

Enhancing performance in cricket by using South African cricket coaches' experiences in an ecological intervention

M. HUMAN¹, B.J.M. STEYN² AND W.J. JORDAAN³

¹*Department of Psychology, University of Pretoria, Pretoria, South Africa;*
E-mail: monja.human@hpc.co.za

²*Department of Sport and Leisure Studies, University of Pretoria, Pretoria, South Africa*

³*Department of Psychology, University of Pretoria, Pretoria, South Africa*

(Received: 15 May 2016; Revision accepted: 30 August 2016)

Abstract

Sport psychology in South Africa has for many years been characterised by the deficit perspective on human nature focusing on “what is wrong with sports people”. Psychological Skills Training (PST) programmes have been used to correct these deficits until optimal performance can happen in the “absence of discomfort.” In this study, an asset perspective to performance enhancement was employed, i.e. the Mindfulness-Acceptance-Commitment (MAC) approach which views optimal performance as happening “despite discomfort”. Sport psychologists present these interventions (PST and MAC) predominantly to cricket players, often neglecting other important role-players such as coaches. The aim of this study was to move away from the deficit perspective and individualistic interventions to an asset perspective with an ecological intervention. This was attained by using South African cricket coaches' experiences of the MAC programme in an experiential learning context. The extent to which experiential learning occurred was established through analyzing 18 individual in-depth, semi-structured interviews with coaches using Interpretive Phenomenological Analysis (IPA). The major findings were that coaches experienced the MAC programme as flexible, accessible and a developmental psychological tool, which increased their knowledge of sport psychology. Coaches enjoyed the MAC programme and found the experiential learning and accompanying manual valuable.

Keywords: Psychological skills training, mindfulness-acceptance-commitment, interpretive phenomenological analysis, ecological intervention, coaches.

How to cite this article:

Human, M., Steyn, B.J.M. & Jordaan, W.J. (2016). Enhancing performance in cricket by using South African cricket coaches' experiences in an ecological intervention. *African Journal for Physical Activity and Health Sciences*, 22(3:1), 725-737.

Introduction

Psychology in South Africa has for many years been characterised by the deficit perspective on human nature and an emphasis on individualistic interventions (Mpofu, Bakker & Lopez Levers, 2011; Pretorius, 2012). If maintained, this will continue the deficit legacy of primarily focusing on “what is wrong with people”, which will also result in the continuation of individualistic interventions employed by psychologists. According to Grobbelaar (2007), sport psychology in South Africa has not been immune to the deficit perspective and individualistic interventions. The deficit perspective in sport psychology in

South Africa is, for example, evident in using Psychological Skills Training (PST) programmes to enhance the performance of players (Weinberg & Gould, 2011). PST programmes are based on Cognitive-Behaviour Therapy (CBT) (Moore, 2009), which exemplifies Second Wave Behaviourism (Hasker, 2010). The underlying assumption of PST programmes is that negative thoughts evoke negative emotions, which most likely will decrease the performance of players. Through psychological skills this notion needs to be changed to positive thoughts and emotions through psychological skills (Gardner & Moore, 2007). In a nutshell, PST programmes view optimal performance as happening in the “absence of discomfort.”

In this study, an asset perspective to performance enhancement was employed, i.e. the Mindfulness-Acceptance-Commitment (MAC) approach (Gardner & Moore, 2007). This approach is a combination of Mindfulness and Acceptance-Commitment Therapy (ACT) and falls within Third Wave Behaviourism. The underlying assumptions of the MAC programme are that players need to be mindful by being in the here-and-now, thus focusing on the task at hand (Gardner & Moore, 2012). Discomfort caused by bodily sensations, internal experiences (thoughts and emotions) and/or external distractions may hinder players from being mindful. However, by accepting (not changing) the discomfort in a non-judgemental way, they can pursue their performance goals through value-driven behaviour (their assets) (Gardner & Moore, 2007). In a nutshell, a MAC programme views optimal performance as happening “despite discomfort.”

In the application of sport psychology in South Africa, performance enhancement programmes have predominantly been presented to players by sport psychologists^a (Terry, 2011), by means of primarily individualistic interventions. Other important role-players in the cricket context, such as coaches, have often been left out in the dark. As players spend a vast amount of time with coaches, it is decidedly sensible that sport psychologists start seeing these role-players as assets who can, if educated in performance enhancement, continue the performance enhancement work of the sport psychologist in both the gymnasium and on the cricket field.

In this study, the focus was on educating 30 South African cricket coaches over a six month period in the MAC programme. In doing so, the researchers moved away from an individualistic intervention with its emphasis on players, to a more ecological intervention (Bronfenbrenner, 1979) by presenting a MAC programme to South African cricket coaches. The rationale behind this was that

^a The Health Professions Council of South Africa (HPCSA) has the following registration categories for psychologists in South Africa: research psychologist, industrial psychologist, educational psychologist, counselling psychologist and clinical psychologist. In this article the term “sport psychologist” refers to a psychologist from any of the five categories working in a sport context in South Africa.

coaches spend much more time with cricketers than with sport psychologists and can continue the work of the psychologist in the gymnasium and on the cricket field. In doing so, the researchers challenged previous delivery of the MAC programme and research on the MAC programme that has solely embraced an individualistic stance by focussing on players (Bernier, Thienot, Codron & Fournier, 2009; Hasker, 2010; Kaufman, Glass & Arnkoff, 2009).

Based on the above discourse, the researchers moved away from the deficit perspective and individualistic interventions prevalent in psychology (Mpofu et al., 2011; Pretorius, 2012) and sport psychology in South Africa (Grobbelaar, 2007), to an asset perspective with an ecological intervention (Bronfenbrenner, 1979). Therefore, the aim of this study was to describe South African cricket coaches' experiences of participating in a MAC programme.

Methodology

Design

As the focus of this study was to generate accounts of how South African cricket coaches experienced the MAC programme through participating in an experiential learning process, phenomenology was chosen as guideline for a research design within the qualitative framework (Creswell, 1998). There are two types of design; descriptive and interpretive phenomenology (Smith, 2003).

Descriptive phenomenology aims to provide a universal description of the phenomenon, which is free from personal biases and prior knowledge and consists of highlighting common features (Giorgi & Giorgi, 2008; Wojnar & Swanson, 2007). Interpretive phenomenology aims to provide an idiographic description of the meaning of the phenomenon, whereby the researchers and participants work together to make their interpretations and perceptions meaningful (Smith, 2003; Wojnar & Swanson, 2007). IPA flows from interpretative phenomenology and was suggested as a "logical" choice for this study because it focuses on understanding and allowing an appreciation of the subtle nuances of the meaning people assign to their experiences of a specific phenomenon (Smith, Flowers & Larkin, 2009).

The quality of the research was enhanced through the criteria of dependability, credibility, conformability and transferability. Dependability was accomplished by providing a thorough description of how interpretations and results were reached. Credibility refers to clarity about the context, the participants and settings of the research in order to help the readers understand and evaluate the research findings. Conformability was established through researcher reflexivity and research supervision. Transferability was obtained by describing all aspects

of the participants and the research context in detail (Thomas, Nelson, & Silverman, 2005).

Setting

The one-day MAC programme used in this study was presented to 30 cricket coaches as part of the Coaches-acceleration-programme-initiative in 2012. The Coaches-acceleration-programme-initiative of Cricket South Africa (CSA) is presented once a year and by invitation only. Participation in the one-day workshop was compulsory, but participation in this research project was completely voluntary. Ten male participants (six black coaches and four Caucasian coaches) volunteered afterwards to participate in the research project. Being a qualitative study, there is no prescribed number of participants in IPA research (Smith et al., 2009).

Participants

This study used a purposive sampling method. Purposive sampling is a conscious selection of a small number of participants that meet certain inclusion criteria, and who might provide rich information that will enable the researchers to conduct an in-depth study on the phenomenon of interest (Onwuegbuzie & Leech, 2007).

The five sampling criteria for this study included participants who attended the CSA Coaches-acceleration-programme-initiative and experienced the MAC programme. Furthermore, participants had to be proficient in English and had done coaching on provincial and/or national level. Coaches who had completed the Level III or IV coaching course with CSA were also included.

Facilitation

The MAC programme used in this study was mainly facilitated through experiential learning. The latter is informally defined as learning by doing, combined with reflection and fits well in a cricket context because it involves an active, hands-on experience, which is contextualised and applied, rather than a passive process (Chambers, 2011; Moon, 2004). Theoretical knowledge about the MAC programme was shared in a limited way to provide some background and context because experience and reflection are less effective in the absence of the foundational knowledge that coaches receive through formal learning (Reade, 2009).

The process of experiential learning consists of a learning cycle with four stages (Kolb, 1984). In this study, the concrete experience (experiencing) was created through participation in the MAC programme. This was followed by the next

two stages, namely reflective observation (reflections) and abstract conceptualisation (thinking) where coaches were encouraged to evaluate and make sense of any personal or professional experiences that arose from participating in the MAC programme by using both written and oral reflections over a six month period. Active experimentation (action) occurred when the cricket coaches displayed and conveyed their experiential learning of the MAC approach to their personal lives and coaching careers.

The MAC programme, presented in a one-day workshop (eight hours), consisted of five distinct phases as proposed by Gardner and Moore (2004). These phases consisted of psycho-education where the rationale, goals and foundations for the MAC programme were explained. Phase two entailed explaining and defining mindfulness as the awareness that emerges when one is paying attention to purpose in the present moment in a non-judgmental way, by allowing experiences to unfold on a moment-to-moment basis (Brown & Ryan, 2003; Kabat-Zinn, 1994) and further relates to the self-management of attentional experiences (Gardner & Moore, 2004; 2007). Phase three consisted of value identification and commitment and the role of personal values in a performance context, as well as the differences between goals and values, were emphasized (Hayes, Strosahl & Wilson, 1999; Gardner & Moore, 2004, 2007). Phase four explained acceptance and referred to players accepting the reality of their internal experiences (thoughts, emotions and bodily sensations), as well as external stimuli such as noise, in a non-judging way as an inevitable part of life, and it is not necessary to control, reduce, eliminate or deny these experiences (Gardner & Moore, 2004, 2007, 2012; Hasker, 2010; Kee & Wang, 2008). Phase five integrated and illustrated how mindfulness, acceptance and commitment work together, forming the MAC programme (Gardner & Moore, 2007).

After facilitating the MAC programme, three consecutive interviews were conducted with all 10 coaches over a six month period. Within seven days after having a concrete experience through the MAC programme, each of the 10 participants were interviewed with the emphasis on what the coaches themselves had learned experientially from the MAC programme. The venue for the first round of interviews was at the High Performance Centre (hpc) and allowed for privacy and was sufficiently quiet.

Two months later the second semi-structured interview was conducted with the emphasis on how coaches had displayed their experiential learning to their own coaching. Four months after attending the initial MAC programme, all 10 coaches participated in the third semi-structured interview where the emphasis was on how coaches had transferred their experiential learning to their cricketers. The second and third interviews ranged from 45-70 minutes and a convenient time, date and location for each participant was organized and conducted at each coach's work place throughout South Africa.

Data analysis

The data used were the transcribed IPA semi-structured interviews. The data reflect an idiographic dimension and as such are concerned with the particular, implying understanding a specific phenomenon, as experienced by particular people in a particular context (Smith et al., 2009). The researchers personally transcribed the material to become familiar with each participant's accounts to acquire intuitive appreciation and to make sense of each participant's experiences (Smith et al., 2009; Wojnar & Swanson, 2007). Six of the 10 coaches' interviews were analysed. Eighteen interviews representing three black and three Caucasian coaches were analysed, i.e. three interviews with each coach. The IPA approach considers time spent and depth of reflection as central rather than using a large sample size (Smith et al., 2009).

The IPA method as outlined by Smith et al. (2009) was followed: Step 1: Reading and re-reading of the transcripts with the aim of becoming familiar with the accounts. Step 2: Initial noting, which included using the researchers' own personal reflections, professional knowledge and experience in order to "sound out" the meaning of key processes for each coach. Step 3: Developing emerging themes. The researchers were looking for developing emerging themes as a way to reduce the volume of detail whilst maintaining the complexity, connections and patterns between exploratory notes. Step 4: Searching for connections across emerging themes. Some themes clustered centrally together, whilst others were regarded as possible super-ordinate concepts. Step 5: Moving to the next participant's transcript. Steps 1 – 4 were repeated for each interview. After the analysis was completed for all three interviews with the first coach, the researchers moved to the second coach's transcript. Step 6: Looking for patterns across all participants' transcripts. After repeating steps 1 – 4 with each of the six coaches' transcripts the researchers started searching for patterns across all data sets as well as outlining master and super-ordinate themes.

Results

Three master themes central to coaches' experiences emerged from the analysis: the significance of the MAC programme, the duration of the MAC programme and the presentation of the MAC-programme. The super-ordinate themes associated with each master theme will be displayed in italic letters.

The significance of the MAC programme

Coaches experienced the MAC programme as flexible, allowing them space to make sense and discover their own interpretations relating to mindfulness, acceptance and commitment, even challenging the proposed mindfulness-acceptance-commitment linear presentation sequence. The coaches' experiences

suggest starting with commitment to values, followed by accepting that discomfort is part of cricket. Mindfulness is then applied to be aware of and stay attentive in the present moment, despite experiencing discomfort. One coach, “Riaan”^b, described his experience of flexibility as open and allowing him to find his own strategy or method when working with it: “...That was actually refreshing as well, the openness and flexibility (L93). I think the mindfulness comes from, well I actually think it works backwards in a way. I think commitment comes from being committed to your values and then going back to accepting that things can’t always go well. Then you have to realize that things are not always going to work out well because your mind is not always working so nicely. Then you have to be mindful by staying committed. So I think sometimes the order actually works the other way around and that works well for me. So I think that is one of things that I will use, especially as the season starts (T170-172)”.

Although the MAC approach follows a systematic framework and is characterized by a structured outline, flexibility is possible in order to allow for an individually tailored MAC intervention (Gardner & Moore, 2007).

Coaches also experienced the MAC programme as accessible, to be used by the whole cricket community, consisting of people from different backgrounds, cultures, ages, educational levels, genders and performance levels. This was emphasized by another coach “David” because he could relate to it as a cricket coach when he shared: “The same applies to the MAC approach. It is something that talks to you as a cricket coach. Obviously, I think most of the coaches here feel that the MAC approach is talking to us. It is something we are going to try and translate or give to our players in the best way we can...I will use most of the things that I hear because I believe in it and it is working for me (L180)”. The MAC programme is accessible to all performance populations and was developed to reduce work-site stress and enhance athletic performance. It further aims to maximize performance and enhance human potential by giving people from a variety of occupational, recreational and general life domains access to learning and gaining knowledge about mindfulness, acceptance and commitment (Gardner & Moore, 2007). This makes the MAC programme also applicable for coaches, forming part of the performance population due to the amount of time, focus and energy spent on achieving and obtaining results on a daily basis (Fuoss & Troppmann, 1981; Kidman & Hanrahan, 2011).

Coaches experienced the MAC programme as a psycho-educational process providing them with psychological “tools” and a continuing framework to work with and develop human beings through reflection, creating change and addressing the psychological side of players. As “Mpho” described, looking at

^b The names used for the participating coaches are fictitious and pseudonyms.

their behaviour holistically they were able to contribute to the players' and coaches' growth: "The MAC programme is looking at everything holistically. MAC will be the tool to help my boys firstly, to understand themselves and then secondly, what they are doing or need to do in order to get to the next level. Same goes for me as a coach (L180)". According to Gardner and Moore (2007), developing human beings and enhancing human performance is one of the aims of the MAC programme as also experienced by coaches in this study.

Coaches articulated that the MAC programme contributed to their need of gaining knowledge in sport psychology that can be utilized when working and dealing with the psychological components of cricket. "Garreth" suggested that increased knowledge of sport psychology makes him a better coach because it positions him constructively to be influential whilst coaching: "...Psychologists can maybe work with teams or individuals for maybe once a week or so. We as coaches do it every day. It is not whether we want to do it or not. We are doing it anyway. Our influence has an effect on the people we are coaching. We have to decide what kind of influence it can be because it is either going to be a positive or a negative influence. We have an influence anyway. We have to understand that it is our responsibility to try and up-skill ourselves and our knowledge of sport psychology because we have to transfer these skills to the kids (L159)". This need for coaches to gain more knowledge of sport psychology was also recognised by Williams and Kendall (2007) and Sullivan and Hodge (1991). Coaches want more knowledge of sport psychology to be able to convey that in their coaching contexts (Pain & Harwood, 2004).

All the coaches in this study indeed learned about awareness. In doing so they realised that awareness formed the foundation and golden thread that ties the three individual principles (mindfulness, acceptance and commitment) together into one MAC programme. Increased awareness, therefore, helped coaches to stay focused in the present moment by accepting situations as they happen, and in the process, staying committed to value-driven goals. "Carl" described his awareness of being in the moment during match situations: "I think the main thing of the MAC approach is awareness. It brought about an awareness of what we are doing and what we want to do. Furthermore, how we accept and commit to doing that. You need to be aware. Certainly being aware of the moment... (L159)...I think the main difference is that the MAC approach allows you to deal with situations in the here-and-now, as opposed to preparation and reflection (L164)". Coaches' increased awareness, therefore, links with the primary and central feature of the MAC programme, which is the development of mindfulness as a form of heightened present-in-the-moment awareness (Gardner & Moore, 2007).

The duration of the MAC programme

The five distinct phases in the MAC-protocol includes psycho-education, mindfulness, values identification and commitment, acceptance and integration and practice and they were presented in an eight hour session, 1.5 hour per session protocol (Gardner & Moore, 2004). That was later changed to a seven module MAC approach presented over a period of six weeks (Gardner & Moore, 2007). The MAC programme, as utilized in this study, was presented in an eight hour workshop. Two coaches felt that eight hours was sufficient time. “Garreth”, for example, said: “I think it was perfect for me. I don’t mind sitting in a room for eight hours because I understand how this can help me to improve. It would obviously be different if you had a group of people who weren’t really interested in what you were saying. For me it was perfect the length of time (L175)”.

However, the majority of coaches felt more time was needed to debrief, reflect and explore activities further. One day only left them feeling overwhelmed because it was too much information to absorb for one day. “David’s” experience of time pressure expresses this: ...A day is not enough. If we had two days with you, we know that we are going to balance it nicely...In fact, we go through the manual and ask enough questions and do more activities as well. There were times that we didn’t reflect because we were pressed for time...A day was not enough taking into consideration that the mind can only take in so much (L188). The majority of coaches, therefore, confirmed the suggested longer time frame of either eight sessions or a six week period as outlined by Gardner and Moore (2004; 2007).

The presentation of the MAC programme

All coaches noted that learning about mindfulness, acceptance and commitment as separate parts allowed them to grasp and understand each principle first, before working with the MAC programme in totality. Coaches, therefore, needed to grasp their experiences of mindfulness, acceptance and commitment first, before transforming their experience into a personalized and meaningful representation of the MAC programme as a unit. “Mpho” appreciated the presentation of separate parts: “I think the way you divided MAC and made it into modules was good (L195)”, whilst “Samual” acknowledged the interrelatedness of the parts: “...I like to stay positive regardless of what I do. I mean those three things of the MAC approach working together (T300)”.

The MAC programme was presented to coaches through a process of experiential learning. Coaches enjoyed this process because it involves an active, hands-on experience, which is contextualised and applied, rather than a passive process (Chambers, 2011). Experiential learning by means of examples contributed to “David” enjoying the MAC programme: “The honest truth is very

meaningful. It was something that caught my attention. I couldn't afford to sleep during the lecture because it was something that I always wanted...The way you presented the MAC programme to us made it fun. The best way to learn is by having fun and receiving examples. Usually, with us blacks, reading something becomes a problem, but if you show it to me I will remember it forever...(L184)". "Samual" valued experiential learning because it was an active as opposed to a passive process: "I thought the presentation was good because we didn't just sit there and listen. We participated in the activities, the theories and that kind of stuff (L122)".

However, coaches suggested for more MAC activities to be experienced on-the-field during training and games. They felt that these activities should be more specifically designed for cricket and then included in future MAC programmes as part of the experiential learning process.

The manual handed out during the workshop provided some background and context to the MAC approach. "Garreth" explained his experience of including a manual: "The manual made things easy and gave guidance so that the guys can afterwards go back and refer to it again. It will be easy to open, refer back and read through. So if you think about something that you need to access urgently, you just go back to the MAC manual...(L191)".

Coaches used the manual to revisit the theoretical aspect of the MAC programme and confirmed that experience and reflection are less effective in the absence of the foundational knowledge usually received through formal learning (Reade, 2009).

Discussion

The aim of this study was to move away from the deficit perspective and individualistic interventions prevalent in psychology (Mpofu et al., 2011; Pretorius 2012) and sport psychology in South Africa (Grobbelaar, 2007), to an asset perspective and ecological intervention (Bronfenbrenner, 1979), specifically in the context of cricket in South Africa. The richness and depth of the results illustrated how this aim was reached through engaging cricket coaches (as opposed to players) in a psycho-educational MAC programme (as opposed to PST), thereby providing an extension of sport psychologists in regard to the psychological demands of cricket. The flexibility of the MAC programme allowed South African cricket coaches space to make sense of and discover their own interpretations relating to mindfulness, acceptance and commitment (Gardner & Moore, 2007). Making the MAC programme accessible to the whole cricket community is very relevant to the South African context, which consists of people from different backgrounds, cultures, ages, educational levels, genders and performance levels. This will greatly assist in addressing the country's

diverse geographic and educational challenges and dilemmas (South African Institute of Race Relations, 2013) because it will teach and empower the broader cricket community to perform despite dilemmas associated with the above mentioned challenges.

The MAC programme aims to develop human beings and enhance human performance through understanding how internal human processes interact with external demands (Gardner & Moore, 2007). This was indeed experienced by all coaches who felt that the MAC programme, as a psycho-educational process, helped them to gain knowledge in sport psychology, as well as providing them with psychological “tools” and a continuing framework to work with the psychological dimensions of their players. Coaches, therefore, also confirmed what Roos (1997) proposed, that psychologists can, via psycho-education, equip other individuals and groups (like coaches) with skills and competencies to empower them in the process of developing human potential. This is in line with Pretorius’ (2012) suggestion that other role players (like coaches) can extend the curative, preventative and developmental work of psychologists within broader systems (Pretorius, 2012). The results also highlighted that coaches needed more than eight hours to engage in a psycho-educational MAC programme, and this should be considered when planning coaching education workshops in future. Presenting the MAC programme by means of experiential learning made it enjoyable because it is contextualised and applied rather than a passive learning process (Chambers, 2011). Coaches engaging in their own experiential learning cycle (Kolb, 1984) increased the possibility of sharing their own learning about the MAC programme with their players.

Conclusion

This study has contributed to the field of sport psychology by applying an ecological perspective (as opposed to an individualistic view) to psycho-education by using the MAC approach (as opposed to PST) to educate coaches (as opposed to players) to deal more comprehensively and also perhaps more effectively with the psychological demands of cricket.

References

- Bronfenbrenner, U. (1979). *The Ecology of Human Development*. Cambridge, UK: Harvard University Press.
- Bernier, M., Thienot, E., Codron, R. & Fournier, J.F. (2009). Mindfulness and acceptance approaches in sport performance. *Journal of Clinical Sports Psychology*, 4, 320-333.
- Brown, K.W. & Ryan, R.M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.

- Chambers, F. (2011). Learning theory for effective learning in practice. In K. Armour (Ed.), *Sport pedagogy. An Introduction for Teaching and Coaching* (1st ed.) (pp. 39-52). Harlow, UK: Pearson Education Limited.
- Creswell, J.W. (1998). *Qualitative Inquiry and Research Design: Choosing among five Traditions*. Thousand Oaks, CA: Sage.
- Fuoss, D.E. & Troppmann, R.J. (1981). *Effective Coaching. A Psychological Approach*. New York, NY: John Wiley & Sons.
- Gardner, F.L. & Moore, Z.E. (2004). A Mindfulness-acceptance-commitment-based approach to athletic performance enhancement: Theoretical considerations. *Behavior Therapy*, 35, 707-723.
- Gardner, F.L. & Moore, Z.E. (2007). *The Psychology of Enhancing Human Performance. The Mindfulness-Acceptance-Commitment (MAC) Approach*. New York, NY: Springer Publishing.
- Gardner, F.L. & Moore, Z.E. (2012). Mindfulness and acceptance models in sport psychology: A decade of basic and applied scientific advancements. *Canadian Psychology/Psychologie Canadienne*, 53, 309-318. doi: 10.1037/a0030220
- Giorgi, A. & Giorgi, B. (2008). Phenomenology. In J. A. Smith (Ed.), *Qualitative Psychology. A Practical Guide to Research Methods* (2nd ed.) (pp. 27–52). London, UK: Sage.
- Grobbelaar, H.W. (2007). A survey of South African provincial netball coaches' opinions, abilities and limitations regarding mental skills training. *South African Journal for Research in Sport, Physical Education and Recreation*, 29, 27-39.
- Hasker, S.M. (2010). *Evaluation of the mindfulness-acceptance-commitment approach for enhancing athletic performance* (Doctoral dissertation). Retrieved from Psycinfo. (Order No. AAI3413164).
- Hayes, S.C., Strosahl, K.D. & Wilson, K.G. (1999). *Acceptance and Commitment Therapy: An Experiential Approach to Behaviour Change*. New York, NY: Guilford Press.
- Kabat-Zinn, J. (1994). *Wherever You Go, There You Are: Mindfulness Meditation in Everyday Life*. New York, NY: Hyperion.
- Kaufman, K.A., Glass, C.R. & Arnkoff, D.B. (2009). Evaluation of mindful sport performance enhancement (MSPE): A new approach to promote flow in athletes. *Journal of Clinical Sports Psychology*, 4, 334-356.
- Kee, Y.H. & Wang, C.K.J. (2008). Relationships between mindfulness, flow disposition and mental skills adoption: A cluster analytic approach. *Psychology of Sport and Exercise*, 9, 393-411.
- Kidman, L. & Hanrahan, J.S. (2011). *The Coaching Process. A Practical Guide to Becoming an Effective Sports Coach* (3rd ed.). New York, NY: Routledge.
- Kolb, D.A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall.
- Moon, J.A. (2004). *A Handbook of Reflective and Experiential Learning: Theory and Practice*. London, UK: Routledge.

Enhancing performance in cricket 737

- Moore, Z.E. (2009). Theoretical and empirical developments of the mindfulness-acceptance commitment (MAC) approach to performance enhancement. *Journal of Clinical Sports Psychology, 4*, 291-302.
- Mpofu, E., Bakker, T. & Lopez Levers, L. (2011). Counselling in African cultural heritage settings: The challenges and opportunities. In E. Mpofu (Ed.), *Counselling People with African Ancestry* (pp. 313-316). New York, NY: Cambridge University Press.
- Onwuegbuzie, A.J. & Leech, N.L. (2007). A call for qualitative power analysis. *Quality & Quantity, 41*, 105-121.
- Pain, M.A. & Harwood, C.G. (2004). Knowledge and perceptions of sport psychology within English soccer. *Journal of Sports Sciences, 22*, 813-826.
- Pretorius, G. (2012). Reflections of the scope of practice in the South African profession of psychology: A moral plea for relevance and a future vision. *South African Journal of Psychology, 42*, 509-521. doi: 10.1177/008124631204200405
- Reade, I. (2009). Formal vs. informal coach education: A commentary. *International Journal of Sport Science & Coaching, 4*, 343-346.
- Roos, V. (1997). *'n Psigo-opleidingsprogram vir die hantering van kinders in 'n geweldgekontamineerde omgewing* (Unpublished doctoral dissertation). University of Pretoria, Pretoria.
- Smith, J.A. (2003). *Qualitative Psychology: A Practical Guide to Research Methods*. London, UK: Sage.
- Smith, J.A., Flowers, P. & Larkin, M. (2009). *Interpretative Phenomenological Analysis. Theory, Method and Research*. London, UK: Sage.
- South African Institute of Race Relations (2013). *Fast Facts*. Gauteng: South Africa: Research and Policy Organisation.
- Sullivan, J. & Hodge, K.P. (1991). A survey of coaches and athletes about sport psychology in New Zealand. *The Sport Psychologist, 5*, 140-151.
- Terry, P.C. (2011). Beware the sun, Icarus. In P. R. Martin, F.M. Cheung, M.C. Knowles, M. Kyrios, L. Littlefield, J.B. Overmier. & J. Prieto (Eds.), *IAAP Handbook of Applied Psychology* (1st ed.) (pp. 386-412). Oxford, UK: Blackwell Publishing Ltd.
- Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2005). *Research Methods in Physical Activity*. Champaign, IL: Human Kinetics.
- Weinberg, R.S. & Gould, D. (2011). *Foundations in Sport and Exercise Psychology* (5th ed.). Champaign, IL: Human Kinetics.
- Williams, S.J. & Kendall, L. (2007). Perceptions of elite coaches and sports scientists of the research need for elite coaching practice. *Journal of Sports Sciences, 25*, 1577-1586.
- Wojnar, D.M. & Swanson, K.M. (2007). Phenomenology. An exploration. *Journal of Holistic Nursing, 25*, 172-180.