South African amateur golfers' barriers in competitive games

CC Johnson-Brown

Orcid.org/0000-0001-9316-3738

Mini-dissertation submitted in partial fulfilment of the requirements for the degree *Magister Artium* in Clinical Psychology at the Potchefstroom campus of the North-West University

Supervisor: Dr Kobus du Plooy

Graduation October 2018

Student number: 20431880

Table of Contents

Acknowledgements

I would like to express my heartfelt thanks and appreciation to the following people:

- Ali, a special thanks to you for your continued support and encouragement at all times.
- Keagan, thank you for being patient when I had to work
- Dr. K. du Plooy, thank you for your guidance and input during this study and for sharing your wealth of knowledge,
- My family and friends who were there for me during this process
- David Levey (language editor) for your input in finalising this document.

Declaration Statement

I, Charmaine Johnson-Brown (20431880), declare that *South African amateur golfers' barriers in competitive games*, a mini-dissertation submitted in partial fulfilment of the requirements for the degree *Magister Artium* in Clinical Psychology at the Potchefstroom campus of the North-West University, was completed according to the Copyright Act, No 98 of 1978 of the Republic of South Africa. All literary and academic material and sources, consulted during the writing and compilation of this mini-dissertation have been acknowledged and referenced according to the American Psychological Association's Publication manual (6th edition). No single or comprehensive unit of this mini-dissertation has been plagiarised from another author or institution and the document remains the intellectual property of the corresponding author, namely myself.

Furthermore, I certify that submission of this mini-dissertation is exclusively for examination purposes at the Potchefstroom Campus of the North-West University and it has not been submitted for any other purposes to any third party.

(Signature on hard copy)

Charmaine Johnson-Brown

Summary

Golf has increasingly become more popular on an international and national level (The Royal and Ancient Golf Club of St. Andrews – R&A, 2016). Merely mentioning names such as Tiger Woods, Gary Player, Ernie Els, Rory McIlroy, Brandon Grace and Louis Oosthuizen, suggests how prevalent this sport has become. Marketing of golf tourism and golf sporting events such as the Nedbank Golf Challenge is drawing an exclusive class of athletes and spectators globally (Hudson, 2009; Nedbank Golf Challenge, 2016). Some of the most recent figures suggest that during 2015, approximately 26 million people in the USA were playing golf (Statista, 2016). In South Africa the numbers stand at 119800 golf players affiliated to the 466 golf courses. Thirty-eight percent (38%) of these players are located in the province of Gauteng alone (South African Golf Association, 2016). As one of the most lucrative types of sport for an athlete, numerous players set out each year to become professional golfers around the globe and in South Africa. The increased popularity of this sporting event, together with its multifaceted aspects, motivated the present research study. This study's focus is on amateur South African golfers with regard to their optimal performance. Cultivating an awareness of how to assist the transition of amateur golfers to professional golfers in South Africa is important; particularly in that as a developing country it has limited resources. An amateur golfer engages in the sport activity for the challenge it provides and some of them play with the intention of transitioning to become a professional golfer (Carroll, 2009; R&A, 2016; Santos, 2013; Stambulova, Alfermann, Statler & CôTé, 2009; Wylleman, Alfermann & Lavallee, 2004). Such golfers frequently have to maintain a full-time job and other activities to supplement their golfing lifestyle as, unlike a professional player's career, it is not undertaken on a full-time basis (Carroll, 2009; Stambulova et al., 2009; Santos, 2013). They frequently also experience other types of occupational demands and family responsibilities that might all prevent their total commitment to improving their

performance (Harmison, 2006).

The identification of the barriers experienced by amateur South African golfers is essential for understanding how they influence performance prior to and during competitive games. Findings for this present study revealed that insufficient resources, insufficient practice as well as external and internal pressures all hinder the performance of these golf players. These barriers were found to interact with each other too. The lack of financial resources emerged as a particular concern for most South African golfers as a hindrance to achieving their ultimate goals of becoming professional players. Furthermore, their lack of exposure to a competitive environment and to a variety of golf courses further inhibited the development of their golf skills and tournament mindsets. A scarcity of access to professional services and assistance also prevents them from gaining the required knowledge and expert advice on their game to further develop them into professional players.

As mentioned above, another barrier that hinders the improvement of the performance of amateur golfers is insufficient practice. Amateur golfers engage in competitive games on a part-time basis and need to balance different demands simultaneously. However, becoming a professional golfer requires frequent and consistent practice and preparation. The quality of their practice and time allocated to training and sport-related demands emerged from the data as a significant challenge for amateur South African golfers. Another key finding of this study was the external and internal pressures experienced by the said golfers. These include an inadequate social support network, expectations of sponsors leading to performance anxiety, detrimental thought processes and insufficient emotional regulation. These pressures impact on how the golfer thinks about their golf and their emotional experience at that moment. These thoughts and emotions frequently have a negative influence on their behaviour and perceptions, to such an extent that they also hamper the golfer's performance during a competitive game. Findings from this study highlighted the need for more

assistance for amateur golfers in removing or mitigating those barriers that inhibit their performance and hinder their development into professional players.

Keywords: golf, amateur, barriers, golfers, performance, pressures, resources, sport psychology

Opsomming

Gholf word al hoe meer gewild op internasionale en nasionale vlak (The Royal and Ancient Golfclub of St Andrews - R & A, 2016). Name soos Tiger Woods, Gary Player, Ernie Els, Rory McIlroy, Brandon Grace en Louis Oosthuizen dui daarop hoe gewild hierdie sport geword het. Bemarking van gholftoerisme en gholf sportgebeurtenisse soos die Nedbank Golf Challenge lok 'n eksklusiewe klas atlete en toeskouers wêreldwyd (Hudson, 2009; Nedbank golf challenges, 2016). Van die jongste syfers dui daarop dat ongeveer 26 miljoen mense in die VSA gedurende 2015 gholf gespeel het (Statista, 2016). In Suid-Afrika staan die syfer by 119800 geaffilieerde gholfspelers uit die 466 gholfbane. Agt-en-dertig present (38%) van hierdie spelers is in die Gautengse provinsie (South African Golf Association, 2016). As een van die mees winsgewende sportsoorte regoor die wêreld en in Suid-Afrika, stel talle spelers elke jaar daarin belang om professionele gholfspelers te word. Die toenemende gewildheid van hierdie sportgebeurtenis, tesame met die veelvoudige aspekte daarvan, het tot die huidige navorsingsstudie gelei. Laasgenoemde het op Suid-Afrikaanse amateur gholfspelers gefokus met betrekking tot hul optimale prestasie. As 'n ontwikkelende land met beperkte hulpbronne, is ‘n grotere bewustheid van hoe om die oorgang vanaf amateur gholfspelers tot professionele gholfspelers in Suid-Afrika te maak, baie belangrik. 'n Amateur-gholfspeler speel die sportaktiwiteit vir die uitdaging wat dit bied (Carroll, 2009; R & A, 2016; Santos, 2013). Sulke gholfspelers moet gereeld ‘n voltydse werk beklee en ander aktiwiteite onderneem om hul lewenstyl aan te vul aangesien so ’n loopbaan nie voltyds gedoen word nie (Carroll, 2009; Stambulova, Alfermann, Statler & Côté, 2009; Santos, 2013). Hulle ervaar ook gereeld ander vorme van beroepseise en gesinsverantwoordelikhede wat kan met hul prestasie inmeng (Harmison, 2006). Belangriker, sommige van die amateur-gholfspelers speel dit met die doel om 'n professionele gholfspeler te word (Wylleman et al., 2004; Stambulova et al., 2009).

Die identifisering van hierdie struikelblokke wat amateur gholfspelers ervaar, is noodsaaklik om te verstaan hoe hulle prestasie beïnvloed, voor en tydens 'n kompeterende spel. Bevindinge van hierdie huidige studie het aangedui dat onvoldoende hulpbronne, onvoldoende oefening, eksterne druk as ook interne druk almal die prestasie van Suid-Afrikaanse amateurgholfspelers belemmer. Daar is ook gevind dat daar interaksie tussen hierdie struikelblokke is. Die gebrek aan finansiële hulpbronne het as 'n besondere kommer vir die meeste Suid-Afrikaanse gholfspelers voorgekom. Verder het die gebrek aan blootstelling aan die mededingende omgewing en blootstelling aan 'n verskeidenheid gholfbane hul ontwikkeling van hul gholfvaardighede en toernooi-ingesteldhede verder belemmer. 'n Gebrek aan professionele dienste en hulp verhoed hulle ook om die nodige kennis en kundige advies op hul spel te kry om hulle verder as professionele spelers te ontwikkel.

Nog 'n struikelblok wat die prestasie van amateur-gholfspelers belemmer, is onvoldoende oefening. Amateurgholfspelers neem deel aan die mededingende spel en moet verskillende eise terselfdertyd meng. Om egter 'n professionele gholfspeler te word, vereis gereelde en konsekwente oefening en voorbereiding. Die gehalte van hul oefening en tyd wat toegeken is aan oefening en sportverwante eise het as 'n verdere uitdaging vir amateur-Suid-Afrikaanse gholfspelers voorgekom. Nog 'n belangrike bevinding van hierdie studie was die eksterne en interne druk wat sulke gholfspelers ervaar. Dit sluit in 'n onvoldoende sosiale ondersteuningsnetwerk, verwagtiginge vanaf borge, nadelige denkprosesse en onvoldoende emosionele regulering. Wanneer 'n amateur Suid-Afrikaanse gholfspeler hierdie druk ervaar, beïnvloed dit hoe die gholfspeler op die oomblik oor hul gholf dink sowel as hul emosionele ervaring. Hierdie gedagtes en emosies beïnvloed hul gedrag en persepsies op 'n nadelige wyse. Op so 'n manier belemmer dit ook hul vertoning tydens 'n mededingende wedstryd. Bevindinge uit hierdie studie het die behoefte aan meer hulp vir amateur-gholfspelers

beklemtoon sodat die struikelblokke wat hul prestasie belemmer of verhoed, aangespreek kan word sodat hul ontwikkeling in professionele spelers bevorder word.

Sleutelwoorde: gholf, amateur, struikelblokke, druk, gholfspelers, hulpbronne, prestasie, sport sielkunde

Preface

- This mini-dissertation was written in article format in accordance with rules A4.4.2 of the North-West University.
- The article in Section II of this mini-dissertation, titled: *South African amateur golfers' barriers in competitive games*, will be submitted for possible publication in the *South African Journal for Research in Sport, Physical Education and Recreation.*
- The editorial and referencing style of Sections I and III of this mini-dissertation is in strict accordance with the guidelines described and defined within the Publication Manual (6th edition) of the American Psychological Association (APA) style guide.
- The author guidelines of the *South African Journal for Research in Sport, Physical Education and Recreation* described in section 2.1 of this mini-dissertation stipulate adherence to the Harvard editorial and referencing style.
- The page numbering in this mini-dissertation is consecutive, starting from the introduction.
- Dr Kobus du Plooy, the co-author of the article: *South African amateur golfers' barriers in competitive games* in Section II of this mini-dissertation granted his consent for submission of the said article for examination purposes, in partial fulfilment of the requirements for an MA degree in Clinical Psychology.
- The numbering of the tables is restarted in Section II.
- For publication purposes the referencing in this mini-dissertation is restarted in every section.
- This mini-dissertation received a TurnItIn report within accepted norms.

Letter of Permission

Permission is hereby granted for the submission by the first author, C. Johnson-Brown, of the following mini-dissertation for examination purposes, towards partial fulfilment of the requirements for the degree *Magister Artium* in clinical psychology at the Potchefstroom campus of the North-West University:

South African amateur golfers' barriers in competitive games.

The role of the co-author was as follows: Dr. K. Du Plooy acted as supervisor and assisted with the conception, design, data generation and peer review of this study.

(Signature on hard copy)

Dr Kobus du Plooy

Proof of language editing

expertenglisheditorscc

CERTIFICATE

D N R LEVEY (PROF.)
FREELANCE LANGUAGE EDITOR AND CONSULTANT
Expert English Editors CC 2007/147556/23
editse@gmail.com www.experteglisheditors.co.za

P O Box 14686, Hatfield, 0028, South Africa
Tel. +27 (0)12 333 5053. Cell +27 (0)83 384 1324. Fax -27 (0)86 511 6439

Full Member of Professional Editors' Guild. Member of South African Translators Institute. For bouquets or brickbats regarding quality of service please contact SATI at P O Box 1710, Rivonia, 2128. Tel. +27 (0)11 803-2681, sati@intekom.co.za

TO WHOM IT MAY CONCERN

This is to certify that I have edited the following document for English style, language usage, logic and consistency; it is the responsibility of the author to accept or reject the suggested changes manually, and interact with the comments in order to finalise the text.

Author:	Charmaine Johnson Brown
Title:	Aspects that may hinder performance among amateur South-African golfers prior to and/or during a competitive game
Degree:	MA Clinical Psychology
Institution:	Department of Psychology, North West University, Potchefstroom Campus, South Africa

Sincerely

DAVID LEVEY

Electronically signed

2018-04-18

Members: D Levey; J Levey. Reg. No: 2007/147556/23

South African amateur golfers' barriers in competitive game

SECTION 1: INTRODUCTION AND RATIONALE

1.1 Introduction

In this study the barriers that may potentially hinder performance among amateur golfers prior to and/or during a competitive game are explored among a group of amateur South African golfers. The first section of the mini-dissertation contextualises the study with a general introduction and orientation. This is followed by a literature review where significant findings from the literature regarding optimal performance in sport, optimal performance in golf as well as possible factors that may inhibit performance of golfers, with specific reference to amateur golfers, are outlined. Finally, the aim and research question of the study are delineated before concluding the section with a description of the layout of the mini-dissertation.

1.2. Orientation

The popularity of golf is progressively increasing internationally and on a national level (The Royal and Ancient Golf Club of St. Andrews – R&A, 2016). Statistics indicate that during 2015, approximately 26 million people in the USA played golf (Statista, 2016). In South Africa the numbers stand at 466 golf courses with 119800 affiliated golf players, the majority of whom, at 38 %, are based in the province of Gauteng (South African Golf Association, 2016). Numerous references, in social and other media, to well-known personalities such as Tiger Woods, Gary Player, Ernie Els, Rory Mcilroy, Jordan Spieth, Brandon Grace and Louis Oosthuizen suggest how prevalent the sport has become. Globally there has been a steady increase of tournament coverage and media advertising of events such as The Masters and the Ryder Cup (Hudson, 2009). Local tournaments like the Nedbank

Golf Challenge (Nedbank Golf Challenge, 2016) and the Alfred Dunhill Championship (Alfred Dunhill Championship, 2016) draw an exclusive group of players from the US, European and Sunshine tour circuits. Furthermore, the Alfred Dunhill Championship is a pro-am tournament which creates an opportunity for amateur golfers to play a competitive round of golf against professional players (Alfred Dunhill Championship, 2016). The aforesaid is a clear indication of how the sport of golf is continually expanding, both nationally and internationally, and signifies its merit as a research topic.

An understanding of how South African golfers are currently advancing from amateur to professional level becomes important to further promote development of more South African golf stars such as Ernie Els and Louis Oosthuizen, to name but a few. This is particularly important since South Africa is a developing country with limited resources. This study therefore focused on amateur golfers with regard to their optimal performance. At this point a distinction needs to be made between professional and amateur golfers, especially when considering performance of this calibre.

An amateur golfer engages in the sport activity as it necessitates thought and golf skills from them. The said golfer does not undertake the sport activity on a full-time basis, unlike that of a professional player (Carroll, 2009; R&A, 2016; Stambulova, Alfermann, Statler, & CôTé, 2009; Santos, 2013). Professional players sustain themselves financially through the winnings they make by just playing golf. By contrast, amateur players frequently have to maintain a full-time job and other activities to pay for their golfing activities (Carroll, 2009; Santos, 2013). More importantly, the amateur golfer plays golf with the intention of transitioning into a professional golfer (Stambulova et al., 2009; Wylleman et al., 2004). Furthermore, golf is an individualistic sport, played without supervision or an umpire. As such, the individual must regulate and monitor him or herself during a golf round: this is vital in order for him or her to perform. This applies to amateur as well as professional golfers.

Due to the individualistic nature of this sport, the onus is on the golfer herself/himself to maintain an attitude of sportsmanship while being respectful towards playing partners and keeping to the discipline of the game (R&A, 2016). Moreover, in order to perform optimally, a golfer needs to focus on the various aspects of the game (Fletcher & Hartwell, 2004).

As professional players have already established themselves in this regard as professionals, the question arises as to what an amateur golfer experiences with regard to the barriers that could impact his or her performance before and/or during a competitive golfing event? An answer to this question might equip an amateur player to make the transition successfully. This was the rationale for the present study as discussed in the following section.

1.3 Rationale for Study

This study attempted to create an understanding of amateur South African golfers with specific reference to what barriers may be hampering their progress in becoming professional players. An awareness of these barriers could provide insight for the individual as well as the broader sports community. Reputable institutions, such as the South African Society of Sport and Exercise Psychology, the American Psychological Association Division 47 and the Association for Applied Sport Psychology, use science and psychological knowledge and skills to optimise the performance and well-being as well as sport abilities of athletes (South African Society of Sport and Exercise Psychology, 2016). The principle of utilising psychology and sport science to address athletes' performance is a recognised practice and the same principle was used within the context of this study. It is furthermore hoped that these results could serve as a facilitative process to stimulate future research, to minimise the potential loss of talent in South Africa and to promote the development of more professional South African golf stars in the future.

2. LITERATURE REVIEW

An exploration of those barriers that may potentially hinder golf performance was undertaken to create the context for the present study. The databases and search engines consulted for this purpose included Google Scholar, EBSCO, Google, SAGE Publications and JSTOR. Findings indicated the following:

2.1 Optimal Performance

Positive psychology theorists succinctly express important aspects of optimal performance in all sports as 'flow', 'peak performance' and 'mindfulness' (Clark, Tofler & Lardon, 2005; Gardner & Moore, 2004; Jackson, Thomas, Marsh, & Smethurst, 2001; Kee & Wang, 2008). 'Flow' can be deemed as the ideal state of mind where the athletes perceive a balance between the challenges in the environment and their capability to effectively deal with these challenges (Csikszentmihalyi, 1999; Csikszentmihalyi & LeFevre, 1989). This is also viewed as a 'peak performance' state for an individual (Clark et al., 2005; Jackson et al., 2001; Potgieter & Botha, 2014). 'Mindfulness' is similar to the theory of 'flow' and 'peak performance' (Potgieter & Botha, 2014; Sappington, & Longshore, 2015; Thompson, Kaufman, De Petrillo, Glass, & Arnkoff, 2011) and recent research has established a link between 'mindfulness' and sport performance (Gardner & Moore, 2004; Kee & Wang, 2008; Moen, Federici, & Abrahamsen, 2015). The preceding components also form part of a golf player's repertoire and require a fine balance amongst them. Being mentally focused, employing effective emotional regulation and coordinating motor movements (Fletcher & Hartwell, 2004) would optimise the performance of any athlete, including golfers (Bernier, Thienot, Codron, & Fournier, 2009; Gardner & Moore, 2004; Potgieter & Botha, 2014; Sappington, & Longshore, 2015). Striving to attain the 'flow' state in combination with 'mindfulness' will lead to 'peak performance'; these aspects are required to be mentally

focused, to employ effective emotional regulation and to coordinate fine and gross motor movements (Fletcher & Hartwell, 2004). The aforementioned relate to aspects required for optimal performance in all sports. The following sections specifically outline the aspects that are required for optimal performance in golf in addition to the aforementioned. This is because the optimal performance of a golfer comprises various specific skills (mental, technical and physical) of the game (Fletcher & Hartwell, 2004).

2.2 Mental Abilities of Golf Performance

Mental toughness has been closely associated with highly skilled and high achievement-oriented athletes in a range of competitive sports, including golf (Jones, Hanton & Connaughton, 2002). This factor has also been linked to the motivational variables that are included in the self-determination theory devised by Ryan and Deci (Mahoney, Gucciardi, Ntoumanis, & Mallet 2014; Nel, 2014). Cowden, Fuller and Anshel (2014) found a link between learned resourcefulness and mental toughness. Furthermore, Crust & Clough (2011) argue that experiential learning forms an integral part of the latter and that exposure to challenging situations in training and competition would foster ample coping and problem-solving skills. Having and maintaining meaningful social networks also contributes to mental toughness (Crust & Clough, 2011; Nel, 2014). Hence, the cultivation of this characteristic significantly contributes to the development of a highly competitive, self-motivated and committed individual who is able to cope efficiently and maintain focus and concentration under stressed or high pressure circumstances. Mental toughness is therefore also highly applicable to the sport of golf. Given the nature of the sport, golfers need to develop an array of cognitive abilities, such as concentration and focus, in order to enhance their performance (Pop-Jordanova & Demerdvieza, 2010), since competitive golf tournaments are laced with high pressured situations. During these situations it is common for players to experience

heightened emotional arousal which may interfere with their level of focus and concentration. Such a situation could have a adverse impact on performance (Smith, Wright & Cantwell, 2008). Thus, being mentally tough and possessing optimal cognitive skills should promote optimal performance among golfers.

2.3 Technical and Physical Abilities of Golf Performance

Apart from the required mental abilities, physical and technical abilities are also equally important in enhancing golf performance. The attainment of a consistent and replicable swing is every golf players' goal as it can effectively improve a golfers' score (Thomas & Fogarty, 1997; Smith, Roberts, Wallace, Kong, & Forrester, 2015). However, diverse variables, such as wrist rotation, the type of equipment (clubs) the player is using, placement of the ball and wind conditions may all impact on the execution of the swing (Fletcher & Hartwell, 2004; Ghasemzadeh et al., 2009). Furthermore, wrist rotation and posture are critical elements of the swing that add to the ideal technique. Other essential physical requirements for a golfer include core stability and functional movement. These concepts are vital for – and contribute to – human movement (Okada, Huxei, & Nesser, 2011). Core stability influences the execution of the swing movement (Liemohn, Baumgartner, & Gagnon, 2005) while functional movement allows the golfer to maintain a balance between mobility and stability while executing a golf swing with accuracy and efficiency (Behm, Leonard, Young, Bonsey, & MacKinnon, 2005; Mills, Taunton, & Mills, 2005; Okada et al., 2011). Consequently, technical and physical abilities in combination with his/her mental abilities combine to have an important impact on the performance of a golfer.

2.4 Limited Access to Resources

One factor highlighted in the literature as being a hindrance to the performance of amateur golfers was a lack of access to resources. Amateur golfers cannot receive any

financial gain in a competitive event. When playing a competitive event, these players have to waive their right to receive any compensation that could be earned during this event (R&A, 2016). This requires amateur golfers to provide for themselves/ their families as well as earn enough to engage in the chosen sport. Golf, however, is an expensive sport that depends on superior financial and physical resources (e.g., the most suitable equipment such as technologically advanced clubs) (Goldman & Pfluge, 2010; R&A, 2016). This sport attracts many expenses such as the cost of equipment as well as paying for amenities and facilities. She /he also need to consider the cost of travelling to a tournament, paying for accommodation and food, travelling to and from the golf course each day and caddy fees. In South Africa, associations such as GolfRSA and South African Golf Development Board strive to develop amateur golfers (GolfRSA, 2018; South African Golf Development Board – SAGDB, 2018). These associations provide and facilitate playing opportunities for some amateur South African golfers. Yet, only a limited number of such golfers can gain access to this assistance on an annual basis; it therefore becomes evident that a lack of resources may potentially inhibit the performance of all golfers, and in particular amateur golfers, in South Africa.

2.5 Context of the Research Study

The preceding discussions indicated that an amateur golfer engages in golf for the challenge it provides, to become a professional player and does so on a part-time basis (Carroll, 2009; R&A, 2016; Stambulova, Alfermann, Statler & CôTé, 2009; Santos, 2013; Wylleman et al., 2004). These individuals therefore are often obliged to maintain a balance between a full-time occupation to sustain their lifestyle (Carroll, 2009; Santos, 2013) and providing for their family while also pursuing their goal of a professional golfing career. As the topic suggests, various mental, physical and technical aspects might have an impact on an

amateur golfers' performance and their ability to become professional players. These barriers are antecedent to, and occur during, a competitive golfing event and might provide an obstacle in the path of an amateur player pursuing a successful round of golf, which could pave the way towards becoming a professional. As no specific research could be found regarding what barriers may possibly hinder this transition in the South African context, this study consequently aimed to explore the South African amateur golfers' experience of barriers that might hinder their performance.

AIM OF THE STUDY

The aim of this research study was to explore the barriers that, prior to and/or during a competitive game, may hinder the performance of amateur South African golfers.

RESEARCH QUESTION

The research question for this study was as follows:

What barriers, prior to and/or during a competitive game may hinder your performance as an amateur South-African golfer?

STRUCTURE OF THE MINI-DISSERTATION

The mini-dissertation will be submitted in article format, consistent with the General Regulation A.13.7 of the North-West University and is structured as follows:

Section 1

This section consists of the following:

Introduction, rationale for the study, the aim of the study, research question and an outline of the structure of the study.

Section 2

This takes the form of a research article, entitled, *South African amateur golfers' barriers in competitive games.* This article will be submitted for publication in the *South African Journal for Research in Sport, Physical Education and Recreation*. This section and the reference list at the end of the section were compiled in accordance with the guidelines of the last-mentioned journal (see Appendix C attached).

Section 3

Critical reflection

Section 4

Appendices

REFERENCES

Alfred Dunhill Championship. (2016). The tournament. Retrieved from http://www.alfreddunhillchampionship.com/pro_am.php.

Behm, D.G., Leonard, A.M., Young, W.B., Bonsey, W.A.C. & MacKinnon S.N. (2005). Trunk muscle electromyographic activity with unstable and unilateral exercises. *The Journal of Strength & Conditioning Research, 19*(1). 193-201.

Bernier, M., Thienot, E., Codron, R., & Fournier, J. F. (2009). Mindfulness and acceptance approaches in sport performance. *Journal of Clinical Sport Psychology*, *3*(4), 320-333. doi:10.1123/jcsp.3.4.320.

Carroll, B. (2009). Semi-Pro or Pro? *Coffin Corner, 31*(6), 16-18. Retrieved from http://www.profootballresearchers.org/coffin_corner.htm.

Clark, T. P., Tofler, I. R., & Lardon, M. T. (2005). The sport psychiatrist and golf. *Clinics in Sports Medicine*, *24*(4), 959-971. doi:10.1016/j.csm.2005.04.001.

Cowden, R. G., Fuller, D. K., & Anshel, M. H. (2014). Psychological predictors of mental toughness in elite tennis: An exploratory study in learned resourcefulness and competitive trait anxiety. *Perceptual and Motor Skills*, *119*(3), 661-678. doi:10.2466/30.PMS.119c27z0.

Crust, L., & Clough, P. J. (2011). Developing mental toughness: From research to practice. *Journal of Sport Psychology in Action*, *2*(1), 21-32. doi:10.1080/21520704.2011.563436.

Csikszentmihalyi, M., & LeFevre, J. (1989). Optimal experience in work and leisure. *Journal of Personality and Social Psychology*, *56*(5), 815-822. doi:10.1037//0022-3514.56.5.815.

Csikszentmihalyi, M. (1999). If we are so rich, why aren't we happy? *America Psychologist*, *54*(10), 821-827. *doi*:10.1037//0003-066X.54.10.821.

Fletcher, I. M., & Hartwell, M. (2004). Effect of an 8-week combined weights and plyometrics training program on golf drive performance. *The Journal of Strength & Conditioning Research*, *18*(1), 59-62. doi: 10.1519/15334287(2004)018<0059:EOAWCW>2.0.CO;2.

Gardner, F.L. & Moore, Z.E. (2004). A mindfulness-acceptance-commitment-based approach to athletic performance enhancement: Theoretical considerations. *Behavior Therapy*, *35*(4), 707-723. doi:10.1016/S0005-7894(04)80016-9.

Ghasemzadeh, H., Loseu, V., Guenterberg, E., & Jafari, R. (2009, April). *Sport training using body sensor networks: A statistical approach to measure wrist rotation for golf swing.* Proceedings of the Fourth International Conference on Body Area Networks (p. 2). Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering (ICST). doi:10.4108/ICST.BODYNETS2009.6035.

Giacobbi, P., Foore, B., & Weinberg, R. S. (2004). Broken clubs and expletives: The sources of stress and coping responses of skilled and moderately skilled golfers. *Journal of Applied Sport Psychology*, *16*(2), 166-182. doi:10.1080/10413200490437688.

Goldman, J. S., & Pfluge K. F. (2010). Playing golf is elementary. *Strategies*, *23*(6), 24-27. doi:10.1080/08924562.2010.10590900.

GolfRSA. (2018). About us. Retrieved from https://www.golfrsa.com/

Harmison, R. J. (2006). Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills. *Professional Psychology: Research and Practice*, *37*(3), 233. doi:10.1177/1525822X05279903.

Hudson, S. (2009). *Golf tourism*. Retrieved from http://www.goodfellowpublishers.com.

Jackson, S. A., Thomas, P. R., Marsh, H. W., & Smethurst, C. J. (2001). Relationships between flow, self-concept, psychological skills, and performance. *Journal of Applied Sport Psychology*, *13*(2), 129-153. doi:10.1080/104132001753149865.

Jones, G., Hanton, S., & Connaughton, D. (2002). What is this thing called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology*, 14(3): 205-218. doi:10.1080/10413200290103509.

Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, *10*(2), 144-156. doi:10.1093/clipsy/bpg016.

Kee, Y. H., & Wang, C. J. (2008). Relationships between mindfulness, flow dispositions and mental skills adoption: A cluster analytic approach. *Psychology of Sport and Exercise*, *9*(4), 393-411. doi:10.1016/j.psychsport.2007.07.001.

Liemohn, W. P., Baumgartner, T. A., & Gagnon, L. H. (2005). Measuring core stability. *The Journal of Strength & Conditioning Research*, *19*(3), 583-586. doi: 10.5014/ajot.45.3.214.

Mahoney, J. W., Gucciardi, D. F., Ntoumanis, N., & Mallet, C. J. (2014). Mental toughness in sport: Motivational antecedents and associations with performance and psychological health. *Journal of Sport and Exercise Psychology*, *36*(3), 281-292. doi:10.1123/jsep.2013-0260.

Mills, J. D., Taunton, J. E., & Mills, W. A. (2005). The effect of a 10-week training regimen on lumbo-pelvic stability and athletic performance in female athletes: A randomized -controlled trial. *Physical Therapy in Sport*, *6*(2), 60-66. doi:10.1016/j.ptsp.2005.02.006.

Moen, F., Federici, R. A., & Abrahamsen, F. (2015). Examining possible relationships between mindfulness, stress, school-and sport performances and athlete burnout. *International Journal of Coaching Science*, *9*(1). 3-19. Retrieved from https://www.researchgate.net/profile/Frank_Abrahamsen/publication/305687643.pdf

Nedbank Golf Challenge. (2016). The tournament. Retrieved from http://www.nedbankgolfchallenge.com/faninfo.aspx.

Nel, L. (2014). Theories on character strengths, resilience, hope and self-determination. In M. P. Wissing, J. C. Potgieter, T. Guse, I. P. Khumalo, & L. Nel. (Eds.), *Towards flourishing: Contextualising positive psychology* (pp. 116-131). Pretoria: Van Schaik Publishers.

Neil, R., Hanton, S., Mellalieu, S. D., & Fletcher, D. (2011). Competition stress and emotions in sport performers: The role of further appraisals. *Psychology of Sport and Exercise*, *12*(4), 460-470. doi:10.1016/j.psychsport.2011.02.001.

Okada, T., Huxel, K. C., & Nesser, T. W. (2011). Relationship between core stability, functional movement, and performance. *The Journal of Strength & Conditioning Research*, *25*(1), 252-261. doi:10.1519/JSC.0b013e3181874564.

Pop-Jordanova, N., & Demerdzieva, A. (2010). Biofeedback training for peak performance in sport-case study. *Macedonian Journal of Medical Sciences*, *3*(2), 113-118. doi:10.3889/MJMS.1857-5773.2010.0098.

Potgieter, J. C., & Botha, K. F. (2014). Functioning well. In M. P. Wissing, J. C. Potgieter, T. Guse, I. P. Khumalo, & L. Nel. (Eds.), *Towards flourishing: Contextualising positive psychology* (pp. 39-71). Pretoria: Van Schaik Publishers.

Santos, A. L. P. D. (2013). Quality of life in professional, semiprofessional, and amateur athletes: An exploratory analysis in Brazil. *SAGE Open*, *3*(3), 1-8. doi:10.1177/2158244013497723.

Sappington, R., & Longshore, K. (2015). Systematically reviewing the efficacy of mindfulness-based interventions for enhanced athletic performance. *Journal of Clinical Sport Psychology*, *9*(3), 232-262. doi:10.1123/jcsp.2014-0017.

Smith, A., Roberts, J., Wallace, E., Kong, P. W., & Forrester, S. (2015). Golf coaches' perceptions of key technical swing parameters compared to biomechanical literature. *International Journal of Sports Science & Coaching*, *10*(4), 739-755. doi:10.1260/1741-9541.10.4.739.

Smith, D., Wright, C. J., & Cantwell, C. (2008). Beating the bunker: The effect of PETTLEP imagery on golf bunker shot performance. *Research Quarterly for Exercise and Sport*, *79*(3), 385-391. doi:10.5641/193250308X13086832906111.

South African Golf Association. (2016). Affiliated members/ Handicaps. Retrieved from http://www.saga.co.za/.

South African Golf Development Board. (2018). About us. Retrieved from https://www.sagolfboard.org/.

South African Journal for Research in Sport, Physical Education and Recreation. (2017). Home. Retrieved from https://www.sajrsper.com/.

South African Society of Sport and Exercise psychology, (2016). Sport psychology. Retrieved from www.sassep.co.za.

Statista. (2016). The statistical portal. Retrieved from http://www.statista.com/statistics/227420/number-of-golfers-usa/.

Stambulova, N., Alfermann, D., Statler, T., & CôTé, J. E. A. N. (2009). ISSP position stand: Career development and transitions of athletes. *International journal of sport and exercise psychology*, *7*(4), 395-412. doi:10.1234/12345678.

The Royal and Ancient Golf Club of St. Andrews - R&A. (2016). Golf around the world – 2015. Retrieved from http://www.randa.org/~/media/Files/DownloadsAndBublications/Golf-Around-the-World-2015.

Thomas, P. R., & Fogarty, G. J. (1997). Psychological skills training in golf: The role of individual differences in cognitive preferences. *The Sport Psychologist*, *11*(1), 86-106. doi:10.1.1.500.1605.

Thompson, R. W., Kaufman, K. A., De Petrillo, L. A., Glass, C. R., & Arnkoff, D. B. (2011). One year follow-up of mindful sport performance enhancement (MSPE) with archers, golfers, and runners. *Journal of Clinical Sport Psychology*, *5*(2), 99-116. doi:10.1123/jcsp.5.2.99.

Woods, T. (2001, November). How I play the game II. G*olf Digest*, p. 102.

Wylleman, P., Alfermann, D., & Lavallee, D. (2004). Career transitions in sport: European perspectives. *Psychology of Sport and Exercise*, *5*(1), 7-20. doi:10.1016/S1469-0292(02)00049-3.

SECTION 2

ARTICLE: SOUTH AFRICAN AMATEUR GOLFERS' BARRIERS IN COMPETITIVE GAMES

Note to the reader

- The article in Section II of this mini-dissertation, titled *'South African amateur golfers' barriers in competitive games'*, is written in accordance with the author guidelines of *the South African Journal for Research in Sport, Physical Education and Recreation* (please refer to Addendum C of this mini-dissertation). These guidelines stipulate adherence to the style guide and the referencing style.
- The author guidelines of the stipulate that original articles should not exceed 20 pages of words and references, including in text citing and reference list (please refer to Addendum C of this mini-dissertation).
- The article in Section II of this mini-dissertation, titled: *'South African amateur golfers' barriers in competitive games'* has a total of 37 pages and consists of 13 326 words and references including in text citing and reference list. The total word count of the article as it is presented here therefore exceeds the word count limit as set by the guidelines of the said *Journal*. This was done in order to comply with the examination requirements for a mini-dissertation and will be amended prior to submission to the journal for possible publication. Furthermore, the number of pages will be amended before final submission for publication.

Title page

South African amateur golfers' barriers in competitive games

Charmaine Johnson-Brown
Community Psychosocial Health (COMPRES)
School for Psychosocial Health
North-West University, Potchefstroom Campus

Kobus du Plooy
Institute of Psychology & Wellbeing (IPW)
School for Psychosocial Health
North-West University, Potchefstroom Campus

Address for correspondence:
Kobus du Plooy, Private Bag X6001, Potchefstroom, South Africa, 2520
Email: Kobus.duplooy@nwu.ac.za
Telephone: (+27)18 299 1737

Abstract

This qualitative study aimed to explore those barriers that may hinder the performance of amateur golfers in South Africa prior to and/or during a competitive game. Participants involved in the study were amateur golfers older than 18 years who were selected from the Gauteng and North-West provinces through snowball sampling. Data was obtained through individual in-depth interviews. Interpretative phenomenological analysis was used to analyse the data. Findings indicated that inadequate resources, insufficient practice and external and internal pressures all hinder the performance of South African amateur golf players. These barriers were also found to interact with each other. Findings from this study highlighted the need for amateur golfers to receive more assistance to remove or mitigate the barriers inhibiting their performance and hindering their transition into professional players. Given the relatively small sample size included in this study it is recommended that further research with larger sample sizes be conducted to support and validate the present findings.

Keywords: golf, amateur, golfers, barriers, performance, pressures, resources, sport psychology

INTRODUCTION

Golf is a popular sport which annually gains momentum on an international and national level (The Royal and Ancient Golf Club of St. Andrews – R&A, 2016). Professional players such as Tiger Woods, Gary Player, Ernie Els, Rory McIlroy, Jordan Spieth, Brandon Grace and Louis Oosthuizen are well known throughout the world, which suggests how popular this sport has become. Global tournament coverage and media advertising of events such as The Masters and the Ryder Cup have increased over time (Hudson, 2009). In South Africa, tournaments such as the Nedbank Golf Challenge (Nedbank Golf Challenge, 2016) and the Alfred Dunhill Championship (Alfred Dunhill Championship, 2016) also draw an exclusive group of players from the US, European and Sunshine tour circuits on an annual basis. Furthermore, the Alfred Dunhill Championship is a pro-am tournament which creates an opportunity for amateur golfers to play a competitive round of golf against their professional counterparts (Alfred Dunhill Championship, 2016). Some of the most recent data suggest that during 2015 approximately 26 million people in the USA were playing golf (Statista, 2016). In South Africa the numbers stand at 119800 golf players affiliated to the 466 golf courses. Thirty-eight percent (38%) of these players are located in Gauteng Province alone (South African Golf Association, 2016). As one of the most lucrative types of sport, worldwide and in South Africa, numerous athletes set out each year to become professional golfers.

Golf as a sport

The game of golf is played with a maximum of 14 clubs and a ball, proceeding from the teeing ground to the hole with a consecutive number of strokes. A stroke refers to the swinging of the golf club with the goal of moving the ball nearer to the hole. A round of golf consists of 18 holes whereby the player has to hit the ball into the hole with the fewest number of strokes possible. At the end of the round, the player with the least strokes wins the competition (R&A, 2016). Golf is an individualistic game as it is played without supervision or an umpire. Unlike other team sports such as soccer or rugby, the slower and interrupted pace of golf (Clark *et al.*, 2005) requires from players that they regulate and monitor themselves during a golf round to perform optimally. In addition, the golfer is expected to maintain an attitude of sportsmanship and adhere to the discipline of the game as well as demonstrate respect towards playing partners (R&A, 2016). A study by Barnicle *et al.* (2014) found a correlation between the skill level of a player and their adherence to golf etiquette

and rules. Their findings also indicated that a good understanding of the rules of golf serves as an indicator of the players' perception of the sport.

In order to reach professional status, a player needs to progress from being an amateur golfer to becoming a professional. This is achieved by entering a qualifying golf school tournament with a low handicap[1]. Finishing in the top thirty for this tournament would earn the person the professional tour card to partake as a professional golfer on the Sunshine Tour (Sunshine Tour, 2018). This study focuses on South African amateur golfers with regard to their optimal performance. South Africa is a developing country with limited resources; therefore, cultivating an awareness of how to assist in the transition of amateur golfers to professional ones is important. Making a distinction between a professional and an amateur golfer is necessary when considering optimal performance. An amateur golfer engages in the sport activity on a part-time basis and do not receive an income from the competing events (Stambulova *et al.*, 2009; Santos, 2013; R&A, 2016). Professional players are able to sustain themselves financially through their winnings whereas amateur golfers need to engage in a full-time job and other income producing activities to maintain their lifestyle (Carroll, 2009; Santos, 2013). The latter group of players frequently have other types of demands too, such as time constraints, travelling to and from golf tournaments and expectations from others regarding occupational and family responsibilities, all of which could interfere with their performance (Harmison, 2006). More importantly, some amateur golfers play golf with the intention of transitioning to become a professional golfer (Wylleman *et al.*, 2004; Stambulova *et al.*, 2009). The individual nature of this sporting event causes one to consider what an amateur golfer is experiencing with regard to those barriers that could impact their performance before and/or during a competitive game of golf. As such, the present study attempted to gain an understanding of which barriers might be present in such a situation. In order to create sufficient context for the aforementioned, a clear description of abilities which contribute to performance in sport is first warranted.

Optimal performance in sport

What constitutes optimal performance for an athlete? Various aspects should be considered when this question comes to mind. Over time, sport psychologists have used

[1] According to the South African Golf Association (2016) a handicap "is the number of strokes a player receives to adjust their inherent scoring ability to the common level of scratch or zero-handicap golf" (p. 5).

different constructs to describe optimal performance (Harmison, 2006). For the purpose of this study, theory stemming from positive psychology best appeared to define an optimally performing athlete. Aspects of this theory that encapsulate abilities that promotes optimal performance, include the attainment of 'flow', 'peak performance' and 'mindfulness' (Jackson *et al.*, 2001; Thomas *et al.*, 2001; Gardner & Moore, 2004; Clark *et al.*, 2005). 'Flow' refers to the ideal state of mind where the athlete perceives a balance between the challenges in the environment as well as his or her capability to effectively manage these challenges (Csikszentmihalyi & LeFevre, 1989; Csikszentmihalyi, 1999). Csikszentmihalyi (1990) (cited in Spittle & Dilion, 2014) further describes 'flow' as an optimal mental state that encompasses dimensions of integrating actions with awareness, complete concentration on the present task, having distinct goals and feedback, being in control and not feeling self-conscious at that moment. This optimal mental state is associated with optimal athletic performance and is also viewed as a peak performance state for an athlete (Jackson *et al.*, 2001; Clark *et al.*, 2005; Potgieter & Botha, 2014). While 'flow' refers to specific moments of complete absorption in an activity, peak performance focuses on the optimal level of functioning as well as the standard of achievement by the athlete (Jackson *et al.*, 2001; Harmison, 2006).

Another ability that is considered as essential for peak performance for any athlete is the capability of applying mindfulness, which refers to the present-centred non-judgemental awareness of the experience as it unfolds (Kabat-Zinn, 2003; Sappington & Longshore, 2015). This concept is similar to those of flow and peak performance (Potgieter & Botha, 2014; Sappington, & Longshore, 2015; Thompson *et al.* 2011): findings indicated that individuals who are more mindful tend to reach 'flow' states more frequently (Kee & Wang, 2008). Moreover, research has established a link between mindfulness and sport performance (Gardner & Moore, 2004; Kee & Wang, 2008; Moen *et al.*, 2015). The authors, Gardner and Moore (2004), developed a mindfulness-acceptance-based approach known as Mindfulness, Acceptance and Commitment (MAC) which, if achieved, assist athletes in achieving objectivity by having a non-discriminatory awareness of the present moment, being attuned and paying attention, to their internal experience and external environment, while employing effective emotional regulation. This approach to sport, along with the attainment of 'flow', 'peak performance' and 'mindfulness' would optimise performance for any athlete, regardless of the sport in which they participate (Gardner & Moore, 2004; Bernier *et al*, 2009; Potgieter & Botha, 2014; Sappington & Longshore, 2015).

Optimal performance in the sport of golf

In addition to the aspects referred to in the previous section, the aspects of being mentally focused, employing optimal emotional regulation and coordinating gross and fine motor movements (Fletcher & Hartwell, 2004) constitute important skills of a golf players' repertoire and require a fine balance between them. Moreover, a proficient golf player will be acutely aware of the ideal performance state and consequently develop or hone the necessary mental, emotional and cognitive skills to repeatedly reach this ideal state of mind (Jackson *et al*, 2001; Harmison, 2006). Thus, attaining a 'flow' state by increasing awareness of mindfulness will assist the golf player to optimise his or her performance (Thompson *et al.*, 2011). In addition, in order to perform optimally, a golfer needs to focus on various interrelated skills such as mental, technical and physical skills of the game (Fletcher & Hartwell, 2004). The following sections describe these skills in more depth, with specific reference to how they relate to golf.

Psychological skills of golf performance

The legendary golfer, Jack Nicklaus, declared that golf is "ninety percent mental" (Barnicle *et al.*, 2014:90). Tiger Woods (2001) expressed the same sentiment when he stated that mental toughness is a prerequisite for golf performance. 'Mental toughness' as a psychological construct is considered to be intrinsically linked with highly skilled and high achievement-oriented athletes in a range of competitive sports. Gucciardi *et al.* (2012: 194) initially coined the term and indicated that it relates to an athlete's ability to "thrive under pressure situations, to overcome setbacks quickly, and to maintain a high level of functioning in the face of continuous challenges." Various authors and researchers from the field of sport psychology and sport science have operationalised the term based on different constructs or postulations. The researchers, Mahoney *et al.* (2014), for example, found that mental toughness is linked to the motivational variables that are included in the self-determination theory advocated by Ryan and Deci (Nel, 2014). These are autonomy (the belief that one chooses one's own actions), competence (the belief that one is responsible for outcomes), and relatedness (the belief that one has meaningful connections to a social network). An individual will experience optimal functioning if he or she perceives that these three beliefs or needs are satisfied. Furthermore, a supportive environment that nurtures these three needs facilitates mental toughness (Mahoney *et al.*, 2014). According to these authors, such an environment will allow the athlete to make choices, recognises his or her opinions and

perspectives, fosters the individuals' internal motivational sources and provides constructive feedback. The perceived support an athlete receives from significant others and being in a supportive environment consequently nurtures the development of mental toughness in an athlete (Rees *et al.*, 2007; Crust & Clough, 2011; Nel, 2014).

With specific reference to golf, during the course of a game, golfers experience a variety of emotions elicited by their performance (Dewar & Kavussanu, 2011). These emotional states (e.g., positive or negative) will either aid or prevent them from accomplishing their goals during a competitive game (Gardner & Moore, 2004; Harmison, 2006). In consequence, golfers' increased awareness of their emotional state during optimal performance will aid them in making choices that determine their successful pursuit of a goal during a competitive game (Thomas & Fogarty, 1997; Harmison, 2006). In addition, Crust and Clough (2011) proposed that experiential learning forms an integral part of mental toughness and that exposure to challenging situations in training and competition develops ample coping and problem-solving skills. Hence, in this context, mental toughness refers to a highly competitive, self-motivated and committed individual who is able to cope efficiently and maintain focus and concentration under high pressure circumstances. Such individuals possess a self-belief system that sustains and supports them in the face of setbacks; they are able to employ adequate problem-solving skills if and when needed. They are also acutely aware of being connected to a social network (Rees *et al.*, 2007). Thus, we argue that the prerequisite of mental toughness is an essential element for any high achievement and performance-driven golfer.

A further psychological component of golf relates to the players' aptitude to develop an array of cognitive abilities, such as concentration and focus, in order to enhance their performance (Harmison, 2006; Pop-Jordanova & Demerdzieva, 2010). This is particularly important in the game of golf due to its relatively slower pace and the time that elapses between strokes during a game. Focus can be described as the ability to selectively direct one's attention to a specific stimulus, and concentration as the ability to maintain and shift that focus to accommodate the challenges in the environment (Pop-Jordanova & Demerdzieva, 2010). During high pressured situations such as those which often develop during a competitive golf event, emotional arousal is heightened, particularly during the time between strokes, which may interfere with a players' level of concentration. Consequently, this may have a detrimental impact on performance (Smith *et al.*, 2008). Conversely, the players who can direct their attention and maintain the required focus during those moments

will reduce their emotional arousal, allowing them to perform at their optimal best (Thomas & Fogarty, 1997; Pop-Jordanova & Demerdzieva, 2010; Dewar & Kavussanu, 2011). A study conducted by Thomas and Fogarty (1997), for instance, found that a golfer who was mentally prepared for the game executed a golf swing with effective precision (Fletcher & Hartwell, 2004; Ghasemzadeh *et al.*, 2009). Hence, strong cognitive and mental skills are vital ingredients for being able to perform in golf, especially under the pressure of a competitive round. Apart from the aforementioned mental abilities, physical and technical abilities are also equally important in enhancing golf performance. These are discussed in the following section.

Technical skills of golf performance

As the primary goal in golf is to hit the ball into the hole employing as few strokes as possible, a crucial technical skill requirement of the game entails an effective golf swing. The primary goal of such a swing is to propel the ball by means of a sequence of motions with a golf club into a certain direction over a specific distance (Alderslade *et al.*, 2015). The attainment of a consistent and replicable swing is therefore every golf player**'**s goal as it could effectively improve her or his score (Thomas & Fogarty, 1997; Smith *et al.*, 2015). However, diverse variables, such as wrist rotation, the type of equipment (clubs) the player is using, placement of the ball and wind conditions all impact on the execution of the perfect swing (Fletcher & Hartwell, 2004; Ghasemzadeh *et al.*, 2009).

The difference between an effective and ineffective golf swing is a long straight ball flight as opposed to what is commonly referred to as a 'hook' or a 'slice', where the ball moves into an unintended direction. According to Ghasemzadeh *et al.***,** (2009) a too-early rotation of the wrist may lead to an open clubface which will result in the ball 'fading' to the right, following impact (slice). By contrast, a too-late rotation of the wrist may cause a closed clubface which will draw the golf ball to the left, following impact (hook). These incorrect wrist rotations result in undesirable consequences for the golf player. Smith *et al.* (2015) further found that the posture of the golfer's body when playing a stroke as well as his or her ability to maintain a solid stance throughout the whole swing were important aspects in promoting an optimal swing. Maintaining the spine angle is vital for an effective rotation during the swing motion, since the power, efficiency and consistency of the swing are all generated through it. A loss in spine angle towards impact limits hip rotation (Smith *et al.*, 2015). Evidently, wrist rotation and posture are elements of the swing that contribute to the

ideal golf technique. Apart from these technical skills, the physical skills described in the next section also contribute to optimal performance in golf.

Physical skills of golf performance

Golf presents a number of physical requirements for players to be able to perform optimally. One such requirement is core stability as this has been found to be vital to human movement (Okada *et al.*, 2011). Stability of this kind can be described as the capability to control the position and motion of the torso over the pelvis to assist functional movement (Liemohn *et al.*, 2005). Such movement allows optimal generation, transfer and control of energy or force during an integrated sequence of athletic activities (Behm *et al.*, 2005; Mills *et al.*, 2005; Okada *et al.*, 2011). To maintain a balance between mobility and stability while executing a golf swing with accuracy and efficiency requires effective functional movement. An athlete who has muscular strength, movement efficiency, coordination and flexibility as sport-related skills will engage in effective functional movement (Mills *et al.*, 2005; Ghasemzadeh *et al.*, 2009; Okada *et al.*, 2011). Consequently, core stability influences the execution of an optimal golf swing and ultimately affects the performance of the golf player.

Barriers which may hinder golf performance

Amateur golfers engage in the game of golf on a part-time basis and do not receive any financial earnings from a competitive event (Carroll, 2009; Stambulova *et al.*, 2009; Santos, 2013; R&A, 2016). The ruling authority of golf – the R&A – stipulates that the amateur players are obliged to waive their right to receive any compensation they might earn during a competitive event (R&A, 2016). Thus, such golfers need to supplement their income through other sources of revenue. Golf requires financial and physical resources (e.g., to purchase the most suitable equipment such as technologically advanced clubs) (Goldman & Pfluge, 2010; R&A, 2016). This makes it an expensive sport as the South African amateur golfer has a number of expenses to consider, such as the cost of equipment as well as paying for the use of amenities and facilities. The golfer also needs to consider the cost of travelling to a tournament, paying for accommodation and food, travelling to and from the golf course each day and caddy fees. In South Africa, associations such as GolfRSA and the South African Golf Development Board provide and facilitate playing opportunities for some amateur South African golfers (GolfRSA, 2018; South African Golf Development Board – SAGDB, 2018) to assist with the development of these players. However, a limited number of amateur South

African golfers can gain access to this assistance on an annual basis; hence the question remains as to how a lack of resources and other barriers impacts the performance of amateur South African golfers prior to and/ or during a competitive event?

The skills and barriers already referred to earlier make it clear that various skills have an impact on golfers' performance. A skill such as mentally attaining a 'flow' state by increasing awareness of mindfulness will for example most likely assist the golf player in optimising his or her performance (Thompson *et al.*, 2011) as theory from positive psychology suggests (Jackson *et al.*, 2001; Gardner & Moore, 2004; Clark *et al.*, 2005; Kee & Wang, 2008). However, when considering which barriers may hinder golfers' performance, research has mostly concentrated on the effect of certain stressors on professional golf players' performance. Neil *et al.* (2011), for example, studied how players reacted to and made meaning of stressors as well as investigating the coping mechanisms they employed when presented with stressors while playing golf (Giacobbi *et al.*, 2004; Thelwell *et al.*, 2008). The sources of these stressors may be categorised as organisational-related and/ or performance-related and could have a debilitative or facilitative effect on performance (McKay *et al.*, 2008; Thelwell *et al.*, 2008). In addition, the target populations in the majority of these studies of golf players' stressors mostly included elite or professional golfers from the international arena (Jackson *et al.*, 2001; Giacobbi *et al.*, 2004; Thelwell *et al.*, 2008). What makes the present study unique, therefore, is the focus on the experience of barriers that may hinder the performance of an amateur South African golfer. Previous studies that focus on these golfers within the South African context could not be identified. The focus, as explained, is on barriers that are antecedent to and occurs during the competitive event and that might provide a hindrance in the goal of those pursuing a successful round of golf or career as a professional golfer. Moreover, many South African amateur golfers have the potential golf skill to succeed, but fall through the proverbial cracks and never seem to reach their full potential as professionals. It is hoped that this study may provide insight and a point of departure from which changes could be implemented to reduce such occurrences in future.

Purpose of Research

This research study aimed to explore the barriers that may hinder the performance of amateur golfers in South Africa prior to and/or during a competitive game. It is hoped that an awareness of the barriers that may impede the amateur golfers' performance will provide

sport psychologists, coaches, instructors and administrators with insight and understanding of these barriers. Furthermore it also hoped that these findings will initiate the development of appropriate intervention programmes to minimise such barriers and thereby enhance these players' performance and chances of becoming professionals.

METHODOLOGY

The following sections will highlight various aspects relating to the methodology that was utilised in the present study.

Research approach and design

Creswell (2009) states that a qualitative research approach seeks to understand the participants' perspective of their world – how they view the situation that is being studied. The present study used this approach as it is explorative and descriptive in nature. The researcher interviewed the participants and interpreted the information which they had provided during their interviews. This provided insight into South African amateur golfers' perception and experience of factors that might hinder their performances. Various research designs from the qualitative research approach could be utilised to explore the subjective experiences of participants. For this study the researcher employed a phenomenological design. This approach was deemed to be the most suitable for the topic as phenomenology explicates a thorough understanding of the participants' lived experiences (Creswell, 2009; Fouche & Schurink, 2011). Furthermore, it allows the researcher to provide an unbiased and authentic report of factors that may potentially hinder South African amateur golfers' performances (Creswell, 2009).

Participants

The population for this study comprised of amateur golfers from the Gauteng and North-West provinces. Snowball sampling was used to identify potential participants for this study. This is a non-probability sampling technique (Maree & Petersen, 2007; Ellard-Gray *et al.*, 2015) in which the researcher identifies potential participants in the population and interviews them, following which they identify other potential participants whom the researcher can subsequently contact. In the present study, this process followed the steps listed below: firstly, an independent person contacted a potential participant from the identified population and shared with him or her the aim, objective and purpose of the study.

If this participant agreed to form part of the study, he or she provided the details of other potential participants who were then contacted and who in turn also provided the identities of further potential participants and so forth.

During the conversations with each of these individuals it was ensured that they each met the inclusion criteria for the present study: they had to be male or female South African amateur golfers no younger than 18 years and should live in the Gauteng or North-West Provinces. Furthermore, they had to have a handicap of 5 or less to qualify as an amateur golfer. After it was verified that each of the potential participants met the inclusion criteria, they were each sent the informed consent documentation for the present study. Once they returned this completed documentation, they were included in the study and arrangements were made for the researcher to conduct an in-depth interview with them.

The notion of data saturation was next used to determine the number of participants (Mason, 2010). Data saturation warrants a richness of data from the participants' experiences as they describe these. It further implies that the researcher continues to interview participants until it appears that no new data will emerge from more interviews and that all further interviews will merely yield more, similar, responses (Tuckett, 2004; Pietkiewicz & Smith, 2014). Seven participants (one female and six males) were finally included in the study. This sample size permitted the researcher to consider specific details about each individual case and also to examine how the participants made meaning out of their reality (Smith & Osborn, 2003; Biggerstaff & Thompson, 2008; Pringle *et al.*, 2011).

Procedure and ethics

Permission to conduct and proceed with this research study was first obtained from the North-West University's (NWU) Health Research Ethics Committee (HREC); number: NWU-00099-17-S1. The next step entailed that an independent person made contact with the potential participants. This individual also acted as a mediator for the participants throughout the study and assured them that the proposed study had been approved by the HREC. It was also confirmed at this juncture that each potential participant met the inclusion criteria for the study. Next, the informed consent and biographical data forms were provided to all those potential participants who had met the aforementioned criteria prior to their in-depth interviews taking place. Once those who agreed to participate had provided verbal consent to participate in the study, the independent person arranged a time, date and place for each of them to undergo the interview with the researcher. These interviews were each conducted in a

private room at the Potchefstroom or Klerksdorp golf courses. Their duration was approximately 45 – 60 minutes.

Each participant brought a signed hard copy of the informed consent as well as a completed biographical data form to their respective interviews where it was collected by the researcher. An in-depth, unstructured interview was then conducted with each participant. One open-ended question was posed to them: 'What are the barriers, prior to and during a competitive game that may hinder your performance as an amateur South African golfer?' This type of interview was selected as the most appropriate method to collect the data because it provides structure with flexibility, which leads to an increased understanding of the research question (Legard *et al.*, 2003). Further probing also occurred as this may elicit unanticipated responses from participants, while producing additional information in greater detail and depth (Legard *et al.*, 2003). The interviews were audio recorded with the consent of the participants. Following the completion of each of the interviews the participants were thanked for their participation and the interviews sent to a qualified transcriber who transcribed each of them verbatim (Smith & Osborn, 2003). An independent clinical psychologist was also ready to debrief any of the participants in the event that this was required. However, none of the participants requested this service.

Data analysis

Interpretative phenomenological analysis (IPA) was used to analyse the data in the present study (Smith & Osborn, 2003; Biggerstaff & Thompson, 2008; Pringle *et al.*, 2011). This technique essentially entails a two-stage interpretation process that considers both the participant and the researcher: stage one of IPA provides a rich and thick description of participants' subjective realities as it is concerned with their experience, perception of the world and how they make meaning of their realities (Smith & Osborn, 2003; Biggerstaff & Thompson, 2008; Pringle *et al.*, 2011). Stage two entails that throughout the research process the researcher attempted to gain a full understanding of each participant's account and, simultaneously, critically question the purpose as well as the construction of reality from this person's understanding. The researcher opted for a flexible approach to data collection: the in-depth, unstructured interview provided the opportunity for this. Biggerstaff and Thompson (2008: 11) proposed a preliminary schedule for the IPA interpretive process: "(i) Looking at the data in the first place" – here the researcher makes initial notes and transforms them into themes as they emerge from an individual set of data. Next "(ii) preliminary themes are

identified" – here reading and re-reading of the material takes place and is important in an effort to ensure that no important themes are missed or overlooked. During the next step, "(iii) clustering the themes" – the researcher searches for connections between the themes and clusters them together based on similarities between the different data sets. Following this, "(iv) tabulating themes" – takes place; the clustered themes are ordered into a coherent table of themes that portrays the richest descriptions obtained from all the participants. Finally, "(v) writing up a report" – occurs where the end result is a document that was compiled which expansively reflects the participants' experiences. These exact steps were also followed during the present study.

Trustworthiness

The model developed by Lincoln and Guba was used to ensure trustworthiness of this study, a condition which focuses on four aspects: credibility, dependability, conformability and transferability (Krefting, 1991). Firstly, confidence in the certainty of the findings is based on the experience and perception of the participants, hence credibility (Krefting, 1991; Tracy, 2010). Secondly, dependability indicates the range of experiences and even includes the outlying experiences to describe the phenomenon under study (Krefting, 1991; Tracy, 2010). A co-coder, in this instance an intern clinical psychologist who had undergone ethics training, assured the dependability of the data by assisting with the data analysis for this study. Thirdly, conformability (Krefting, 1991) emphasised the issue of neutrality for this study. The study leader and an independent psychologist examined the analysis and interpretation of the data to support conformability. Lastly, a dense and thick description of the data collected from the participants will ensure transferability. The latter allows the collected data to be compared across different contexts (Krefting, 1991). Data saturation was reached after seven interviews were completed. As such it can be assumed that the findings are transferable to other amateur South African golfers based in the Gauteng and North-West Provinces. These findings may also be useful in undertaking similar research with other amateur South African golfers.

RESULTS AND DISCUSSION

The following section describes the themes that were identified from the data. Table 1 provides the biographical data of the participants.

Table 1: Participants' biographical data

Participant code	Age	Gender	Race
P1	30	Male	White
P2	21	Male	White
P3	19	Female	White
P4	22	Male	White
P5	28	Male	White
P6	28	Male	White
P7	25	Male	Coloured

The participants were selected from the North-West and Gauteng Provinces because the researcher lives in Gauteng Province and could obtain easier access to participants from these provinces than from other provinces. Also, 38% of the amateur South African golfing population were residing in the Gauteng Province at the time which allowed for a larger pool of potential participants (South African Golf Association, 2016). Each participant was allocated a number (P1-P7) to maintain confidentiality. Participant 1 was coded P1, participant 2 was P2 and so forth.

Table 2 records the themes identified from the data.

Table 2: Table of themes

THEME 1	**INSUFFICIENT RESOURCES**
Subtheme 1.1	Lack of financial resources
Subtheme 1.2	Lack of exposure to the competitive environment and a variety of golf courses
Subtheme 1.3	Lack of access to professional assistance and coaching
THEME 2	**INSUFFICIENT PRACTICE**
Subtheme 2.1	Poor quality of practice and preparation
Subtheme 2.2	An inability to effectively blend life and golf demands
THEME 3	**EXTERNAL PRESSURE**
Subtheme 3.1	Insufficient social support networks
Subtheme 3.2	Expectations of sponsors leading to performance anxiety
Theme 4	**INTERNAL PRESSURE**
Subtheme 4.1	Detrimental thought processes
Subtheme 4.2	Insufficient emotional regulation

INSUFFICIENT RESOURCES

From the information gathered from the participants it became apparent that insufficient resources have a profoundly detrimental impact on their performance prior to, and during a competitive round of golf. From their perspective, it seems that this barrier dominates and links up with numerous other barriers that are discussed as part of the other themes and sub-themes in this section.

Lack of financial resources

The participants in this study indicated that the lack of financial resources was one of the factors that inhibit their performance. Golf is an expensive sport to sustain, as became evident in the comments from the following five participants: *"... obviously the consistent challenges were definitely finances" (P5); "...where is the money going to come from?" (P2); "the biggest thing is a lot of people that don't make it is also about financial* [reasons]*" (P1)*; "*a lot of amateurs that do not get to play professional golf, I think personally that finances are a huge factor in this" (P1).* A common view among these participants was that financially related worries and stresses pose a constant barrier to them. For example, this would relate to them being forced to stay in cheaper accommodation and further away from golf courses in an effort to save money, which hampers their performance. In elaborating on this issue Participant 2 explained: *"They* [sponsors, administrators and other players] *don't see the guys that have to sleep in their cars, that can't afford hotels and can't afford food"* and as Participant 7 indicated, *"...accommodation was expensive around the golf course."* This adversely influences their preparation and practice time during tournaments; as Participant 6 mentioned, "*you don't have the money to play practice rounds"*.

The findings from numerous studies have indicated a lack of finances as a major contributing factor that impedes amateur golfers' performance (Gould *et. al.,* 1999; Woodman & Hardy, 2001; Hanton *et al.,* 2005). These studies found that the ability of amateur golfers to remain focused along with the life distractions such as financial difficulties would assist them to perform optimally (Jones *et al.,* 2002; Harmison, 2006; Pop-Jordanova & Demerdzieva, 2010). A study carried out by Sarkar and Fletcher (2014) emphasises the importance of athletes possessing an appropriate attentional focus and focussing on relevant task cues. Such a focus could assist the golfer to deal with the pressure and adversity that result from the competitive situation. The data obtained in the present study appears to support these previous findings that a lack of financial resources distracts the participants

from their goal of optimal performance. This in turn may significantly hinder a talented amateur South African golfer from becoming a professional golfer.

Lack of exposure to the competitive environment and a variety of golf courses

Other than financial resources, participants interviewed for the present study were of the view that a lack of exposure to competitive golf tournaments also notably prevented them from performing more optimally during important tournaments. This is about becoming accustomed to dealing with the competitive environment by participating in greater numbers of competitive tournaments which would improve their overall levels of performance. This theme emerged from the following comments by five of the participants:

> "*There weren't enough tournaments that I could play [*in*] ... [I] need to get used to that tournament vibe" (P4;)*
>
> *"There are some guys that play a tournament every week; they probably don't have that kind of stress [*of not playing in enough tournaments*]" (P2);*
>
> *"...the more competition* [you are exposed to*] makes you better, because you either step up or you get left behind" (P6);*
>
> . *"it* [not playing in enough competitive tournaments] *has put me back a bit in a way because to get better at the game you have to play a lot of tournaments to get that competitive edge (P7)"; "you always need more* [opportunities] *to play better and play more tournaments, because you must play as many as you can" (P5)*

In addition to not playing in a sufficient number of competitive tournaments, participants also expressed that not playing on a sufficient variety of golf courses also hampered their chances of performing optimally during important competitive tournaments. Participants shared the views that the lack of access to different types of golf courses, such as coastal and inland courses with different types of greens, fairways and weather conditions impeded their performance during such tournaments, especially those on courses with which they were unfamiliar. This is important because being obliged to play against the elements of nature such as rain and wind requires a particular ability and familiarity with these conditions during a tournament. The lack of exposure to a variety of golf courses therefore has a marked influence on players' efficiency as they cannot develop their skills and playing abilities on these diverse types of golf courses. This is, once more, often linked to a lack of financial resources to gain access to the said variety of courses. The aforementioned was expressed by two of the participants as they explained,

"...you've got a guy [opponent] *that's been able to practice all sorts of shots, all sorts of greens and distances. If you don't have that, how are you going to compete with that?" (P6)* and *"...*[if] *you practice regularly* [on various courses], *you will be able to adapt to those things* [conditions] *and to be able to hit different types of shots." (P1)*

Golf requires a variety of skills: for example, one shot needs may need to be a short 'fade' to the right whereas the next shot may demand a long drive to the fairway (Cotterill *et al.,* 2014). Playing on a variety of golf courses that demand a variety of skills provides the golfer with the opportunity to develop and exercise these different shots and skills. From the perspective of the participants, it seems that a lack of exposure to more frequent competitive tournaments as well as to a variety of courses hampers their development as players and may therefore pose a noteworthy challenge to achieving their goal of becoming professional players.

Lack of access to professional assistance and coaching

From the information reported by the participants, a view also surfaced that the lack of access to professional services and assistance from coaches, sport psychologists and other training aids posed another barrier to their performance. These concerns were expressed from comments by three of the participants, which included the following:

"If you didn't have the money you can't have a sports psychologist" (P6);

"If you have a good coach and a good psychologist and you have good support and the best clubs, then your chances are just better" (P5);

."..they [players who are able to afford professional services and assistance] *have better practicing facilities, they have better coaches "(P2)*

When one considers that golf involves a strong mental component (Clark *et al.*, 2005; Barnicle *et al.,* 2015) it becomes apparent that this also warrants consultation with and assistance from various professional sources to enhance this skill for amateur golfers. This is particularly essential since the individualistic nature of the sport requires players to regulate their thoughts and emotions effectively during a golf round in order to perform optimally. Each player is ultimately responsible for his or her final score at the end of the round. As a result, assistance from coaches and sport psychologists could foster and develop the necessary skills that could propel them into a new level of performance. It therefore seems that players with access to such services could have a better chance at achieving success in

important tournaments compared to those who cannot afford these services. This again underscores why lack of access to financial resources constitutes an important reason for why numerous South African amateur golfers struggle to become professionals: the best coaching and other professional services come at a cost beyond their means.

INSUFFICIENT PRACTICE

The next prominent theme that arose from the present data was that of insufficient practice. Six of the participants agreed that if they do not practice frequently and consistently this leads to a lack of trust and confidence in their own golfing skills. Confidence is a function of memory (Hebscher & Gilboa, 2016) which can be developed through frequent practice, during which the golfers play various shots repeatedly with successful execution. Golf therefore requires frequent, consistent and efficient practice to hone a player's skills and abilities. A perspective was expressed by four of the participants that they struggled to manage the demands of their lives outside of golf because of the demands that this sport placed on them. This in turn hampered their practise and preparation time. The sub-themes which are discussed next relate, firstly, to poor quality of practice and preparation and, secondly, to an inability to effectively blend life and golf demands.

Poor quality of practice and preparation

Another barrier that also emerged from the data concerned the poor quality of practice and preparation prior to and/ or during a competitive event. From the perspective of five participants, it is vital for a golfer to practise frequently and consistently: participant 2 stated:

> "*the last year or two it was difficult, I was not on that level because I didn't really practice, don't put in the time to practice" (P2);* another participant remarked' *"...you can practice to improve. I could have done much better with golf if I could have given all my attention to it (P3)* and added, *"…if they* [players] *didn't prepare well, then they aren't going to play well that day" (P3).*

When describing the amount of practice required, Participant 4 added [that] *"you need to be on the driving range for 8 hours a day, it's your job" (P4).* When explaining why certain amateur South African golfers do not train sufficiently, yet again the issue of the lack of finances lead to insufficient practice and preparation for tournaments was raised, as explained by the following statements by two participants: *"...the preparation that goes into it* [a tournament]*, you have to have the finances." (P7)* Participant 6 also explained that one

cannot practice and prepare sufficiently for important tournaments if *"you don't have the money to play practice rounds" (P6).* A lack of practice rounds was described as a barrier contributing towards hampering the performance of the participating amateur golfers in major tournaments. This is because three of the participants in this study indicated that playing a tournament on a golf course without prior preparation such as a practice round on the same course caused considerable stress to these players:

> *"...courses that I have arrived totally blind to. I didn't have a practice round (P7);*
> *"...make sure you play a practice round on the course" (P5)* as *..."it's difficult when you play a course blind, because you can't plan your way around" (P6).*

Amateur South African golfers do not engage in the sport on a full-time basis and do not receive financial gain from competitive events (Carroll, 2009; Stambulova *et al.*, 2009; Santos, 2013; R&A, 2016). As indicated, amateur South African golfers therefore frequently have to maintain a full-time job and other activities to supplement their income to pay for golfing. It is these other demands that often interfere with sufficient time for them to practice and gain confidence in their abilities (Harmison, 2006; Carroll, 2009; Santos, 2013). This was also indicated by the participants in this study. This emerged as an interesting finding when considering that studies have found that practice and preparation effectively prepare a golfer for optimal performance (Cotterill *et al.*, 2014), mostly because these aspects provide an opportunity to develop their skills, a variety of shots and an opportunity to build the psychological skills of the game (Cotterill *et al.*, 2014). The participants from the present study shared the aforementioned perspectives and confirmed that a lack of sufficient practice and preparation impedes their performances and hampers their chances of becoming professional players.

An inability to effectively blend life and golf demands

Four of the participants pointed out that a great deal of time should be allocated to practising as indicated in the previous sub-theme. However, to effectively combine life demands outside of golf with those of golf were revealed as a challenge and a contributing factor to hampering their performances. The participants indicated that life demands, such as family time and other leisure activities, are often neglected in an effort to meet the requirements of becoming a professional golfer:

"It is difficult to balance everything, to be able to get to everything" (P2) and

"... it [balancing golf and life demands] *is difficult, sometimes either your golf gets neglected, or your school work gets neglected, or your family get neglected, depending on what you're doing at any given time, but it's difficult to balance it" (P3*)

The sacrifices made to practice as much as possible have consequences for the participants that may further impair their performances; as Participant 1 explained: *"I also missed out on a lot of things too. You have to play golf and then there is a friends' birthday, and things like that." (P1)* and Participant 6 also remarked on the risk that such sacrifices entail, stating *"you put in all this time and then there's the possibility of it not working out" (P6).* Sometimes the practice time is compromised in order to manage and balance other life commitments against golf commitments, thereby influencing their performance(s).

Jones *et al.* (2002) found that all athletes find the demands of balancing life and golf to be a challenge to manage. The degree of success in dealing with these demands and managing their lifestyles accordingly may either promote or inhibit their chances of performing optimally (Jones *et al.,* 2002; Gucciardi *et al.,* 2012).

EXTERNAL PRESSURE

In addition to the aforementioned themes, another prominent theme that arose from the data of the current study was that of the impact of external pressure. Participants perceived that they experienced pressure from certain external sources, which also hinders their performance prior to and/ or during a competitive golf round. These were clustered into the sub-themes of an insufficient social support network and expectations of sponsors leading to pressure to perform.

Insufficient social support networks

Having a social network that provides support to an amateur golfer was highlighted by four of the participants as serving as an incentive to perform better. However, if a social network was unsupportive and inadequate, this is a stress factor for a player: "*I will stop playing golf for the family, I will, if it gets to the point where they're saying I'm not spending* [sufficient] *time with them" (P4). "...say my partner and them were not supportive of the golf I would have wondered if I shouldn't stay at home or something like that" (P1).* From these comments it seems that concerns or difficulties with significant others in the participating golfer's life also impact on their functioning during a competitive event. This was further

highlighted by Participant 5 who explained [that] "*…if you're going to be thinking about it* [significant other] *all the time, for example if someone is critically ill or something like that" (P5),* this could lead to a distraction that may impair performance. These concerns are difficult to manage particularly while on tour and could cause the participant to become unfocussed and distracted. Furthermore, pursuing goals related to certain life stages such as starting a family, being a provider for a family and simultaneously pursuing a career as an amateur South African golfer who is trying to become professional tends to cause stress and impact performance. This was clearly expressed by Participant 6, *"if I don't perform* [during a competition]*, I'm not going to have a job" (P6).*

The perceived support an athlete (in this case, a golfer) receives from their significant others as well as being in a supportive environment nurtures their ability to deal with challenging situations (Rees *et al.*, 2007; Crust & Clough, 2011; Nel, 2014). As suggested from the responses of the participants in the present study, the lack of a sufficient social support network and challenges concerning significant others in their lives outside of golf, can impact on the performances of amateur South African golfers.

Expectations from sponsors leading to performance anxiety

As much as the lack of finances is a barrier, two of participants shared that sponsors and the financial assistance which they provide offer welcome relief to amateur South African golfers; Participant 5 said, "*I had a big sponsor at that stage, so I had my clubs fitted and got reasonably good things* [clothing and other golfing equipment]*" (P5).* Despite this relief, participants also articulated that sponsors have high levels of expectation regarding performance and results from the amateurs whom they sponsor. This can often lead to performance anxiety among these sponsored amateurs as they fear the loss of sponsorship. This may place undue pressure on these players despite receiving financial assistance. As Participant 2 explained: *"Worry about money … I don't want to think I am wasting other people's money or something like that" (P2),* while Participant 5 responded, *"if I don't deliver the results, they won't sponsor me again, they will stop sponsoring me" (P5).*

Focus and concentration form part of an array of the cognitive abilities required for optimal performance (Harmison, 2006; Pop-Jordanova & Demerdzieva, 2010). These preceding cognitive abilities seem to be influenced by the perceived consequence of failure,

thus markedly affecting their optimal performance (Harmison, 2006; Pop-Jordanova & Demerdzieva, 2010, Sarkar & Fletcher, 2014).

INTERNAL PRESSURE

In addition to the external pressures articulated above, internal pressures that hamper the performances of amateur South African golfers were also shared by the participants. They explained that such golfers are prone to experiencing internal pressures that are related to detrimental thought processes and insufficient emotional regulation during a golf round. Each of these is discussed as a sub-theme in the following sections.

Detrimental thought processes

The experience of detrimental thought processes was highlighted by participants as a factor that might also considerably impair the performances of amateur South African golfers when these thoughts occur. Participants 6 and 7, for example, reported that the impact of a bad shot coupled with a negative thought may prevent the affected player from focusing effectively on the next shot: "*…if you're focussing on what mustn't happen* [negative thought]*, your focus is in the wrong place" (P6)* and following a negative thought after a poor shot, Participant 7 stated: *"Now your mind-set is so confused. You must just forget that hole, and that is very difficult" (P7).* The participants voiced they frequently tend to experience detrimental thoughts following mistakes or a poor shot, which frequently leads to self-doubt and negativity. Three examples that highlighted this issue were provided by Participant 2 who indicated that following a poor stroke:*"I think a few harsh words with myself while I am walking to the ball" (P2)*; Participant 6, who reported that *"golfers say things to themselves they wouldn't dare say to another player if they hit a bad shot" (P6)* and participant 1 stated: *"talk to myself in my head... what did you do now?" and "what a stupid mistake it was" (P1).* The participants furthermore conveyed that once these thoughts start to occur they often struggle to stop them and would tend to consistently worry about a poor score. This impairs their performance for the rest of the round, as may be understood from the comments of the following four participants:

"*That is the difficult part of golf, after a bad hole, to be able to forget about it and to continue to play" (P2);*

"...worry about the previous score on the previous half" (P4);

"your putting was bad on that day, then you think, will my putting ever improve, things like that, or will my bunker shots improve or will it get worse?" (P3);
"Amateur golfers go on thinking for three, four holes after that [a bad hole]*, thinking about what he did there" (P1).*

There were some suggestions from three of the participants that their detrimental thoughts frequently revolved around challenges that were not within their immediate control or sphere of influence:

"*You think about so many things but you don't really focus on one thing. It is just thoughts running through your head" (P2)* and
"*... three or four bad shots in a row then I start to worry about how I'm going to get through the day (P5); "you're trying to focus on this shot that you need to hit, and you're thinking about another shot on that side or on the green, it's not going to… you're not going to get in" (P4); You are actually thinking about those holes the night before, you are thinking what am I going to do at that hole…?." (P2)*

From these statements it appeared that the fear of failure might almost paralyse a player which may be a barrier throughout a competition.

Clark *et al.* (2005) indicated that golfers are vulnerable to pressures and distractions during a competition because of the interrupted pace of play, the duration of time they spent on a golf course and the delay between playing holes. This down-time within a golf competition can often become a breeding ground for detrimental thoughts (Clark *et al.*, 2005). The participants in the present study reported detrimental thought processes which seem to be consistent with the findings from Clark *et al*. (2005). During times of increased pressure in a competition, golfers can easily experience and struggle with negative thoughts. It is usually these detrimental cognitions that are associated with poor and limited performance in sports (Clark *et al.*, 2005; Harmison, 2006; Smith *et al.*, 2008).

Insufficient emotional regulation

In addition to experiencing detrimental thought processes, the participants of the present study also expressed that insufficient emotional regulation may also occur among amateur South African golfers. Emotional regulation refers to how the amateur player experiences emotions and how their emotional experiences impact others (Tamminen & Crocker, 2013). Four of the participants shared that insufficient emotional regulation during a tournament

impairs performance as it leads to hasty decisions, including not thinking about the choices they make and fast/ rushed swings:

"…when you play golf with emotions on your sleeve, you tend to make rash decisions sometimes" (P6) and

"I've often made the mistake of playing fast after that" (P5) as well as

…"there are days when you are a little angry for a few holes and those are the days when you will play badly" (P2). Furthermore,

"if you are all over the show with your emotions, it's got nothing positive, you know, it just ends up causing more damage than what it does good (P6) and

"You can keep being angry about what happened. So you have to find a way to switch off" (P1).

A view amongst the four interviewees was that golfer' perceptions of their performance – where their focus is at a particular moment and attempting to do their best – all have a marked impact on their performance. If they have sufficient emotional regulation and perceive their performance as optimal, they frequently experience positive emotions during competitions (Gardner & Moore, 2004; Dewar & Kavussanu, 2011). However, the opposite also appears to be true; when they experience insufficient emotional regulation they may more frequently encounter detrimental negative emotions such as anger, frustration and dejection. These emotions are dependent on the golfers' perception of their performance (Thomas & Fogarty, 1997; Dewar & Kavussanu, 2011). Thus, insufficient emotional regulation and control adversely affect the participant's score and overall performance.

Discussion

By engaging with a sample of amateur golfers from the Gauteng and North-West provinces, certain barriers have been highlighted which may hinder performance among amateur South African golfers prior to and/or during a competitive game. The findings of the present study suggest that insufficient resources and insufficient practice affect the performance of such golfers. These findings further suggest that external and internal pressures hamper these players' performance.

Insufficient resources encompass the following aspects: lack of financial resources; lack of access to a competitive environment and a variety of golf courses as well as a lack of access to professional assistance and coaching, which was identified to be a barrier that may

hinder performance among amateur South African golfers prior to and/or during a competitive game. These resources are complex and interrelated with each other. A lack of finances has been indicated in numerous studies as a major contributing factor that impedes amateur golfers' performance (Gould *et al*., 1999; Woodman & Hardy, 2001; Hanton *et al*., 2005). The constant worry and concern about finances distracts the amateur from performing optimally during a round of golf. Literature indicates that the ability to selectively direct one's attention to a specific stimulus, and to maintain and shift that focus to accommodate the challenges in the environment (Pop-Jordanova & Demerdvieza, 2010), optimises performances. If amateur golfers could sharpen their attentional focus and focus on relevant task cues in the present moment instead of being distracted by pressure and adversity (e.g., financial worries) they could optimise their performance during a competitive round of golf (Jones *et al.*, 2002; Harmison, 2006; Pop-Jordanova & Demerdzieva, 2010; Sarkar & Fletcher, 2014). If they can accomplish this, they would, at the same time, be developing aspects of mental toughness (Jones *et al.*, 2002).

A lack of exposure to more frequent competitive tournaments was also identified as a barrier to optimal performance in the present study. Competition stress forms part of the life of an athlete and exposure to competitive sport environments fosters opportunities for the athlete to deal with the type of competitive stressors (Hanton *et al.*, 2005; Mellalieu *et al.*, 2009). Hence, a lack of exposure to competition may lead to poorer performance when South African amateur golfers play tournaments. Cotterill *et al.* (2014) mirror the participants' perspective that golf requires a variety of skills and abilities. The participants in this study reported that a lack of exposure to a variety of golf courses and insufficient practice to develop specific shots on these golf courses (Hayman, 2012; Sherwin & Kenny, 2017) poses a barrier to their performance.

Participants further revealed that a lack of access to professional assistance and coaching affects their performance. Golf involves a major mental component (Clark *et al.*, 2005; Barnicle *et al.*, 2014); as a result, the application of psychological aspects and skills could enhance this aspect of amateur golf players. Coaches provide essential technical support and assist with interventions that develop amateur golfers (Finn, 2009). Assistance from coaches and sport psychologists may foster and develop the necessary skills that could propel the latter to a new level of performance. However, accessing professional assistance and coaching requires financial resources. As the participants from the present study expressed, their lack of the latter impacts their access to professional assistance and coaching.

Consequently, these aspects form another barrier to these amateur golfers' optimal performance.

Poor quality preparation and a lack of practice are also barriers that were highlighted in the present study to be hindering the optimal performance of amateur South African golfers. These findings were consistent with those of Sherwin and Kenny (2017) who stated that it is important to practice since adequate practice provides opportunities for the amateur golfer to address specific technical weaknesses. Furthermore, deliberate practice plays a role in continued performance improvement; while the researched material in the literature review pointed out that practice supports the transition from amateur to professional ranks in golf (Hayman, 2012; Sherwin & Kenny, 2017). When amateur golfers practice deliberately (e.g., employing high levels of mental and physical effort) with specific shots on the golf course, this could be beneficial for golf performance during a competitive event (Hayman, 2012). Findings from Cotterill *et al.*, (2014) asserted that sufficient practice provides an opportunity for athletes to develop their golfing skills and abilities. These authors further argue that playing on a variety of golf courses that require a diversity of skills provides the golfer with the opportunity to develop and exercise these different shots and skills.

The mere fact that amateur golfers engage in this career on a part time basis (Harmison, 2006; Carroll, 2009; Santos, 2013) necessarily interferes with the time they allocate to practice and preparation. The poor quality of practice and preparation hinders the development of confidence in their golfing skills and abilities. Confidence, as a function of memory, can be obtained from frequent practice (Hayman, 2012; Cotterill *et al.*, 2014; Hebscher & Gilboa, 2016). Jones *et al.* (2002) also found that athletes struggle to address and balance sport-related demands, such as practice, with their general lifestyle and social and personal demands. This aspect was also raised to be challenging to participants of the present study as it hinders them from having sufficient and deliberate practise and preparation. As mentioned earlier, being able to prioritise and accommodate the various demands of golf practice, family and work life without being too distracted or overwhelmed by these challenges, has also been found to be associated with mental toughness (Jones *et al.*, 2002; Gucciardi *et al.*, 2012). The finding of the impact of poor practice and preparation on performance improvement for amateur South African golfers has already been articulated.

The identification of external and internal pressures endured by amateur golfers is essential in the understanding of how these factors influence their performance. External

pressures, such as a lack of social support and expectations from sponsors regarding performance, further increase the pressure the golfer may experience. The value of sufficient social support from various sources, including parents, significant others and extended family members, has in the literature been identified as a critical factor impacting the performance of an athlete (Rees *et al.*, 2007; Crust & Clough, 2011; Nel, 2014). Rees *et al*. (2007) in their study highlighted the impact that a support social network has on the athlete's performance by explaining that when it is strong and supportive it can promote their performance(s), but when it is insufficient and/or unsupportive, it may impair their performance(s). These findings resonate with the responses from the participants in the present study: a strong social support network and involvement from significant others outside of the golf fraternity encourage optimal performance, whereas a lack of social support interferes with and therefore presents a barrier to optimal performance.

Sponsorship provides an alternative and welcome revenue source for amateur golfers. Some of the participants in this study expressed the view that the sponsors have expectations regarding results. These expectations create performance anxiety that may well have a negative effect on the amateur golfers. The perceived consequence of failure resulting from performance anxiety and the anticipation of an adverse outcome (losing financial support from sponsors) affects their performance (Sagar *et al.*, 2007). This seems to affect their focus and concentration, which is a crucial mental component that harnesses optimal performance (Harmison, 2006; Pop-Jordanova & Demerdzieva, 2010). The inability to maintain deliberate focus and attention on what is important at that specific moment (Sarkar & Fletcher, 2014) during a competitive round of golf could possibly explain why their efficiency and proficiency are hampered during major tournaments.

The other key finding concerned internal pressures and emphasised the influence of detrimental thought processes and insufficient emotional regulation that further inhibit the performance of amateur South African golfers. Negative thoughts and emotions such as anger, fear and worry are prone to occur during a golf tournament (Clark *et al.*, 2005). The nature of this sporting event, such as the interrupted pace of play, the duration of time such golfers spent on a golf course and the delay between playing holes, allow time for experiencing these negative cognitions and emotions. Literature states that during times of increased pressure such as a competitive event, the athlete may experience difficulty to stop or control these negative cognitions (Clark *et. al,*, 2005). It further states that these thoughts could influence the performance of the athlete (Clark *et. al,*, 2005; Cotterill *et al.*, 2014*)*. The

detrimental thought processes for the participants of this study entail the following: (i) the effect of a bad shot coupled with a negative thought could prevent the affected player from focusing effectively on the next shot. (ii) Most of the participants agreed they frequently tend to experience negative thoughts following mistakes or poor shots, which often lead to self-doubt and negativism. Furthermore, once these thoughts start to occur, they often struggle to stop these thoughts and would tend to consistently worry about a poor score. (iii) Some of the participants agreed that their negative cognitions frequently revolved around aspects that are not within their immediate control or sphere of influence. The results from the present study seems to be consistent with other research which found that negative cognitive processes have an influence on an athletes' performance (Clark *et. al,,* 2005; Cotterill *et al.*, 2014; Chang *et. al.,* 2017).

Arousal levels of emotions are also heightened during high pressure moments such as a competitive event (Clark *et. al.,* 2005). In the process control over emotions may become impaired and emotional regulation may become insufficient (Thomas & Fogarty, 1997; Jackson *et al*., 2001; Harmison, 2006). If amateur golfers therefore do not possess sufficient ability to emotionally regulate, they may more frequently experience detrimental negative emotions such as anger, frustration and dejection (Gardner & Moore, 2004; Dewar & Kavussanu, 2011). They may as a result also perceive their performance as limited or poor (Thomas & Fogarty, 1997; Dewar & Kavussanu, 2011). Instead of attempting to control, eliminate or suppress these internal pressures (Gardner & Moore, 2004), the amateur golfer could further develop the ability to apply mindfulness. This refers to the present-centred, non-judgemental awareness of the experience as it unfolds (Kabat-Zinn, 2003; Sappington & Longshore, 2015) and might effectively enhance the performance of the player (Gardner & Moore, 2004; Kee & Wang, 2008; Moen *et al.*, 2015). According to Gardner and Moore (2004), mindfulness for the amateur golfer may lead to a non-discriminatory awareness of the present moment, being attuned and paying attention to their internal experience and external environment while employing effective emotional regulation.

Numerous amateur golfers seek to improve their performance, lower their golf scores, and transition to professional status in the sport. The mental toughness theory posits that mentally tough athletes are highly competitive, self-motivated and committed individuals who are able to cope efficiently and maintain focus and concentration under stressed or high pressure circumstances (Crust & Clough, 2011; Gucciardi *et al.*, 2012; Mahone *et al.*, 2014). By gaining an increased awareness of the barriers that might hinder their optimal

performance and harnessing their mental toughness could pave the way for amateur South African golfers towards becoming professional players.

Practical application

It is envisioned that the results of the present study may be practically utilised by the following role players in an attempt to eradicate or at least mitigate the barriers that were found in the present study to be hampering the optimal performance of amateur South African golfers:

Administrators: The debilitating effect of insufficient resources could motivate administrators to actively seek out and allocate more financial assistance for the amateur golfers. Possible avenues to consider in this regard could be to lobby for more financial aid from government and private sponsorships, to provide golfing scholarships through already existing golfing academies and tertiary institutions.

Significant others: Encouraging clear and optimal communication with significant others and social support networks could serve as incentives to enhance performance of amateur golfers.

Coaches and sport psychologists: Coaches could provide specific technical support and facilitate discussion with possible sponsors. Psychologists could also potentially facilitate psychological interventions in the form of mental skills training, assisting the amateur to focus on the moment instead of the outcome and fostering emotional regulation prior to and during a competitive event that would elevate the golfer to a new level of performance. Furthermore, coaches and sport psychologists could educate and assist amateur golfers in the process of setting goals that could optimise their performance.

Amateur South African golfers: An awareness of how insufficient resources impact performance should motivate amateur golfers to actively search for assistance from role players such as GolfRSA and the South African Golf Development Board and sponsors. Amateur golfers could also be encouraged to recognise the value of deliberate and sufficient practice while employing high levels of mental and physical efforts to assist their performances. Also, being aware of the pressures that the amateur golfers experience could serve as incentive to seek professional assistance from a sport psychologist when indicated.

CONCLUSION

Currently, it appears that literature concerning performance of South African amateur golfers is limited. Previous research studies mostly concentrated on the effect of stressors on the performance of professional golf players from the international arena. The present study was conducted with a relatively small sample size of amateur golfers from Gauteng and North West provinces. While the findings of the study are considered transferable, it is recommended that the results of the study should be verified with players from other provinces as well. An interesting finding from this study is the increased awareness of how external and internal pressures pose a barrier to optimal performance of amateur South African golfers. These pressures are complex and entwined with each other. Future research could also focus on enabling the amateur golfers to be better mentally equipped in dealing with these pressures, thereby enhancing their performance.

REFERENCES

ALDERSLADE, V.; CROUS, L.C. & LOUW, Q.A. (2015). Correlation between passive and dynamic range of rotation in lead and trail hips during a golf swing. *South African Journal for Research in Sport, Physical Education and Recreation*, 37(3): 15-28.

ALFRED DUNHILL CHAMPIONSHIP. (2016). The tournament. Hyperlink: [http://www.alfreddunhillchampionship.com/pro_am.php]. Retrieved on 22 April 2016.

BARNICLE, S., BARNES, J. & LEE, A. (2014). A good walk made great: The psychology of business golf. *International Journal of Golf Science*, 3(1): 90-100.

BEHM, D.G.; LEONARD, A.M.; YOUNG, W.B.; BONSEY, W.A.C. & MACKINNON S.N. (2005). Trunk muscle electromyographic activity with unstable and unilateral exercises. *The Journal of Strength & Conditioning Research*, 19(1): 193-201.

BERNIER, M.; THIENOT, E.; CODRON, R. & FOURNIER, J. F. (2009). Mindfulness and acceptance approaches in sport performance. *Journal of Clinical Sport Psychology*, 3(4): 320-333.

BIGGERSTAFF, D. & THOMPSON, A.R. (2008). Interpretative phenomenological analysis (IPA): A qualitative methodology of choice in healthcare research. *Qualitative Research in Psychology*, 5(3): 214-224.

CARROLL, B. (2009). Semi-pro or pro? *Coffin Corner*, 31(6): 16-18.

CHANG, K.H.; LU, F.J.; CHYI, T.; HSU, Y.W.; CHAN, S.W. & WANG, E.T. (2017). Examining the stress-burnout relationship: the mediating role of negative thoughts. *PeerJ*, *5*: e4181.

CLARK, T. P.; TOFLER, I. R. & LARDON, M. T. (2005). The sport psychiatrist and golf. *Clinics in Sports Medicine*, 24(4): 959-971.

COTTERILL, S.T.; COLLINS, D. & SANDERS, R. (2014). Developing effective pre-performance routines for golf performance: Implications for the coach. *Athletic Insight*, 6(1): 53-64.

CRESWELL, J. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). California: SAGE Publications.

CRUST, L. & CLOUGH, P. J. (2011). Developing mental toughness: From research to practice. *Journal of Sport Psychology in Action*, 2(1): 21-32.

CSIKSZENTMIHALYI, M., & LEFEVRE, J. (1989). Optimal experience in work and leisure. *Journal of Personality and Social Psychology*, 56(5): 815-822.

CSIKSZENTMIHALYI, M. (1999). If we are so rich, why aren't we happy? *America Psychologist*, 54(10): 821-827.

DEWAR, A. J. & KAVUSSANU, M. (2011). Achievement goals and emotions in golf: The mediating and moderating role of perceived performance. *Psychology of Sport and Exercise*, 12(5): 525-532.

ELLARD-GRAY, A.; JEFFREY, N. K.; CHOUBAK, M., & CRANN, S. E. (2015). Finding the hidden participant: Solutions for recruiting hidden, hard-to-reach, and vulnerable populations. *International Journal of Qualitative Methods*, 14(5): 1-10.

FINN, J. (2009). Using mental skills to improve golfing performance: A theory-based case study for golf coaches. I*nternational Journal of Sports Science & Coaching*, 4(1): 223-245.

FLETCHER, I. M., & HARTWELL, M. (2004). Effect of an 8-week combined weights and plyometrics training program on golf drive performance. *The Journal of Strength & Conditioning Research*, 18(1): 59-62.

FOUCHÉ, C. B., & SCHURINK, W. (2011). Qualitative research designs. In A. S. De Vos; C. B. Fouché & C. S. Delport, *Research at grass roots: For the social sciences and human service profession*s (4th ed.)(pp.312-317). Pretoria: Van Schaik Publishers.

GARDNER, F. L., & MOORE, Z. E. (2004). A mindfulness-acceptance-commitment-based approach to athletic performance enhancement: Theoretical considerations. *Behavior Therapy*, 35(4): 707-723.

GHASEMZADEH, H.; LOSEU, V.; GUENTERBERG, E. & JAFARI, R. (2009). Sport training using body sensor networks: A statistical approach to measure wrist rotation for golf swing. (p. 2). In Proceedings of the "Fourth International Conference on Body Area Networks", 1-3 April 2009. Los angeles, USA: Institute

for Computer Sciences, Social-Informatics and Telecommunications Engineering (ICST)..

GIACOBBI, P.; FOORE, B. & WEINBERG, R.S. (2004). Broken clubs and expletives: The sources of stress and coping responses of skilled and moderately skilled golfers. *Journal of Applied Sport Psychology*, 16(2): 166-182.

GOLDMAN, J. S. & PFLUGE K. F. (2010). Playing golf is elementary. *Strategies*, 23(6): 24-27.

GOLFRSA. (2018). "About us". Hyperlink: [https://www.golfrsa.com]. Retrieved on 20 March 2018.

GOULD, D.; GUINAN, D.; GREENLEAF, C.; MEDBERY, R. & PETERSON, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *The Sport Psychologist*, 13(4): 371-394.

GUCCIARDI, D.F.; HANTON, S. & MALLETT, C.J. (2012). Progressing measurement in mental toughness: A case example of the Mental Toughness Questionnare 48. *Sport, Exercise, and Performance Psychology*, 1(3): 194-124.

HANTON, S.; FLETCHER, D. & COUGHLAN, G. (2005). Stress in elite sport performers: A comparative study of competitive and organizational stressors. *Journal of Sports Sciences*, 23(10): 1129-1141.

HARMISON, R. J. (2006). Peak performance in sport: Identifying ideal performance states and developing athletes' psychological skills. *Professional Psychology: Research and Practice*, 37(3): 233-243.

HAYMAN, R. (2012). The role of deliberate practice in developing adolescent golfing excellence. Unpublished doctoral dissertation. Lancashire: University of Central Lancashire.

HEBSCHER, M. & GILBOA, A. (2016). A boost of confidence: The role of the ventromedial prefrontal cortex in memory, decision-making, and schemas. *Neuropsychologia*, 90: 46-58.

HUDSON, S. (2009). *Golf tourism*. Hyperlink: [http://www.goodfellowpublishers.com]. Retrieved on 26 May 2017.

JACKSON, S. A.; THOMAS, P. R.; MARSH, H. W. & SMETHURST, C. J. (2001). Relationships between flow, self-concept, psychological skills, and performance. *Journal of Applied Sport Psychology*, 13(2): 129-153.

JONES, G.; HANTON, S. & CONNAUGHTON, D. (2002). What is this thing called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology*, 14(3): 205-218.

KABAT-ZINN, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2): 144-156.

KEE, Y. H., & WANG, C. J. (2008). Relationships between mindfulness, flow dispositions and mental skills adoption: A cluster analytic approach. *Psychology of Sport and Exercise*, 9(4): 393-411.

KREFTING, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American Journal of Occupational Therapy*, 45(3): 214-222.

LEGARD, R.; KEEGAN, J. & WARD, K. (2003). In-depth interviews. In J. Lewis, & J. Ritchie (Eds.), *Qualitative research practice. A guide for social science students and researchers* (pp. 139-165). London: SAGE Publications.

LIEMOHN, W. P.; BAUMGARTNER, T. A. & GAGNON, L. H. (2005). Measuring core stability. *The Journal of Strength & Conditioning Research*, 19(3): 583-586.

MAHONEY, J. W.; GUCCIARDI, D. F.; NTOUMANIS, N. & MALLET, C. J. (2014). Mental toughness in sport: Motivational antecedents and associations with performance and psychological health. *Journal of Sport and Exercise Psychology*, 36(3): 281-292.

MAREE, K. & PETERSEN, J. (2007). Sampling. In K. Maree. *First steps in research* (3rd ed.)(pp. 172-180). Pretoria: Van Schaik Publishers.

MASON, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Forum qualitative Sozialforschung/Forum: qualitative social research*, 11(3).

McKAY, J.; NIVEN, A. G.; LAVALLEE, D. & WHITE, A. (2008). Sources of strain among elite UK track athletes. *The Sport Psychologist*, 22(2):143-163.

MELLALIEU, S. D.; NEIL, R.; HANTON, S. & FLETCHER, D. (2009). Competition stress in sport performers: Stressors experienced in the competition environment. *Journal of Sports Sciences*, 27(7): 729-744.

MILLS, J. D.; TAUNTON, J. E. & MILLS, W. A. (2005). The effect of a 10-week training regimen on lumbo-pelvic stability and athletic performance in female athletes: a randomized-controlled trial. *Physical Therapy in Sport*, 6(2): 60-66.

MOEN, F.; FEDERICI, R. A. & ABRAHAMSEN, F. (2015). Examining possible relationships between mindfulness, stress, school-and sport performances and athlete burnout. *International Journal of Coaching Science*, 9(1): 3-19.

NEDBANK GOLF CHALLENGE. (2016). The tournament. Hyperlink: [http://www.nedbankgolfchallenge.com/faninfo.aspx]. Retrieved on 22 April 2016.

NEIL, R.; HANTON, S.; MELLALIEU, S. D. & FLETCHER, D. (2011). Competition stress and emotions in sport performers: The role of further appraisals. *Psychology of Sport and Exercise*, 12(4): 460-470.

NEL, L. (2014). Theories on character strengths, resilience, hope and self-determination. In M. P. Wissing; J. C. Potgieter; T. Guse; I. P. Khumalo & L. Nel (Eds.), *Towards flourishing: Contextualising positive psychology* (pp. 116-131). Pretoria: Van Schaik Publishers.

OKADA, T.; HUXEL, K. C. & NESSER, T. W. (2011). Relationship between core stability, functional movement, and performance. *The Journal of Strength & Conditioning Research*, 25(1): 252-261.

PIETKIEWICZ, I. & SMITH, J. A. (2014). A practical guide to using interpretative phenomenological analysis in qualitative research psychology. *Psychological Journal*, 20(1): 7-14.

POP-JORDANOVA, N. & DEMERDZIEVA, A. (2010). Biofeedback training for peak performance in sport-case study. *Macedonian Journal of Medical Sciences*, 3(2): 113-118.

POTGIETER, J. C., & BOTHA, K. F. (2014). Functioning well. In M. P. Wissing; J. C. Potgieter; T. Guse; I. P. Khumalo & L. Nel. (Eds.), *Towards flourishing: Contextualising positive psychology* (pp. 39-71). Pretoria: Van Schaik Publishers.

PRINGLE, J.; DRUMMOND, J.; MCLAFFERTY, E. & HENDRY, C. (2011). Interpretative phenomenological analysis: A discussion and critique. *Nurse Researcher*, 18(3): 20-24.

REES, T.; HARDY, L. & FREEMAN, P. (2007). Stressors, social support, and effects upon performance in golf. *Journal of Sports Sciences*, 25(1): 33-42.

SAGAR, S.S.; LAVALLEE, D. & SPRAY, C.M. (2007). Why young elite athletes fear failure: Consequences of failure. *Journal of Sports Sciences*, 25(11): 1171-1184.

SANTOS, A. L. P. D. (2013). Quality of life in professional, semiprofessional, and amateur athletes: An exploratory analysis in Brazil. *SAGE Open*, 3(3): 1-8.

SAPPINGTON, R. & LONGSHORE, K. (2015). Systematically reviewing the efficacy of mindfulness-based interventions for enhanced athletic performance. *Journal of Clinical Sport Psychology*, 9(3): 232-262.

SARKAR, M. & FLETCHER, D. (2014). Psychological resilience in sport performers: A review of stressors and protective factors. *Journal of Sports Science*, 32(15): 1419-1434.

SHERWIN, I. A. & KENNY, I. C. (2017). Putting movement and performance outcome using standard, belly and long putters. *International Journal of Sports Science & Coaching*, 12(4): 532-539.

SMITH, A.; ROBERTS, J.; WALLACE, E.; KONG, P. W. & FORRESTER, S. (2015). Golf coaches' perceptions of key technical swing parameters compared to biomechanical literature. *International Journal of Sports Science & Coaching*, 10(4): 739-755.

SMITH, D.; WRIGHT, C. J. & CANTWELL, C. (2008). Beating the bunker: The effect of PETTLEP imagery on golf bunker shot performance. *Research Quarterly for Exercise and Sport*, 79(3): 385-391.

SMITH, J.A. & OSBORN, M. (2003). Interpretative phenomenological analysis. In J.A. Smith (Ed), *Qualitative psychology: A practical guide to research methods* (pp. 53-80). London: Sage.

SOUTH AFRICAN GOLF ASSOCIATION. (2016). "Affiliated members". *Handicaps.* Hyperlink: [http://www.saga.co.za/]. Retrieved on 22 April 2016.

SOUTH AFRICAN GOLF DEVELOPMENT BOARD. (2018). About us. Hyperlink: [https://www.sagolfboard.org/]. Retrieved on 20 March 2018.

SOUTH AFRICAN JOURNAL FOR RESEARCH IN SPORT, PHYSICAL EDUCATION AND RECREATION. (2017). Home. Hyperlink: [https://www.sajrsper.com/]. Retrieved on 03 September 2017.

SPITTLE, M. & DILLON, R. (2014). Mystical experience to measurable description: The relationship between spirituality and flow in golf. *Facta Universitatis, Series: Physical Education and Sport*, 12(1): 1-10.

STAMBULOVA, N.; ALFERMANN, D.; STATLER, T. & CÔTÉ, J. E. A. N. (2009). ISSP position stand: Career development and transitions of athletes. *International Journal of Sport and Exercise Psychology*, 7(4): 395-412.

STATISTA. (2016). The statistical portal. Hyperlink: [http://www.statista.com/statistics] Retrieved on April 2016.

SUNSHINE TOUR (2018). Home. Hyperlink: [http://sunshinetour.com/]. Retrieved on 19 March 2018.

TAMMINEN, K. A. & CROCKER, P. R. (2013). "I control my own emotions for the sake of the team": Emotional self-regulation and interpersonal emotion regulation among female high-performance curlers. *Psychology of Sport and Exercise*, 14(5): 737-747.

THE ROYAL AND ANCIENT GOLF CLUB OF ST. ANDREWS - R&A. (2016). Golf around the world - 2015. Hyperlink: [http://www.randa.org/]. Retrieved on 22 April 2016.

THELWELL, R. C.; WESTON, N. J.; GREENLEES, I. A. & HUTCHINGS, N. V. (2008). Stressors in elite sport: A coach perspective. *Journal of Sports Sciences*, 26(9): 905-918.

THOMAS, P. R. & FOGARTY, G. J. (1997). Psychological skills training in golf: The role of individual differences in cognitive preferences. *The Sport Psychologist*, 11(1): 86-106.

THOMPSON, R. W.; KAUFMAN, K. A.; DE PETRILLO, L. A.; GLASS, C. R. & ARNKOFF, D. B. (2011). One year follow-up of mindful sport performance enhancement (MSPE) with archers, golfers, and runners. *Journal of Clinical Sport Psychology*, 5(2): 99-116.

TRACY, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10): 837-851.

TUCKETT, A (2004). Qualitative research sampling: the very real complexities. *Nurse Researcher*, 12(1): 47-61.

WOODMAN, T. & HARDY, L. (2001). A case study of organizational stress in elite sport. *Journal of Applied Sport Psychology*, 13(2): 207-238.

WOODS, T. (2001). How I play the game II. *Golf Digest.* pp.102.

WYLLEMAN, P.; ALFERMANN, D. & LAVALLEE, D. (2004). Career transitions in sport: European perspectives. *Psychology of sport and exercise*, 5(1): 7-20.

SECTION 3

CRITICAL REFLECTION

1. INTRODUCTION

Various mental, physical and technical skills impact on a golfer's performance. Attaining a flow state by increasing awareness of mindfulness might assist the golf player in optimising performance (Thompson, Kaufman, De Petrillo, Glass, & Arnkoff, 2011) as theory from positive psychology suggests (Clark, Tofler & Lardon, 2005; Gardner & Moore, 2004; Jackson, Thomas, Marsh & Smethurst, 2001; Kee & Wang, 2008). Previous research studies have mostly concentrated on the effect of stressors on the performance of professional golf players from the international arena (Giacobbi, Foore, Weinberg, 2004; Jackson et al., 2001; Neil, Hanton, Mellalieu, & Fletcher, 2011; Thelwell, Weston, Greenlees, & Hutchings, 2008). These stressors could be categorised into either organisational-related and/ or performance sources and could have debilitative or facilitative effects on performance (McKay, Niven, Lavallee, & White, 2008; Thelwell et al., 2008). The researchers considered how players reacted to and made meaning of stressors as well as the coping mechanisms they employed when presented with stressors during performance (Giacobbi et al., 2004, Thelwell et al., 2008).

The present study contributes to the field of clinical sport psychology by focusing on the experience of South African amateur golfers with regard to barriers that might inhibit their optimal performance. These barriers are a precursor to, and transpire during the competitive event. It may provide a hindrance in the path of pursuing a successful round of golf or career for a South African amateur golfer. Most of the amateur golfers have the potential golf skill to succeed and develop into professional players, yet some of them never

seem to reach their full potential. The key findings and value of this study obtained a better understanding of the barriers that impedes the amateur South African golfer's pursuit of a successful career in golf as a professional. It further provides valuable information to administrators, coaches, psychologists, significant others and amateur golfers concerning these performance inhibiting barriers.

2. CRITICAL REFLECTION ON THE PRESENT STUDY

The aim of the study was to explore the barriers that may hinder, prior to and/ or during a competitive game, the performance of South African amateur golfers. For the purpose of the study, seven participants (one female and six males) were selected from the North West and Gauteng provinces. These participants were selected because of their status as amateur golfers who are older than 18 years and have a handicap of 5 or less. Findings from this study indicated that insufficient resources, insufficient practice as well as external and internal pressures are all barriers that hinder the optimal performance of amateur South African golfers. The lack of financial resources emerged as a particular concern for most South African amateur golfers as impairment barrier to achieve their ultimate goals of becoming professional players. Furthermore, participants shared the same perspective that a lack of exposure to the competitive environment and exposure to a variety of golf courses further inhibited their development of their golf skills and tournament mind-sets. The lack of professional services and assistance also prevents them from gaining the required knowledge and expert advice on their game to further develop them into professional players.

Another factor that appears to pose a barrier to their optimal performance is poor quality of practice and preparation. Amateur golfers engage in the competitive game on a part-time basis and therefore need to balance different demands at the same time. However, to become a professional golfer requires frequent and consistent practice and preparation.

The quality of their practice and time allocated to training and sport-related demands further emerged from the data to be a barrier to optimal performance for amateur South African golfers.

Another finding in the study was also the external and internal pressures the participants experience in the South African context. These include an insufficient social support network, challenges significant others' experiences, detrimental thought processes and insufficient emotional regulation. When the participating amateur South African golfer experiences these pressures they may impact on how the golfer thinks about their golf and their emotional experience at that moment. These thoughts and emotions frequently influence their behaviour and perceptions in an adverse manner. In this way it also presents as barriers to their optimal performance during a competitive game.

3. RECOMMENDATIONS FOR FUTURE RESEARCH

The present study was conducted with a relatively small sample size of amateur golfers from Gauteng and North West Province. The golfers in these provinces were easily accessible to the researcher since the researcher lives in Gauteng. Also, thirty-eight percent of these players are located in Gauteng Province which allowed for a larger pool of potential participants in the present study (South African Golf Association, 2016. The smaller sample size nevertheless allowed an in-depth exploration of the participants' perspectives and experiences. It also met the criteria for a mini-dissertation at the NWU. A limitation was that the participants for this study were predominantly white with just one of the participants being from the coloured ethnicity. As such, these results may not be applicable to the larger population. It is therefore recommended that the results of the present study should be verified with larger sample sizes and players from other provinces and racial groups. Future research should also be undertaken to explore how to enhance the mental capabilities of these

golfers to provide resources for the amateur South African golfer to be better equipped in dealing with the external and internal pressures that was highlighted by this study. In addition, a collaborative (cross-disciplinary) research effort with other specialist disciplines, such as physical sciences is also recommended in order to provide more valid and reliable research finding on the present topic.

CONCLUSION

Currently, it appears that literature concerning the performance of South African amateur golfers is limited. Previous research studies largely concentrated on the effect of stressors on the performance of elite or professional golfers from the international arena. Findings from this study increased the awareness of how external and internal pressures hamper performance among a group of amateur South African golfers. These barriers are complex and intertwined. The results from this study further created an understanding of the experiences of amateur South African golfers and those barriers which inhibit their optimal performance in this sport. Utilising the results from this study can potentially minimise the loss of future golfing talent in South Africa. The results of this study further offer insight for sport psychologists, coaches, players and other golf administrators alike. By utilising these findings it is hoped that it will spark the development of appropriate intervention programmes to minimise such barriers and thereby enhance these players' optimal performances and chances of becoming future South African golfing professionals.

References

Clark, T. P., Tofler, I. R., & Lardon, M. T. (2005). The sport psychiatrist and golf. *Clinics in Sports Medicine*, *24*(4), 959-971. doi:10.1016/j.csm.2005.04.001.

Gardner, F.L., & Moore, Z.E., 2004. A mindfulness-acceptance-commitment-based approach to athletic performance enhancement: Theoretical considerations. *Behavior Therapy*,*35*(4), pp.707-723. doi:10.1016/S0005-7894(04)80016-9.

Giacobbi, P., Foore, B., & Weinberg, R. S. (2004). Broken clubs and expletives: The sources of stress and coping responses of skilled and moderately skilled golfers. *Journal of Applied Sport Psychology*, *16*(2), 166-182. doi:10.1080/10413200490437688.

Jackson, S. A., Thomas, P. R., Marsh, H. W., & Smethurst, C. J. (2001). Relationships between flow, self-concept, psychological skills, and performance. *Journal of Applied Sport Psychology*, *13*(2), 129-153. doi:10.1080/104132001753149865.

Kee, Y. H., & Wang, C. J. (2008). Relationships between mindfulness, flow dispositions and mental skills adoption: A cluster analytic approach. *Psychology of Sport and Exercise*, *9*(4), 393-411. doi:10.1016/j.psychsport.2007.07.001.

McKay, J., Niven, A. G., Lavallee, D., & White, A. (2008). Sources of strain among elite UK track athletes. *The Sport Psychologist*, *22*(2), 143-163. doi:10.1123/tsp.22.2.143.

Neil, R., Hanton, S., Mellalieu, S. D., & Fletcher, D. (2011). Competition stress and emotions in sport performers: The role of further appraisals. *Psychology of Sport and Exercise*, *12*(4), 460-470. doi:10.1016/j.psychsport.2011.02.001.

Thelwell, R. C., Weston, N. J., Greenlees, I. A., & Hutchings, N. V. (2008). Stressors in elite sport: A coach perspective. *Journal of Sports Sciences, 26*(9), 905-918. doi:10.1080/02640410801885933.

Thompson, R. W., Kaufman, K. A., De Petrillo, L. A., Glass, C. R., & Arnkoff, D. B. (2011). One year follow-up of mindful sport performance enhancement (MSPE) with archers, golfers, and runners. *Journal of Clinical Sport Psychology, 5*(2), 99-116. doi: 10.1123/jcsp.5.2.99.

SECTION 4

APPENDICES

Appendix A: Informed consent form

HREC Stamp

INFORMED CONSENT DOCUMENTATION FOR AMATEUR GOLFERS

TITLE OF THE RESEARCH STUDY: South African amateur golfers' barriers in competitive games

ETHICS REFERENCE NWU-00099-17-S1

PRINCIPAL INVESTIGATOR: Dr. Kobus du Plooy

POST GRADUATE STUDENT: CC Johnson-Brown

ADDRESS: Institute for Psychology and Wellness
North-West University, Potchefstroom Campus
Private Bag X6001
Potchefstroom
2520.

CONTACT NUMBER: (018) 299 1737

You are being invited to take part in a **research study** that forms part of post graduate Master's and studies. Please take some time to read the information presented here, which will explain the details of this study. Please ask the researcher or person explaining the research to you any questions about any part of this study that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research is about and how you might be involved. Also, your participation is **entirely voluntary** and you are free to say no to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part now.

This study has been approved by the **Health Research Ethics Committee of the Faculty of Health Sciences of the North-West University (NWU-00099-17-S1)** and will be conducted according to the ethical guidelines and principles of Ethics in Health Research: Principles, Processes and Structures (DoH, 2015) and other international ethical guidelines applicable to this study. It might be necessary for the research ethics committee members or other relevant people to inspect the research records.

What is this research study all about?

- *This study will be conducted in Gauteng and North-west province at the local golf course and will involve an interview of 45-60 minutes with an experienced health researcher trained in clinical psychology. A minimum of 6 participants will be included in this study.*
- *We plan to explore the barriers that may hinder, prior to and/or during a competitive game, the performance of amateur golfers in South Africa.*

Why have you been invited to participate?

You have been invited to be part of this research because:

- *You are an amateur golfer that is older than 18 years and can either be male or female. You should have a handicap of 5 and less.*
- *You also fit the research because you are a golfer from Gauteng and North-west province.*

You will not be able to take part in this research if:

- *You do not have knowledge, exposure to or is actively involved in golf. If you play social/recreational golf or as a professional player, and if you are an amateur who has a handicap higher than 5 you will also be unable to participate in this study.*
- *You are not able to converse in English or Afrikaans.*
- *You are a relative or friend of the researcher*

What will be expected of you?

- *You will be expected to be interviewed for approximately 45-60 minutes. This interview will be recorded (audio recording) and later transcribed.*

Will you gain anything from taking part in this research?

- *The gains for you if you take part in this study will be an increased personal awareness of the barriers that might impact your performance.*

- *The other gains of the completion of this research will be for the wider South African golfing community to assist with the development of appropriate intervention programs for amateur golfers to assist them to become professional players.*

Are there risks involved in you taking part in this research and what will be done to prevent them?

- *You might experience some psychological discomfort such as boredom and giving up your time for the interview process; however every effort will be made to prevent and/or limit such an occurrence by having the interview time for a maximum of 60 minutes.*

How will we protect your confidentiality and who will see your findings?

- *Anonymity of your findings will be protected by coding the data so that no link can be made to a specific participant. As such every effort will be made to respect your privacy at all times by keeping identifying information and data in a locked safe with the researcher for safe keeping at all times. Only the researchers will be able to look at your findings. Findings will be kept safe by locking hard copies in locked cupboards in the researcher's office and electronic data will be password protected. (As soon as data has been transcribed it will be deleted from the recorders). Data will be stored for 7 years before being destroyed.*

What will happen with the findings or samples?

- *The findings of this study will only be used for this research.*

How will you know about the results of this research?

- *We will offer you the option of receiving verbal feedback about the results once it is completed*

- *We will also give you the results of this research once the article has been completed and it will be emailed to you.*

- *You will be informed of any new relevant findings as soon as it becomes available.*

Will you be paid to take part in this study and are there any costs for you?

- *You will be compensated for your travelling expenses. The payment approach is payment for your time, inconvenience and expenses for being involved in the research study.*

- *There will thus be no costs involved for you, if you do take part in this study.*

Is there anything else that you should know or do?

- You can contact Dr. Kobus du Plooy at **(018) 299 1737** if you have any further questions or have any problems.
- You can also contact the Health Research Ethics Committee via Mrs Carolien van Zyl at 018 299 1206 or carolien.vanzyl@nwu.ac.za if you have any concerns that were not answered about the research or if you have complaints about the research.
- You will receive a copy of this information and consent form for your own purposes.

Declaration by participant

By signing below, I ……..……. agree to take part in the research study titled: South African amateur golfers' barriers in competitive games

I declare that:

- I have read this information/it was explained to me by a trusted person in a language with which I am fluent and comfortable.
- The research was clearly explained to me.
- I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be handled in a negative way if I do so.
- I may be asked to leave the study before it has finished, if the researcher feels it is in the best interest, or if I do not follow the study plan, as agreed to.

Signed at (*place*) .....…..…….. on (*date*) ……...…….. 20....

....

Signature of participant **Signature of witness**

Declaration by person obtaining consent (independent person)

I *(name)* ……..…… declare that:

- I clearly and in detail explained the information in this document to .....

- I did/did not use an interpreter.
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I gave him/her time to discuss it with others if he/she wished to do so.

Signed at (*place*) .....…..…….. on (*date*) ……...…….. 20....

....

Signature of person obtaining consent **Signature of witness**

Declaration by researcher

I *(name)* ……..…… declare that:

- I explained the information in this document to …….. **and** encouraged him/her to ask questions and took adequate time to answer
- I did/did not use an interpreter
- I am satisfied that he/she adequately understands all aspects of the research, as described above.
- I am satisfied that he/she had time to discuss it with others if he/she wished to do so.

Signed at (*place*) .....…..…….. on (*date*) ……...…….. 20....

....

Signature of researcher **Signature of witness**

Appendix B: Biographical data form

Date:_____

BIOGRAPHICAL DATA

The purpose of this form is for you to provide your basic biographical information.

INSTRUCTIONS: Please answer the following questions by allocating (by marking the applicable box with X) or by filling in (if the 'other' option applies to you) the correct answer.
The completion of this form will not take longer than five minutes.

1. **Name and surname: _____**

2. **Date of birth: _____**

3. **Race:**

African	Coloured/ Mixed	Indian	White	Other

4. **Contact details (cell): _____**
   (email): _____

5. Years playing golf: _____

6. Current handicap: _____

7. Careel goal as golfer: _____

Appendix C: Guidelines for authors - *South African journal for research in Sport, Physical Education and Recreation*

INFORMATION FOR AUTHORS

The *South African Journal for Research in Sport, Physical Education and Recreation* is published by Stellenbosch University. Contributions from the fields of Sport Science, Physical Education, Recreation/Leisure Studies, Exercise Science and Dance Studies will be considered for publication. The articles submitted will be administered by the appropriate Subject Review Editor and evaluated by two or more referees. The decision as to whether a particular article is to be published or not, rests with the Editorial Board.

SUBMISSION

Manuscripts that do not comply with the following requirements regarding process, style and format will not be handled.

Manuscripts should be typed with ***one and a half spacing*** in 12-point Times New Roman letter size for the text. All the text in tables and figures should be in 10-point Times New Roman font size. Please do not use *Calibri*. The original manuscript can be submitted by Email. The length may not exceed 20 pages (tables, figures, references, etc. included). The **page setup** (cm) must be in the following format:

MARGINS		**PAPER SIZE**
Top:	3.56 cm	*Width*: 17.5 cm
Bottom:	1.78 cm	*Height*:24.5 cm
Left:	2.11 cm	
Right:	2.11 cm	
Gutter:	0.00 cm	
Header:	2.03 cm	
Footer:	0.89 cm	

Original manuscripts may be submitted in English or Afrikaans and should be sent to:

The Editor	**Editorial Office**
South African Journal for Research in Sport, Physical Education and Recreation	Tel.: +27 (0)18-299 1821
Physical Activity, Sport and Recreation	E-mail:sajrsper@nwu.ac.za
North-West University, POTCHEFSTROOM	
Republic of South Africa	

CONDITIONS

Each manuscript must be accompanied by a ***covering letter*** in which the following is declared: (1) that the manuscript contains original research; (2) that the manuscript or parts of the manuscript has not been published elsewhere previously; (3) that the manuscript is not currently being presented elsewhere for publication; and (4) that all the authors have read and approved the manuscript. This signed declaration regarding the originality must accompany

each manuscript.

Authors are also requested to name three/3 potential referees, of which one/1 must be an *international* referee (the Journal is not bound to use these referees). Complete information regarding the referees (name, surname, e-mail address and telephone numbers) must be provided in the cover letter.

We discourage the practice of parts of one study in different journals. Authors who submit a manuscript from a study of which some data have been or will be published elsewhere, must provide a strong justification in the accompanying letter to the Editor. The justification for not publishing all the data together in one paper must also be motivated in the covering letter.

The author should also ensure that the ***language*** of the manuscript has been ***edited*** thoroughly (English [UK]) by the time of submission. The name, address and telephone number of the person who did the language editing must be provided. Any expenses incurred by the Journal dealing with language editing will be added to the author's page fees.

The manuscript must have an ***ethical clearance number*** that was supplied by the authentic ethical committee of a specific institution. The process that was followed to obtain ethical clearance must be described in the manuscript under the heading, 'Ethical clearance'. No manuscript can be published without this declaration. Review articles do not need ethical clearance.

Any uncertainty regarding the ***statistical procedures*** that arise during the assessment of the manuscript will be referred to a local statistician. Any expenses incurred by the Journal dealing with statistical procedures will be added to the author's page fees.

PREPARATION OF MANUSCRIPT

Manuscripts must be presented in a format that is compatible with *Microsoft Word for Windows* (PC). Tables, all figures (illustrations, diagrams, etc.) and graphs are regarded as text and must be presented in a format that is compatible with ***Word*** and figures should be ***accessible*** to make any text corrections. Photographs must be presented in *jpg* format.

Original manuscripts must contain the following sections in the following sequence: Title page, Abstract, Introduction, Purpose of Research, Methodology, Results, Discussion, Practical application, Conclusions, Acknowledgements (if applicable) and References.

Title page

The first page of each manuscript should indicate the *title* in English and Afrikaans (will be translated for foreign authors), the *names* (title, first name in full and other initials, surname) of the author(s), the *telephone* numbers (work & home [& *mobile* for local authors]), *facsimile* number, *E-mail* address and the *field of study*. The ***complete mailing address*** and ***telephone numbers*** of the corresponding author and the institution (department, university, city, country) where the work was conducted should be provided in full. When more than one author and/or authors from various departments and institutions are involved, the **[1]*author*(s)** must be numbered according to their **[1]*department*(s)**. If any of the above-mentioned information should change during the review process, please inform the Subject Editor. A ***short title*** of not more than ***45 characters*** (including spaces), should be provided for use as a

running heading.

Abstract

Each manuscript must be accompanied by an abstract of approximately 150-200 words in *English* and should be set on a *separate page* as a SINGLE paragraph (1.5 spacing). A list of three to seven ***key words*** in *English* is required for indexing purposes and they should be typed below the abstract. Articles in Afrikaans must include an ***additional*** extended ***summary*** (500-1000 words) in English. This summary must start on a new page (just before the reference list) and the English title of the article should be placed at the beginning.

Text

Start the text on a new page with the title of the article (centred and *without* the names of the authors). Follow the style of the most recent issue of the Journal regarding the use of headings and subheadings. Use only ***one line space*** after a paragraph. Only make use of ***section breaks*** and not ***page breaks***. The text, as well as the tables and figures, may not be in any other format than ***normal***. Thus, ***no style sheets*** may be used.

Tables and figures

Tables and figures should be numbered in *Arabic* numerals (1, 2, etc.). Tables require the heading at the *top,* while figures have the legend *below* and both are not included in the cells of the table/figure. ***Note:*** Use the decimal POINT (not the decimal comma). The site where the table or figure should be placed in the text must be indicated clearly in the manuscript. All tables and figures are to be placed *after the reference list* with each on a ***separate page***, always ending with a ***section break***. Any preference for the use of *colour* in the case of figures or photographs must be noted and will be at an *additional cost* to the page tariff.

It is essential that tables/figures should be contained/fit within the page setup described earlier for this Journal. Portrait layout must be maintained for all tables/figures. Tables must use separate rows/columns (do not merge cells) for each item. Figures must be in ***Word*** and accessible to make corrections or changes within the figure where deemed necessary. Please ensure that the figures especially are of high quality for printing purposes. Any preference for the use of *colour* in the case of figures or photographs must be noted and will be at an *additional cost* to the page tariff.

References

In the *text*, the Harvard method must be adopted by providing the author's surname and the date placed in parentheses. *For example:* Daly (1970); King and Loathes (1985); (Botha & Sonn, 2002); McGuines *et al.* (1986) or (Daly, 1970:80) where Daly is not part of the sentence and page number is added for a direct quotation. More than one reference must be arranged ***chronologically*** (Daly, 1970; King & Loathes, 1985). Note that *et al.* (italics) is used in the body of the text from the beginning when there are ***more than two authors***, but never in the list of references, where all authors must be provided.

List of references

Only the references cited in the text should be listed alphabetically according to surname (last

name) of authors (uppercase) after the body of text under the heading, **REFERENCES** (uppercase) starting on a new page. In the case where the TITLE of an article, book, etc., is in any other language than English, the author must also provide an ***English translation*** of the title in parentheses (this applies to Afrikaans titles as well).

In the case of articles published in ***JOURNALS***, references listed should include the surnames and initials (upper case) of ***all*** authors, the date of the publication in parentheses, the full title of the article, the full title of the journal (italics), the volume number, the series/issue number in parentheses (omitted only if the said journal does not use issue numbers), followed by a colon and a space with the first and last page numbers separated by a hyphen. The use of the correct punctuation is of importance.

If the reference is a ***BOOK***, the surname (last name, upper case) and initials (without spaces) of the author or editor (Ed.) must be provided, followed by the date of publication in parentheses, the title of the book (italics) as given on the title page, the number of the edition (ed.) in parentheses, the city (and abbreviation for the state in the case of the USA OR the country) where published, followed by a colon, a space and the name of the publisher.

For a ***CHAPTER*** in a book, the page numbers of the chapter cited must be provided in parentheses (not italics) after the title of the book. For further details, authors should consult the most recent publication of this Journal for other examples.

If the reference is a ***THESIS*** (master's level) or ***DISSERTATION*** (doctoral level), italics is **not** used in the title as it is an unpublished work. Provide the name of the city, state/country, colon, university and department/faculty.

For ***ELECTRONIC SOURCES,*** all references start with the same information that would be provided for a printed source (if available). The web page information follows the reference. It will usually contain the name of the author(s) (if known), year of publication or last revision, title of complete work in inverted commas, title of web page in italics, Uniform Resource Locater (URL) or access path in text brackets (do not end the path statement with a full stop), full stop after the closing bracket and date of access, "Retrieved on 10 December 2015". See "How to cite information from the Internet and the Worldwide Web" at [http://www.apa.org/journals/webref.html] for specific examples. When citing a web site in the text, merely give the author and date. When reference is made to a specific statement (quotation) in the article/document and no page number is given, the word 'online' is used for citing in the text (e.g., Van der Merwe, 2010:online).

When referencing an article in a ***NEWSPAPER,*** the key word of the newspaper is typed in capitals, as this is how it will appear in the ***alphabetical listing*** of references, namely *The CAPE ARGUS* will appear under "C" or *Die BURGER* will appear under "B".

In the case of a paper presented in conference ***PROCEEDINGS***, the editors and the title of the proceedings, the page numbers of the article being referred to and the details of the congress (when and where it was held) and by whom the proceedings was published should be provided.

EXAMPLES OF STYLE OF FORMULATIONS FOR DIFFERENT REFERENCES

Journal

ZHENG, N.; BARRENTINE, S.W.; FLEISIG, G.S. & ANDREWS, J.R. (2008). Kinematic analysis of swing in pro and amateur golfer. *International Journal of Sports Medicine*, 29(6): 487-493.

Book

WEINBERG, R.S. & GOULD, D. (2011). *Foundations of sport and exercise psychology* (5th ed.). Champaign, IL: Human Kinetics.

Chapter in book

SCHNECK, C.M. (2010). Visual perception. In J. Case-Smith & J.C. O'Brian (Eds.), *Occupational therapy for children* (6th ed.) (pp. 373-403). Maryland Heights, MO: Mosby.

Thesis/Dissertation

SURUJLAL, J. (2004). Human resources management of professional sports coaches in South Africa. Unpublished doctoral dissertation. Johannesburg, South Africa: Rand Afrikaans University.

Proceedings of a conference

HARDMAN, K. & MARSHALL, J. (2001). Worldwide survey on the state and status of physical education in schools. In G. Doll-Tepper & D. Scoretz (Eds.), *World summit on physical education* (pp. 15-37). Proceedings of the "World Summit on Physical Education", 3-5 November 1999. Berlin, Germany: International Council of Sport Science and Physical Education (ICSSPE).

Personal communication/correspondence/interview

BOUKES, P.B. (2015). Personal communication from the Acting Director of Sport at the Nelson Mandela Metropolitan University, Port Elizabeth on 27 February 2015.

JACOBS, L. (2015). Personal interview with the Spokesperson of UNICEF, 25 August, Pretoria.

Newspaper

CAPE ARGUS, The (1997). 25 March, p.5.

Electronic source

DINOFFER, J. (2011). "Activities to build balance". *Prevent child obesity 101*. Hyperlink: [http: //www.preventchildobesity101.com/Activities/BalanceActivities.php]. Retrieved on 20 November 2012.

ADMINISTRATION

If authors honour the rules and specifications for the submission of manuscripts, unnecessary

delays would be avoided. Requesting 'copy right' concerning figures or photographs is the responsibility of the authors and should be indicated. A manuscript that does not meet the requirements, as set out above, will be returned to the author without being evaluated. A subject specialist Editor administers and coordinates the assessment of the referees and provides the final recommendation.

The corresponding author will receive a complimentary copy of the Journal and five reprints of the article that could be shared with the co-authors. The original manuscripts and illustrations will be discarded one month after publication unless a request is received to return the original to the corresponding author. A page fee of South African **R300** per page is payable on receipt of a statement issued by the Editor.