, then evaluation to restart the cycle of the programme if necessary.

9.8 Study limitations

Several limitations need to be considered in this current study. The current thesis was not explicitly designed to measure athletes pre- and post-MST and compare results for practice and competition. The thesis was limited to female netball players only since they are currently the ones who are involved in competitive games at the tertiary level in Zimbabwe. A limitation in the current study was the geographical area that only covered Masvingo province in Zimbabwe and not the ten provinces limiting making generalizations in the current situation in Zimbabwe. Thus, findings only apply to Masvingo Province with seven districts. The other limitation of this thesis is that the researcher could not use the Delphi technique as anticipated for expertise to input their views in the proposed MST programme. Experts did not respond, and due to time constraints, new experts could not be recruited. The researcher relied on the literature and findings of the study to develop the proposed MST programme.

9.9 Study conclusion

The thesis gave a background and outlined research questions and objectives. Literature was reviewed, looking at successful skills and programmes that have been successfully used to reduce athletes stress and enhance performance. The thesis used a multimethod, and there were four phases in the study, with Phase 3 consisting of quantitative and qualitative data. This thesis used the CBT theory to guide the MST programme since the focus was on cognitive strategies. Using this theory in the MST programme would allow individuals total control over their cognitions and behaviours and help enhance their performance (McCardle et al., 2017). The CBT informed this study on coaches' perspectives of the implementation of well-established MST programmes by

coaches on how they should tackle MST for their student-athletes who are prone to stress and continued use of MS by athletes would reduce stress and improve performance (Arthur et al., 2017; Mathers, 2017).

Additionally, an increase in self-efficacy becomes relevant in the implementation of MST programme since it influences performance. Coaches have a role to help athletes enhance their performance through integrating mental skills into their coaching. The thesis proposed an MST programme that coaches and athletes could use to enhance athletes performances during competitive games.

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APPENDIX A: INFORMATION SHEET

UNIVERSITY OF THE WESTERN CAPE

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INFORMATION SHEET

Project Title: Development of mental skills training programmes for competitive collegiate netball players in Zimbabwe

What is this study about?

This is a multi-method research study being conducted by Thembelihle Gondo at the University of Western Cape. We are inviting you to participate in this research project; you are a possible candidate to participate in the study because you are a netball player who is registered with one of the tertiary institutions in Zimbabwe. The purpose of this research project is to evaluate the mental skills training programmes in competitive collegiate netball players in tertiary institutions.

What will I be asked to do If I agree to participate?

You will be asked to complete structured questionnaires at the beginning of the study and at the end of the study. All data obtained, records and notes will be kept confidential and you will remain anonymous. Your participation in the study will make a valuable contribution to sports performance in Zimbabwe. The questionnaires will be self-administered and will take 20-30 minutes to complete.

Would my participation in this study be kept confidential?

Your personal information will be kept confidential. To help protect your confidentiality, your name will not be used in the data collection procedure. Data will be stored in locked filing cabinets and storage areas, using identification codes only on data forms, and using password-protected computer files. If we write a report about this research project, your identity will be protected.

What are the risks of this research?

The study may include risks that may be better described as things that could make subjects feel uncomfortable such as disclosing information that you don't want to share. Participants will be provided with suitable support from the researcher or be referred to professional help.

What are the benefits of this research?

This research is designed to help you personally in your netball performance, but the results may also help the investigator learn more about the mental skills training and sport performance. We hope that, in the future, other sportspersons might benefit from this study through improved understanding of the research topic and the use of mental skills training as a tool for enhancing sport performance.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by Thembelihle Gondo from the Department of Sport, Recreation and Exercise Science at the University of the Western Cape. If you have any questions about the research study itself, please contact me at +263(39264965) or email mathegondo@gmail.com

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APPENDIX B: CONSENT FORM

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CONSENT FORM

Title of Research Project: Development of mental skills training programmes for competitive collegiate netball players in Zimbabwe

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study at any time without giving a reason, and this will not negatively affect me in any way.

Participant's name: ……

Participant's signature: ……..

Date: ……..

APPENDIX C: FOCUS GROUP CONFIDENTIALITY BINDING FORM

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

Tel: +27 21-9592350, Fax: 27 21-959368

E-mail: ntsoli@uwc.ac.za

Title of Research Project: Development of mental skills training programmes for competitive collegiate netball players in Zimbabwe

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way. I agree to be audio-taped during my participation in the study. I also agree not to disclose any information that was discussed during the group discussion.

Participant's name: ……..

Participant's signature: ……..

Date: ……..

APPENDIX D: INTERVIEW GUIDE FOR COACHES

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Title of Research Project: Development of mental skills training programmes for competitive collegiate netball players in Zimbabwe

1. What do you understand by mental training?
2. In your opinion what do you think is the importance of mental skills training in netball?
3. Explain what you think mental training does to your performance?
4. How much time do you spend on mental skills?
5. What is likely to distract you from concentrating during practice and competition?
6. How does your coach assist you handle pressure, worry and anxiety during training and competition?
7. What do you do when teammates frustrate you by making constant errors during practice or competition?
8. How do you handle coach criticism during a match? How about positive verbal comments?
9. How does your coach assist you to be mentally prepared for the games?
10. What is the value of post-match discussions to you?
11. What would you say are challenges you face in your mental preparation?

APPENDIX E: FOCUS GROUP INTERVIEW GUIDE FOR PLAYERS

UNIVERSITY OF THE WESTERN CAPE

Private Bag X 17, Bellville 7535, South Africa

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E-mail: ntsoli@uwc.ac.za

Title of Research Project: Development of mental skills training programmes for competitive collegiate netball players in Zimbabwe

1. What does mental skills training mean to you?
2. What are the characteristics of effective mental skills programmes?
3. Why are mental skills important in netball?
4. What mental skills programmes do you use during your coaching?
5. How do you plan mental skills for practice and pre-competition for your players?
6. Explain your role in mental skills training of your netball players both for individual and team
7. Given a range of mental skills, which ones would you say are important in netball?
8. How do you promote use of mental skills by your netball players?
9. What do you do to assist your players manage stress during practice or competition?
10. How would you build a cohesive team that is committed and motivated?
11. What do you think should be done to improve mental skills of competitive netball players?

APPENDIX F: TOPS QUESTIONNAIRE

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Private Bag X 17, Bellville 7535, South Africa

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Title of Research Project: Development of mental skills training programmes for competitive collegiate netball players in Zimbabwe

This questionnaire measures performance strategies used by athletes in various sport situations. Because individual athletes are very different in their approach to their sport, we expect the responses to be different. We want to stress, therefore, that there are no right or wrong answers. All that is required is for you to be open and honest in your responses.

Each of the following items describes a specific situation that you may encounter in your training and competition. Please circle how frequently these situations apply to you on the following 1-5 scale:

		Never	Rarely	Sometimes	Often	Always
1	I set realistic but challenging goals for myself.	1	2	3	4	5
2	I say things to myself to help my practice performances.	1	2	3	4	5
3	During practice I visualize successful past performances.	1	2	3	4	5
4	My attention wanders while I am training.	1	2	3	4	5
5	I practice using relaxation techniques at workouts.	1	2	3	4	5
6	I practice a way to relax.	1	2	3	4	5
7	During competition I set specific goals for myself.	1	2	3	4	5
8	When the pressure is on at competitions, I know how to relax.	1	2	3	4	5
9	My self-talk during competition is negative.	1	2	3	4	5
10	During practice, I don't think about performing much—I just let it happen.	1	2	3	4	5
11	I perform at competitions without consciously thinking about it.	1	2	3	4	5
12	I rehearse my performance in my mind before practice.	1	2	3	4	5
13	I can raise my energy level at competitions when necessary.	1	2	3	4	5
14	During competition I have thoughts of failure.	1	2	3	4	5
15	I use practice time to work on my relaxation techniques.	1	2	3	4	5
16	I manage my self-talk effectively during practice.	1	2	3	4	5
17	I am able to relax if I get too nervous at a competition.	1	2	3	4	5
18	I visualize my competition going exactly the way I want it to go.	1	2	3	4	5

(continued)

		Never	Rarely	Sometimes	Often	Always
19	I am able to control distracting thoughts while I am training.	1	2	3	4	5
20	I get frustrated and emotionally upset when practice does not go well.	1	2	3	4	5
21	I have specific cue words or phrases that I say to myself to help my performance during competition.	1	2	3	4	5
22	I evaluate whether I achieve my competition goals.	1	2	3	4	5
23	During practice, my movements and skills just seem to flow naturally from one to another.	1	2	3	4	5
24	When I make a mistake in competition, I have trouble getting my concentration back.	1	2	3	4	5
25	When I need to, I can relax myself at competition to get ready to perform.	1	2	3	4	5
26	I set very specific goals for competition.	1	2	3	4	5
27	I relax myself at practice to get ready.	1	2	3	4	5
28	I psych myself up at competitions to get ready to perform.	1	2	3	4	5
29	At practice, I can allow the whole skill or movement to happen naturally without concentrating on each part of the skill.	1	2	3	4	5
30	During competition I perform on "automatic pilot."	1	2	3	4	5
31	When something upsets me during a competition, my performance suffers.	1	2	3	4	5
32	I keep my thoughts positive during competition.	1	2	3	4	5
33	I say things to myself to help my competitive performances.	1	2	3	4	5
34	At competitions, I rehearse the feel of my performance in my imagination.	1	2	3	4	5
35	I practice a way to energize myself.	1	2	3	4	5
36	I manage my self-talk effectively during competition.	1	2	3	4	5
37	I set goals to help me use practice time effectively.	1	2	3	4	5
38	I have trouble energizing myself if I feel sluggish during practice.	1	2	3	4	5
39	When things are going poorly in practice, I stay in control of myself emotionally.	1	2	3	4	5
40	I do what needs to be done to get psyched up for practice.	1	2	3	4	5
41	During competition, I don't think about performing much —I just let it happen.	1	2	3	4	5
42	At practice, when I visualize my performance, I imagine what it will feel like.	1	2	3	4	5

(continued)

		Never	Rarely	Sometimes	Often	Always
43	I find it difficult to relax when I feel too tense at competition.	1	2	3	4	5
44	I have difficulty increasing my energy level.	1	2	3	4	5
45	During practice I focus my attention effectively.	1	2	3	4	5
46	I set personal performance goals for competition.	1	2	3	4	5
47	I motivate myself to train through positive self-talk.	1	2	3	4	5
48	During practice sessions I just seem to be in a flow.	1	2	3	4	5
49	I practice energizing myself during the training sessions.	1	2	3	4	5
50	I have trouble maintaining my concentration during long practices.	1	2	3	4	5
51	I talk positively to myself to get the most out of practice.	1	2	3	4	5
52	I can increase my energy level to just the right level for performance.	1	2	3	4	5
53	I have very specific goals for practice.	1	2	3	4	5
54	During competition I play/perform with little conscious effort.	1	2	3	4	5
55	I imagine my competitive routine before I do it at a competition.	1	2	3	4	5
56	I imagine screwing up during competition.	1	2	3	4	5
57	I talk positively to myself to get the most out of competitions.	1	2	3	4	5
58	I don't set goals for practices; I just go out and do it.	1	2	3	4	5
59	I rehearse my performance in my mind at competitions.	1	2	3	4	5
60	I have trouble controlling my emotions when things are not going well at practice.	1	2	3	4	5
64	When I perform poorly in practice I lose focus.	1	2	3	4	5
62	My emotions keep me from performing my best at competitions.	1	2	3	4	5
63	My emotions get out of control under pressure of competition.	1	2	3	4	5
64	At practice, when I visualize my performance, I imagine watching myself as if on a video replay.	1	2	3	4	5

APPENDIX G: ETHICS CLEARANCE LETTER

OFFICE OF THE DIRECTOR: RESEARCH
RESEARCH AND INNOVATION DIVISION

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1 September 2016

Mrs T Gondo
SRES
Faculty of Community and Health Sciences

Ethics Reference Number: HS16/6/10

Project Title: Development of mental skills training programmes in competitive collegiate netball players in tertiary institutions in Zimbabwe.

Approval Period: 24 August 2016 – 24 August 2017

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

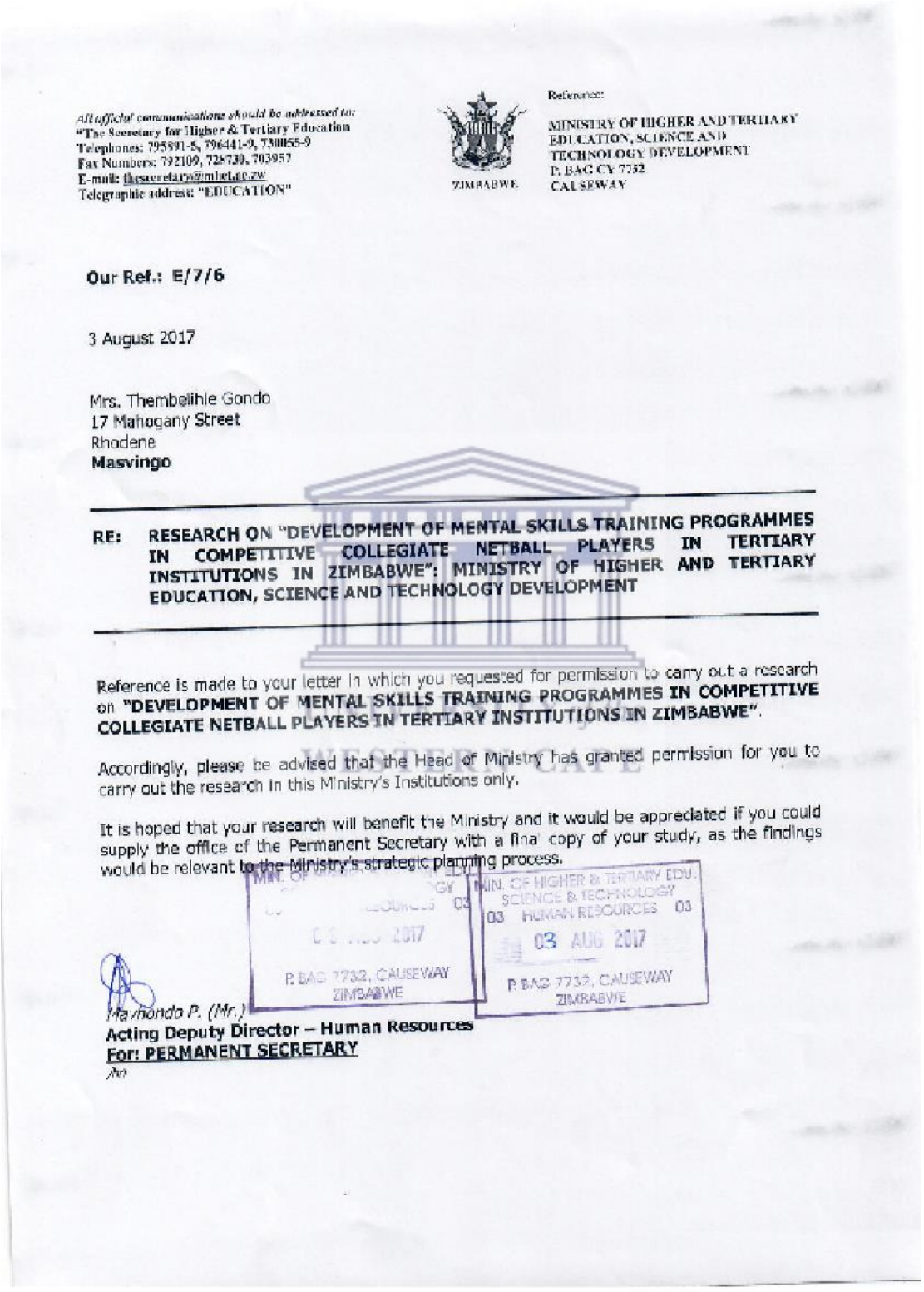
Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval. Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

PROVISIONAL REC NUMBER - 130416-049

APPENDIX H: ETHICS CLEARANCE - ZIMBABWE MINISTRY



All official communications should be addressed to:
"The Secretary for Higher & Tertiary Education
Telephones: 795891-5, 796441-9, 738855-9
Fax Numbers: 792109, 728730, 703957
E-mail: thesecretary@mhet.ac.zw
Telegraphic address: "EDUCATION"

ZIMBABWE

Reference:
MINISTRY OF HIGHER AND TERTIARY EDUCATION, SCIENCE AND TECHNOLOGY DEVELOPMENT
P. BAG CY 7732
CAUSEWAY

Our Ref.: E/7/6

3 August 2017

Mrs. Thembelihle Gondo
17 Mahogany Street
Rhodene
Masvingo

RE: RESEARCH ON "DEVELOPMENT OF MENTAL SKILLS TRAINING PROGRAMMES IN COMPETITIVE COLLEGIATE NETBALL PLAYERS IN TERTIARY INSTITUTIONS IN ZIMBABWE": MINISTRY OF HIGHER AND TERTIARY EDUCATION, SCIENCE AND TECHNOLOGY DEVELOPMENT

Reference is made to your letter in which you requested for permission to carry out a research on **"DEVELOPMENT OF MENTAL SKILLS TRAINING PROGRAMMES IN COMPETITIVE COLLEGIATE NETBALL PLAYERS IN TERTIARY INSTITUTIONS IN ZIMBABWE"**.

Accordingly, please be advised that the Head of Ministry has granted permission for you to carry out the research in this Ministry's Institutions only.

It is hoped that your research will benefit the Ministry and it would be appreciated if you could supply the office of the Permanent Secretary with a final copy of your study, as the findings would be relevant to the Ministry's strategic planning process.

MIN. OF HIGHER & TERTIARY EDU. SCIENCE & TECHNOLOGY 03 HUMAN RESOURCES 03
03 AUG 2017
P. BAG 7732, CAUSEWAY ZIMBABWE

MIN. OF HIGHER & TERTIARY EDU. SCIENCE & TECHNOLOGY 03 HUMAN RESOURCES 03
03 AUG 2017
P. BAG 7732, CAUSEWAY ZIMBABWE

Mavhondo P. (Mr.)
Acting Deputy Director – Human Resources
For: PERMANENT SECRETARY
/kn

APPENDIX I : APPRAISAL TOOL

Questions	Yes	No
1. Was the study conducted in a higher education setting?		
2. Was the study conducted in the field of mental skills training in sport?		
3. Was the study conducted in the field of sports psychology?		
4. Was the sampling process clearly stated?		
5. Did the research design appropriately address the research question?		
6. Was the research design clearly stated		
7. Are the research methods made explicit (interviews, focused groups, topic guide etc)		
8. Had the researcher clearly responded to reflexivity during the study?		
9. Was the drop-out rate reported?		
10. Was the ethical issue taken into consideration?		
11. Was the data analysis sufficiently rigorous?		
12. Were the findings explicit?		
13. Did the authors identify new areas of research?		
Grading quality assessment checklist for observation score **0-33%** **34-66%** **66-100%** **Poor** **Satisfactory** **Good**	Yes=1	No=0