

**COPING AND PSYCHOLOGICAL WELL-BEING OF UNIVERSITY
RUGBY PLAYERS**

C. M. D. Laureano
M. A. (Clinical) Psychology

**Thesis submitted for the degree Philosophiae Doctor in Psychology at
the North-West University**

Promoter: Dr. A. W. Nienaber
Co-Promoter: Mr. H. W. Grobbelaar

November 2008
Potchefstroom Campus

Acknowledgements

I would like to acknowledge the following people for making this study a possibility.

I would like to thank my Heavenly Father for His providing me with this opportunity to learn from and work with brilliant people.

I am ever so grateful to my promoter, Dr. Alida Nienaber, and my co-promoter, Mr. Heinrich Grobbelaar, for their wisdom, encouragement and persistence.

To Dr. Suria Ellis, for her patience in overseeing the statistical element of this study.

To the North-West PUK Rugby Institute for their cooperation and support. I would like to extend a special thank you to the coach of the senior first team, the coach of the u/19 team, sport psychology consultant of the u/19 team and Hennie Botha for their assistance.

To the NWU-PRI senior first team and u/19 team rugby players who willingly gave up their time to participate in this study.

To St. Stithians Boys' College and Mr. Dave Knowles for their support .

To Greg Crighton and Basie Viljoen for taking the time to ensure the language proficiency of this study.

To my loving husband, Johann Serfontein for his understanding and companionship.

To my parents, Julia and Carlos Laureano, for their strength, empowering advice, and affection.

To my brother, Bruno and my sister in-law Juanita Matias for their sense of humour, love and generosity.

Contents

	Page
Acknowledgements	ii
List of Tables	iv
Summary	v
Opsomming	vii
Preface	x
Declaration	xi
Chapter 1: Introduction and Problem Statement	1
Chapter 2: Article 1: The Needs and Coping Abilities of University Rugby Players.	8
Chapter 3: Article 2: Development of an Experiential Learning Programme Aimed at Facilitating Coping Strategies and Well-Being Of University Rugby Players.	30
Chapter 4: Article 3: The Effectiveness of an Experiential Learning Programme Aimed at Facilitating the Coping Strategies and Well-Being of University Rugby Players.	51
Chapter 5: Conclusion, Implications and Recommendations	74
Complete Reference List	77

List of Tables

	Page
Table 1: Biographical Information of the Sample Group	56
Table 2: Reliability of Psychometric Tests	62
Table 3: Differences within the Experimental Group after the Intervention	63
Table 4: Differences within the Control Group after the Intervention	65
Table 5: The Differences between the Control and Experimental Groups after the Intervention	66

Summary

Coping and Psychological Well-Being of University Rugby Players

Key Words: Psychological well-being, coping, cope, sport psychology, positive psychology, university rugby players.

University rugby players often pursue academic and semi-professional sporting careers simultaneously which is demanding, stressful and highly competitive. This situation gives rise to individual needs and how they cope with these needs will have an impact on their overall well-being. The needs and coping mechanisms of the senior first and second team rugby players of the North-West University PUK Rugby Institute (NWU-PRI) were determined by means of a focus-group interview, essays and individual interviews. The focus-group interview was conducted with seven senior university rugby players and the essays were completed by 28 senior university rugby players. The individual interviews were conducted with the coach of the senior first team and the sport psychology consultant of the u/19 team. The results identified themes regarding time-management, motivation, injuries, character, coping, and goal-setting. A programme (founded on the experiential learning theory) which focuses on these themes and aimed at facilitating coping and well-being of university rugby players, was developed. The Experiential Learning Programme (ELP) consists of six sessions of one hour duration conducted over two consecutive weeks. The themes of the sessions are; Motivation, Goal-Setting, Time-Management, Coping with Injuries, Emotion-Focused Coping and Individual Zone of Optimal Functioning.

A two group (experimental and control) pre-test and post-test design was used and the sample group was drawn from 41 rugby players from the u/19A training squad of the NWU-PRI. The experimental (n=20) and control (n=21) groups both underwent pre- and post-testing, whereas the ELP was only presented to the experimental group. Post-testing took place one month after the ELP was presented. The battery of tests used to determine

the effectiveness of the ELP were, the Affectometer (Kammann & Flett, 1983), Coping Self-Efficacy Scale (Chesney, Folkman & Chambers, 1996), Proactive Attitude Scale (Schwarzer, 1997), Fortitude Questionnaire (Pretorius, 1998) and Cognitive Appraisal Questionnaire (Botha & Wissing, 2005). The results obtained proved the ELP to be effective in facilitating coping and well-being in university rugby players.

The experimental group's coping abilities showed great improvement in dealing with life difficulties. They are able to make better use of coping strategies like, problem-focused coping ($d=0.73$), the ability to stop unpleasant emotions and thoughts ($d=0.73$) and to seek out social support from family and friends ($d=1.07$). They also showed marked improvements in the evaluation (appraisal) of good and/or bad events ($d=0.63$) and their ability to move towards action (proactive attitude) ($d=0.73$). The extent of positive emotions ($d=0.75$) they experienced increased, whereas the extent of negative emotions ($d=-0.55$) experienced decreased. It can be concluded that the experimental group's sense of well-being was enhanced. The control group showed no improvements in their coping ability or well-being. The improvements in the experimental group's results can, thus, be attributed to the effectiveness of the ELP.

A limitation of this study is that these results cannot be generalised to provincial or national rugby players at all levels of competition or to other team sports. The ELP should be presented to small groups for it to be effective. This may limit the number of participants in accordance with the time presenters and participants have available and the number of presenters trained in presenting the ELP. It is recommended that the effectiveness of the ELP should be evaluated at provincial and national level and that the ELP should also be adapted to and evaluated in other team sports. It can be concluded that the ELP programme is ideal for first year university rugby players who may find the transition from high school academics and rugby, to university studies and semi-professional rugby stressful, as it may assist them in coping with personal and sport related stressors and can facilitate their sense of well-being.

Opsomming

Coping en Psigologiese Welsyn van Universiteitsrugbyspelers

Sleutelwoorde: Psigologiese Welsyn, welsyn, welstand, cope, coping, sportsielkunde, positiewe sielkunde, universiteitsrugbyspelers

Universiteitsrugbyspelers streef na akademiese- sowel as semi-professionele sportloopbane wat veeleisend, stresvol en hoogs kompetierend is. Hierdie situasie lei tot individuele behoeftes en hoe die sportmense met hierdie behoeftes cope, het 'n impak op hulle algemene welsyn. Die behoeftes en copingmeganismes van die senior eerste- en tweedespan rugbyspelers van die Noordwes-Universiteit PUK Rugby Instituut (NWU-PRI) is vasgestel deur middel van 'n fokusgroep onderhoud, die skryf van opstelle en individuele onderhoude. Die fokusgroep onderhoud is gevoer met sewe senior universiteitsrugbyspelers en die opstelle is voltooi deur 28 senior universiteitsrugbyspelers. Individuele onderhoude is gevoer met die afrigter van die eerste senior span en die sportsielkunde konsultant van die o/19 span. Die resultate het temas geïdentifiseer wat tydsbestuur, motivering, beserings, karakter, coping en doelstellings, ingesluit het. 'n Program (gegrond op die ervarings leermodel) wat fokus op hierdie temas en gemik is op die verbetering van welsyn en coping van universiteitsrugbyspelers, is ontwikkel.

Die Ervarings Leermodel (ELM) bestaan uit ses sessies van een uur elk, aangebied oor 'n tydperk van twee weke. Die temas vir die sessies was: Motivering, Doelstellings, Tydbestuur, Hantering van Beserings, Emosie-Gefokusde Coping en Individuele sone van optimale funksionering.

'n Twee groep (eksperimentele en kontrolegroep) voor- en natoetsontwerp is gebruik en die steekproef is saamgestel uit 41 rugbyspelers van die o/19 A oefengroep van die NWU-PRI. Die eksperimentele (n=20) en kontrole groepe (n=21) het albei voor- en natoetsing deurgestaan, terwyl die ELM slegs aan die eksperimentele groep aangebied is.

Natoetsing het een maand na die afloop van die ELM plaasgevind. Die toetsbattery wat saamgestel is om die effektiwiteit van die ELM te toets, het die volgende instrumente ingesluit: die “Affectometer” (Kammann & Flett, 1983), die “Coping Self-Efficacy Scale” (Chesney, Folkman & Chambers, 1996), die “Proactive Attitude Scale” (Schwarzer, 1997), die “Fortitude Questionnaire” (Pretorius, 1998) en die “Cognitive Appraisal Questionnaire” (Botha & Wissing, 2005). Die resultate wat verkry is, het bewys dat die ELM effektief was om copingvaardighede en welsyn van rugbyspelers te fasiliteer.

Die eksperimentele groep se copingvaardighede het na afloop van die ELM groot verbetering getoon met betrekking tot die hantering van lewensprobleme. Hulle het beter gebruik gemaak van copingstrategieë soos probleem-gefokusde coping ($d=0.73$) die vermoë om onaangename gedagtes en emosies te stop ($d=0.73$) en om sosiale ondersteuning van familie en vriende ($d=1.07$) op te soek. Hulle het ook beduidende verbeterings getoon in hulle vermoë om goeie en slegte gebeure ($d=0.63$) te evalueer en om te beweeg na ’n pro-aktiewe ($d=0.73$), positiewe houding. Die omvang van positiewe emosies ($d=0.75$) wat hulle ervaar het, het vermeerder, terwyl die omvang van negatiewe emosies ($d=-0.55$) verminder het. Dit dui op ’n groeiende gevoel van coping. Die kontrolegroep het geen verbeterings in coping vermoë of welsyn getoon nie. Die verbetering in die eksperimentele groep se resultate kan dus toegeskryf word aan die effektiwiteit van die ELM.

’n Beperking van die studie is dat die resultate nie veralgemeen kan word tot provinsiale of nasionale rugbyspelerskompetisievlakke of na ander spansportsoorte nie. Dit is van belang dat die ELM aangebied word aan kleiner groepe om effektief te wees. Die hoeveelheid deelnemers kan beperk word in ooreenstemming met die tyd wat die deelnemers beskikbaar het en die beskikbaarheid van opgeleide aanbieders van die ELM kursus.

Dit word aanbeveel dat die effektiwiteit van die ELM geëvalueer word op provinsiale en nasionale kompetisievlak en dat die ELM aangepas en ge-evalueer word vir ander

spansportsoorte. Die ELM program is ideaal vir eerstejaar universiteitsrugbyspelers wat die oorgang van hoërskoolstudies en rugby na universiteitstudies en semi-professionele rugby stresvol kan vind. Die ELM kan ook sportmense help om beter te cope met persoonlike en sportverwante stressore en om hulle algemene sin van welsyn te verbeter.

Preface

- This thesis is submitted in article format as described in rules A.14.4.2, and A13.7.3, A12.7.4, A17.7.5 of the North-West University.
- The two manuscripts comprising this thesis were submitted for peer review at the 4th European Conference on Positive Psychology, Opatija, Croatia (first manuscript) and at the South African Sport and Recreation Congress (SASReCon), Port Elizabeth, South Africa (second manuscript). The abstract of the third Manuscript has been submitted for possible presentation at the 12th International Society of Sport Psychology (ISSP) World Congress of Sport Psychology, Marrakesh, Morocco.
- The referencing style and editorial approach for this thesis is in line with the prescription of the *Publication Manual* (5th edition) of the American Psychological Association (APA).
- For the purpose of this thesis, the page numbering of the thesis as a whole is consecutive. However, each individual manuscript was numbered starting from page 1 for submission purposes.
- Attached, please find the letter signed by the promoter and co-promoter authorising the use of these articles for purposes of submission of a Ph.D degree.

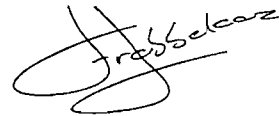
Declaration

The co-authors of the three articles, which form part of this thesis, Dr. Alida Nienaber (promoter) and Mr. Heinrich Grobbelaar (co-promoter), hereby give permission to the candidate, Mrs. Cynthia Laureano to include the three articles as part of a Doctorate thesis. The contribution (advisory and supportive) of the promoter and co-promoter were kept within reasonable limits, thereby enabling the candidate to submit this thesis for examination purposes. This thesis, therefore, serves as fulfillment of the requirements for the Ph.D. degree in Psychology within the School of Psycho-Social Behavioural Sciences-Psychology in the Faculty of Health Sciences at the North-West University (Potchefstroom Campus).



Dr. Alida Nienaber

Promoter



Mr. Heinrich Grobbelaar

Co-promoter

CHAPTER 1

Introduction and Problem Statement

University rugby players are subjected to unique pressures due to their academic and sporting commitments which makes coping difficult, for example the risk of injuries (Lee, Garraway, Hepburn & Laidlaw, 2001), the pressures to win each game (Coopoo, 2006), adjusting to strict fitness regimes, number of games played within the season, pressure to perform academically (Baker, 2004; Hadfield, 2006a), personal stressors and maintaining healthy social ties (Weinberg & Gould, 2007). Some sports people find it so difficult to cope with these demands and the competitive nature of the sport that they give in to the temptation of using steroids to maintain or enhance their performance (Weinberg & Gould, 2007) or attempt to ease the pressure by turning to alcohol and drugs (Lorente, Peretti-Watel, Griffet & Grélot, 2003).

In the high-pressured sport of rugby union, it is generally accepted that, when all else is equal, it is the individuals with the strongest mental attitude that succeed (Gazing Performance Ltd, 2006). The psychological aspect of sporting talent becomes more important as the level of skills are raised (Sisterhen, 2004), hence the increased importance of addressing the psychological component of sporting performance.

In order to cope with stressors both on and off the field (during training and competitive games) rugby players will need to recognise their own thoughts and structure their beliefs. This will bring about an increase in the accuracy and flexibility of their thoughts. They can then manage the emotional and behavioural consequences more effectively (Norton, 2005). The inability to cope may have negative consequences such as reduced performance, increased risk of developing injuries, dissatisfaction and possible withdrawal from the sport (Nicholls & Polman, 2007). University rugby players would, therefore, need to learn to cope with the mentioned stressors to reduce the likelihood of these negative consequences.

There has been a great deal of research conducted on what sports people find stressful and how they cope with these stressors. Pensgaard and Roberts (2003) discovered that sports persons' goal orientations influence the coping strategies they implement. Sports persons' with a high task/low ego goal orientation tended to have more effective coping strategies such as social support and active coping, while those with high task/high ego orientations associated with positive reappraisals and growth strategies. Sports women with high ego goal orientations also made less use of effective coping strategies like active coping and planning, whereas this was not the case among their male counterparts. Holt and Dunn (2004) studied the relationship between appraisal and coping of female soccer players and found that appraisals and coping are closely related to personal goals in that a sports participant will experience anxiety once their personal goal is under threat. This study further emphasised that problem-focused coping was found to be most effective in controllable situations whereas emotion-focused coping was most effective in uncontrollable situations.

Nicholls, Holt, Polman and Bloomfield (2006) discovered that the main stressors associated with rugby were related to injuries, mental errors and physical errors. In addition they found that senior rugby players also made greater use of problem-focused coping than emotion-focused coping or avoidance-coping strategies, whilst the effectiveness of these strategies also varied greatly. Nicholls and Polman (2007) identified physical errors, receiving criticism from the coach or a parent and coping with injuries as major stressors among u/18 rugby players. This sample group also used problem-focused coping more often than emotion-focused coping or avoidance coping strategies, whilst their ability to cope was dependent on the number of coping strategies deployed.

The above mentioned research studies are informative and valuable, albeit mostly exploratory in content. There is a need within South African sport to identify the specific needs of the various sports persons and how they cope with these needs, in order to develop and implement intervention programmes specifically aimed at facilitating their coping abilities and well-being. Lazarus (2000) states that sports persons will need to learn how to clear their minds of negative self-talk and replace it with more constructive

thought patterns to restore or maintain performance, motivation, attention and concentration. He further reiterates that intervention programmes can be helpful to prepare the sports persons. Nicholls et al. (2006) as well as Nicholls and Polman (2007) recommends that a number of coping strategies need to be taught to rugby players by means of intervention programmes to facilitate more effective coping abilities.

It is, therefore, hypothesised that university rugby players would benefit from a group intervention programme that focuses on facilitating coping strategies and overall well-being. Group interventions, in particular, offer a unique learning advantage where group members learn from each other's common experiences, thereby offering a wider range of resources (Jacobs, Masson & Harvill, 2002). These interventions are time efficient, they provide a sense of belonging to its participants, a safe environment to practice newly acquired skills, provides feedback and an opportunity for its members to learn vicariously through each other (Corey, 2001). Groups replicate real life situations enabling members to learn new methods of coping and they provide opportunities for commitment to improve certain behaviours (Jacobs et al., 2002). Groups also build a sense of camaraderie amongst its members which is ideal for a team sport like rugby where good relationships among team mates are essential.

The purpose of this study is, therefore, to assess and facilitate the well-being and coping abilities of university rugby players. A group intervention will be developed based on the data retrieved from a focus-group and individual interviews that will be conducted. The research questions can be formulated as such;

- What are the psychosocial stressors that university rugby players need to cope with.
- How do university rugby players cope with these stressors?
- What themes should be included in an intervention programme aimed at facilitating coping abilities and well-being in university rugby players?
- Would this programme be effective in facilitating well-being and coping in university rugby players?

Aims

The aims of this study are as follows:

- To identify which psychosocial stressors university rugby players need to cope with.
- To identify how university rugby players cope with these stressors.
- To develop an intervention programme aimed at facilitating university rugby players' coping abilities and well-being, based on the identified themes.
- To evaluate and determine how effective the developed intervention programme is in facilitating the university rugby players' coping abilities and well-being.

Hypothesis

The hypothesis of this study is as follows:

- Due to the explorative and descriptive nature of the first and second research question and aim, no hypothesis will be formulated.
- No hypothesis can be made for the third research question and aim because it consists of the process of developing a programme.
- A hypothesis can be made, based on the fourth research question and aim. It is hypothesised that the developed intervention programme will facilitate university rugby players' well-being and coping abilities.

Outline of the Thesis

The research study consists of 4 chapters

Chapter 1: *Introduction*

Chapter 2: *The Needs and Coping Abilities of University Rugby Players* (presented at the 4th European Conference on Positive Psychology 1-4 July, 2008. Opatija, Croatia).

Chapter 3: *Development of an Experiential Learning Programme Aimed at Facilitating Coping Strategies and Well-Being of University Rugby Players* (presented at the South African Sport and Recreation Congress (SASReCon) 25-27 June, 2008. Port Elizabeth, South Africa).

Chapter 4: *The Effectiveness of an Experiential Learning Programme Aimed at Facilitating the Coping Strategies and Well-Being of University Rugby Players* (abstract submitted for possible presentation at the 12th International Society of Sport Psychology (ISSP) World Congress of Sport Psychology June 17-21, 2009. Marrakesh, Morocco).

Chapter 5: *Conclusion*

References

Baker, S. R. (2004). Intrinsic, extrinsic, and amotivational orientations: Their role in university adjustment, stress, well-being and subsequent academic performance. *Current Psychology, 23* (3), 189-202.

Coopoo, Y. (2006). *The perfect rugby player*. Retrieved on May 25, 2006 from <http://www.health24/specificsports/rugby.html>

Corey, G. (2001). *Theory and practice of counseling and psychotherapy* (6th ed.). USA: Wadsworth.

Gazing Performance Ltd. (2006). *Mental skills: A perspective on their role in performance and how to understand and develop them*. Retrieved on May 26, 2006 from <http://communityrugby.com>

Hadfield, D. (2006a). *Building character and self-reliance in players: Some suggestions for coaches*. Retrieved on May 25, 2006 from <http://www.communityrugby.com>

Holt, N. L., & Dunn, J. G. H. (2004). Longitudinal idiographic analysis of appraisal and coping responses in sport. *Psychology of Sport and Exercise, 5*, 213-222

Jacobs, E. E., Masson, R. L., & Harvill, R. L. (2002). *Group counselling: Strategies and counselling*. CA: Wadsworth.

Lazarus, R. S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist, 14*, 229-252.

Lee, A. J., Garraway, W. M., Hepburn, W., & Laidlaw, R. (2001). Influence of rugby injuries on players' subsequent health and lifestyle: Beginning a long term follow-up. *British Journal of Sports Medicine, 35*, 38-42.

Lorente, F. O., Peretti-Watel, P., Griffet, J., & Grélot, L. (2003). Alcohol use and intoxication in sport university students. *Alcohol and Alcoholism*, 35 (5), 427-430.

Nicholls, A. R., & Polman, R. C. J. (2007). Stressors, coping and coping effectiveness among players from the England under-18 union team. *Journal of Sport Behaviour*, 30 (2), 1-16.

Nicholls, A. R., Holt, N. L., Polman, R. C. J., & Bloomfield, J. (2006). Stressors, coping and coping effectiveness among professional rugby union players. *The Sport Psychologist*, 20, 314-329.

Norton, G. (2005). The Resilience Inventory: Essential skills to overcome life's challenges. *Management Today*, 10, 56-58.

Pensgaard, A. M., & Roberts, C. (2003). Achievement goal orientations and the use of coping strategies among winter olympians. *Psychology of Sport and Exercise*, 4 (2), 101-116.

Sisterhen, L. (2004). Enhancing your musical performance abilities. *American Music Teacher*, 54 (1), 32-109.

Weinberg, R. S., & Gould, D. (2007). *Foundations of sport and exercise psychology* (4th ed.). Champaign, Ill: Human Kinetics.

CHAPTER 2

Article 1

The Needs and Coping Abilities of University Rugby Players

Laureano, C. M. D.

School of Psycho-Social Behavioural Sciences: Psychology

Faculty of Health Sciences

North-West University

Potchefstroom

Nienaber, A. W.

School of Psycho-Social Behavioural Sciences: Psychology

Faculty of Health Sciences

North-West University

Potchefstroom

Grobbelaar, H. W.

Department of Sport Science

Faculty of Education

Stellenbosch University

Stellenbosch

Abstract

The art of balancing the priorities of rugby and an academic university career is stressful. Research findings suggest that the demands of training and playing at a semi-professional level and the demands of an academic programme are enormous. The needs and coping mechanisms of the senior first and second team rugby players of the North-West University PUK Rugby Institute (NWU-PRU) were determined by means of a focus-group interview, essays and individual interviews. The focus-group interview was conducted with seven university rugby players and the essays were written by 28 university rugby players. The individual interviews were conducted with the coach of the senior first team and the sport psychology consultant of the u/19 team. This survey identified themes regarding; basic needs, motivation, time management, goal-setting, optimism, injuries, self-confidence, counselling, team dynamics, communication, social support, spirituality, self-actualisation, coachability, commitment, character, and psychological problem areas. A programme which focuses on these themes aimed at facilitating coping strategies and well-being of university rugby players is highly recommended.

(Word count: 164)

Keywords: Well-being, sport psychology, positive psychology, needs, coping, cope.

Introduction

Rugby union is an interactive, contact/collision team sport that is characterised by players changing from attack/offense to defense several times within one game (Hodge, Lonsdale & McKenzie, 2006). A rugby team comprises of 15 players who need to concentrate on their position-specific roles and how these relate to the team as a whole. There are also different tactics for defensive and offensive plays. These aspects of the game may place strain on the psychological skills of each player (Hodge et al., 2006).

University rugby players are being molded, developed and prepared for the professional league (Coach, 2006). They get a taste of what it is like to play professionally and they know that they are only a scout away from reaching their dream (Coach, 2006). As with any dream there are obstacles, stressors, needs and busy schedules making it difficult to cope.

The various stressors of a sport like rugby include avoiding or recovering from injuries, playing an important game, media attention, poor refereeing, bad weather conditions, provocative opponents, making mental or physical errors, dealing with errors made by teammates, enduring pain, dealing with the successful performance of an opponent, being penalised by a referee, and being reprimanded by the coach (Anshel & Anderson, 2002; Anshel, Williams & Williams, 2000; Ntoumanis, Biddle & Haddock, 1999; Sport Psychology Consultant, 2006). These stressors are exacerbated by adapting to the adult world of university and the obligations required for achieving the qualifications needed for a career (Deniz, 2006; Dyson & Renk, 2006).

Coping with stressors during a sporting competition is a fundamental part of successful performance (Anshel & Anderson, 2002). Coping involves cognitive and behavioural activities directed toward managing specific external and/or internal demands that are interpreted as taxing or exceeding the resources of that person (Anshel et al., 2000; Pakenham, Chiu, Bursnall & Cannon, 2007). Strümpfer (2003) further explained that coping consists of activities that individuals undertake to master, tolerate, reduce or minimise environmental or intrapsychic demands that they perceive as threatening, harmful, or represent a potential loss.

Coping with stressors necessitates the regaining of composure, establishing a proper mental state, and maintaining optimal arousal and concentration levels for optimal performance in sport (Anshel et al., 2000). However, failure to cope with the above mentioned stressors may adversely impact on psychological processes like concentration, attentional focus and arousal. Therefore effective coping is essential for the sporting and personal well-being of university rugby players (Anshel & Anderson, 2002). Well-being is considered to be associated with the fulfillment of individuals' full potential and discovering their true self by living in a way that is in accordance with their personal values and virtues resulting in an expansion of potential and growth (Compton, 2005). This involves activities that create opportunities for individuals to realise their full potential.

The stressors mentioned, may interfere with the university rugby players' desire to cope, their need for well-being, and their satisfaction of certain needs. These needs may comprise of the ability to manage time, maintain current relationships, finding ways to fulfill all obligations, to control emotions and anxiety during competitive games, coping with victories and losses, dealing with comments by spectators, achieving personal goals, improving technique, attention or focus and perhaps other needs that have not been mentioned (Amiot, Gaudreau & Blanchard, 2004; Anshel & Delany, 2003; Baker, 2004; Weinberg & Gould, 2007). The aim of this study is to identify what the needs of university rugby players are and how they cope with and resolve these needs.

Method

Design

A qualitative research design was chosen (Morrow, 2004). There has been an increase in coping literature and its relation to sporting performance. However, there is a lack of qualitative research examining the coping processes of university rugby players. Qualitative research is a useful tool for when little is known about a subject and for small sample groups. It creates categories of meaning based on the data obtained from the participants being studied, for example to identify what are the specific needs, and the coping methods used by university rugby players (Anshel, 2002; Morrow, 2004).

Participants

Phase 1

The focus-group interview participants consisted of an availability sample of seven senior rugby players from the first and second teams of the North-West University-PUK Rugby Institute (NWU-PRI) (Mean age = 22.14, SD = 1.86). The individual interviews were conducted with the coach of the senior first team, and the sport psychology consultant, of the u/19 teams.

Phase 2

Essays were completed by an availability sample of 28 senior rugby players from the first and second teams of the NWU-PRI (Mean age = 22.96, SD = 1.63).

The focus-group interview participants spoke candidly and freely, they were eager to contribute to the discussion. No feelings of tension, fatigue or boredom were observed. The participants were willing to complete the essay, while there was one participant who chose not to complete it which resulted in 28 essays that were completed in total.

Procedure

The Chief Executive Officer of the NWU-PRI and the coach of the senior first team rugby were approached, permission was obtained to conduct the research and to ask assistance if needed. The focus-group interview and the individual interviews were audio-taped. To ensure trustworthiness of the data collected from the focus-group interview and the individual interviews, it was made available to a third party who is experienced in qualitative research and who read and re-read the data to ensure the conclusions made from the results were really that which was gained from the data collected. The data gathered from the essays were compared to that of the focus-group interview and individual interviews. This was done to determine if there were correlating themes and to verify the data gathered from the focus-group interview and individual interviews. This creates a chain of evidence (Leedy, 1997) and ensures that there is consistency in the findings across the various methods and data sources (Morrow, 2004).

Trustworthiness of Data

The trustworthiness of the qualitative data was ascertained by verifying the data resources and the data collected by comparing it with theoretical and literary sources as advised by Leedy (1997). The researcher made use of open-ended questions as recommended by Hoyle, Harris and Judd (2002) as far as possible. To evaluate trustworthiness of the data collected, it was made available to all interested parties, hereby creating a chain of evidence (Leedy, 1997).

Ethical Considerations

This study was approved by the NWU Ethics Committee (Ethics approval number: NWU 00024/07/S4). Informed consent was given to audio-tape the focus-group interview and the two individual interviews. The participants of the focus-group interview were asked to maintain confidentiality of the opinions aired by the other participants and that it should not be discussed outside of the focus-group interview. The participants who wrote the essays were assured anonymity and confidentiality. Participation in the focus-group interview, essays, or individual interviews were voluntary and the focus-group and essay participants completed consent forms stating that their participation was voluntary. Before commencing with the focus-group interview, essay writing, and individual interviews, each participant and interviewee was informed of the ethical considerations relevant to this type of research as well as their right to withdraw at any time, should they so choose.

Results and Discussion

Focus-Group Interview and Essays

The results were examined according to correlating themes. Direct quotes were provided to verify the themes identified. Some participants were Afrikaans speaking and their direct responses are quoted and the English translation also appears. Some participants were English speaking and therefore no translation was needed.

Literature that substantiates the themes is identified and discussed in the conclusion. The overlapping themes identified from the focus-group interview, essays, and individual

interviews were discussed in the conclusion. The thematic results of the focus-group interview and essays are as follows.

Basic Needs

Numerous basic needs were identified from essay responses like, appropriate transport and food: “First of all I need a place to stay, a car to get around, and food to eat, and these are my basic needs (Eerste benodig ek blyplek, motor om rond te ry en kos om te eet - dus net basiese behoeftes)”. The participants stated that the fulfillment of their basic needs were dependent on their parents or university bursaries to provide for them. The participants also felt that they needed to be in peak condition and that they had to eat correctly: “...to eat correctly and to eat the correct foods (...eet reg en eet die regte kos)”.

Motivation

Motivation seems to be the key aspect which affects the performance and perseverance of the rugby players. The focus-group interview participants felt demotivated when they experienced negative self-talk in the form of self-doubt, especially during rehabilitation of injuries or after a losing a game: “You start asking yourself so many questions, am I good enough?...you start having a lot of negative thoughts,” which they felt contributed to their experience of performance anxiety. Hard work that went unnoticed by team members or coaching staff, they felt, had a negative effect on their own and the team morale, thereby, resulting in reduced motivation to provide the necessary effort during training and competitions: “It’s nice when someone says positive things to you like, ‘well done’ (Dis lekker as iemand vir jou positiewe goed sê soos, ‘well done’)”. Another participant added “Why can’t the coach say... ‘you played a flipping good game, I just don’t like the manner in which you did that, go work a bit harder on it’ (Hoekom kan ‘n coach nie sê nie... ‘jy het ‘n flipping good game gespeel, ek hou nie van die manier hoe jy dit doen nie gaan werk ’n bietjie aan daardie’)”.

One player added in his essay on how he struggles to motivate himself to work: “I am the type of person who needs a great deal of motivation and guidance...it’s essential to have an atmosphere that motivates and keeps you positive especially when taking into account the hard training sessions and other obligations e.g. academic tests, assignments etc. (Ek

is 'n tipe persoon wat baie motivering en leiding nodig het...dis belangrik om 'n omgewing te hê wat jou motiveer en positief hou teenoor harde oefensessies ten spyte van alle ander verpligtinge, byvoorbeeld akademiese toetse, take ens.)”.

Time Management

The players in the focus-group interview confessed that they struggled with time management due to the demanding schedules of university rugby and their academic commitments. The players revealed how they found it difficult to prioritise their lives in a way that it allowed time for all their commitments and for their social and familial responsibilities: “Time management is a very important factor (Ek dink 'n belangrike faktor is tydbestuur)” and “...you need to set your priorities straight, your academic life, your social life, and the rugby (...jy moet jou prioriteite regkry, jou akademie, sosiale lewe, en rugby”).

The players affirmed this sentiment through their essay responses: “Time is crucial it is difficult to manage class and practice” and “I feel at times as if I am torn into two, the rugby expects so much and I want to make a success of it and academics expects so much and I want to succeed in it too (Dit voel party keer asof ek in twee geskeur gaan word, die rugby verwag baie, en ek wil presteer maar so ook die akademie en daarin wil ek ook graag goed doen)”. The players further confessed that they struggled with the discipline needed to keep to their goals, leaving them in a predicament where one or the other priority cannot be kept due to time constraints.

Goal-Setting

The players in the focus-group interview further identified goal-setting as a means of increasing their motivation and a means to achieve their ambitions: “...having a common goal and working towards it helped a lot”, yet they felt that it was a difficult skill to master especially when unexpected events arose. The essays confirmed goal-setting as a means used by the players to cope: “I need to have objectives or goals to work towards (Ek moet mikpunte of doelwit hê om na te werk)” and “I set goals for myself and work hard towards achieving them (Ek stel vir myself doelwitte en werk hard daaraan)”.

Optimism

The players in the focus-group interview confirmed that remaining optimistic when stressors were present, had a motivating effect on their game, the rest of the team, their academic work, and their life in general. They felt that remaining optimistic is challenging especially when the pressure is on, but once achieved, its impact is powerful: “I try to forget (about stressors) and focus on positive things (Ek probeer vergeet (van stressors) en fokus op die positiewe goed)”. The essay responses confirmed the importance of optimism in coping with the stressors associated with university rugby: “It’s essential to have an atmosphere that motivates you, keeps you positive (Dis belangrik om ’n omgewing te hê wat jou motiveer en positief hou)” and “I am a very positive person, I am an optimistic person and I always see a way out when I encounter problems (Ek is ’n positiewe persoon, ek is optimisties en sien altyd ’n uitkoms as ek probleme ondervind)”.

Injuries

The focus-group interview participants further found injuries very frustrating, as they placed all their energy into training and into matches, yet an injury could place them a few weeks to a few months behind, depending on the severity thereof: “You’re working so hard towards something and as soon as you are about to get it, then the ligaments are gone”. It is for this reason that the rugby players attempt to avoid injuries at all cost as mentioned in an essay: “My need as a university rugby player is to go through a season without any injuries (My behoeftes as ’n universiteit se rugbyspeler is om ’n seisoen deur te gaan sonder enige beserings)”.

Self-Confidence

Most players in the focus-group interview, admitted to experiencing a decrease in their self-confidence, negatively impacting their game: “...at times your self-confidence is gone due to an injury or you performed poorly in a game”. What some found to be helpful, were relaxation and visualisation exercises in which they would imagine and rehearse their actions in their minds. Relaxation exercises as a means of coping was, however, not confirmed by the players’ responses in the essay.

Counselling Services

The focus-group interview participants acknowledged that having a counsellor available has always been helpful when personal problems began to affect their general well-being. The NWU-PRI has employed professionals who are qualified in providing lay counselling. The players expressed that having such a service instills a sense of security because they know there is someone whom they can turn to should they have the need: “If you are stressed it helps to talk to someone”. Counselling services were, however, not mentioned in the players’ responses in the essay.

Team Dynamics

The focus-group interview participants felt that each move they make on and off the field will have an impact on the team: “If one of us falls under the wagon, it’s going to cost us the team.” They admitted that this added pressure and produced enormous amounts of anxiety. It was also mentioned in the essay, how important it was for the team to remain positive and supportive: “It’s important that the team has support and remains positive (Dis belangrik dat die span ondersteuning het en positief is)”.

Communication

Open communication between players and management staff was emphasised by the rugby players during the focus-group interviews, but was not confirmed in the essay responses. Communication allowed them to feel involved and valued: “I think the communication between the coach and the player is very important”. Positive criticism and acknowledgement of good game-play, gave them the opportunity to improve their play and boost their confidence: “It’s nice when someone says positive things to you like, ‘well done’ (Dis lekker as iemand vir jou positiewe goed sê soos, ‘well done’)”.

Social Support

Many of the focus-group interview participants affirmed that social support was vital, as it helped to relieve pent up stress and fatigue. It provided distraction and had a relaxing effect. It enabled them to forget about the stressors associated with university academics and semi-professional rugby, albeit temporarily: “...just to get away...to forget about everything...it’s a big part of coping too (...om net weg te kom van alles af...te vergeet ’n bietjie van alles af...dis ’n groot deel om van te cope ook)”. One participant also

mentioned in his essay: “What helps me to cope in stressful situations is to be social and to surround myself with good friends (Deur sosiaal te wees en my te omring met goeie vriende help om te cope in stres-situasies)”.

Spirituality

The focus-group interview participants stated that spirituality is very important and helps them to cope and remain hopeful: “What also helps a lot are my parents which play a big role and my spiritual life which means a lot to me (Wat my rêrig baie help, is my ouers hulle speel ’n groot rol en my geestelike lewe tel baie vir my)”. This too was confirmed by the essay: “I trust in God, there is a reason for everything that happens, and one can learn from everything whether it’s good or bad (Ek vertrou op God, alles gebeur met ’n doel en mens kan leer uit alles wat goed of sleg is)”.

Self-Actualisation

The rugby players’ essay responses revealed that they aimed to actualise themselves to reach their fullest potential in rugby, academics and all other areas within their lives and to be the best person that they could be: “My needs as an individual is basically to one day be successful in all terrains, money, wife, children, and health (My behoeftes as individu is basies om eendag suksesvol te wees op alle terreine, geld, vrou, kinders en gesondheid)” and “I want to reach my highest potential ...and to live correctly and be healthy (Ek wil my volle potensiaal bereik ...en om reg te leef en gesond te wees.)”

Most of the players confessed that coping mechanisms are ideal, but at times they struggle to initiate them: “...with goal-setting, I didn’t come around to doing it (...met doelwitte, ek het nie rêrig by dit uitgekom nie)”.

Individual Interviews

The purpose of the individual interviews was to understand the context of the university rugby player. Individual interviews were conducted with the coach for the NWU-PRI senior first team and the sport psychology consultant of the u/19 team.

Training Schedule and Time Management

The coach offered very useful information regarding the typical training schedule of a NWU-PRI rugby player to understand how they are pressed for time. Their schedule

consists of training, various tournaments throughout the year and recovery periods which are superimposed on the usual stressors that an average university student grapples with on a daily basis. The coach further explained that a NWU-PRI rugby player will play 38 games in a season, which consists of, three to four games per week during peak periods. He further informed the interviewer that the pre-season training begins in November. They then have a short break in December and resume training again in early January the following year (before university classes begin). The season runs until October where they break for a month until the start of the next season.

The coach's insights were very informative in that apart from championships, tournaments, club games, and training, the rugby players have other obligations like the maintenance of personal relationships, semester tests, exams, projects, practical training, and hostel responsibilities resulting in very little time to attend to all their responsibilities.

During the individual interview with the sport psychology consultant, it was reiterated how some of the rugby players struggled with time management. He stated that the amount of time that each player spends in the gym, on the field for training or for competitive games, resulted in time constraints for other academic activities: "The competition element of rugby, the performance element and... the time they put in the gym and on the field... results in time constraints". He further emphasised that time management is an art which university rugby players need to master in order to cope and to be successful: "Time management is essential to prioritise what is important in their lives".

Academic Challenges

During the individual interview the coach informed the interviewer of the rugby players' academic endeavours in that most of them are studying sport related diplomas/degrees like Human Movement Science, or other degrees like B.A., B.Sc. or B.Com. Naturally each diploma/degree has its own challenges that are separate from the world of university rugby.

Goal-Setting

The coach emphasised that goal-setting is vital to help motivate the players and to provide them with goals which they can aspire to. He sets clear goals and each player is informed on what these goals are, so as to give them clear direction, to involve them in the planning process and to communicate what is required from each of them: “for a player to be successful he has to have clearly defined goals”. This is why he develops goals for each player for the duration of the particular rugby season. He plans the rugby training according to three phases, the first phase is retraining the players, the second is qualifying for club championships, and the third phase is to prepare for the annual intervarsity match against the University of the Free State.

The coach also stated how important the recovery period is. The recovery periods are strategically planned within each phase according to the degree of effort that is required from the players, as per goals set for that particular phase. He feels that this helps to motivate them. They have to, however, set their own goals for other responsibilities and priorities in their lives.

Coachability, Commitment and Character

For a rugby player to be successful, according to the coach, the players need to be “coachable”, have commitment and character. Coachability can be seen as the ability to accept the criticism of the coach and not to take it personally, but to apply it to their game to improve their technique.

When referring to commitment, he further stated that the players need to be disciplined and willing to work hard to achieve their goals in all the sectors of their lives: “They (rugby players) have made a conscious choice that they want to do this (play rugby) and there lies a commitment behind that choice”.

Initiative is a positive trait that a rugby player may possess. According to the sport psychology consultant, initiative is a trait that contributes to being a successful NWU-PRI rugby player. He strongly felt that the rugby players need to show initiative when they were unsure of their game and required positive criticism or sought guidance to

enhance their technique, they should feel free to approach the coach and ask for assistance, instead of waiting to be approached. He further states that they should also be able to critically evaluate their own game: "...sit down after a match and really be critical with yourself", and identify areas of possible improvement and ask a team member to confirm their assessment.

Psychological Problem Areas

It was the opinion of the sport psychologist that other psychological problem areas of the rugby players include difficulty in coping with success and failure, performance anxiety, personal problems, and injuries. The coach affirms that success can at times result in inflated egos which may cause the players to lessen the amount of effort they place in their game and practice sessions: "...they start suffering from delusions of grandeur...they get caught up in the success with external pressures like agents who want them to be professional before they are ready". The sport psychology consultant declares the possible impact of failure, which can negatively impact the players' performance in that they feel inferior and begin to doubt their ability and talent.

The sport psychology consultant communicated that performance anxiety can lead to self-doubt where the players become so anxious that they doubt their abilities and their game play does not reflect their skill and in turn it may negatively impact the team. He referred to "activation control" which is a combination of control over anxiety and emotions, and keeping focus within the game context. He found that some rugby players are "lacking in activation levels".

The coach added that personal or family problems, especially for players who come from disadvantaged communities and who have few resources, may distract the rugby player, reducing their work ethic and causing emotional fatigue: "A lot of our players from disadvantaged communities suffer from family problems". He revealed that this is an area that the NWU-PRI attempts to address by having professional staff who are trained in pastoral care to assist the players when they become emotionally laden.

Injuries

The sport psychology consultant stressed that the incidence of injuries has a big impact on players' sporting and overall well-being. He explained that injuries imply that the player will need to spend an amount of time in rehabilitation, and he may fall behind on the team dynamics, new techniques learnt and games played. As a result, he states further, they try to rush the rehabilitation period: "Sometimes guys tend to rush out of their injuries...to get back into playing". He revealed how players become over-eager and over train during rehabilitation "...sometimes they think that more is better and do heavier weights which mess up the recovery process". He asserted that rugby players may even hide the fact that they have an injury for fear of losing their position "...they try to hide the injury sometimes to their own advantage and sometimes to their detriment". He further voiced his concern for how players, who do not adhere to the rehabilitation regime as recommended by the professionals, may incur greater injuries than they originally had.

Conclusions

University rugby players need to fulfill interpersonal, social, academic and sporting responsibilities and balancing these priorities can be stressful (Baker, 2004; Dyson & Renk, 2006).

Rugby is a team sport and the dynamics within the team are vital for the successful performance of that team, as mentioned by the participants' responses in the focus-group interview and essay. Team dynamics is influenced by the motivation and the effort of each participant. Lack in team effort and motivation can result in poor timing, teamwork or strategy (Hodge et al., 2006).

Motivation in sport is related to the satisfaction of players' needs for autonomy, competence, relatedness by means of the sporting environment. If their needs are not met, a decrease in motivation and well-being occurs (Reinboth & Duda, 2006). The response from the focus-group interview and essay identified that once the rugby players felt low in self-confidence, they developed a tendency for negative self-talk which reduced their motivation and performance and increased their levels anxiety. It may be of value in

future research to determine the foremost motivating factors in university rugby and its effect on the players' performance.

Goal-setting has been found to have positive effects on the motivation and performance of sports people (Ntoumanis et al., 1999). The responses from the focus-group interview, essays and individual interviews conducted, confirm how important it is to set goals. Goal-setting assisted university rugby players to evaluate their performance. It is also considered to be an effective means of enhancing performance in sport (Munroe-Chandler, Hall & Weinberg, 2004). The quality of the goals set (for either competition or training) and the sports person's discipline, will determine its effectiveness on motivation and the resulting performance. An intervention which focuses on developing quality goals for training and competition may be of great benefit to the rugby players.

The performance and well-being of each rugby player is dependent on how much time they dedicate to their various obligations. The data obtained from the focus-group interview, essays and from the individual interviews affirm that time is a limited resource for the university rugby players due to their many obligations and time management is, therefore, essential. Holt and Dunn (2004) confirmed that many sports people make use of time management as a problem-focused coping skill which gives the sports person a sense of control and boosts self-confidence.

The occurrences of injuries are common in rugby (Lee, Garraway, Hepburn & Laidlaw, 2001). In 1999 there was an estimate of 91 276 injuries in the South African rugby playing population (Upton, 1999). Injuries may have a negative impact on a player's confidence reducing their drive. They fear they will miss out on opportunities to learn new strategies and run the risk of losing their place in the team during their rehabilitation period. This data obtained from the focus-group interview, essays, and from the individual interviews, is verified by the study of Lee et al. (2001) where they found that rugby players were tempted to compete in matches before they were fully recovered and to run the risk of incurring a more severe injury in the process. It may be beneficial for an intervention to assist rugby players in facilitating coping strategies to deal with injuries.

The character of sports people will also determine the specific coping strategies to be used. Positive character components are essential. The sporting professionals in the individual interviews stated that they need to be committed, confident, be able to cope with the impact of success and failure, to be open-minded, to be willing to receive instruction, and be able to communicate with coaching staff and other team members. It is important for any successful sports person to possess the ability to manage emotions both during training and competition, to rebound from failure, to remain focused, to be committed, to obtain interpersonal skills involving communication and to possess a form of mental resilience (Arathoon & Malouff, 2004; Fourie & Potgieter, 2001; Hodge et al., 2006; Moran, 2004).

Some of the participants in the focus-group interview did admit that they made use of coping strategies like relaxation, mental imagery, use of counselling services, and to remain optimistic to aid them in emotional and anxiety control. Wang, Huddleston and Peng (2003) found that many sports people in the United States, Canada, Europe, Wales and England used coping strategies that ranged from relaxation exercises, imagery, self-hypnosis, centering, mental rehearsal, using keywords, simulated practice, remaining optimistic by positive self-talk, distancing, mental distraction and venting of unpleasant emotions. Gaudreau and Blondin (2004) as well as Whitehead and Basson (2005) found that sample groups used in their studies made use of similar coping strategies. Another coping strategy identified during the focus-group interview, essays, and individual interviews, was social support. Social support aids in alleviating stress and general well-being (Pakenham et al., 2007).

Spirituality was mentioned during the focus-group interview and in the essay. The participants found that their spirituality gave them strength to adjust to various difficulties. In this regard Corey (2001) is of the opinion that spiritual values can provide solutions for struggles, a source of healing, and give strength during critical times by helping people find purpose in life. Spirituality has also been identified as a component that contributes to mental toughness (Fourie & Potgieter, 2001).

The needs identified from the essays were basic physiological needs (food, a place to stay and transport) and the need for self-actualisation. Maslow's theory (Meyer, Moore &

Viljoen, 1997) states that an individual is able to function at a level of self-actualisation only once lower basic needs are gratified on a regular basis. The need for self-actualisation is innate and needs to be satisfied to achieve growth and well-being. Self-actualisation encourages a person to discover and realise his or her highest potential like (in this case) being the best rugby player and in so doing, become fully functioning, goal-orientated beings (Meyer et al., 1997).

Thus, the conclusion can be made that due to the demanding nature of semi-professional rugby played at university level and the stressors associated with achieving a degree, elite student rugby players would benefit from a program that focuses on facilitating their coping and well-being.

Limitation

A limitation of this study should be mentioned, the sample is focused on university rugby players who play in a semi-professional league. The results obtained cannot be generalised to professional leagues or to other sports. The researcher found that the participants were eager and motivated to participate, however, the honesty of the responses obtained in the essays cannot be assured. The responses were thought of as honest due to the voluntary nature of the participation and the extensive explanation of the ethical issues.

Recommendations

A practical recommendation for future research is to develop a programme that facilitates coping strategies aimed at enhancing the well-being of the university rugby players with specific reference to the areas identified in the findings of this study. Such a programme may be suitable to u/19 university rugby players who may find the transition from high school academics and rugby to University academics and semi-professional rugby stressful. This programme should focus on time-management, motivation and goal-setting, coping with injuries and coping with emotions in a manner that facilitates coping and well-being.

References

- Amiot, C. E., Gaudreau, P., & Blanchard, C. M. (2004). Self-determination, coping and goal attainment. *Journal of Sport & Exercise Psychology, 26* (3), 396-411.
- Anshel, M. H. (2002). Qualitative validation for a model for coping with acute stress in sport. *Journal of Sport Behaviour, 24* (3), 223-246.
- Anshel, M. H., & Anderson, D. I. (2002). Coping with acute stress in sport: Linking athletes' coping style, coping strategies, affect and motor performance. *Stress, Anxiety and Coping, 15* (2), 193-209.
- Anshel, M. H., & Delany, J. (2003). Sources of acute stress, cognitive appraisals and coping strategies of male and female child athletes. *Journal of Sport Behaviour, 24* (4), 329-353.
- Anshel, M. H., Williams, L. R. T., & Williams, S. M. (2000). Coping style following acute stress in competitive sport. *The Journal of Social Psychology, 140* (6), 751-773.
- Arathoon, S. M., & Malouff, J. M. (2004). The Effectiveness of a brief cognitive intervention to help athletes cope with competition loss. *Journal of Sport Behaviour, 27* (3), 1-11.
- Baker, S. R. (2004). Intrinsic, extrinsic, and amotivational orientations: Their role in university adjustment, stress, well-being and subsequent academic performance. *Current Psychology, 23* (3), 189-202.
- Coach. (2006) Personal interview undertaken.
- Compton, W. C. (2005). *Introduction to positive psychology*. California: Thomson Wadsworth.

Corey, G. (2001). *Theory and practice of counseling and psychotherapy* (6th ed.). USA: Wadsworth.

Deniz, M. E. (2006). The relationship among coping with stress, life satisfaction, decision-making style and self-esteem: An investigation with Turkish university students. *Social Behavioural and Personality*, 34 (9), 116-1170.

Dyson, R., & Renk, R. (2006). Freshman adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology*, 62 (10), 1231-1244.

Fourie, S., & Potgieter, J. (2001). The nature of mental toughness in sport. *South African Journal for Research in Sport Physical Education and Recreation*, 23 (2), 63-72.

Gaudreau, P., & Blondin, J. (2004). Different athletes cope differently during sporting competition: A cluster analysis of coping. *Personality and Individual Coping*, 36, 1865-1877.

Hodge, K., Lonsdale, C., & McKenzie, A. (2006). Thinking rugby: Using sport psychology to improve rugby performance. In J. Dosil (Ed.), *The Sport Psychologist's Handbook: A guide for sport-specific performance enhancement* (pp.183-209). England: John Wiley & Sons.

Holt, N. L., & Dunn, J. G. H. (2004). Longitudinal idiographic analysis of appraisal and coping responses in sport. *Psychology of Sport and Exercise*, 5, 213-222.

Hoyle, R. H., Harris, M. J., & Judd, C. M. (2002). *Research methods: In social relations* (7th ed.). USA: Wadsworth Thomson Learning.

Lee, A. J., Garraway, W. M., Hepburn, W., & Laidlaw, R. (2001). Influence of rugby injuries on players' subsequent health and lifestyle: Beginning a long term follow-up. *British Journal of Sports Medicine*, 35, 38-42.

Leedy, P. H. (1997). *Practical research: Planning and design* (6th ed.). Upper Saddle River: Prentice Hall.

Meyer, W. F., Moore, C., & Viljoen, H. G. (1997). *Personology: From individual to ecosystem*. Johannesburg: Heinemann.

Moran, A. P. (2004). *Sport and exercise psychology: A critical introduction*. New York: Routledge.

Morrow, S. L. (2004). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of Counseling Psychology*, 52 (2), 250-260.

Munroe-Chandler, K., Hall, C. R., & Weinberg, R. S. (2004). A qualitative analysis of the types of goals athletes set in training and competition. *Journal of Sport Behaviour*, 27 (1), 58-74.

Ntoumanis, N., Biddle, S. J. H., & Haddock, G. (1999). The mediating role of coping strategies on the relationship between achievement motivation and affect in sport. *Anxiety, Stress & Coping*, 12 (3), 1-18.

Pakenham, K. I., Chiu, J., Bursnall, S., & Cannon, T. (2007). Relations between social support, appraisal and coping and both positive and negative outcomes in young carers. *Journal of Health Psychology*, 12, 89-102.

Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, needs satisfaction, and indices of well-being in team sport: A longitudinal perspective. *Psychology of Sport and Exercise*, 7, 269-286.

Sport Psychology Consultant. (2006). Personal interview undertaken.

Strümpfer, D. J. W. (2003). Resilience and burnout: A stitch that could save nine. *South African Journal of Psychology*, 33 (2), 69-79.

Upton, P. A. H. (1999). *Epidemiology of rugby injuries: A series of independent rugby studies conducted amongst schoolboys, senior club & provincial rugby players in the Western Cape*. Unpublished Philosophiae Doctor in Physiotherapy, University of Cape Town: Cape Town

Wang, L., Huddleston, S., & Peng, L. (2003). Psychological skills used by Chinese swimmers. *International Sports Journal*, 48-55.

Weinberg, R. S., & Gould, D. (2007). *Foundations of sport and exercise psychology* (4th ed.). Champaign Ill.: Human Kinetics.

Whitehead, K. A., & Basson, C. J. (2005). Sport-related difference in type and amount of mental imagery used by athletes. *South African Journal for Research in Sport, Physical Education and Recreation*, 27 (2), 159-174.

CHAPTER 3

Article 2

Development of an Experiential Learning Programme Aimed at Facilitating Coping Strategies and Well-Being of University Rugby Players

Laureano, C. M. D.

School of Psycho-Social Behavioural Sciences: Psychology

Faculty of Health Sciences

North-West University

Potchefstroom

Nienaber, A. W.

School of Psycho-Social Behavioural Sciences: Psychology

Faculty of Health Sciences

North-West University

Potchefstroom

Grobbelaar, H. W.

Department of Sport Science

Faculty of Education

Stellenbosch University

Stellenbosch

Abstract

University sports persons pursue academic and semi-professional sporting careers simultaneously and it can be competitive, stressful and demanding. This gives rise to needs and how they cope with these needs will have an impact on their overall well-being. In order to enhance their sense of well-being, they will need to recognise their own thoughts, structure beliefs and harness the power of increased accuracy and flexibility of thinking to effectively manage their emotions and behaviour (Norton, 2005). The needs and coping mechanisms of senior rugby players from the North-West University PUK Rugby Institute were identified via focus-group interviews and essays written by the players, as well as individual interviews with the senior head coach and sport psychology consultant. The themes that were identified were, basic needs, motivation, time management, goal-setting, optimism, injuries, self-confidence, counselling, team dynamics services, communication, social support, spirituality, self-actualisation, coachability, commitment, character, and psychological problem areas. The aim of this study was to develop a programme that facilitates coping strategies and well-being of the university rugby players with reference to the identified needs. Experiential learning (which according to Kolb and Kolb (2005) is a process whereby knowledge is created through the transformation of experience) is the conceptual framework that underlies the programme. It consists of activities which engage participants in a process that assists their learning experience, focusing on their thoughts, feelings, perceptions and behaviour.

The developed ELP consisted of six one hour sessions addressing motivation, goal-setting, time-management, coping with injuries, emotion-focused coping and the Individual Zone of Optimal Functioning of Hannin (2000).

(Word Count: 248)

Keywords: Programme development, well-being, coping, university rugby.

Introduction

Most university rugby players have committed themselves to developing careers in rugby and in achieving a university degree. The university rugby training schedule is demanding and time consuming with 38 games per season, which may consist of three to four games per week during peak season tournaments (Coach, 2006). In addition the rugby players also attend regular training sessions. The pre-season training starts in November and there is a short break in December. Training resumes again in early January before university classes begin and the season ends in September. Such a demanding rugby schedule can place strain on the academic side of rugby players' life (Coach, 2006).

The typical degrees that the rugby players are registered for range from sport related diplomas/degrees like Human Movement Science, or other degrees like B.A., B.Sc. or B.Com. (Coach, 2006). The demands involved in achieving an academic university degree are extensive and involve investing time in preparation, class attendance, examinations, and projects (Deniz, 2006; Dyson & Renk, 2006). The demands of academics and rugby leave very little time for the social sphere of their lives.

The rugby players find themselves in the predicament of dividing their time among their roles or obligations. At times this is successfully done and at other times it is unsuccessful. This may result in stress and difficulties in coping, affecting well-being, relationships, and performance in the class and on the field. The ability to cope with stressors is essential for sporting success (Nicholls, Polman, Levy, Taylor & Copley, 2007).

A need assessment was conducted to determine what the needs and difficulties are that rugby players grapple with. A focus-group interview was conducted with seven senior first and second team rugby players of the North-West University PUK Rugby Institute (NWU-PRI) (Mean age=22.14, SD=1.86). Individual interviews were conducted with the coach of the senior first team, and the sport psychology consultant of the u/19 teams. Essays were completed by an availability sample of 28 first and second senior team

players (Mean age=22.96, SD=1.63). The reason that the need assessment was conducted with a sample group comprising of senior rugby players instead of u/19 players, is that senior players have more experience within the university rugby environment and they are more aware of the stressors a university rugby player would typically encounter.

The themes that were identified from the data collected were, basic needs, motivation, time management, goal-setting, optimism, injuries, self-confidence, counselling, team dynamics services, communication, social support, spirituality, self-actualisation, coachability (the ability to accept criticism from the coach), commitment, character, and psychological problem areas.

It was recommended that a programme should be presented to u/19 university rugby players who may find transition from high school academics and rugby to university academics and semi-professional rugby stressful. The developed programme should address the above mentioned themes. It has been found that psychological skills improve motor skills learning and performance (Wang, Huddleston & Peng, 2003). The aim of this study is, therefore, to develop a programme that facilitates the coping strategies and well-being of the university rugby players, with reference to the identified themes. In the next section the theoretical framework and procedure as well as the content of each session of the programme will be discussed in depth.

The Conceptual Framework Underlying the Development of the Programme

Experiential learning is the conceptual framework that underlies this programme. According to Kolb and Kolb (2005), experiential learning is a process whereby knowledge is created through the transformation of experience. It provides active, participatory learning opportunities where the participant is aroused from passive listener to active respondent (Hawtrey, 2007). It is for this reason that the experiential learning framework was chosen to form the foundation for the development of the intervention programme.

The programme consists of various activities ranging from filling in worksheets, to developing personal insight, and learning new skills; while other activities involve group

work and discussions. Group work in particular, offers a unique learning advantage where group members learn from each other's common experiences, therefore offering a wider range of resources (Jacobs, Masson & Harvill, 2002). Groups provide a sense of belonging, it creates a safe environment to practice new skills learnt, and it provides feedback and an opportunity for participants to learn through each other's experiences (Corey, 2001). Groups recreate real life situations equipping participants to learn new methods of coping and it gives participants the opportunity to commit to improving certain behaviours (Jacobs et al., 2002). Group work also builds a sense of camaraderie among the participants (Jacobs et al., 2002) which is essential for a team sport like rugby, where good relationships among team mates are essential.

These group activities encourage participants to engage in a proactive manner by asking them to express their opinions, and use inductive reasoning as suggested by Hawtrey (2007). Groups have the ability to encourage people in creative and more life-giving directions (Corey & Corey, 2002). The developed experiential programme attempts to incorporate personal involvement through discussions and by applying concepts to real-life situations. This transforms knowledge from being abstract and theoretical to something that is useful and useable (Crues & Crues, 2006).

Method

Programme Development and Description

The programme is divided into six sessions of one hour each. It is administered to male rugby players, but is suitable for both sexes. Each session begins by welcoming the participants and it is followed by an ice-breaker to place the participants at ease and to introduce the topic of the specific session. The purpose of the session is discussed, informing the participants of the respective objectives that will be covered. The discourse then follows and is made up of various interactive activities and discussions to introduce and expand on the subject. Each session comes to a conclusion with the researcher summarising the topic briefly and thanking the participants for their cooperation.

Session One: Motivation

The overall purpose of this session is for each participant to develop a better understanding of what the concept “motivation” refers to. The learning objective for this session is for participants to, identify if they are intrinsically motivated, extrinsically motivated or amotivated and to apply strategies to maintain long-term motivation.

Motivation is essential for a sporting/academic career, general well-being, and the ability to cope. It is a force that initiates, directs and sustains human behaviour (Alexandris, Tsorbatzoudis & Grouios, 2002; Beaudoin, 2006; Doren, 2000). It is the driving force that motivates an individual to perform an action towards a specific direction or goal. Motivation determines the amount of effort that will be invested and the degree of persistence or resilience the individual possesses to face certain obstacles or stressors (Hadfield, 2006b). In order, to achieve or perform a particular action like coping one firstly needs to be motivated. It is for this reason the topic “motivation” was chosen for the first session.

A person’s motivation to participate in a task can be referred to as locus of causality, namely intrinsic motivation, extrinsic motivation and amotivation (Beaudoin, 2006). When participation in an activity is pleasurable and the focus is on skill improvement and learning, the individual’s locus of causality is said to be intrinsically motivated (Ryska, 2002; Wang & Biddle, 2003). When an individual’s reason for participating in an activity is motivated by outperforming others, demonstrating superior ability with minimal effort, trophies, salaries, scholarships, or approval of others, the individual’s locus of causality is said to be extrinsically motivated (Elliot, 2005; Ryska, 2002). A person who is amotivated is not driven to work towards any goal. The participants are encouraged in the session to fill in a questionnaire compiled by Elliot (2005) to determine their locus of causality: are they predominantly intrinsically motivated, extrinsically motivated or amotivated?

Internal and external rewards can improve and influence both forms of motivation. Some sports men and women who are intrinsically motivated may lose their passion when an extrinsic reward is added. The determining factor (locus of causality) is the sports

person's perception of which force controls their effort (Elliot, 2005). If individuals view the cause of their behaviour as external to themselves, someone else is perceived as being in control. They may, as a result, feel a reduced sense of self-determination and their motivation may decrease. If sports persons, however, believe that they are the cause of their behaviour, they may experience a greater feeling of control and autonomy, resulting in an increase in motivation (Wang & Biddle, 2003).

Feelings of autonomy and competence are powerful motivators. External rewards like monetary gains can bring about a lack of motivation as the effect of extrinsic motivation is short lived. Extrinsic motivation is not always negative as it can assist when intrinsic motivation may be temporarily low. Emphasis should always be on developing a predominantly intrinsic motivational goal of enjoyment and a sense of purpose (Elliot, 2005). The participants can use the knowledge of whether they are intrinsically or extrinsically motivated to assist them when motivation is low and to focus on increasing their internal motivation. Some suggestions are made to maintain long-term internal motivation as suggested by Csíkszentmihályi (1997), Karageorghis (1999) and Elliot (2005). The participants are asked to apply this to the situation they find themselves in by means of a group discussion. This creates an experiential opportunity for learning by recreating a real life experience (their personal situation) and the applications of these newly learnt strategies in a safe environment.

Session Two: Goal-Setting

In the previous session motivation was discussed and how the sports person's locus of causality, be it intrinsic or extrinsic, will influence the types of goals they set. Goals are a level of performance that an individual wishes to attain, typically, within a specified period of time (Latham & Locke, 2006). Goals contribute to the level of well-being and help individuals to cope. Individuals who do not practice goal directed behaviour find it difficult to attain values that make their survival and happiness possible. The advantages for setting goals are: an increase in well-being, personal satisfaction, sense of purpose, self-efficacy, tangible rewards and team building (Latham & Locke, 2006).

There are two types of goal orientations (a tendency for an individual to adopt task or ego-orientated goals) that have been identified. Goal orientations are central to the way in which individuals define success and evaluate personal competence and are critical determinants of motivation (Boyd & Kim, 2007). The achievement goal theory identifies two types of goal orientations namely task-orientated (mastery) goals or ego-orientated goals (Hall, Kerr, Kozub & Finnie, 2007).

Individuals, who are task orientated, tend to be internally motivated, concerned with mastery of skill, learning, improvement, and regard achievement in self-referenced terms. They tend to be flexible, focus on the development of skills and persist when faced with difficult challenges and obstacles (Hall et al., 2007). Task-orientated goals are positively associated with positive behavioural and adaptive psychological responses and positive feelings of self (Grossbard, Cumming, Standage, Smith & Smoll, 2006).

Ego-orientated individuals are concerned with demonstrating their ability rather than developing their ability and their source of motivation is external, referenced towards out-performing others. Ego-orientation is associated with maladaptive outcomes, like when an individual wishes to demonstrate superior ability with minimal effort, cheating, or blaming others for inferior ability (Poulsen, Ziviani & Cuskelly, 2006).

Achievement situations may result in an individual setting a task-orientated goal and in another situation an ego-orientated goal or even a combination of the two. One needs to be realistic in competitive situations where sports people are bombarded with ego-involving criteria. In competitive situations a high ego-orientated/high task-orientated goal combination is encouraged. It becomes problematic when ego-orientation is high and task-orientation is low (Harwood, 2005).

The participants are encouraged to complete an activity so as to assist them to identify if they are predominantly task-orientated or ego-orientated and to modify their goals in a way that is more adaptive. In the next activity they are given the opportunity to set goals in major areas of their life for instance academics, sports, and family. Guidelines are given to help them develop more task-orientated goals as suggested by Mind Tools

(2007) and by Wilson (1994). Once again this activity encourages the participants to become personally involved by applying the knowledge they have learnt about goal-setting to their situation.

Session Three: Time-Management

University rugby players have many goals, roles and obligations, including rugby, academics, social and university obligations. These obligations may place a strain on the amount of time available for each responsibility. In order to manage all their obligations, they will need to master the skill of time-management. The overall purpose of this session was to help the participants to identify pitfalls in their time management skills and to help them select possible strategies which are better suited to their lifestyle to aid them in managing their time efficiently.

Time management is a way of gaining control over your life (Dartmouth, 2007). Time management is an art to be mastered and may take some practice as participants would need to change some habits which require self-discipline. If they were willing to monitor their progress regularly and make the needed improvements, they should be successful.

The first step in time management is to draw up a time schedule to determine how much time is spent on each obligation. The participants were asked to draw up their own time schedule as suggested by Dartmouth (2007) and to identify the time available which they could use to fulfil the goals they developed in session two.

The participants were asked to complete a “to do list” for the week and to correlate their “to do list” with the time they have available. They were provided with guidelines on how to draw up an effective “to do list” (Career Skills Library, 2004; Neenan & Dryden, 2002). By doing this activity within a group environment, it provided the participants with a safe space to practice new skills learnt (Hawtrey, 2007).

The participants needed to be wary of activities that may waste their time and they were asked which activities they struggled with. This was done in the format of a group discussion. Career Skills Library (2004), Neenan and Dryden (2002) as well as Wetmore

(1999a) mentioned common time wasters that most people struggle with and common suggestion on how to deal with them was discussed within the group. The group setting was ideal to discuss obstacles like difficulties in managing time. They also learnt that their difficulty was not unique to them and that others within the group felt the same. This created a sense of community amongst group members (Corey & Corey, 2002).

Procrastination is the tendency to continuously delay a task due to anxiety or feeling overwhelmed by the task. It is a common cause for delaying urgent tasks and limiting available time even more. It is a force that prevents someone from starting or completing a task on time. Reasons for procrastination may be emotional blocks where people may feel guilty that they are not spending enough time with friends, anger towards the coach/lecturer who gave them tasks, or low faith in their own abilities so that they become anxious to start the task. It is important to identify the cause of the procrastination, then to break up the task into smaller steps, and to start with a small step and work your way up until the task is completed (Wetmore, 1999b).

Each person is able to function at his best during a specific time of day. Participants were asked to identify at what time during the day (i.e. mornings, afternoons or evenings) they functioned at their best and when they had more energy. They are then encouraged, where possible, to utilise this time of day for difficult tasks. To preserve energy, it is essential to take regular breaks to maintain a good work ethic and to prevent fatigue.

Session Four: Coping with Injuries

Injuries are common within the sport of rugby and can be quite stressful for a rugby player. The topic is introduced with a case study of a university rugby player who is injured and how he makes use of positive and maladaptive coping skills. The participants are then encouraged to discuss in groups the appropriate ways of coping with injuries and how they would feel if they were the protagonist in the case study. The rationale for this session is to identify means of coping with injuries in a functional and empowering manner thereby building resilience. Injuries have an impact on the physical and psychological well-being of a sports person (Johnston & Carroll, 2000). Injuries can

bring about negative affect, lowered self-esteem, as well as higher levels of depression and anxiety among sports people (Johnston & Carroll, 2000).

The next activity was a continuation of the previous case study, where participants discussed possible predisposing factors that may have lead to the protagonist developing an injury. They further identified poor coping mechanisms that the protagonist used and named more effective coping mechanisms that would have aided his functioning during the rehabilitation process.

Certain psychological factors (such as personality factors, over-estimation of ability, lack of caution, certain predisposing attitudes, trait anxiety, high or low pain tolerance, a history of stressors, aggression, amotivation, poor coping skills and lack of support) can predispose a sports person towards developing an injury (Erasmus, 2006). Sports people who are at a higher risk of developing injuries, are those with negative life stressors, increases in daily hassles, previous injuries, and poor coping mechanisms (Brown, 2005). This elevated stress response, increases muscle tension and distractibility, whereas it decreases awareness to important cues increasing the sports person's vulnerability to developing an injury (Brown, 2005). By discussing the above mentioned predisposing factors allowed the participants of the programme to realise their own vulnerability and to take care of themselves when they are vulnerable and hereby, proactively preventing injuries.

Coping can be defined as an active process concerned with a person's attempt to reduce the intensity or frequency of a stimulus that is perceived as threatening (Hoedaya & Anshel, 2003). The participants are made aware of the two types of coping namely problem-focused or emotional-focused coping. Problem-focused coping involves activities that include strategies to manage or alter stressors through behaviours like gathering information, goal-setting, time-management skills, and problem-solving. Emotion-focused coping involves attempts to control emotional responses evoked by stressors through actions like meditation, relaxation, and cognitive efforts to change the meaning associated to a situation (Holt & Dunn, 2004). The participants completed an activity where they are to refer back to the case study and identify the emotion and problem-solving strategies the protagonist used and to name other emotional or problem-

solving strategies not mentioned. Problem-focused coping is more effective for controllable situations and emotion-focused coping is more suited to stressors over which an individual has no control (Holt & Dunn, 2004). The participants then completed an activity where they are to apply problem-focused and/or emotion-focused coping to a particular situation they found themselves in. They were given a list of examples of emotion-focused and problem-focused strategies they could use as suggested by Brown (2005).

Session Five: Emotion-Focused Coping

Emotion-focused coping is gaining control over emotions elicited by a particular situation which may hamper performance. The skills used to control these emotions may require some training and hence a session dedicated to this topic. The rationale for this session is to identify means to acquire increased control over debilitating emotions.

The researcher introduces the topic of emotion-focused coping by presenting an activity where the participants are to divide into equal groups. Each group is given a different scenario which evokes a debilitating emotion and they need to find an emotion-focused coping solution. Each group presents the scenario and solution to the larger group for discussion. The participants are given a list of emotion-focused strategies which they can apply to their scenario as suggested by Holt and Dunn (2004). This task encourages the participants to make use of inductive reasoning and rely on past experiences, problem-solving skills and the support of members within their group (Corey & Corey, 2002; Hawtrey, 2007).

The participants are then given the opportunity to partake in a relaxation exercise which helps players control anxiety. The researcher asks the participants to lie on the floor with pillows to aid comfort and to close their eyes as they listen to the researcher as she guides them throughout the activity. The relaxation exercise consists of two parts; the first part makes use of progressive relaxation whereby the participants learn to relax specific muscle groups while attending to the feelings associated with either the tensed or relaxed states (Hui, Wan, Chan, & Yung, 2006). The second part comprises of visualisation where the participants are asked to create an image in their minds to enhance the feeling

of relaxation. Visualisation is a common skill used by many sports people to help reduce anxiety and aid performance (Nicholls et al., 2007; O'Shei, 2006; Wang et al., 2003).

Session Six: The Individual Zone of Optimal Functioning

Emotions are an important element of human functioning and sport performance. Emotions can impair or enhance an individual's ability depending on the type of emotion, its intensity and its relationship to the sports person's peak performance. The rationale of this session is for the rugby players to gain insight into the specific emotions and its effects on their performance. The rugby players will also, be able to apply strategies to counterbalance these emotions by using the model of Hannin's (2000) Individual Zone of Optimal Functioning (IZOF).

The "Individual" in the acronym refers to the subjective emotional experience of the individual accompanying successful, average and poor performance. The "Zone" refers to the specific relationship between the perceived intensity of optimal and dysfunctional emotional states and the quality of performance (Hannin, 2000). In other words the "Zone" is concerned with the effect optimal or dysfunctional emotions have on an individual's performance. "Optimal" refers to the most relevant and appropriate emotions for the sports person for those particular conditions. It refers to the best internal conditions which bring about high quality performance (Hannin, 2000). "Functioning" refers to the optimal effect the emotional states has on the quality of performance process. IZOF examines two functional aspects of the emotion-performance relationship, namely energising/de-energising or organising/de-organising (Hannin, 2000).

The rugby players themselves are the best equipped to manage their own emotional state. To be able to control their emotional state in a competitive game they will need to determine where their activation-level is, whether it is low, too high or at an optimal performance level. Activation level is a concept closely related to the mood of the sports person. Every sports person has an emotional point where he/she is sufficiently mentally stimulated to possess the desire and the drive to perform, without being so excited by the prospect of competition that he/she loses concentration regarding the execution of the required physical aspects of the sport (Thayer, 1978). The phrase "to get psyched up" is a simple example of words that are used to take the sports person to the activation level if

they are emotionally not stimulated enough for instance, too relaxed to reach the level of peak performance (Dalloway, 2000). These sports people would need to apply strategies like visualisation or shallow breathing. If sports people are “psyched out” they are usually emotionally over-stimulated to perform at optimal peak for instance, over anxious and will need to apply strategies like deep breathing. It is therefore important for the rugby player to determine if he is emotionally under-stimulated, over- stimulated or at peak performance level to enable him to apply the correct strategies to reach the needed activation level for his peak performance.

The participants are given a graph explaining the continuum of the “psych-up” zone (emotionally under-stimulated), the peak performance zone and the “psych-out” zone (emotionally over-stimulated). The typical psychological symptoms, physical symptoms, thoughts type of play and performance that accompanies each zone is also explained (Arcelin, Brisswalter & Delignieres, 1997). The participants are encouraged to discuss within the larger group potential strategies that they could use, should they find themselves in the psyched-up zone or the psyched-out zone.

The participants are asked to think of a time when they found that they had performed to their peak and when they had their worst performance in a competitive game. They need to bear in mind that positive emotions (relaxation) and negative emotions (anxiety) can both be helpful or harmful depending on their intensity. The participants are then given a list of helpful positive emotions and helpful negative emotions. They are then to refer to their best performance and to tick off the emotions they experienced during that game. They are given another list of harmful positive and harmful negative emotions they experienced during their worst performance in a game and they need to tick off the emotions they experienced. Once they have identified these emotions (helpful positive, helpful negative, harmful positive and harmful negative) they are asked to rate the intensities that they should experience these emotions to reach their peak performance. Naturally the helpful positive and helpful negative emotions should have higher intensity ratings and the harmful positive and harmful negative emotions should have lower intensity ratings.

The participants are then to use this information to think of keywords they can use to direct them to reach their activation level to be able to perform at their peak. This is done on an easy to carry cue card that they can keep on their person as a motivation device when needed.

Termination

The participants are prepared for termination of the programme during each session by naming the sessions that have been presented and the sessions that were still to be presented. By doing this, it reminds the group members that there were only six sessions and then the group would terminate. Each session should be terminated by asking groups members to summarise the content discussed and the extent to which the session was meaningful to them. The presenter should add any important factors that the group members may forget or that need to be re-emphasised. This provides the participants with an ongoing opportunity to reflect on past sessions, to evaluate what has been learnt and to add personal meaning to these experiences, as suggested by Gladding (1995).

The last session and hence the termination of the programme, is concluded by asking the group members to summarise the whole programme and to identify which session was most meaningful to them and why. They are asked how they can apply these skills practically outside the group. The purpose for this is to empower the group members to reflect on what they have experienced and to make ways for new beginnings by using the skills learnt. Gladding (1995) confirmed that this is the best way to terminate a group. To supplement the reflection process, the group members are asked to complete a rating sheet where they evaluate how valuable they found each session, the capability of the presenter, to identify the possible areas of improvements and if the programme was suitable for the u/19 rugby squads and any topics that should be included in the programme. The rating sheet can be used for recommendations on how the programme can be improved upon. The group members are encouraged to contact the presenter if they felt the need or if the programme content had unlocked any emotional concerns.

Conclusion

The academic and sporting career of the university rugby players can place a strain on their resources. It was thought best to develop an experiential learning programme that would facilitate the coping ability and the well-being of u/19 rugby players. The programme developed was founded on the experiential model of learning and the functional use of group work. It consists of six sessions of one hour duration each. The six sessions are; Motivation, Goal-Setting, Time Management, Coping with Injuries, Emotion-Focused Coping and Individual Zone of Optimal Functioning. Each session makes use of interactive discussions, group-work, problem-solving skills, interpersonal experiences and application of concepts to real life situations. This makes the learning experience experiential and personal. It was recommended that this programme be evaluated to determine its effectiveness on facilitating coping and well-being in university rugby players.

References

Alexandris, K., Tsorbatzoudis, C., & Grouios, G. (2002). Perceived constraints on recreational sport participation: Investigating their relationship with intrinsic motivation, extrinsic motivation and amotivation. *Journal of Leisure Research*, 34 (3), 233-252.

Arcelin, R., Brisswalter, J., & Delignieres, D. (1997). Effect of physical exercise duration on decision performance. *Journal of Human Movement Studies*, 32, 123-144.

Beaudoin, C. M. (2006). Competitive Orientations and sport motivation of professional women football players: An internet survey. *Journal of Sport Behaviour*, 29 (3), 201-212.

Boyd, M. P., & Kim, M. (2007). Goal orientation and sensation seeking in relation to optimal mood states among skateboarders. *Journal of Sport Behaviour*, 30 (1), 21-35.

Brown, C. (2005). Injuries: The psychology of recovery and rehab. In S. Murphy (Ed.), *The sport psych handbook: a complete guide to today's best mental training* (pp. 215-236). New Zealand: Human Kinetics.

Career Skills Library (2004). *Organization skills* (2nd ed.). New York: Ferguson.

Coach. (2006). Personal interview undertaken.

Corey, G. (2001). *Theory and practice of counselling and psychotherapy*. USA: Wadsworth.

Corey, M. S., & Corey, G. (2002). *Groups: process and practice* (6th ed.). California: Wadsworth.

Cruess, R. L., & Cruess, S. R. (2006). Teaching professionalism: General principles. *Medical Teacher*, 28 (3), 205-208.

Csikszentmihályi, M. (1997). Happiness and creativity: Going with the flow. *Futurist*, 31 (5), 1-7.

Dalloway, M. (2000). *Modelling the fast women of racing*. Retrieved on April 17, 2008 from:

<http://www.performance-media.com/articles6.php>

Dartmouth (2007). *Managing your time*. Retrieved on May 03, 2007 from:

<http://www.dartmouth.edu/~acskills/success/time.html>

Deniz, M. E. (2006). The relationship among coping with stress, life satisfaction, decision-making style and self-esteem: An investigation with Turkish university students. *Social Behavioural and Personality*, 34 (9), 116-1170.

Doren, K. (2000). Athletes share insight on how to motivate and succeed. *San Diego Business Journal*, 21 (40), 1-3.

Dyson, R., & Renk, R. (2006). Freshman adaptation to university life: Depressive symptoms, stress and coping. *Journal of Clinical Psychology*, 62 (10), 1231-1244.

Elliot, J. F. (2005). Motivation: The need to achieve. In S. Murphy (Ed.), *The sport psych handbook: a complete guide to today's best mental training* (pp. 3-18). New Zealand: Human Kinetics.

Erasmus, H. (2006). *The Effect of a prevention programme on the rugby injuries of 15- and 16-year old schoolboys*. Unpublished Philosophiae Doctor in Education, North-West University-Potchefstroom Campus, Potchefstroom.

Gladding, S. T. (1995). *Group work: A counselling speciality*. New Jersey: Prentice-Hall.

Grossbard, J. R., Cumming, S. P., Standage, M., Smith, R. E., & Smoll, F. L. (2006). Social desirability and relations between goal orientations and competitive trait anxiety in young athletes. *Psychology of Sport and Exercise*, 8 (4), 491-505.

Hadfield, D. (2006b). *Motivation and Hippocrates: Understanding your players*. Retrieved on May 25, 2006 from: <http://www.communityrugby.com>

Hall, H. K., Kerr, A. W., Kozub, S. A., & Finnie, S. B. (2007). Motivational antecedents of obligatory exercise: The influence of achievement goals and multidimensional perfectionism. *Psychology of Sport and Exercise*, 8 (3), 297-316.

Hannin Y.L. (2000). Individual zones of optimal functioning (IZOF) model. In Y. L. Hannin (Ed.), *Emotions in sport* (pp. 65-90). Champaign Ill.,: Human Kinetics Publishers.

Harwood, C. (2005). Goals: More than just the score. In S. Murphy (Ed.), *The sport psych handbook: A complete guide to today's best mental training* (pp. 19-36). New Zealand: Human Kinetics.

Hawtrey, K. (2007). Using experiential learning techniques. *Journal of Economic Education*, 143-152.

Hoedaya, D., & Anshel, M. (2003). Use and effectiveness of coping with stress in sport among australian and indonesian athletes. *Australian Journal of Psychology*, 55 (3), 159-165.

Holt, N. L., & Dunn, J. G. H. (2004). Longitudinal idiographic analyses of appraisal and coping responses in sport. *Psychology of Sport and Exercise*, 5, 213-222.

Hui, P. N., Wan, M., Chan, W. K., & Yung, P. M. B. (2006). An evaluation of two behavioural rehabilitation programs, qigong versus progressive relaxation, in improving the quality of life in cardiac patients. *The Journal of Alternative and Complementary Medicine*, 12 (5), 373-378.

Jacobs, E. E., Masson, R. L., & Harvill, R. L. (2002). *Group counselling: Strategies and counselling*. California: Wadsworth.

Johnston, L. H., & Carroll, D. (2000). The psychological impact of injury: Effects of prior sport and exercise involvement. *British Journal of Sports Medicine*, 34, 436-439.

Karageorghis, C. (1999). Entering "the zone": A guide for coaches. *The Sport Journal*, 2 (3), 1-9.

Kolb, A.Y., & Kolb, D.A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4, (2), 1-20.

Latham, G. P., & Locke, E. A. (2006). The benefits and overcoming the pitfalls of goal-setting. *Organizational Dynamics*, 35 (4), 332-340.

Mind Tools (2007). *Personal goal-setting: Find direction, live life your way*. Retrieved on June 27, 2007 from:

<http://www.mindtools.com/page6.html>

Neenan, M., & Dryden, W. (2002). *Life coaching: A cognitive approach*. New York: Brunner-Routledge.

Nicholls, A. R., Polman, R., Levy, A. R., Taylor, J., & Cobley, S. (2007). Stressors, coping and coping effectiveness: Gender, type of sport, and skill differences. *Journal of Sport Sciences*, 25 (13), 1521-1530.

Norton, G. (2005). The Resilience Inventory: Essential skills to overcome life's challenges. *Management Today*, 10, 56-58.

O'Shei, T. (2006). Visualising perfection. *Dance Spirit*, 10 (4), 34-35.

Poulsen, A. A., Ziviani, J. M., & Cuskelly, M. (2006). General self-concept and life satisfaction for boys with differing levels of physical coordination: The role of goal orientations and leisure participation. *Human Movement Science, 25* (6), 839-860.

Ryska, T. A. (2002). The effects of athletic identity and motivation goals on global competence perceptions of student-athletes. *Child Study Journal, 32* (2), 109-129.

Thayer, R. E. (1978). Toward a psychological theory of multidimensional activation (arousal) [Abstract]. *Motivation and Emotion, 2* (1), 1-34. Retrieved on April 17, 2008 from:

<http://www.springerlink.com/content/q1658j1740v26014/>

Wang, C. K. J., & Biddle, S. J. H. (2003). Intrinsic motivation towards sports in Singaporean students: The role of sport ability beliefs. *Journal of Health Psychology, 8* (5), 515-523.

Wang, L., Huddleston, S., & Peng, L. (2003). Psychological skills used by Chinese swimmers. *International Sports Journal, 48-55*.

Wetmore, D. E. (1999a). *Interruptions interruptions*. Retrieved on July 05, 2007 from: <http://www.balancetime.com>

Wetmore, D. E. (1999b). *Time thieves*. Retrieved on July 05, 2007 from: <http://www.balancetime.com>

Wilson, S. B. (1994). How good are you at goal-setting? *Executive Female, 17* (4), 73-74.

CHAPTER 4

Article 3

The Effectiveness of an Experiential Learning Programme Aimed at Facilitating Coping Strategies and Well-Being of University Rugby Players

Laureano, C. M. D.

School of Psycho-Social Behavioural Sciences: Psychology
Faculty of Health Sciences
North-West University
Potchefstroom

Nienaber, A. W.

School of Psycho-Social Behavioural Sciences: Psychology
Faculty of Health Sciences
North-West University
Potchefstroom

Grobbelaar, H. W.

Department of Sport Science
Faculty of Education
Stellenbosch University
Stellenbosch

Abstract

An Experiential Learning programme (ELP) was developed based on information gathered during focus-group interviews (n=7), the completion of essays (n=28) and individual interviews with coaching staff members (n=2). The aim of this study was to evaluate the effect of the developed programme on the coping abilities and well-being of first year university rugby players.

A two group (experimental and control) pre-test and post-test design was used and the sample group consisted of 41 male players (Mean age = 18.90, SD=0.30) from the u/19A training squad of the North-West University PUK Rugby Institute in South Africa. The experimental (n=20) and control (n=21) groups underwent pre-testing and post-testing (30 days after the intervention) on five psychological questionnaires, whereas the ELP (six one hour sessions over a two week period) was presented to the experimental group only. The experimental group's coping abilities (emotion-focused and problem-focused coping) showed practically significant improvements ($d=0.73$), as did their ability to rely on social support from family and friends ($d= 1.07$) and the stopping of unpleasant thoughts and emotions ($d=0.73$). Their cognitive appraisals of good and/or bad events ($d=0.63$) and their ability to move towards action (proactive attitude) ($d=0.73$) also improved significantly. The experimental group further experienced significantly more positive emotions ($d=0.75$) and less negative emotions ($d=-0.55$), indicating an enhanced sense of well-being. The control group, however, showed small and insignificant improvements. It can therefore be concluded that the developed ELP is effective in facilitating the coping strategies and well-being of university rugby players.

(Word Count: 248)

Introduction

Sport specific and/or personal stressors may impair a rugby player's ability to perform his role, which may be to the detriment of the team's performance. It is also, essential for rugby players to cope with stressors in order to achieve optimal performance. In this regard Rial (2008) emphasises the importance of psychological training to achieve optimal and consistent sporting performance.

The ability to cope with stressors is an important psychological life skill. Coping embodies an individual's cognitive, affective and behavioural capacity to manage specific internal and/or external stressors (Holt & Dunn, 2004). Sport and coping appear to be an oxymoron as recreational sport and physical exercise helps individuals cope with day to day stressors, whilst serious sport participation causes stressors necessitating good coping skills. Regular participation in physical exercise leads to a reduction in depressive symptoms and anxiety, decreased age related mental deterioration, assists in prevention and therapeutic management of various medical illnesses, and it brings about improvements in self-esteem and a more positive perception of self by others (Schomer & Drake, 2001). When sport involvement is on a competitive level, however, various stressors and accompanying emotions are present (Anshel, Williams & Williams, 2000). The type of emotion, its intensity, and its relationship to the sports person's particular sport can impair or enhance performance (Hannin, 2000). Stressors and emotions may further have an impact on general well-being of the rugby player and needs to be managed accordingly. Well-being refers to the subjective perception of an individual's quality of life and internal states (Reinboth & Duda, 2006). To maintain a sense of well-being and facilitate optimal sporting performance, sports people need to learn how to cope with a multitude of stressors (Anshel et al., 2000).

An intervention programme was developed to promote coping strategies and well-being in u/19 rugby players of the North-West University PUK Rugby Institute (NWU-PRU). An experiential framework served as a basis for this as it provided the players with opportunities to actively participate in learning (Hawtrey, 2007). The experiential

learning programme (ELP) consisted of six sessions of one hour duration each covering the following themes; Motivation, Goal-Setting, Time-Management, Coping with Injuries, Emotion-Focused Coping and Individual Zone of Optimal Functioning. Each session made use of interactive discussions, group-work, problem-solving skills, interpersonal experiences, and application of concepts to real life situations. The ELP will be discussed in more detail further on in the article (page 56).

Most university rugby players attend universities that are far from their parental home and they need to be self-reliant, need to adjust to the high expectations and to the competitive nature of the sporting world (Sport Psychology Consultant, 2006). The u/19 university rugby player has the dual role of being a student, whilst playing rugby. Their first year of studies is often described as a year of adjustment and emotional turmoil, in which they are expected to make the transition academically and successfully negotiate the sporting transition. Most first year students expect their university studies to be a continuation of their high school experience and most students are unprepared and struggle to cope with the emotional impact this experience has on them (Papanikolaou, Nikolaidis, Patsiaouras & Alexopoulos, 2002). The developed ELP helped them cope with this transition and assist them to cope with stressors in such a way that it promotes performance and well-being. It assisted rugby players to cope with stressors on and off the field. The facilitation of coping skills should enhance a sense of well-being which is essential for a successful rugby player (Anshel & Anderson, 2002).

The aim of this study is to determine if the ELP is effective in facilitating coping strategies and well-being of university rugby players.

Method

Design

A two group (experimental and control) pre-test and post-test design was used as described by Johnson and Onwuegbuzie (2004).

Participants

The sample group consisted of 41 u/19 A-training squad members of the NWU-PRI who were enrolled for university programmes at the North-West University. The experimental group consisted of 20 players who were available to attend the ELP based on their academic and training schedules (availability sample). The remaining 21 rugby players with busier schedules formed part of the control group. The experimental and control groups both underwent pre-testing and post-testing, whereas the ELP was only presented to the experimental group. Biographical information of the sample group is included in Table 1.

Table 1: Biographical Information of the Sample Group (N = 41)

		Total Sample Group (n=41)	Experimental Group (n=20)	Control Group (n=21)
Age	19 years	37	17	20
	18 years	4	3	1
	Mean	18.90	18.85	18.95
	Standard Deviation	0.30	0.56	0.22
Races	White	36	16	20
	Black	2	2	0
	Coloured	3	2	1
Positions	Props	6	2	4
	Hookers	4	1	3
	Locks	4	3	1
	Loose Forwards	8	5	3
	Half-Backs	5	3	2
	Inside-Backs	11	5	6
	Outside-Backs	3	1	2
	Total	41	20	21

Procedure

The u/19 coach was approached to gain permission and to arrange times for testing and ELP presentation. A total of 41 university rugby players completed a battery of tests during pre-testing. The ELP was presented to the experimental group (n=20) where One session was presented per day and each session lasted for one hour. The programme was presented over six days spanning over two consecutive weeks. The experimental group was divided into three smaller groups according to the academic timetables and training schedules of the participants. Each session was presented to all the smaller groups that formed part of the experimental group. One month (30 days) after the last session of the ELP was presented to the experimental group, both the control (n=21) and experimental

(n=20) groups completed the same battery of tests for post-testing. The pre-test and post-test results were analysed by the statistical consultation services of the North-West University. Certain conclusions were made based on the results of the analysis.

Experiential Learning Programme

Development of the ELP

The development of the ELP is discussed in detail in a previous article by the same authors (Laureano, Nienaber & Grobbelaar, 2008). A need assessment was conducted to determine what the need and coping strategies of the university rugby players are. The assessment consisted of a focus-group interview, essays, and individual interviews. The focus-group interview was conducted with seven first and second senior team rugby players of the NWU-PRI (Mean age=22.14, SD=1.86). Essays were completed by an availability sample of 28 players (Mean age= 22.96, SD= 1.63). The reason for the sample group of need assessment comprising of senior rugby players instead of u/19 players to whom the programme is presented to, is that senior players have more experience within the university rugby environment and they are more aware of the stressors a university rugby player would typically encounter. Individual interviews were conducted with the coach of the senior first team, and the sport psychology consultant of the u/19 teams.

The data obtained from the assessment resulted in the following themes: basic needs, motivation, time management, goal setting, optimism, injuries, self-confidence, counselling, team dynamics services, communication, social support, spirituality, self-actualisation, coachability (the ability to accept criticism from the coach), commitment, character, and psychological problem areas.

The above mentioned themes were correlated with literature to develop the ELP programme. Experiential learning forms the framework on which this programme is based and consists of activities to help transform knowledge from being abstract and theoretical to something useful and usable (Cruess & Cruess, 2006). Experiential learning has served as a foundation for a number of programmes within various fields of disciplines. Hopkinson and Hogg (2004) found that experiential exercises enhanced

marketing students' understanding of substantive theory and also aids acquisition of transferable skills as part of research management and investigation. Kolb and Kolb (2005) believed that experiential learning also enhances the learning process in higher education. Barrett (2007) found that the abstract concepts of creative arts can be better understood and the learning process more easily facilitated by making use of experiential learning activities.

Experiential learning has been used primarily in the field of education but is just as useful for programmes where new skills, behaviours and concepts are being taught. The present study aims to do the same through the experiential learning programme (ELP) that has been developed. The ELP consists of activities which engage participants in a process that assists their learning experience, holistically focusing on their thoughts, feelings, perceptions, and behaviours (Kolb & Kolb, 2005). The various activities range from worksheets aimed to develop personal insight or to learn new skills; while other activities involved group work and discussions. Group work in particular, offers a unique learning advantage where group members learn from each other's common experiences, therefore offering a wider range of resources (Jacobs, Masson & Harvill, 2002).

The Content of the ELP

The ELP is made up of six sessions of one hour duration conducted over two consecutive weeks. The overall purpose of the first session *Motivation*, is for participants to develop a better understanding of what the concept "motivation" refers to identify if they are predominantly intrinsically motivated, extrinsically motivated or amotivated and to be able to apply strategies to maintain long-term motivation. In the second session that deals with *Goal-Setting*, each participant developed a better understanding of their typical goal orientation, they were able to set more realistic goals and were able to adjust their goals to be more adaptive to their situation. The main objective of the *Time-Management* session was to enable the rugby players to identify pitfalls in their time management skills and to help them to select possible strategies which were better suited to their lifestyle that aided them in managing their time more efficiently.

Injuries are common within elite sport and can be quite stressful for a sports person. The rationale for the *Coping with Injuries* session, is for participants to be able to identify means of coping with injuries in a functional and empowering manner which builds resilience. The *Emotion-Focused Coping* session is aimed at gaining control over emotions elicited by a particular situation that may hamper performance. The skills used to control these emotions may require some training and hence a session is dedicated to this topic. The rationale for this session is to identify means to acquire increased control over debilitating emotions. The last session focuses on emotions, as they are an important element of human functioning and sport performance. Emotions can impair or enhance an individual's ability dependent on the type of emotion, its intensity and its relationship to the sports person's peak performance. The rationale of this session, therefore, is for the player to gain insight into the specific emotions in relation to its effects on their performance and which strategies to apply to counterbalance these emotions by using Hannin's (2000) *Individual Zone of Optimal Functioning (IZOF)* model.

Ethical Considerations

This study was approved by the NWU Ethics Committee (approval number: NWU 00024/07/S4). The sample group (control and experimental groups) signed consent forms stating that they freely and voluntarily participated in completing the battery of tests for pre-testing and post-testing. They were informed of the relevant ethical considerations and that they were free to withdraw at any time should they so wish. The experimental group also signed a consent form stating their voluntary participation in the ELP.

Research Instruments

The following questionnaires made up the battery of tests for pre-testing and post-testing.

The Affectometer 2 (AFM) (Kammann & Flett, 1983).

The AFM (Kammann & Flett, 1983) is made up of 20 items, which includes 10 positive mood items (satisfied, optimistic, useful, confident, understood, loving, free-and-easy, enthusiastic, good-natured, clear-headed) and 10 negative mood items (discontented, hopeless, insignificant, helpless, lonely, withdrawn, tense, depressed, impatient, confused). This scale measures a sense of well-being or general happiness (Wissing &

van Eeden, 2002). It has been reported that the scale correlates with other measures of well-being and has adequate test-retest reliability (Kammann & Flett, 1983; Rook, 2001).

Coping Self-Efficacy Scale (CSE) (Chesney, Folkman, & Chambers, 1996).

The CSE (Chesney et al., 1996) consists of 26 items measuring an individual's self-efficacy to cope with life stressors. The CSE is made up of three sub-scales; a) problem focused coping, b) stop unpleasant emotions and thoughts and c) get support from friends and family. The 11 point likert scale required participants to indicate if they believe they are capable of performing actions important to adaptive coping, with scores ranging from 0 (cannot do at all) to 11 (certain can do) (Chesney et al., 1996; Chesney, Neilands, Chambers, Taylor & Folkman, 2006; Heckman, Catz, Heckman, Miller & Kalichman, 2004).

The Proactive Attitude Scale (PA Scale) (Schwarzer, 1997)

The Proactive Attitude is a personality characteristic that can influence motivation and action. The PA Scale consists of 15 items and evaluates an individual's belief in various facets such as resourcefulness, responsibility, values, and vision (e.g. "I feel driven by my personal values"). Participants are asked to rate items on a four-point likert scale ranging from 1 (not at all true) to 4 (exactly true) (Schwarzer, 1997; Schwarzer, 1999).

The Fortitude Questionnaire (FORQ) (Pretorius, 1998)

The FORQ (Pretorius, 1998) is designed to measure the extent to which an individual is able to cope with stress and have the strength to meet the demands of a particular situation. The questionnaire is made-up of three sub-scales a) an evaluation of self and own abilities, b) an evaluation of social supports from family members and friends c) a general evaluation of social environment. The questionnaire is made-up of 20 items answered on a four point likert scale ranging from 1 (does not apply) to 4 (applies very strongly) (Heyns, Venter, Esterhuyse, Bam & Odendaal, 2003; Pretorius, 1998).

The Cognitive Appraisal Questionnaire-2 (Botha & Wissing, 2005)

The Cognitive Appraisal Questionnaire is an eight item self-report questionnaire based on the explanatory style of Buchanan and Seligman (Wissing, 2006). The explanatory style

refers to the individual's explanations for the causes of good and bad events, which is based on three dimensions. These dimensions are i) internal (me) versus external (someone else) ii) stable (forever) versus unstable (short-lived) and iii) global (affecting everything) versus specific (impact/influence localised). Three dimensions form part of the questionnaire but only one total score is provided instead of three separate scores. An optimistic explanatory style is characterised by viewing the reasons of adverse events as external, specific and unstable, while positive events are caused by internal, global and stable factors (Botha & Wissing, 2005; Wissing, 2006).

Data Analysis

Cronbach's Alpha reliability indices were calculated for all the questionnaires used (see table 2). Descriptive statistics (means and standard deviations) of the measuring instruments were computed. The significance of difference within and between experimental and control groups were analysed (Johnson & Onwuegbuzie, 2004) for all the psychometric tests by means of parametric statistical tests. Group differences were determined with independent t-tests before the intervention (ELP) to see how the groups compared. After the intervention, within group differences were calculated to determine the effect of the intervention on the experimental group by means of dependent t-tests. The difference between pre-testing and post-testing results determined the effectiveness of the ELP in facilitating well-being and coping in the experimental group. Effect sizes (Cohen's d) were also used to determine if the differences were of practical significance (Cohen, 1997) due to the relatively small size of the groups.

Results

The Reliability of Psychometric Tests

The reliability of the psychometric tests was determined by calculating a Cronbach's Alpha (Trochim, 2006). Table 2 shows the Cronbach's Alpha calculated for each psychometric test used.

Table 2: Reliability of Psychometric Tests

Psychometric Test	Cronbach's Alpha
AFM- Positive Mood Items	0.82
AFM- Negative Mood Items	0.85
CSE- Problem Focused Coping	0.82
CSE- Stop unpleasant emotions and thoughts	0.84
CSE- Get support from friends and family	0.74
PA Questionnaire	0.72
FORQ- Self	0.59
FORQ- Support	0.64
FORQ- Friends	0.67
Cognitive Appraisal Questionnaire	0.52

Table 2 shows that all of the psychometric tests used had a Cronbach's Alpha values above 0.5, with six of the scales having a Cronbach's Alpha scores above 0.7. By taking these results into account, it would appear as if the tests are reliable for this particular group of subjects. The Cognitive Appraisal Questionnaire had a Cronbach's Alpha of 0.52 which is not as high as the other psychometric tests used. It is, however, reliable for the purpose and context of this study.

Comparison of Pre-Test Results

The differences within the experimental group (after the intervention) and the effect sizes were calculated. The effect sizes were calculated for the comparison of pre-test results to determine if the control and experimental group differed before the intervention was conducted.

The effect sizes were calculated by using Cohen's *d*. Cohen's *d* can be defined as the difference between two means divided by the maximum standard deviation for those means (Cohen, 1997). Cohen's *d* reflects mean differences between treatment groups in standard deviation units, with guidelines of 0.2, 0.5, and 0.8 indicating small, medium, and large effects, respectively. However, it should be noted that interpretation of Cohen's *d* effect sizes should be made within the context of the particular construct being measured (Mausbach, Harvey, Goldman, Jeste & Patterson, 2007).

The control group results were higher than the experimental group in the PA Scale, in the FORQ-Self sub-scale, the AFM-Positive sub-scale and in the Cognitive Appraisal

Questionnaire. The experimental group did, however, have higher results than the control group in the AFM-Negative sub-scale.

The experimental group was selected based on participants who were able to commit themselves to six sessions over two weeks. Therefore the control and experimental groups' levels of commitment, stress, academic load and perceptions of their environment may differ resulting in the variation in effect sizes. The Analysis of Covariance (ANCOVA) compares the post-test's results for control and experimental groups while controlling for pre-test's results, to reduce the error variance as suggested by Field (2005).

Comparison of Post-Test Results

In Table 3 the means, standard deviation, P-values and effect sizes were calculated to determine whether the experimental group benefited from the intervention.

Table 3: Differences within the Experimental Group after the Intervention

Variable	Pre-test results		Increase in Results		P-Values	Effect Size (Cohen's <i>d</i>)
	Mean	Standard Deviation	Mean Difference	Standard Deviation		
AFM – Positive mood items	36.10	6.20	3.70	4.92	0.00°	0.75**
AFM –Negative mood items	23.31	6.62	-2.81	5.08	0.02°	-0.55**
CSE Scale – Problem Focused Coping	82.15	12.76	8.75	12	0.00°	0.73**
CSE Scale–Stop Unpleasant Emotions and Thoughts	59.80	13.13	8.80	12.13	0.00°	0.73**
CSE Scale–Get Support from Friends and Family	36.40	6.14	3.80	3.55	0.00°	1.07***
PA Scale–Proactive attitude	37.59	4.56	3.66	5.01	0.00°	0.73**
FORQ– Self	20.55	2.87	2.10	2.81	0.00°	0.75**
FORQ – Friends	20.15	2.06	0.95	2.48	0.10	0.38*
FORQ – Support	22.25	3.39	1.85	3.69	0.04°	0.50**
CAQ – Cognitive Appraisal	16.55	2.96	1.90	3.02	0.01°	0.63**

* $d = 0.2$ small effect

** $d = 0.5$ medium effect

*** $d = 0.8$ large effect

° Statistically Significant (P-Values ≤ 0.05)

Positive results appeared after the intervention was conducted as is evident in Table 3. The AFM-Positive sub-scale measures the presence of positive emotions and well-being experienced by a particular person (Wissing & van Eeden, 2002). The results of this sub-scale indicate that the experimental group experienced more positive emotions and a greater sense of general well-being. The AFM-Negative sub-scale showed a reduction in negative emotions experienced by the experimental group after the intervention was conducted to facilitate coping strategies and a greater sense of well-being.

The improved results of the experimental group's CSE-Problem Focused Coping sub-scale, CSE-Stop Unpleasant Emotions and Thoughts sub-scale, and CSE-Get Support from Family and Friends sub-scale, the conclusion can be made that they are making better use of effective coping strategies to face life difficulties like problem focused coping, the ability to stop unpleasant thoughts and emotions and to seek out support. This in turn, may have brought about the improved results in the AFM-Positive sub-scale (increase in positive emotions experienced) and the drop in results of the AFM-Negative sub-scale (decrease in negative emotions experienced).

The results of the PA scale indicate that the experimental group had an increase in motivation to move towards action which verifies the results obtained in the CSE-Problem Focused Coping, AFM-Positive sub-scale and the AFM-Negative sub-scale. If the experimental group is able to cope better, surely, they will demonstrate an increase in positive emotions and a decrease in negative emotions and, therefore, have a heightened feeling of well-being. The FORQ-Self sub-scale's results indicate that the experimental group is better equipped to evaluate themselves and their own abilities in such a manner that assists them to cope with stressors and once again these results correlate with the results of the CSE-Problem Focused Coping. Therefore, if the stressor they are facing is as a result of their own behaviour or lack of ability, they can evaluate their behaviour and attempt to resolve the problem.

In Table 4 the means, standard deviation, P-values and effect sizes were presented to determine whether there were similar changes in the control group's results as reflected in the results of the experimental group.

Table 4: Differences within the Control Group after the Intervention

Variable	Pre-test results		Increase in Results		P-Values	Effect Size (Cohen's <i>d</i>)
	Mean	Standard Deviation	Mean Difference	Standard Deviation		
AFM – Positive mood items	38.10	4.52	0.57	3.92	0.51	0.15*
AFM – Negative mood items	19.24	5.08	0.71	4.80	0.50	0.15*
CSE Scale – Problem Focused Coping	82.43	10.87	1.05	6.94	0.50	0.15*
CSE Scale – Stop Unpleasant Emotions and Thoughts	62.62	8.49	0.71	8.25	0.70	0.09*
CSE Scale – Get Support from Friends and Family	34.81	8.04	1.29	7.83	0.75	0.16*
PA Scale – Proactive attitude	42.55	3.29	0.14	2.41	0.79	0.06**
FORQ – Self	21.86	2.20	0.57	2.01	0.21	0.28*
FORQ – Friends	20.67	2.31	-0.10	2.53	0.86	-0.04*
FORQ – Support	21.76	2.21	1.10	2.47	0.06	0.44**
CAQ – Cognitive Appraisal	17.86	2.13	-0.43	2.23	0.39	-0.09*

* $d = 0.2$ small effect ** $d = 0.5$ medium effect *** $d = 0.8$ large effect

° Statistically Significant (P-Values ≤ 0.05)

Table 4 portrays small effect sizes (insignificant differences between pre-testing and post-testing) among the control group. The control group underwent small insignificant changes as compared to the significant changes experienced by the experimental group. Hence, it can be concluded that the ELP was in fact effective in facilitating coping and well-being.

The differences between the control and the experimental groups were determined by comparing the adjusted means as evident in Table 5.

Table 5: The Differences between the Control and Experimental Groups after the Intervention

Variable	Experimental group	Control group	Mean Square Error of ANCOVA	Statistical significance (p-values)	Practical significance (Cohen's <i>d</i> -value)
	Adjusted mean	Adjusted mean			
AFM – Positive mood items	40.35	38.15	13.68	0.07	0.49 **
AFM – Negative mood items	18.98	21.40	22.45	0.13	0.53 **
CSE Scale – Problem Focused Coping	91.00	83.38	82.77	0.01*	0.84 ***
CSE Scale – Stop Unpleasant Emotions and Thoughts	69.13	62.83	59.46	0.01*	0.82 ***
CSE Scale – Get Support from Friends and Family	39.82	36.47	23.46	0.03*	0.71 ***
PA Scale – Proactive attitude	42.24	40.25	12.49	0.11	0.57 **
FORQ – Self	23.12	21.99	5.41	0.15	0.47 **
FORQ – Friends	21.20	20.47	4.63	0.27	0.34 *
FORQ – Support	24.03	22.93	5.87	0.16	0.45 **
CAQ – Cognitive Appraisal	18.76	17.14	5.20	0.03*	0.70 ***

* $d = 0.2$ small effect ** $d = 0.5$ medium effect *** $d = 0.8$ large effect

° Statistically Significant (P-Values ≤ 0.05)

The experimental group had higher adjusted mean as compared to the control group with regards to the PA Scale, CSE Scale-Problem Focused Coping, CSE Scale-Stop Unpleasant Emotions and Thoughts, CSE-Get Support from Friends and Family and Cognitive Appraisal Questionnaire. The experimental group's motivation to take action, to focus on identifying a solution to a problem, the ability to capture unpleasant thoughts and emotions, to be able to get support from family and friends and the ability to explain good and bad events in a manner that aids coping was higher than that of the control group. The experimental group had higher scores on all the sub-scales of the CSE as compared to the control group, indicating an elevated coping ability in the experimental group.

The experimental group did, however, show a lower adjusted mean of AFM-negative, in other words the experimental group experienced less negative emotions as compared to the control group.

Discussion

Nicholls and Polman (2007) suggested that rugby players should make use of more adaptive coping strategies which are best suited to deal with the stressor at hand, such as rectifying a physical error by going through the routine (problem-focused coping) or by making use of relaxation exercises (emotion-focused coping) when coping with the stress of making an error. Emotion-focused coping refers to attempts to regulate emotional responses resulting from stressors through strategies like meditation, relaxation, and cognitive efforts to change the meaning an individual attaches to a situation (Holt & Dunn, 2004). Problem-focused coping refers to strategies used to manage or alter the stressor through behaviour like information gathering, goal-setting, time management skills and problem-solving (Holt & Dunn, 2004; Pensgaard & Roberts, 2003). The ELP assist participants to cope with stressors by emotion-focused and/or problem-focused coping. From the results obtained in the CSE-Stop Unpleasant Emotions and Thoughts, Cognitive Appraisal Questionnaire and the CSE-Problem-Focused Coping subscales it is clear that this objective was achieved.

The implemented ELP further brought about practically significant changes regarding the Proactive Attitude Scale among the experimental group implying that their resourcefulness, sense of responsibility, values and vision increased moderately. Resourcefulness implies that the individual's belief is that there are sufficient internal or external resources to aid them in achieving their goals. This belief impacts their sense of responsibility, and the belief that their future is not determined by external forces alone. A proactive individual has a balanced view of self-blame and other-blame in negative situations. These individuals take responsibility for past events and take responsibility to initiate actions to make things happen (Schwarzer, 1997).

Schwarzer (1997) also noted that a Proactive attitude impacts on motivation and action. The session focusing on *Motivation* attempted to encourage the participants to develop an intrinsic sense of motivation where the individual takes responsibility for his own actions and personal development (Elliot, 2005). Increased motivation can also encourage participants to dream and develop appropriate goals as discussed in the *Goal-Setting* session. The *Emotion-Focused Coping* session, focused in depth on how to control emotional responses evoked by stressors through actions like visualisation and relaxation exercises as outlined by Holt and Dunn (2004). The above mentioned sessions brought about an increase in the participants' belief of increased resourcefulness and sense of autonomy.

The results of the FORQ-Friends and the FORQ- Support sub-scales, as well as results of the Coping Self-Efficacy-Get Support from Friends and Family Subscale, may be attributed to the discussion of appropriate ways of coping (like seeking social support) in the session that deals with *Coping with Injuries* and *Coping with Emotions*. Seeking social support is associated with well-being, it acts as a protective factor against psychological disturbances (Pakenham, Chiu, Burnall & Cannon, 2007) and helps sports people cope with the incidences of injuries (Albinson & Petrie, 2003; Maddison & Prapavessis, 2005). In this regard, Pensgaard and Roberts (2003) found social support to be an adaptive coping strategy. Maddison and Prapavessis (2005) discovered that the effectiveness of individual's coping abilities can be determined by the choice of coping strategies used and the amount of social support received. The experimental group also

showed significant improvement in all the sub-scales of the CSE indicating improved coping abilities as a result of the intervention programme.

The improved results of the AFM-Positive and the drop in results in AFM-Negative sub-scales may be attributed to an increased sense of well-being and decrease in experiencing negative emotions in the experimental group. As previously mentioned, the AFM measures a sense of well-being or general happiness (Wissing & van Eeden, 2002). A sports person's psychological well-being is, to some extent, dependent on his capacity to cope effectively with the various demands of stressful situations (Gaudreau & Blondin, 2004). An increase in the experimental group's psychological well-being, as suggested by the results of the AFM, may be attributed to more effective coping. The increase in effective coping of the experimental group is also verified by the result of the CSE Scale which indicates an increase in the individual's competence to make use of specific coping strategies like problem focused-coping by being able to stop unpleasant thoughts and emotions and the ability to get support from friends and family.

Anshel, Kim, Kim, Chang and Eom (2001) as well as Anshel and Delany (2003) emphasise that how a person copes with a stressful situation will depend on their appraisal thereof. The experimental group's Cognitive Appraisal Questionnaire results indicate that their explanations or cognitive appraisal that they adopt is a more optimistic explanatory style where adverse events are explained as being external, specific and unstable, and positive events are appraised as being caused by internal, global and stable factors (Wissing, 2006). It can, therefore, be concluded that the experimental group will choose more adaptive coping strategies.

Conclusions and Recommendations

The present study aimed to evaluate the effectiveness of an experiential learning programme in facilitating coping and well-being in university rugby players. The overall results conclude that indeed the ELP was found to be effective in facilitating coping and well-being in university rugby players.

Limitation

A limitation of this study is that these results cannot be generalised to provincial or national rugby competition level or to other team sports outside of rugby. The ELP programme is effective when presented in small groups limit the number of participants. This problem can be resolved by dividing the number of participants into small groups and presenting the ELP to each group. This is limited by time availability and the number of presenters trained in the ELP.

Recommendations for Further Research

It is recommended that the ELP be evaluated at provincial and national competition level and that the ELP should also be adapted to other team sports and its effectiveness evaluated.

Recommendations for Practice

The ELP programme is useful for first year university rugby students who may find the transition from high school academics and rugby to university studies and semi-professional rugby stressful. The pressure to perform in a dynamic and demanding academic environment and to develop and strive towards sporting excellence in a society that rewards winning, is considerable (Papanikolaou et al., 2002). The developed ELP helps the rugby players cope with the demands placed on them. Stress is an ongoing part of day to day life and cannot be avoided, however, overly high or prolonged levels of stress may produce undesirable effects (Papanikolaou et al., 2002) and the ELP can be used effectively to prevent or minimise these effects.

Sports persons need to be able to cope with personal and sport related stressors. It is for this reason that the practical recommendation is made for the ELP programme to be presented to sports persons to facilitate their coping abilities and to enhance their sense of well-being.

References

- Albinson, B., & Petrie, T. A. (2003). cognitive appraisal, stress and coping: Preinjury and postinjury factors influencing psychological adjustment to sport injury. *Journal of Sport Rehabilitation, 12*, 306-322.
- Anshel, M. H., & Anderson, D. I. (2002). Coping with acute stress in sport: Linking athletes' coping style, coping strategies, affect and motor performance. *Stress, Anxiety and Coping, 15* (2), 193-209.
- Anshel, M. H., & Delany, J. (2003). Sources of acute stress, cognitive appraisals and coping strategies of male and female child athletes. *Journal of Sport Behavior, 24* (4), 392-353.
- Anshel, M. H., Kim, K., Kim, B., Chang, K., & Eom, H. (2001). A model of coping with stressful events in sport: Theory, application, and future direction. *Journal of Sport Psychology, 32*, 43-75.
- Anshel, M. H., Williams, L. R. T., & Williams, S. M. (2000). Coping style following acute stress in competitive sport. *The Journal of Social Psychology, 140* (6), 751-773.
- Barret, E. (2007). Experiential learning in practice as research: Context, method, knowledge. *Journal of Visual Art Practice, 6* (2), 115-124.
- Botha, E., & Wissing, M. P. (2005). *Cognitive Appraisal Questionnaire*. Unpublished Manuscript, North-West University-Potchefstroom Campus, Potchefstroom.
- Chesney, M., Folkman, S., & Chambers, D. (1996). Coping effectiveness training of men living with HIV: Preliminary findings. *International Journal of STDs & AIDS, 7* (2) 75-82.

- Chesney, M. A., Neilands, T. B., Chambers, D. B., Taylor, J. M., & Folkman, S. (2006). A validity and reliability study of the Coping Self-Efficacy Scale. *British Journal of Health Psychology, 11*, 421-437.
- Cohen, J. (1997). *Statistical power analysis for the behavioural sciences*. New York: Academic Press.
- Cruess, R. L., & Cruess, S. R. (2006). Teaching professionalism: General principles. *Medical Teacher, 28*, (1), 205-208.
- Elliot, J. F. (2005). Motivation: The need to achieve. In S. Murphy (Ed.), *The sport psych handbook: A complete guide to today's best mental training* (pp. 3-18). New Zealand: Human Kinetics.
- Field, A. (2005). *Discovering statistics using SPSS for Windows* (2nd ed.). London: Sage.
- Gaudreau, P. & Blondin, J. (2004). Different athletes cope differently during a sport competition: A cluster analysis of coping. *Personality and Individual Coping, 36*, 1865-1877.
- Hannin Y.L. (2000). Individual zones of optimal functioning (IZOF) model. In Y. L. Hannin (Ed.), *Emotions in sport* (pp. 65-90). Champaign Ill.: Human Kinetics Publishers.
- Hawtrey, K. (2007). Using experiential learning techniques. *Journal of Economic Education, 143*-152.
- Heckman, B. D., Catz, S. L., Heckman, T. G., Miller, J. G., & Kalichman, S. C. (2004). Adherence to antiretroviral therapy in rural persons living with HIV disease in the United States. *Aids Care, 16* (2), 219-230.

Heyns, P. M., Venter, J. H., Esterhuysen, K. G., Bam, R. H., & Odendaal, D. C. (2003). Nursing care for patients with Alzheimer's disease: Their strengths and risks of burnout. *South African Journal of Psychology, 33* (2), 80-85.

Holt, N. L., & Dunn, J. G. H. (2004). Longitudinal idiographic analyses of appraisal and coping responses in sport. *Psychology of Sport and Exercise, 5*, 213-222.

Hopkinson, G. C., & Hogg, M. K. (2004). Teaching and learning qualitative research in the social sciences: An experiential learning approach amongst marketing students. *Journal of Further and Higher Education, 28* (3), 307-320.

Jacobs, E. E., Masson, R. L., & Harvill, R. L. (2002). *Group counselling: Strategies and counselling*. California: Wadsworth.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed method research: A research paradigm whose time has come. *Educational Researcher, 33* (7), 14-26.

Kammann, R., & Flett, R. (1983). Affectometer 2: A scale to measure current level of general happiness. *Australian Journal of Psychology, 69*, 925-937.

Kolb, A. Y., & Kolb, D. A. (2005). Learning style and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education, 4* (2), 1-20.

Laureano, C. M. D., Nienaber, A. W., & Grobbelaar, H. W. (2008). *Development of an experiential learning programme aimed at facilitating coping strategies and well-being of university rugby players*. Unpublished Manuscript, North-West University-Potchefstroom Campus, Potchefstroom.

Maddison, R., & Prapavessis, H. (2005). A psychological approach to the prediction and prevention of athletic injury. *Journal of Sport & Exercise Psychology, 27*, 289-310.

Mausbach, B. T., Harvey, P. D., Goldman, S. R., Jeste D. V., & Patterson, T. L. (2007). *Development of a brief scale of everyday functioning in persons with serious mental illness*. Retrieved on July 11, 2008 from:

<http://schizophreniabulletin.oxfordjournals.org/cgi/content/full/sbm014v1>

Nicholls, A. R., & Polman, R. C. J. (2007). Stressors, coping and coping effectiveness among players from the England under-18 union team. *Journal of Sport Behaviour*, 30 (2), 1-16.

Pakenham, K. I., Chiu, J., Bursnall, S., & Cannon, T. (2007). Relations between social support, appraisal and coping and both positive and negative outcomes in young carers. *Journal of Health Psychology*, 12, 89-102.

Papanikolaou, Z. Nikolaidis, D., Patsiaouras, A., & Alexopoulos, P. (2002). *The freshman experience: high stress-low grades*. Retrieved April 8, 2005 from:

<http://www.athleticinsight.com/Vol5Iss4/Commentary.htm>

Pensgaard, A. M., & Roberts, C. (2003). Achievement goal orientations and the use of coping strategies among winter olympians. *Psychology of Sport and Exercise*, 4 (2), 101-116.

Pretorius, T. B. (1998). *Fortitude as stress-resistance: Development and validation of the Fortitude Questionnaire*. Belville: University of the Western Cape.

Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, need satisfaction and indices of well-being in team sports: A longitudinal perspective. *Psychology of Sport and Exercise*, 6, 269-286.

Rial, C. F. (2008). The invisible aspect of tennis: A revision of the psychological processes of the activity. *International Tennis Federation Coaching and Sport Science Review*, 15 (44), 9-11.

Rook, S. K. (2001). Emotional health and positive versus negative social exchange: A daily diary analysis applied developmental science. *Applied Developmental Science, 5* (2), 86-97.

Schomer, H. H., & Drake, B. S. (2001). Physical Activity and mental health. *International Federation of Sports Medicine Journal, 2* (3), 1-9.

Schwarzer, R. (1999). *The Proactive Attitude Scale (PA Scale)*. Retrieved on May 19, 2008 from:

http://userpage.fu-berlin.de/_health/proactive.htm

Schwarzer, R. (1997). *Proactive attitude*. Retrieved on May 23 , 2008 from:

http://web.fu-belin.de/gesund/pulicat/ehps_cd/health/proactiv.htm

Sport Psychology Consultant. (2006). Personal interview undertaken.

Trochim, W. M. K. (2006). *Types of reliability*. Retrieved on August 13, 2008 from:

<http://www.socialresearchmethods.net/kb/reotypes.php>

Wissing, J. A. B. (2006). *Psychological well-being in cultural context: Measurement, patterns and relevance for practice*. Unpublished Philosophiae Doctor in Psychology, North-West University-Potchefstroom Campus, Potchefstroom.

Wissing, M. P., & van Eeden, C. (2002). Empirical clarification of the nature of psychological well-being. *South African Journal of Psychology, 32* (1), 32-44.

CHAPTER 5

Conclusion, Limitations and Recommendations

The aims of this study were (i) to identify which psychosocial stressors university rugby players need to cope with and how they cope with these stressors (Manuscript 1), (ii) to develop an intervention programme aimed at facilitating university rugby players' coping abilities and well-being (Manuscript 2) and (iii) to evaluate and determine how effective the developed intervention programme was in facilitating the university rugby players' coping abilities and well-being (Manuscript 3).

The first article was presented at the 4th European Conference on Positive Psychology on the 1-4 July, 2008 in Opatija, Croatia. The manuscript explored the stressors associated with university rugby players who chose to pursue an academic and sporting career simultaneously. These stressors gave rise to needs, and how the rugby players attempt to satisfy or cope with these needs is the focus of this article. This was done by conducting a needs assessment which involved a focus-group interview with senior rugby players from the senior first and second teams of the North-West University-PUK Rugby Institute (NWU-PRI) (n=7), individual interviews with the coach of the senior first team and the sport psychology consultant of the u/19 team as well as essays completed by 28 first and second team rugby players. The focus-group interview participants had a mean age of 22.14 with a standard deviation of 1.86 and the participants who completed the essays had a means age of 22.96 with a standard deviation of 1.63.

This survey identified needs regarding the satisfying of basic needs, motivation, the need to learn how to cope with an injury, team dynamics and lack of confidence. The coping strategies that the rugby players made use of were time-management, goal-setting, relaxation exercises, mental imagery, optimism, counselling services, communication, social support, spirituality and self-actualisation.

The findings reported in the first article cannot be generalised to professional or national level rugby players or to other team sports, as the sample group comprises of rugby players who play in a semi-professional league.

It was concluded in Article one that the demands placed on university rugby players can be stressful and requires adjustment to interpersonal, social and academic demands.

It was recommended that an intervention programme be developed that aims to facilitate coping strategies and well-being of university rugby players with specific reference to the areas identified during this phase of the study.

Article two was presented at the South African Sport and Recreation Congress (SASReCon) on the 25-27 June, 2008 in Port Elizabeth, South Africa. The article describes the process of developing an intervention programme based on themes identified from the need assessment conducted in Article one. Experiential learning is the conceptual framework that underlies this programme consisting of active participatory learning opportunities (Kolb & Kolb, 2005; Hawtrey, 2007). The aim of the programme was to facilitate the coping abilities and well-being of university rugby players. The programme consisted of six one hour sessions addressing motivation, goal-setting, time-management, coping with injuries, emotion-focused coping and the individual zone of optimal functioning. Each session was made up of interactive discussions, group-work, problem-solving skills, interpersonal experiences and application of concepts to real life situations. The participants were prepared for termination of the programme at the end of each session and after the last session of the programme by asking the participants to summarise what they have learnt, to identify what they found most meaningful and how they can apply these skills practically.

A recommendation was made that this programme be evaluated to determine its effectiveness on facilitating coping abilities and well-being among university rugby players.

The abstract of the third article has been submitted for possible presentation to the 12th International Society of Sport Psychology (ISSP) World Congress of Sport Psychology on the 17-21 June, 2009 in Marrakesh, Morocco. This article evaluates the effectiveness of the intervention programme developed in Article two. A two group (experimental and

control) pre-test and post-test were used. The sample group was drawn from 41 university rugby players from the u/19 A-training squad of the North-West University PUK Rugby Institute. The experimental (n=20) and control (n=21) groups both underwent pre-testing and post-testing but the developed experiential learning programme (ELP) was only presented to the experimental group.

The following battery was used to determine the effectiveness of the ELP; The Affectometer 2 (Kammann & Flett, 1983), Coping Self-Efficacy Scale (CSE) (Chesney, Folkman & Chambers, 1996) Proactive Attitude Scale (PA Scale) (Schwarzer, 1997), The Fortitude Questionnaire (FORQ) (Pretorius, 1998) and the Cognitive Appraisal Questionnaire-2 (Botha & Wissing, 2005). The obtained results proved the ELP effective in facilitating coping and well-being among u/19 rugby players. The experimental group's coping abilities, including emotion-focused coping and problem-focused coping, showed marked improvements. Their ability to rely on social support from family and friends and to stop unpleasant thoughts and emotions that may accompany stressful events improved significantly. It is apparent that the experimental group were able to appraise good and/or bad events and move towards action (proactive attitude). The experience of positive emotions increased whereas the experience of negative emotions decreased, indicating an enhanced sense of well-being. The control group showed small and insignificant improvements. It can therefore be concluded that the developed ELP is effective in facilitating the coping abilities and well-being of university rugby players.

A limitation of this study is that these results cannot be generalised to provincial or national competition level or to other team sports outside of rugby. It is, therefore, recommended that the ELP be evaluated at provincial and national competition levels and the ELP should be adapted to other team sports and its effectiveness evaluated. It is also recommended that the ELP be used to assist first year rugby students who may find the transition from high school academics and rugby to university studies and semi-professional rugby difficult. It is foreseen that the ELP can effectively prevent or minimise the levels of stress. Another practical recommendation is to present the ELP to sports persons who need to cope with personal and sport related stressors in a manner that facilitates their coping abilities and well-being.

Complete Reference List

- Albinson, B., & Petrie, T. A. (2003). Cognitive appraisal, stress and coping: Preinjury and postinjury factors influencing psychological adjustment to sport injury. *Journal of Sport Rehabilitation, 12*, 306-322.
- Alexandris, K., Tsorbatzoudis, C., & Grouios, G. (2002). Perceived constraints on recreational sport participation: Investigating their relationship with intrinsic motivation, extrinsic motivation and amotivation. *Journal of Leisure Research, 34* (3), 233-252.
- Amiot, C. E., Gaudreau, P., & Blanchard, C. M. (2004). Self-determination, coping and goal attainment. *Journal of Sport & Exercise Psychology, 26* (3), 396-411.
- Anshel, M. H. (2002). Qualitative validation for a model for coping with acute stress in sport. *Journal of Sport Behaviour, 24* (3), 223-246.
- Anshel, M. H., & Anderson, D. I. (2002). Coping with acute stress in sport: Linking athletes' coping style, coping strategies, affect and motor performance. *Stress, Anxiety and Coping, 15* (2), 193-209.
- Anshel, M. H., & Delany, J. (2003). Sources of acute stress, cognitive appraisals and coping strategies of male and female child athletes. *Journal of Sport Behaviour, 24* (4), 329-353.
- Anshel, M. H., Kim, K., Kim, B., Chang, K., & Eom, H. (2001). A model of coping with stressful events in sport: Theory, application, and future direction. *Journal of Sport Psychology, 32*, 43-75.
- Anshel, M. H., Williams, L. R. T., & Williams, S. M. (2000). Coping style following acute stress in competitive sport. *The Journal of Social Psychology, 140* (6), 751-773.

Arathoon, S. M., & Malouff, J. M. (2004). The effectiveness of a brief cognitive intervention to help athletes cope with competition loss. *Journal of Sport Behaviour*, 27 (3), 1-11.

Arcelin, R., Brisswalter, J., & Delignieres, D. (1997). Effect of physical exercise duration on decision performance. *Journal of Human Movement Studies*, 32, 123-144.

Baker, S. R. (2004). Intrinsic, extrinsic, and amotivational orientations: Their role in University adjustment, stress, well-being and subsequent academic performance. *Current Psychology*, 23 (3), 189-202.

Barret, E. (2007). Experiential learning in practice as research: Context, method, knowledge. *Journal of Visual Art Practice*, 6 (2), 115-124.

Beaudoin, C. M. (2006). Competitive orientations and sport motivation of professional women football players: An internet survey. *Journal of Sport Behaviour*, 29 (3), 201-212.

Botha, E., & Wissing, M. P. (2005). *Cognitive Appraisal Questionnaire*. Unpublished Manuscript, North-West University-Potchefstroom Campus, Potchefstroom.

Boyd, M. P., & Kim, M. (2007). Goal orientation and sensation seeking in relation to optimal mood states among skateboarders. *Journal of Sport Behaviour*, 30 (1), 21-35.

Brown, C. (2005). Injuries: The psychology of recovery and rehab. In S. Murphy (Ed.), *The sport psych handbook: A complete guide to today's best mental training* (pp. 215-236). New Zealand: Human Kinetics.

Career Skills Library (2004). *Organization skills* (2nd ed.). New York: Ferguson.

Chesney, M., Folkman, S., & Chambers, D. (1996). Coping effectiveness training of men living with HIV: Preliminary findings. *International Journal of STDs & AIDS*, 7 (2) 75-82.

Chesney, M. A., Neilands, T. B., Chambers, D. B., Taylor, J. M., & Folkman, S. (2006). A validity and reliability study of the Coping Self-Efficacy Scale. *British Journal of Health Psychology, 11*, 421-437.

Coach. (2006) Personal interview undertaken.

Cohen, J. (1997). *Statistical power analysis for the behavioural sciences*. New York: Academic Press.

Compton, W. C. (2005). *Introduction to positive psychology*. California: Thomson Wadsworth.

Coopoo, Y. (2006). *The perfect rugby player*. Retrieved on May 25, 2006 from <http://www.health24/specificsports/rugby.html>

Corey, G. (2001). *Theory and practice of counseling and psychotherapy* (6th ed.). USA: Wadsworth.

Corey, M. S., & Corey, G. (2002). *Groups: Process and practice* (6th ed.). California: Wadsworth.

Cruess, R. L., & Cruess, S. R. (2006). Teaching professionalism: General principles. *Medical Teacher, 28* (3), 205-208.

Csikszentmihályi, M. (1997). Happiness and creativity: Going with the flow. *Futurist, 31* (5), 1-7.

Dalloway, M. (2000). *Modelling the fast women of racing*. Retrieved on April 17, 2008 from: <http://www.performance-media.com/articles6.php>

Dartmouth (2007). *Managing your time*. Retrieved on May 03, 2007 from:
<http://www.dartmouth.edu/~acskills/success/time.html>

Deniz, M. E. (2006). The relationship among coping with stress, life satisfaction, decision-making style and self-esteem: An investigation with Turkish university students. *Social Behavioural and Personality*, 34 (9), 116-1170.

Doren, K. (2000). Athletes share insight on how to motivate and succeed. *San Diego Business Journal*, 21 (40), 1-3.

Dyson, R., & Renk, R. (2006). Freshman adaptation to university life: Depressive symptoms, stress, and coping. *Journal of Clinical Psychology*, 62 (10), 1231-1244.

Elliot, J. F. (2005). Motivation: The need to achieve. In. S. Murphy (Ed.), *The sport psych handbook: A complete guide to today's best mental training* (pp. 3-18). New Zealand: Human Kinetics.

Erasmus, H. (2006). *The effect of a prevention programme on the rugby injuries of 15- and 16-year old schoolboys*. Unpublished Philosophiae Doctor in Education, North-West University-Potchefstroom Campus, Potchefstroom.

Field, A. (2005). *Discovering statistics using SPSS for Windows* (2nd ed.). London: Sage.

Fourie, S., & Potgieter, J. (2001). The nature of mental toughness in sport. *South African Journal for Research in Sport Physical Education and Recreation* , 23 (2), 63-72.

Gaudreau, P., & Blondin, J. (2004). Different athletes cope differently during sporting competition: A cluster analysis of coping. *Personality and Individual Coping*, 36, 1865-1877.

Gazing Performance Ltd. (2006). *Mental skills: A perspective on their role in performance and how to understand and develop them*. Retrieved on May 26, 2006 from <http://communityrugby.com>

Gladding, S. T. (1995). *Group Work: A counselling speciality*. New Jersey: Prentice-Hall.

Grossbard, J. R., Cumming, S. P., Standage, M., Smith, R. E., & Smoll, F. L. (2006). social desirability and relations between goal orientations and competitive trait anxiety in young athletes. *Psychology of Sport and Exercise*, 8 (4), 491-505.

Hadfield, D. (2006a). *Building character and self-reliance in players: Some suggestions for coaches*. Retrieved on May 25, 2006 from <http://www.communityrugby.com>

Hadfield, D. (2006b). *Motivation and Hippocrates: Understanding your players*. Retrieved on May 25, 2006 from: <http://www.communityrugby.com>

Hall, H. K., Kerr, A. W., Kozub, S. A., & Finnie, S. B. (2007). Motivational antecedents of obligatory exercise: The influence of achievement goals and multidimensional perfectionism. *Psychology of Sport and Exercise*, 8 (3), 297-316.

Hannin Y.L. (2000). Individual zones of optimal functioning (IZOF) model. In Y. L. Hannin (Ed.), *Emotions in sport* (pp. 65-90). Champaign Ill.: Human Kinetics Publishers.

Harwood, C. (2005). Goals: More than just the score. In S. Murphy (Ed.), *The sport psych handbook: A complete guide to today's best mental training* (pp. 19-36). New Zealand: Human Kinetics.

Hawtreay, K. (2007). Using experiential learning techniques. *Journal of Economic Education*, 143-152.

Heckman, B. D., Catz, S. L., Heckman, T. G., Miller, J. G., & Kalichman, S. C. (2004). adherence to antiretroviral therapy in rural persons living with HIV disease in the United States. *Aids Care, 16* (2), 219-230.

Heyns, P. M., Venter, J. H., Esterhuyse, K. G., Bam, R. H., & Odendaal, D. C. (2003). Nursing care for patients with Alzheimer's disease: Their strengths and risks of burnout. *South African Journal of Psychology, 33* (2), 80-85.

Hodge, K., Lonsdale, C., & Mckenzie, A. (2006). Thinking rugby: Using sport psychology to improve rugby performance. In J. Dosil (Ed.), *The sport psychologist's handbook: A guide for sport-specific performance enhancement* (pp.183-209). England: John Wiley & Sons.

Hoedaya, D., & Anshel, M. (2003). Use and effectiveness of coping with stress in sport among Australian and Indonesian athletes. *Australian Journal of Psychology, 55* (3), 159-165.

Holt, N. L., & Dunn, J. G. H. (2004). Longitudinal idiographic analysis of appraisal and coping responses in sport. *Psychology of Sport and Exercise, 5*, 213-222.

Hopkinson, G. C., & Hogg, M. K. (2004). Teaching and learning qualitative research in the social sciences: An experiential learning approach amongst marketing students. *Journal of Further and Higher Education, 28* (3), 307-320.

Hoyle, R. H., Harris, M. J., & Judd, C. M. (2002). *Research methods: In social relations* (7th ed.). USA: Wadsworth Thomson Learning.

Hui, P. N., Wan, M., Chan, W. K., & Yung, P. M. B. (2006). An evaluation of two behavioural rehabilitation programs, qigong versus progressive relaxation, in improving the quality of life in cardiac patients, *The Journal of Alternative and Complementary Medicine, 12* (5), 373-378.

Jacobs, E. E., Masson, R. L., & Harvill, R. L. (2002). *Group counselling: Strategies and counselling*. California: Wadsworth.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed method research: A research paradigm whose time has come. *Educational Researcher*, 33 (7), 14-26.

Johnston, L. H., & Carroll, D. (2000). The psychological impact of injury: Effects of prior sport and exercise involvement. *British Journal of Sports Medicine*, 34, 436-439.

Kammann, R., & Flett, R. (1983). Affectometer 2: A scale to measure current level of general happiness. *Australian Journal of Psychology*, 69, 925-937.

Karageorghis, C. (1999). Entering "the zone": A guide for coaches. *The Sport Journal*, 2 (3), 1-9.

Kolb, A.Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4, (2), 1-20.

Latham, G. P., & Locke, E. A. (2006). The benefits and overcoming the pitfalls of goal-setting. *Organizational Dynamics*, 35 (4), 332-340.

Laureano, C. M. D., Nienaber, A. W., & Grobbelaar, H. W. (2008). *Development of an experiential learning programme aimed at facilitating coping strategies and well-being of university rugby players*. Unpublished Manuscript, North-West University-Potchefstroom Campus, Potchefstroom.

Lazarus, R. S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist*, 14, 229-252.

Lee, A. J., Garraway, W. M., Hepburn, W., & Laidlaw, R. (2001). Influence of rugby injuries on players' subsequent health and lifestyle: Beginning a long term follow-up. *British Journal of Sports Medicine, 35*, 38-42.

Leedy, P. H. (1997). *Practical research: Planning and design* (6th ed.). Upper Saddle River: Prentice Hall.

Lorente, F. O., Peretti-Watel, P., Griffet, J., & Grélot, L. (2003). Alcohol use and intoxication in sport university students: *Alcohol and Alcoholism, 35* (5), 427-430.

Maddison, R., & Prapavessis, H. (2005). A psychological approach to the prediction and prevention of athletic injury. *Journal of Sport & Exercise Psychology, 27*, 289-310.

Mausbach, B. T., Harvey, P. D., Goldman, S. R., Jeste D. V., & Patterson, T. L. (2007). *Development of a brief scale of everyday functioning in persons with serious mental illness*. Retrieved on July 11, 2008 from:
<http://schizophreniabulletin.oxfordjournals.org/cgi/content/full/sbm014v1>

Meyer, W. F., Moore, C., & Viljoen, H. G. (1997). *Personology: From individual to ecosystem*. Johannesburg: Heinemann.

Mind Tools (2007). *Personal goal-setting: Find direction, live life your way*. Retrieved on June 27, 2007 from:
<http://www.mindtools.com/page6.html>

Moran, A. P. (2004). *Sport and exercise psychology: A critical introduction*. New York: Routledge.

Morrow, S. L. (2004). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of Counseling Psychology, 52* (2), 250-260.

Munroe-Chandler, K., Hall, C. R., & Weinberg, R. S. (2004). A qualitative analysis of the types of goals athletes set in training and competition. *Journal of Sport Behaviour*, 27 (1), 58-74.

Neenan, M., & Dryden, W. (2002). *Life coaching: A cognitive approach*. New York: Brunner-Routledge.

Nicholls, A. R., & Polman, R. C. J. (2007). Stressors, coping and coping effectiveness among players from the England under-18 union team. *Journal of Sport Behaviour*, 30 (2), 1-16.

Nicholls, A. R., Holt, N. L., Polman, R. C. J., & Bloomfield, J. (2006). Stressors, coping and coping effectiveness among professional rugby union players. *The Sport Psychologist*, 20, 314-329.

Nicholls, A. R., Polman, R. C. J., Levy, A. R., Taylor, J., & Cobley, S. (2007). Stressors, coping and coping effectiveness: Gender, type of sport, and skill differences. *Journal of Sport Sciences*, 25 (13), 1521-1530.

Norton, G. (2005). The Resilience Inventory: Essential skills to overcome life's challenges. *Management Today*, 10, 56-58.

Ntoumanis, N., Biddle, S. J. H., & Haddock, G. (1999). The mediating role of coping strategies on the relationship between achievement motivation and affect in sport. *Anxiety, Stress & Coping*, 12 (3), 1-18.

O'Shei, T. (2006). Visualising perfection. *Dance Spirit*, 10 (4), 34-35.

Pakenham, K. I., Chiu, J., Bursnall, S., & Cannon, T. (2007). Relations between social support, appraisal and coping and both positive and negative outcomes in young carers. *Journal of Health Psychology*, 12, 89-102.

Papanikolaou, Z. Nikolaidis, D., Patsiaouras, A., & Alexopoulos, P. (2002). *The freshman experience: High stress-low grades*. Retrieved April 8, 2005 from: <http://www.athleticinsight.com/Vol5Iss4/Commentary.htm>

Pensgaard, A. M., & Roberts, C. (2003). Achievement goal orientations and the use of coping strategies among winter olympians. *Psychology of Sport and Exercise, 4* (2), 101-116.

Poulsen, A. A., Ziviani, J. M., & Cuskelly, M. (2006). General self-concept and life satisfaction for boys with differing levels of physical coordination: The role of goal orientations and leisure participation. *Human Movement Science, 25* (6), 839-860.

Pretorius, T. B. (1998). *Fortitude as stress-resistance: Development and validation of the Fortitude Questionnaire*. Belville: University of the Western Cape.

Reinboth, M., & Duda, J. L. (2006). Perceived motivational climate, needs satisfaction, and indices of well-being in team sport: A longitudinal perspective. *Psychology of Sport and Exercise, 7*, 269-286.

Rial, C. F. (2008). The invisible aspect of tennis: A revision of the psychological processes of the activity. *International Tennis Federation Coaching and Sport Science Review, 15* (44), 9-11.

Rook, S. K. (2001). Emotional health and positive versus negative social exchange: A daily diary analysis applied developmental science. *Applied Developmental Science, 5* (2), 86-97.

Ryska, T. A. (2002). The effects of athletic identity and motivation goals on global competence perceptions of student-athletes. *Child Study Journal, 32* (2), 109-129.

Schomer, H. H., & Drake, B. S. (2001). Physical activity and mental health. *International Federation of Sports Medicine Journal, 2* (3), 1-9.

Schwarzer, R. (1999). *The Proactive Attitude Scale (PA Scale)*. Retrieved on May 19, 2008 from:

http://userpage.fu-berlin.de/_health/proactive.htm

Schwarzer, R. (1997). *Proactive attitude*. Retrieved on May 23 , 2008 from:

http://web.fu-belin.de/gesund/pulicat/ehps_cd/health/proactiv.htm

Sisterhen, L. (2004). Enhancing your musical performance abilities. *American Music Teacher*, 54 (1), 32-109.

Sport Psychology Consultant. (2006). Personal interview undertaken.

Strümpfer, D. J. W. (2003). Resilience and burnout: A stitch that could save nine. *South African Journal of Psychology*, 33 (2), 69-79.

Thayer, R. E. (1978). Toward a psychological theory of multidimensional activation (arousal) [Abstract]. *Motivation and Emotion*, 2 (1), 1-34. Retrieved on April 17, 2008 from:

<http://www.springerlink.com/content/q1658j1740v26014/>

Trochim, W. M. K. (2006). *Types of reliability*. Retrieved on August 13, 2008 from:

<http://www.socialresearchmethods.net/kb/reotypes.php>

Upton, P. A. H. (1999). *Epidemiology of rugby injuries: A series of independent rugby studies conducted amongst schoolboys, senior club & provincial rugby players in the Western Cape*. Unpublished Philosophiae Doctor in Physiotherapy, University of Cape Town: Cape Town

Wang, C. K. J., & Biddle, S. J. H. (2003). Intrinsic motivation towards sports in singaporean students: The role of sport ability beliefs. *Journal of Health Psychology*, 8 (5), 515-523.

Wang, L., Huddleston, S. & Peng, L. (2003). Psychological skills used by Chinese swimmers. *International Sports Journal*, 71 (1), 48-55.

Weinberg, R. S. & Gould, D. (2007). *Foundations of Sport and Exercise Psychology* (4th ed.). Champaign Ill.: Human Kinetics.

Wetmore, D. E. (1999a). *Interruptions Interruptions*. Retrieved on July 05, 2007 from: <http://www.balancetime.com>

Wetmore, D. E. (1999b). *Time Thieves*. Retrieved on July 05, 2007 from: <http://www.balancetime.com>

Whitehead, K. A. & Basson, C. J. (2005). Sport-Related Difference in Type and Amount of Mental Imagery Used by Athletes. *South African Journal for Research in Sport, Physical Education and Recreation*, 27 (2), 159-174.

Wilson, S. B. (1994). How Good are you at Goal-Setting? *Executive Female*, 17 (4), 73-74.

Wissing, J. A. B. (2006). *Psychological Well-Being in Cultural Context: Measurement, patterns and relevance for practice*. Unpublished Philosophiae Doctor in Psychology, North-West University-Potchefstroom Campus, Potchefstroom.

Wissing, M. P. & van Eeden, C. (2002). Empirical Clarification of the Nature of Psychological Well-Being. *South African Journal of Psychology*, 32 (1), 32-44.