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CARDIFF METROPOLITAN UNIVERSITY

Prifysgol Fetropolitan Caerdydd

CARDIFF SCHOOL OF SPORT

DEGREE OF BACHELOR OF SCIENCE (HONOURS)

SPORT AND EXERCISE SCIENCE

THE BENEFITS ASSOCIATED WITH REFLECTIVE
PRACTICE WITHIN ELITE LEVEL GOLFER

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THE BENEFITS WITH REFLECTIVE PRACTICE WITHIN
ELITE LEVEL GOLFERS

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Abstract

This study explored the reflective process of elite level golfers within a national golfing squad, post practice and post competition. Six participants (2 females and 4 males), with playing experience ranging from 0-5 years, were interviewed about their experiences of reflective practice. Participants suggested that reflective practice benefited their performance through increased self-awareness, informed learning and future practice, enhanced confidence and coping. This was consistent with the finding of Cropley (2007) and Faull and Cropley (2009), however what was discovered from this research project was that golfers felt they attained a better ability to cope as a result of post competition reflections. The individuals perceived that the post round reflections had more meaning, which resulted in the individuals gaining more confidence. This impacted on the way in which the individuals perceived they could cope in future situations (Connaughton, Hanton, & Jones, 2010).

CHAPTER ONE

INTRODUCTION

1.0 Introduction

1.1 Introduction

This chapter will introduce why reflective practice is an important tool to enhance an individual's effectiveness and performance due to the attributions associated. This will be demonstrated by highlighting the findings from previous research, to justify why effective reflection is an important intervention to consider (Faull & Cropley, 2009; Knowles, Gilbourne, Borrie & Nevil 2001; Jonker, Marije, Elferink-Gemser, Ilse de Roos, & Visscher 2012; Sparrow, 2009)

1.2 Reflective practice

Reflective practice is a process that has been acknowledged by researchers (e.g., Cropley, 2007,2010) to enhance self awareness, which results in improvement in performance. The process of reflective practice can be carried out in a number of different ways, from an internal thinking (Kemmis, 1985) to systematic record of events (Cropley & Faull, 2009). The mechanisms associated with reflective practice are: Informs learning, self-awareness, self-confidence and human flourishing (Cropley, 2007; Hanton, Cropley, Miles, Mellalieu & Neil, 2007; Ghaye, 2010). However, the research is lacking a qualitative approach as to the direct process of reflection performers engage in, and how they use this information to enhance their performance.

Self-awareness and informing future action have been acknowledged by Cropley (2007) to be an outcome of reflective practice, which is beneficial to performance, a premise also supported by Cleary and Zimmerman (2001). It has been noted by Anderson, Miles, Mahoney, and Robinson (2002) and Hanton, Cropley, Miles, Mellalieu, and Neil (2007) that reflection can enhance confidence, which is potentially very beneficial given that confidence has been linked to facilitating performance levels amongst athletes (Anderson, Miles, Mahoney & Robinson, 2002; Hanton *et al.*, 2007). However, Cropley and Faull (2009) identified that reflection can be complex and ambiguous. Therefore, it would be fair to research

what reflective practice performers engage in, so this can help identify what needs to be done in order to determine what athletes can do in order to maximise their performance.

The aim of this study, therefore, was to qualitatively examine the reflective process carried out by elite level golfers. Specifically, identifying what they do to reflect, why they do this, and whether their reflective process benefits them in any way.

CHAPTER TWO
LITERATURE REVIEW

2.0 Literature Review

2.1 Introduction

Reflection is a word that has been used in sport by athletes and coaches, this is because it can be used as a tool to enhance learning and development within athletes, (Cropley, Miles, Hanton & Niven, 2007). It is important to understand what reflection actually is and what it consists of before it can effectively be carried out. The early research of Kemmis (1985) defined reflection as “a dialectical process: it looks inwards at our thoughts and thought processes and outwards at the situation in which we find our selves; when we consider the interaction of internal and external, our reflection orients us for further thought and action. Reflection is thus ‘meta thinking’ (thinking about thinking) in which we consider the relationship between our thoughts and action in a particular context” (p141). Boud, Keogh and Walker (1985) described reflection as a cycle of critical situations that are recorded, which improves self-awareness and then returned to in future situations to inform action. These are very complex definitions which expresses how complicated the reflective process can be, to put it more simply, Mezirow (1991) defined reflection as “... an individuals capacity to apply prior experiences to improve subsequent performance in a goal directed and effective manner.” The main message from the definitions is that, whether reflections are externally or internally examined, reflections are a process that can improve self-awareness and inform learning, which can impact on future actions and decisions. The simplistic nature of reflective practice was later address by Gibbs (1998) who referred to the reflection process in the following cycle:

1. Identify areas for review
2. Recognition and planning
3. Implementation and monitoring
4. Reflect and review
5. Continue....

Given the definitions, it is important to understand why reflective practice is useful and how it can aid performance or effectiveness. If this can be fully understood then individuals will seek the skills needed in order to enhance the quality of

reflection and, in turn, enhance performance. Reflective practice has been researched and investigated by a number of different researchers (e.g., Anderson, Miles, Mahony & Robinson, 2002; Copley, *et al.*, 2007; Hanton Copley, Miles, Mellalieu, & Neil, 2007; Jonker, *et al.*, 2012; Neil, Hanton & Mellalieu, 2011) who have all demonstrated different reasons why reflective practice is important. These include improved self-awareness, informs learning, which can influence future practice and increased self confidence, however they are all consistent in the findings that in some way reflections can positively impact on performance.

2.2 Mechanisms of reflective practice

This chapter will discuss the following areas that have been proposed regarding the mechanisms of reflective practice: Informs learning, self-awareness, self confidence and human flourishing. In order to show how reflection can promote specific benefits associated with performance.

2.2.1 Inform learning

Copley, *et al.* (2007) suggested reflections will inform learning and help to facilitate the development of athletes. If athletes can learn from critical situations, good or bad, it can lead to increased effectiveness. When athletes are more effective it can lead to increased performance because they are less likely to make the same mistake in future situations or they can repeat previous good practice, as the individuals become self-aware through reflections. Ericsson (2003) showed that athletes who engaged in the reflective process during their junior years separate themselves from their peers, which suggested those individuals that learnt from situations more effectively enhanced their development. This point also highlighted by Jonker, *et al.* (2012) showed that those individuals who engage in reflections at a junior level were those who progressed and competed as senior international. This emphasised the importance of younger athletes engaging in reflective practice, as it potentially gives them a better chance to progress to the next sporting level.

It has been suggested that if athletes want to inform future action that reflection must be carried out (McFee, 1993), as this would navigate direction and justify specific areas of improvement or maintenance. This was further emphasised by Cropley *et al.* (2010) who recognised that those individuals' who engage in the reflective process and develop knowledge in action will have an impact when situations evolve during a game or training situation, which will consequently have a positive impact on performance.

2.2.2 Self-awareness

Self-awareness has been identified by many researches as a mechanism of reflective practice (e.g., Cleary & Zimmerman, 2001; Faull & Cropley, 2009; Ertmer & Newby, 1996; Kitsantas & Zimmerman, 2002; Jonker *et al.*, 2010; Toering, Elferink-Gemser, Jordet, & Visscher, 2009; Cropley, Hanton, Miles, & Niven, 2010). These authors acknowledged that those individuals who reflect on a specific skill or elements of performance become more self-aware. Such awareness informs planning or actions on future games or practice. If future practice can be improved or developed this will not only increase competence athletes have (Cropley *et al.*, 2010) but it will also improve quality of performance.

Faull and Cropley (2009) carried out a case study that researched how an individual triathlon athlete uses reflection to develop their training schedule and how this impacts on the development of the athlete. Findings from this case study support the notion that reflective practice can be used to holistically aid athletic performance, this was shown by an increased self-awareness and evaluations skills, this supports the notion that reflective practice is an important skill to be attained by athletes. Zimmerman, (2002) also suggested that athletes who successfully reflect become more self aware, which is also demonstrated by Cropley *et al.* (2007). As a result of self-awareness, more successful goal setting will be set which can lead to an increased motivation and confidence (Weinberg & Gould, 2007). The notion of self-awareness has supported by Jonker *et al.* (2012) those athletes who become aware are more likely to adopt the correct strategy. Reflecting on skill specific attributes improves awareness for development within individuals, will allow them to adapt by improving their training or decision-making. This will lead to higher levels of confidence in specific situations Bandura (1991).

2.2.3 Self confidence

Sports confidence is a very popular topic in sports psychology because it is very strongly linked to facilitating or enhancing an individual's performance. If reflections can help protect or improve an athlete's confidence, then reflections is a very powerful tool to be used. Anderson, *et al.* (2002) and Hanton *et al.* (2007) suggested that those individuals who successfully evaluate themselves will have increased confidence in specific environments. This leads onto empowerment, as it has been acknowledge by Jonker *et al.* (2012) that those athletes who reflect are better at making more sense of their thoughts will increase their levels of empowerment (Ghaye & Ghaye, 1998) which allows them to implement change, in turn, gave them the ability to independently cope. In contrast to the above Neil *et al.* (2011) suggested that individuals who negatively appraise themselves will experience negative emotions regarding that performance. Such thoughts and emotions can also have a negative influence on their confidence (Neil *et al.*, 2011) therefore the correct process of reflection is important to protect or enhance confidence. Consequently, if individuals can reflect on positive elements of performance, confidence will be promoted therefore desirable attributions will be attained from better decision making and executions of shots which would be useful to aid performance (Greenless, 2009). Such a notion would support that of Bandura (1997) who suggested that focusing on previous positive performance accomplishments will impact on an individuals self efficacy. Coffee and Rees (2009) also suggested that reflections did not immediately impact on self-efficacy (a situation specific form of self-confidence), however medium term reflection increased an athletes feeling of controllability in a particular situation.

It has been noted that those athletes who have high levels of self-confidence are more resilient and less likely to choke in sport (Hill, Hanton, Flemming, & Matthews, 2009). Factors that influenced mental toughness, were involving competition into training environments engaging in activities for enjoyment, socialisation, skill and mastery (Connaughton, Hanton, Jones, & Wadey, 2008; Gould, Dieffenbach, & Moffett, 2002). In addition to this goal setting was proven to be a very powerful tool increase mental toughness or self belief, the feeling of achievement gives athletes confidence which protects mental toughness

(Connaughton, *et al.*, 2010). To effectively goal set individuals must reflect, in order to have meaningful and purposeful goals (Zimmerman, 2002) otherwise goals will be unattainable and unrealistic leading to decrease in confidence which further emphasizes the importance of reflection (Adams, 2012).

2.2.4 Human Flourishing

Reflections will impact on an individual's ability to appreciate the positive elements they currently have in their life or their sport. This will help them to feel more positive and happy which can impact on the performance Ghaye (2010). The psychological well being of athlete will depend on the interpretations of an event, if an individual can positively engage in the task at hand, this will create a meaningful purpose to life and a positive relationship with peers and colleagues (Fredrickson, 2009) this is known as human flourishing. If there is a relationship between reflection and flourishing then this can lead to positive action. If flourishing can be attained then this will improve the whole well being of an athlete, optimism, meaningful work and more productive practice. It is a very important point to consider especially if we want to protect or enhance an individual's confidence but this notion will not impact highly on learning or development. In sport, the outcome is not directly indicated to how good your good days are but more often than not how good your bad days are. If we only focus on positive element of performance improving our weakness could be limited this will constrain our development and learning potential on any given task. This could be a limiting factor for an athlete who wants to be strong in all areas of their game as only focusing on positive elements of performance will limit the learning from negative things that occur that could be very useful towards learning and close the gap between good days and bad days (Ghaye, 2010)

2.3 Reflective Practice Research: Consultancy

Reflection has been considered in a consultancy context which has been carried out by Cropley *et al.* (2007, 2010) who investigated how reflections impacted on the application of sports psychologists. Cropley *et al.* (2007) indicated that the reflective process is complex and it requires careful thought however there are

many benefits associated with reflective practice. According to Williams (2001), individuals who engage reflective practice more often were those who are most effective. Cropley *et al.* (2007) investigated how sports psychologist used reflective practice 48 hours after the consultancy experience. During this study the participant was asked to think about the reflections immediately after the experience. This was to ensure the participant fully understood the experience, which lead to the key elements being drawn from the experience, resulting in more accurate reflections (Knowles, Gilbourne, Borrie, & Nevill, 2001). Indeed, Cropley *et al.* (2007) showed that by having a structure approach allowed the participant to produce effective reflections. Having the opportunity to reflect with a mentor will also add depth to the reflective process, allowing clarity to immerge from the findings (Williams, 2001). It is clear that from the findings of Cropley *et al.* (2007), Williams (2001), those who engage reflective practice has to ensure the reflections are individualised in order to fully gain the benefits associated with reflection (Faull & Cropley, 2009), however guidance is always necessary to maintain focus and to stay on track.

Cropley *et al.* (2010) adopted a more focused approach to understanding reflective practice when they investigated specific types of reflections that were being used by the sports psychologist and how these could potentially impact on effectiveness. The rationale of this study was to determine what type of reflective practice can ensure consultants are more effective and inform better decisions, this will help them understand why in which they made those decisions, which will impact on development and effectiveness. The investigation showed that the psychologists engaged in four different categories of reflection: technical rationality, knowledge in action, reflection in action and reflection on action. This study showed that as a result of reflection self-awareness was increased. However, it is still unclear what individuals should directly reflect upon in order to maximise their self awareness and learning. The research also lacks clarity on whether reflective practice directly relates to more self-awareness, because there was no direct measure of reflection. With this in mind it has been problematic for researchers (e.g., Cropley *et al.*, 2010; Cropley, Neil, Wilson & Faull, 2011) to state that reflection is directly related to an improved self awareness or learning. This is because improvements in performance could be related to an improvement

of skill, through practice and not directly linked to reflective practice. However, through a qualitative study individuals could state how they used reflections to guide learning and development to highlight how effective reflective practice can be.

2.4 Reflective Practice Research: Sports Coaching and athletes

It is important to consider how reflective practice from a coaches perspective can impact on an athletes engagement to the activity or task. Neil *et al.* (2011) suggested that coaches found it beneficial to reflect because it enhanced knowledge and understanding of players. Cropley *et al.* (2010) acknowledged that reflection impacts on knowledge in action, this will influence the approach a coach adopt to maximise effectiveness. This will impact on future action, informing the coaches to make better decisions based upon previous of experience as a result of reflective practice.

Cropley *et al.* (2007) indicated that reflective practice informed knowledge, however if this is not acted upon the information becomes irrelevant. It is important, that the individual puts the learnt skills into practice to resolve the issues associated or to maintain good practice (Faull *et al.*, 2009). Such a process will reduce the risk of information festering around inside the athletes mind. However, reflection is an on-going cycle with learning continuing to take place, (Gibbs, 1998).

The limitations of the research up until this point is that reflection is a very complicated skill to develop and the models seemed to be over simplified and do not demonstrate the difficult nature of the reflective process. Gibbs (1998) model of reflective practice follows a simple stage-by-stage process allowing learning and development to take place. However this not supported by Cropley *et al.* (2007) who recognised the complexes and ambiguous nature of reflection, which is a barrier to individuals engaging in this process. It has also been recognised by Faull *et al.* (2009) that reflection has to be individualised to maximise its effectiveness. The research does not indicate factors or methods that would best suit certain individuals in specific sports, however coaches who engaged in the

reflective process, enhanced the level of reflection as they become more familiar with the process (Knowles, Gilbourne, Borrie, & Nevill, 2001). Knowles *et al.* (2001) investigated how, Gibbs (1998), model of reflective practice impacted on coaches and their performance. The findings of the study highlighted that the reflection processes is not simple. Indeed, it can be complex and ambiguous based on the variety of responses between coaches. Specifically it was recognised that not every coach reflects in the same way, which brought Knowles *et al.* (2001) to suggest that different methods of reflection should be addressed in the early stages of the reflection process. Nevertheless this article only researched the process the coaches' experience as they reflected on themselves in a coaching setting. In order to show that reflection leads to better coaching it would be important to monitor athletes' participant levels, engagement in skill or task which will suggest that as the coaches improve on their reflections so did the outcome of the session which was represented by the athletes performance. Copley, *et al.* (2011) showed that coaches who engaged in reflection learnt from the experience, which altered their approach to which they coached. This involved, allowing the players to make their own decisions regarding training activities as result this change the coach athlete relationship and improved communication. This facilitated the way in which the players interpreted the messages being delivered. Further results from the study showed that the players felt more comfortable with the coaches which resulting in them becoming more approachable. The players felt responsible for their own performance, and this impacted on cohesion within the team performance. These finding showed that reflections can be used as a tool to pull out the positive and negative elements of performance, which can inform learning and development more effectively It is also important to note that reflections seemed to be more powerful when they were committed to paper.

2.5 Reflective Practice Research: Emotions

Emotions are important to consider when researching reflective practice for two reasons. First, the way athletes' interpret the event can influence the emotions they experience, which in turn can have an affect on performance (Lazarus, 2000). Second, Sparrow (2009) suggested that if individuals reflect on the performance when they have high emotions, then these emotions could impact upon the perceptions of the situations they are reflecting on. That is, the interpretation can influence the effectiveness of being able to reflect accurately, impairing the perceived reality of the situation, which will hinder development and learning. Sparrow (2009) acknowledged that there is limited of research that investigates information retrieval in highly emotional states. Cropley, Macleod and Tata (2000) suggested emotions such as depression resulted in athletes recall of incidents being more negative in nature. This was also supported by Lavender and Watkins (2004) who noted that those individuals who engaged in rumination during high emotive states regenerated fewer positive events. With this in mind it could be suggested that reflections should only be carried out when athletes are in a non-emotional state.

Anxiety is an emotion that is caused by negative thoughts and that can have detrimental performance effects (Lazarus, 2000). Hanton, Cropley and Lee (2009) conducted a study on elite athletes, which emphasised how reflective strategies could impact on the way in which individuals processed cognitive and somatic information, in turn changed they way in which they interpreted symptoms of anxiety. The findings suggested that reflecting on positive elements of their game or previous performance impacted on anxiety by reducing the level individuals experienced during future performance. This is because it helped them to cope and gave athletes the opportunity to draw upon previous positive experiences prior to the event, which resulted in the athletes dealing with the symptoms of anxiety. These findings showed that an effective strategy to deal with anxiety would be reflection, however some researchers will argue that learning may not take place if we do not address negative elements of performance (Ghaye, 2010). It is important that the reflective process has balance so athletes can draw valuable positive and negatives elements from the event in order for athletes to

learn from what didn't go so well, and use the positives elements to enhance confidence (Connaughton *et al.*, 2010). Hanton *et al.* (2009) have acknowledged by engaging in the reflective process improved the knowledge and understanding of competitive experience, which informs more rational decision making when faced with anxious situations.

2.6 Rationale and Purpose

Reflection is a very important tool if an individual wants to improve their performance in a number of ways, it has been shown that it can inform learning, increase confidence and self awareness which impacts on future actions. Self-confidence and self-awareness both have been noted to influence an individual's performance and effectiveness in any given situation. The limitations in the research are that nothing investigates the specific nature of reflection within sport performers and the process of reflection they engage in order to gain these attributions. By understanding how sports performers reflect, what they reflect on, and how the reflective process is beneficial to their performance. This will be useful in an applied setting because practitioners or sports psychologists can identify areas individuals can improve and provide reflection as a possible intervention. This will guide the research as to how golfers act upon the reflective process and how this impacts on performance. The purpose of the study, therefore, was to identify the process of reflection elite level golfers engage in. The benefits associated with reflective practice, that the golfers perceived to be helpful towards their performance, which can be used in future practice to enhance performance. It can also highlight possible strengths and weaknesses of the current reflective process that is used by the golfers, which can open further investigation as to more suitable reflective practices.

CHAPTER THREE

METHODOLGY

3.0 Method

3.1 Research Design

The purpose of this study was to investigate the current reflective process the members of an elite national golfing squad carried out, and to examine whether reflection enhanced their performance. Goetz and Lecompte (1984) used the term “criterion – based sampling” where the researcher sets the specific criterion that must be adhered to if a subject is going to be appropriate for the investigation. To gain this information participants were interviewed so that they could share their experiences and provide in depth information regarding the utility of reflective practices.

3.2 Participants

The participants that were used during this study were the current members of the national squad, this sample was chosen because this is the group of golfers who are considered to be the best amateur golfers within the country (Thomas & Nelson, 1996). There are currently 16 members of the Elite squad however there were only 6 players eligible to take part in this study. The participants consisted of 2 Female Golfers (participants 2 & 3) and 4 Male golfers (participants 1, 4, 5 & 6) (Hanton & Connaughton, 2002; Patton, 2002). The golfers that were interviewed are required to carry out regular self-reflections, which they are obligated to do so by the national golf organisation. Therefore no prompts or guidance of reflection were needed, the investigation was an insight into what they specifically do and how they use the information to enhance their performance.

During the time of this study January – February (2013), the golfers were in the off-season, therefore the majority of the reflections they encounter were after practice sessions, rather than after competition. The age range of the participants was 16- 20 (Mean = 17.83, SD \pm 1.47) with playing experience of 0 – 5 years competing in the National Team. The reflective process and the perceived benefits of the reflective process was discussed through a one to one chat with myself and the performance director, to show what will be done during this study and how this

could contribute to knowledge. Once this was fully understood he allowed the selected members of the squad to take part in the study. All participants were then asked to take part in a one to one interview, regarding their current reflection process.

3.3 Data Collection

Lincoln and Guba (1985) suggest that qualitative research should be judged on its trustworthiness. Trustworthiness in the current study was achieved through its credibility and transferability. The players were interviewed to draw upon, firstly how they currently reflected and how this benefited their performance. To inform this, players kept playing and practice diaries in order to monitor their reflective process, after every meaningful practice and playing session, (Faull *et al.*, 2009). This was beneficial because players found it easier to recall previous sessions drawing upon the key points, which allowed clarity of their reflections to come forward. In order to address the purpose of the study, semi structured interviews were used with the golfers organised to prompt the interview, which was helpful to guide the interview process (Hill, Hanton, Fleming & Matthews, 2009). To establish external validity in this study, detailed quotes from each participant were provided in the interview transcripts. Reliability was established by providing a detailed description of the exact procedures followed. This would enable other researchers to follow the same process (Saunders & Thornhil, 1997).

The first part of the interview looked into what the players currently did to reflect, and how often they currently reflected. The interview guide then led into mechanisms of reflective practice, to probe how it may have effect on the participants. This was guided by the previous research (Cropley *et al.*, 2009; Knowles *et al.*, 2001; Jonker *et al.*, 2012; Sparrow, 2009) that suggested, reflective practice enhances performance in a number of ways such as: Future practice, informs learning, self-confidence, self-awareness and emotions. Examples of questions are as follows, which was taken from my interview guide.

E.g.,

Explain to me what reflective practice is?

What reflective practice are you currently doing?

How is this beneficial towards your performance?

The topic areas were allowed to emerge by the participants; key words were acknowledged to prompt key themes that directed further questioning (Patton, 2002). This was followed up by open-ended questions allowing specific scenarios of reflections to emerge, checking for understanding and clarity after description of event.

E.g.,

So you indicated it helped your confidence, what does confidence mean to you?

How does this help your performance?

Give me a specific example of this?

3.4 Pilot interviews

Firstly a pilot interview was carried out; this was to gain clarity of the type of questions that were addressed in the interview guide. It also helped to gain experience and confidence to take out the key words and prompts that were highlighted from the participants. It was noted from the pilot interview that golfers interpreted reflective practice as feedback, which involved the same process, just a different association with the word. This was an invaluable experience because it firstly gave clarity to the participants and it allowed the interviews from that point onwards to flow. One interview guide was enough for the purpose of this study because the guide that was developed was appropriate and relevant for the golfers, therefore the interview flowed and was successful.

3.5 Procedure

After the pilot interview, participants were contacted and agreed to take part in the study. The individuals were sent an email with details regarding the study in advance, to prepare them for the interview process. The participants were informed prior to the interview that they would be discussing the reflective process, based on their previous performance of critical rounds and important practice sessions. Semi structured interviews then took place, where key points of the reflection process and how it was beneficial to their performance was then discussed. The individuals were then interviewed, based upon previous reflections in which at any point they were allowed to withdraw from the interview, (Patton, 2002). The diaries were used to record thoughts and feels they experienced and statistical measurements of fairways hit, greens in regulation, puts per round, sand saves and up and downs was recorded to inform the technical coach (Faull *et al.*, 2009). This was helpful for them because they recorded more accurate accounts of the thoughts and actions they experienced during play.

The interviews took place at the Celtic manor resort, which is the golf course the golfers meet for national squad duty, which was a familiar environment (Morse, 1994). This was at the discretion of the National coach, and the compliance of the players themselves. The national elite squad has a winter program where the individuals have played 3-4 competitive rounds of golf, against each other, which simulated real life competitive situation (Allen, Jones & Sheffield, 2010).

3.5 Data analysis

The interviews adopted a deductive approach through questions being developed based on previous literature and theory. The analysis, however, was inductive in nature (Patton, 2002). Specifically, an inductive content analysis was used to allow new key themes to emerge as no other study has examined reflective practice amongst elite level golfers. That is, how individuals thought reflective practice was beneficial for their performance. For example: what did they reflect up on? How did they use this information? Once they had established this how did

they use the positive information attained to enhance performance and how did they use the negative elements to guide future actions.

The interviews were transcribed and read, drawing upon the key points from the reflective process. This consisted of highlighting what the golfers actually did when they reflected. Then how they perceived this to be beneficial towards their performance. To check further understanding the golfers were asked to give specific examples or accounts of when this happened during their career, this was helpful because it gave a clear insight to the impact reflections have, which was valuable evidence to support how they benefitted from the reflective process. The key points that were acknowledged from the interviews were clearly presented to the participants to ensure clarification and confirmation of clear findings.

The results from the interviews were categorised in excel firstly into what each participant did when they reflected (e.g., online or hand written accounts; Sharma, 2010). The second process of the results was then to highlight how they found the reflective process beneficial to their performance, which was supported by specific quotes, and scenarios they have previously experienced. The results from the interview were clarified by the participant (Lincoln & Guba, 1985), where the findings from the interviews were sent back to the participant to so they could indicate the accuracy of the events discussed during the interviews (Cresswell, 2007). The information attained from the interviews was then presented in direct quotations that the individuals identified (Silverman, 2000), which highlights descriptive detail, firstly of the process of reflective practice. Secondly, the benefits of reflective practice, thirdly the limitations associated to reflective practice that was acknowledged by the participants. The rationale for presenting the findings in this was to provide a detailed insight into firstly what and how elite level golfers reflect, and how this has specifically enhanced their performance.

CHAPTER FOUR

RESULTS

4.0 Results

In order to best address the research question, this section will be separated into three main parts. The first part will focus on when reflection took place. The second section will highlight benefits of reflective practice, this includes improved self confidence, self-awareness, informs learning and reflection as a coping strategy. The final section will highlight the limitations to reflecting. To illuminate the experiences of all participants, selected quotations will be used to identify the experiences the golfers had whilst engaging in the reflective process.

4.1. When Reflection took place

This section will identify when reflection took place, post competition and post practice sessions. It will also indicate exactly what the participants did to reflect, giving an insight into the specific content that was recorded during these reflections.

4.1.1 Post practice reflective process.

The reflective process among the participants differed, varying from a thorough systematic reflection, which would be presented in a written account clearly highlighting strengths, weakness and how to develop. Too an, inward thinking, which is the internal thoughts, the participants were thinking which is not expressed through written accounts (Kemmis, 1985). Participant 1, 4 and 6 engaged in an online record of reflective practice, which could be viewed by the coach, and support staff. This was illustrated by participant 1, "I reflect after each practice session, on the website and writing down what I've been doing in my session, what's been good, bad, and what I'll do differently in the next session." The specific content that would be recorded during these online reflections which was provided by participant 4:

I wouldn't write down a specific bad shot... I was practicing, putting or chipping, and there was a consistent bad shot, like a "bad strike" or something, I would write that down, I'd put down "Strike is a bit weak,

pushing slightly” I could go back and look at that and just try to figure out why. Because now I know what I do in my swing, I can fix it myself.

Participant 2 kept a practice diary, which was used to record information regarding the sessions that had taken place:

[I reflect] on individual parts of my game, after a pitching session, how good it was. If it wasn't very good, why wasn't it very good? For example “Why was my concentration not there, was I being distracted? How can it be improved?”

Participant 2 also gave herself a rating as to how she thought the sessions went, “at the moment I give myself a mark out of ten, as to how good my practice was. I write down whether it was very good, good, bad, etc.” This process of reflection was different to the entire participants; nevertheless the statistical content of information that was recorded is the same as participants 1, 4 and 6. The rationale for participant 2 using a diary was because it was more convenient to write down the key elements in this way to more accurately record events. Where as, participant 3 and 5 reflected differently from the other participants. Specifically, participant 3's main source of reflection came from social support, “having my Dad beside me and always telling me that I'm still maintaining the right things”. Participant 5 did not engage in a systematic reflective process, but adopted an internal thought process where he thought about how the practice session went and how it could have been improved, participant 5 identified “I didn't write it down. I just looked at it myself when I was at work and thought how did that go today? I always sort of review it in my head, rather than write it down”.

The practice reflection varied between all the participants, but the one element that was consistent between all participants was that all of them recorded and monitored statistical data that was identified during practice sessions.

4.1.2 Post competition reflective process.

All participants submitted reflections online as part of their support requirements from the national organisation, where the coaches and performance committee all had access to. Participant 3 gave an insight as to what the all participants have to write down:

I would always do my stats first... fairways, greens, putting etc. I would write down individually the clubs through the bag and how I was feeling over shots. Did I have technical thoughts in my head over different clubs? Did I have any specific way of green-reading that day?

The second element of reflection, which was not directly statistical data, had four main elements to it. That is, the 3 best shots of that day, what went well, what didn't go so well and how to improve this was indicated by participant 6:

In competitive reflections... the three best shots, identifying them and just writing them down and describing them helps me a lot more. What were the positives I found? What can I do to improve, or what wasn't so good. Answer those questions and then identify what I need to do.

The way in which the information was acted upon differed between all individuals, participant 5 indicated that he had many different processes of reflection he had to adhere to because of governing bodies which might suggest why this participant does not engage in reflection after practice as it is too time consuming:

After every round I'd do my stats. I didn't do the same stats for everything; I had the stats for the Golf Union and different stats, for my college. My personal coach also gave me stats and they were all three different systems. I did not record specific content, where I missed the fairways or the amount of putts, on the reflections for my coach or college. I only recorded that information on the golf union stats. So reflections for each round were different, which isn't that great.

Participant 3 used her father as support with the reflections, which was consistent with the post practice reflections. Where as participant 1, 2 and 6 used the information to inform the coach of their strengths and weaknesses of that individual tournament.

4.2. Benefits of reflective practice

The participants identified numerous benefits as a result of reflection. Specifically, reflective practice was suggested to improve confidence, which resulted in them coping better in future situations. It was also identified that reflective practice ensures learning took place, which informed future practice. To add to this, reflections enhanced self-awareness, which helped the participants become aware of their strengths and weaknesses.

4.2.1 Reflection improves confidence

Anderson *et al.* (2002) and Hanton *et al.* (2007) suggested that confidence would increase as a result of reflection. In support of this, all six of the participants of this study experienced an enhancement in their confidence as a result of reflection. Participant 5 defines confidence and indicates how previous reflections helped him to acknowledge specific keys that have previously helped him:

Confidence is just finding a certain self-belief, whether it's something I'm thinking about, or as a result of reflections from the week before. Helping me focus on my keys, like the back of the ball, this then gives me confidence, because it has worked before.

Participants in this study highlighted the importance confidence has on their game. Participant 2 indicated that confidence is critical to their game, suggesting it protects the probability of negative thoughts coming into their mind:

... big aspect of the game... confidence. It's very much a mental game, so, say if your confidence is down, you could even be hitting it well, but if your confidence goes down then you're going to start hitting bad shots and doubts are going to come into your mind.

This was also illustrated by participant 6 who recognised the importance confidence has on his game and how this is likely to facilitate the performance level, therefore, increasing their chance to win:

... it goes into that mental state of confidence and if you don't have confidence then you can't be confident about your game. You're going to go out there with a negative attitude and think you aren't going to win.

Through reflections, participants 6 suggested that confidence impacts on his attitude towards his game. Which he later indicated that you could still enhance your confidence on bad rounds providing the reflective process is carried out correctly:

If you reflect well even on bad days, your confidence can still be good... so your three best shots in a day where you could have shot 90 and everyone else has shot 68. If you find your three best shots are positives, then you've built your confidence and kind of scratched [forgotten about] that 90.

It is apparent that the process of reflection is a very power tool to maintain or develop confidence within the participants. Participant 6 has indicated here that through recording the three best shots of the day, even on days that were not so successful you can still gain confidence from the positive elements of that performance.

As a result of reflection all individuals experienced an increase in confidence in many different ways. This varied from having more confidence in their technique, through to knowing they can drive or putt well, which was identified through their reflections. Participant 2 acknowledge that, "I'll get my confidence from the practice sessions going into tournaments, just to keep that going. I'll keep doing the same things when I get to the tournaments." Reflection gave her confidence because she could see what she was doing well, which helped her take this information into competitions

Participant 4 showed that reflecting on previous performances is a valuable procedure, especially when faced with a similar situation in the future (Cropley *et al.*, 2010). This is because it gives the participant the confidence to commit to the shot, knowing they have selected the correct club, and that they have the ability to execute the shot needed. Participant 4 stated:

If you write them down and you look over them before the next tournament, and on the first hole you get the same shot, you can write down "I had 150

yards at 9 iron/8 iron close with a little cut.” You come back to the next tournament, read over that and you’ve got that down and you know you can hit it well... because that confidence that you’ve done it before fills you.

The reflective process post competition and post practice seems to be a valuable activity for the performer to maintain or develop confidence, when faced with any situation. Through influencing confidence the participants have towards, their technique, decision making and ability to execute the task.

4.2.2 Reflection informs learning

Informing learning was another benefit of reflection that was identified during this study. Specifically, due to the process of reflection, all participants found that what they wrote down influenced learning. This is coherent with the finding of Cropley *et al.* (2007). With regards to the mechanisms that influenced learning, it is apparent that identification of strengths and areas for improvement has to be classified first for learning to take place. Participant 4 described that the reflective process help him identify strengths and weaknesses within his game. Once this has been acknowledged action must then take place to resolve specific issues within his game. Reflection helped him learn, what works best. For example, participant 4 gave insight into how this process helps him technically, “I know what I’m doing technically so he just tells me what it is and I go away and work at it.” This was acknowledged through both support from national coach and awareness through reflections.

Participant 1 described learning from practice rounds, which would inform future decisions when competing, with regards to shot selection and decision-making. Participant 1 described, “there is a run out that is in your reach [long rough, bunker or water] and then you hit drivers straight through it and you can learn a lot from that and not hit drivers the next round.” Participant 2 described learning as a level of improvement in comparison to previous reflections:

A 10/10 would not be if I was hitting it well. It’s just what I’ve got out of the session. So, if I’ve done a skills session I’d feel “Right, I’ve got a lot out of

that. I've improved since the previous skills test." That would be a 10/10 session.

All participants learnt from the reflection process. For example, participant 3 learnt from every round during the Olympics in Australia as to how best deal with hot climate of 48 degrees, ensuring there was sufficient fluid taken on board:

I learned from every round as a result of reflection because of the different feelings that I was on the golf course. The second day was the hardest day, because it was 48o and my mind wasn't on the golf. It was on my health and my fitness, because I was concentrating more on my fluid intake.

Participant 4 acknowledged that concentration levels were starting to drop during performance, after identifying this, on course strategies such as fuel and hydration intake was monitored to ensure concentration levels were maintained:

I used to carry a coke, or chocolate on the course, but I have identified through monitoring my rounds through reflection, just water helps concentration more. ... instead of having a cup of tea, I'll have water... then it helps keep concentration up throughout the day.

Participant 5 highlighted, that he just learnt from experience, "I've reviewed my practice at the end of each practice session and thought it was pretty poor towards the end of it." He also acknowledged that he only reflects upon the negative elements of his practice session "I always take the negatives from everything so I'd look at what I need to improve for the next session, to improve it" this indicates that he has learnt from the negatives of his previous practice to guide future practice. Participant 6 highlighted, "learning through reflection you can only improve... so when you learn, you act on what you've learned and so put that in action to improve your game. It guides your future practice." This suggests that identification, of what works best for their game from on course decisions, implementing swing keys or technical changes, these are important if athletes what to learn, this will then lead to informing future decisions.

4.2.3 Reflection informs practice

Reflective practice is a useful process to identify positive and negative elements of performance. Therefore, individuals use reflection to direct future practice (Mcfee, 1993). The participants within this study all indicated that as a result of reflection, it guided and led future practice sessions. Participant 1 described how reflection informed future practice because, “It showed me my weakness in my game, it showed me where I need to practice next; what I didn’t need to practice if I was really good at it.” Participant 2 gave insight into what specifically help them identify what they needed to do through reflection and how they did it “I reflect, and then I take that to my practice, if it’s because of my pitch and runs, I need to improve on them, so I work on them... whether it’s my strike, ...I’m pitching it too far...”

Participants 3 and 4 also acknowledged that as a result of reflection, they then practiced differently in order for them to improve their performance. When asked how do you act upon your reflections? Participant 3 acknowledge “I’d go and practice afterwards” Participant 4 also gave a specific insight to how they used the coach to direct the future practice, which informed specific drills to help recuperate the performance level this player desires:

My pace putting was off...I was about 30+ feet away from the hole and I wasn’t getting it consistently within 3ft [coach] looked at that and he said that I was having too many 3-putts, we talked about it. He gave me ways I could improve. He gave me a putter, to help my rhythm, which helped.

Participant 5 and 6 both used the post competition stats to direct future practice. For example, they both reviewed their stats and highlighted the weakness within these numbers which resulted in them focusing on that area of the game during future practice sessions. Participant 5 stated:

... I’ll always do my stats for fairways hit, and greens hit. For example, with greens hit, I’d look at where I was missing them, so I’d look at how many greens left and how many rights and shorts and longs, so I can identify which areas. If I’m consistently missing the green left I can work on it. Stats are going to help me with that rather than saying I hit 12 greens I need to hit more greens, I need to look at why and how I can improve.

4.2.4 Reflection improves self-awareness

Self-awareness is important if an individual wants to feel they are in control of themselves and the surroundings. Cropley *et al.* (2010) and Zimmerman (2002) both indicated that self-awareness would increase if individuals reflect. This study supports such notion because all participants reported that as a result of reflection they become more self-aware. This included being aware of their weakness or strengths, identifying what they needed to do to improve that. This ranged from, technical, tactical or mental elements of their game in order for them to improve their performance. Participant 1 acknowledged a very important point, why it is important to reflect to enhance awareness, "so reflecting does help because if you're not aware of it you can't really do anything about it". This suggests that if you are not aware of your weaknesses then you can't act upon it to enhance performance. In contrast, participant 2 acknowledged, "Let's say I was distracted. I would write down why I was distracted, whether there were people around, aspects like that. How can I get away from that?" Reflection for this participant enhances awareness as to what may distract them during practice, and this information directs the way in which they adopt practice in future sessions to enhance quality of practice. Participant 3 uses social support as well as reflection to enhance awareness:

... why have I hit that left? Why have I hit that right? I'd be manipulating all the time and [significant other] could see that all the time, but obviously I can't see it, I can only feel it, but off-course, when I'd come off, then he'd tell me.

Participant 3 indicated that the effectiveness of her reflections was shown through her success on course. This shows that she is aware of what she has to do to play well as a result of reflections, which has facilitated her performance. When asked How do you know it's working? The response was, "It's worked so far...." Meaning, what she has learnt and implemented into her game has been successful this shows she is now more aware of what makes her play well as a result of reflections.

Participants 4, 5 and 6 also stated that reflection identified strengths and weaknesses within their game, enhancing awareness to direct future practice.

Participant 6 also used reflection to categorise what member of the support team they needed:

... create a structure of how you want to improve that, so depending on what needs to be improved, you could either go and see [support member 1], or go and see [support member 2] or [support member 3], depending on what you needed to improve on: your mental game or the more technical side, or just generally playing.

It is clear from these findings that reflection enhances awareness in a number of different ways, from awareness of strengths and weaknesses of their game, to identify support required or to determine what is the best source of practice that works from them.

4.2.5 Reflection as a way of coping

Reflection as a way of coping, was identified by the all participants, therefore revealing a new insight into how an athlete's reflection can benefit performance. This was more dominant when the participants described post competition reflections, the participants suggested that they learnt from previous rounds identifying specific keys, such as mental or technical, were crucial for them to play well or cope in certain situations. Technical keys for golfers are when the golfer focuses on one element of their swing (e.g., back swing or rhythm), mental keys (e.g., commit to the shot or focus on target). Participant 4 indicated, "I had keys I could go back to from the session." Participant 5 showed how when he was struggling, by looking back on previous reflection would help deal and manage the situation, whether it was technical or mental in nature:

... when you're struggling, "What was I thinking about then, because I hit 14 out of 15 fairways." When I'm playing well I write down certain keys in my notebook so that, a couple of weeks later, if I've gone off thinking about something and I'm struggling, I can look back on my stats to see when I was hitting it well and see what I was thinking about. So it can help bring it back when I'm trying to get some more confidence.

However, participant 1 and 3 did not indicate that reflections enhanced their ability to cope, and participant 2 acknowledged that they gained confidence from reflections, but it was confidence itself that then helped them to cope rather than reflection. Participant 2 stated, "It's not all about whether you're hitting it well or not; you can still get a score round if you're not hitting it well, when your confidence is high." This is useful because they have previously acknowledged that reflections enhance their confidence whether it was that of social support or recording practice session, they used this confidence when competing, which helped them cope.

4.3 The limitations associated with reflective practice

The participants within this study highlighted limitations of reflective practice, at times it was not effective to aid their performance and it could possibly be negative. Participant 1 acknowledged that due to the time between rounds when playing competition it was not always possible to act upon reflections. As a result, participant 1 would not reflect in depth because the correct follow up action could not be carried out:

It all depends on how close the next round is. If it's a couple of days then I probably won't reflect in depth, because I won't have much time to improve, but if, it's a week I'll go back over the next few days and work on what I need to improve, that should really help me for the next event.

This suggests that if individuals cannot act upon these reflections they will not endorse as much information from such events. The current system that was in place for this national squad was that once the reflections were uploaded this could be viewed by the support staff but not again by the players themselves. Participant 1 identified that reflections were not useful if the information was not available to view after it had been submitted online. Participant 1 also suggested that he understood the value of the reflective process but also stated that having the golf union enforcing this reflection it also impacts on the likelihood of engaging

in reflection. Participant 1, "I don't feel I have to, but then I sort of do! I know I have to, so I know I want to. It's definitely beneficial but the [National squad] also advises us to do it to stay on their good side." Participant 1 acknowledged that reflection is timely process therefore unless this participant had a lot of time to reflect then this would not be carried out effectively:

Occasionally I'd write down some key information but not all the time. If I had a lot of time to reflect then I would, but last year I was very busy with competitions, so I didn't really have much time to reflect as well.

Participants 2 identified that reflective practice needs to be individualised in order for it be most effective, "I'd add a few more details to it but I think that's specific to each player. I think each player should want to do that anyway". Participants 3 stated that too much feedback can over complicated the thought process which can impact performance when on the golf course, "I don't reflect on everything, because too much feedback can jumble up my mind and thinking about too many things on a golf course is not good." This was also apparent with participant 4, who suggested that reflections impact on emotions:

... looking at a putting session from a while ago and it was going badly, I then start rushing, I'll be thinking "I've just done that" I'll get a bit angry with myself. I'll go back to the balls without realising I am quite angry, it will just start over again.

This shows that this individual needs to be shown how to effectively reflect in order for it to facilitate his game rather than frustrate him. Participant 1 and 6 who suggested that if they reflect when highly emotional, that of happiness or anger, this would impact on the information they recorded, for example, participant 6 stated also mentioned reflection when emotional:

If you're emotionally attached to your game on that day, if you had a bad round, you can be extremely harsh on yourself and not identify the right areas of what actually went wrong. And if you've had a good day you can

be over-happy with yourself and say everything was great, whereas in fact you'd probably find that a few things could be improved.

Participant 1 and 4 acknowledged that reflection is a difficult process therefore they needed specific skills or tool to reflect effectively, this is consistent with Copley *et al.* (2007) who also suggested that reflection is a complex process which needs practice. Participant 1 identified:

I didn't reflect because I didn't have any tools to reflect on. I didn't reflect because I just didn't want to, because I knew it wasn't the best type of stats, so I didn't want to get any negative thoughts from it. I just didn't see the point.

This suggest to impact on the effectiveness reflection individuals need to be guided or shown how to reflect in order to fully engage them, to help them understand how it can facilitate performance.

CHAPTER FIVE

DISCUSSION

5.0 Discussion

5.1 Introduction

This section will acknowledge how the findings from this study contribute to knowledge; along with the practical implications these findings have on performance. It is apparent that through understanding how reflections are beneficial to enhancing golfers' performance, reflective practice may possibly be a worthwhile intervention. This section will also discuss the potential limitations within the study and how these may guide future research. Acknowledging limitations shows critical understanding, which also gives reason to direct future research.

5.2 Contribution to Knowledge

This study investigated the benefits associated with reflective practice amongst elite level golfers. The investigation reviewed the process of reflection golfers undertook after practice and after competition. This gave an insight to what they did and subsequently acknowledge how they used the information to benefit their performance. To gain an understanding into the process of reflective and how this was beneficial, in depth interviews were conveyed to specifically show what the golfers did, and to indicate the specific factors that they found beneficial for performance. The findings of this study showed that reflective practice enhanced performance by improving self-awareness (Cropley *et al.*, 2010), informing learning (Cropley *et al.*, 2007) and enhancing confidence (Anderson, *et al.*, 2002; Hanton *et al.*, 2007). In addition, this is the first investigation that has shown all these findings in one study. Unlike other research, it identifies a clear indication of the reflective process elite level golfers engage in post practice, and post competition. This research project identified the link between how athletes, coaches and practitioners benefit from reflective practice, reiterating that golfers benefit from reflection in many of the same ways. The current study suggesting that reflection is an effective tool that enhances self-awareness, informs learning, guide's future practice, and enhances confidence within golfers. It also suggests

that golfers use reflection to help them cope during competitions, which seems to be a new finding that has not been addressed or identified directly in previous research.

5.3 Main Discussion

The key findings of this study suggest that golfers used different approaches to reflect, and that the reflective process had different benefits. This section will consider these results in relation to existing literature. The results from this study showed that participants engage in post reflective practice in a number of different ways, ranging from recording practice sessions in diaries (Cropley, 2007), engaging in an inward thinking process (Kemmis, 1985), or filling in online reflections (Sharma, 2010). This could be down to the individual nature of reflective practice. Indeed, Faull *et al.* (2009) acknowledged that for reflective practice to be most effective, the reflective approach adopted needs to be individualised. This was also apparent in the current study as participant 2 acknowledged that she felt all reflections needed to be individualised, suggesting why she reflected differently to the other participants. This was also apparent in the study of Toering, Elferink-Gemser, Jordet and Visscher (2009), elite athletes out weighed their non-elite peers as a result of reflection. Therefore, this suggests why athletes within this study subsequently adopted the reflection in this manner.

In light of this, all the individuals used reflections post practice in order to improve self-awareness; this was because it helped them understand what they needed to do technically to hit the ball more effectively. This was also consistent within the findings of Faull *et al.* (2009), paying dividends to elite athletes being better at assessing situations and adopting the appropriate strategies when identifying a weakness within their skills that they desire to achieve (Ertmer & Newby, 1996; Berliner, 1994).

Reflection was also used as a tool to identify what the golfers needed to practice, in order to improve weaknesses in their game. Individuals used reflection to inform learning (Cropley, *et al.*, 2007) and identify technical areas that may need to be

discussed with the coach. This was acknowledged by coaches in the study of Galvan, Fyall and Culpan (2012) who suggested that reflection empowers athletes to make their own decisions, therefore as a result of awareness they were better at seeking support when needed from significant others (e.g., coach, psychologist).

Reflection enhanced confidence or ability to cope, however this was more positively linked to post competition reflection. Individuals felt that they gained more confidence from post competition reflections this is because they felt that it had more meaning to them, (Zimmerman, 2002). This then resulted in the individuals perceiving that they had a better ability to cope in future situations and felt more confident towards their games (Lazarus, 2000).

The post competition process of reflection was consistent throughout, however this could be because it was an obligation to do so by the organisation, which was pointed out by participant 1. This could suggest that hierarchy can influence the actions or behaviors of athletes, because they may want to fit in the team or feel they may lose their place (Galvan, Fyall & Culpan, 2012). It was also highlighted by participant 2 that the prescriptive questions from the governing body should be changed, further emphasising that the process of reflecting should be individualised (Faull *et al.*, 2009).

In comparison to the above, there was a noticeable difference between participant 2 and 3 and the rest of the group in the way in which participant 2 and 3 used their support team to inform areas of improvement. To elaborate, the participants used their fathers to identify strengths and weaknesses during competition and practice (Hanton, Cropley & Lee, 2009), which impacted on their interpretation of the event (Hanton & Jones, 1999). Indeed, social support have been said to impact the way in which athletes reflect, often enhancing their effectiveness (Irwin, Hanton & Kerwin 2004), resulting in the athletes feeling they can cope more effectively (Hanton *et al.*, 2009). In contrast to this, evidence from the current study could suggest that social support may potentially be detrimental to performance. This is because it could lead to a decrease in awareness, which resulted in their ability to cope. Participant 3 described a situation when the support was not available:

[National squad] Girls last year was a good example. On most of the fairways, I wasn't hitting a lot of fairways because I was hitting them left. I'd got in my head that the course was really tight and I started manipulating the clubface. My Dad came on the second to last day. It wasn't going well at all until he came and helped me, showing me what wasn't going right in my swing and the last round went well after that.

This suggests that participant 3 did not she had the ability to cope or resolve the issues (Lazarus, 2000), without her social support (i.e., Father). This would give reason to identify areas of reflection as an intervention, in order for her to be more self-aware (Cropley, 2007), which would lead to having the ability to cope better in the future without social support.

Sparrow (2009) suggested that emotions would impact on perceptions of event depending on the nature of the emotions they were experiencing. Participants 1 and 6 support this notion as they indicated that when post competitions reflections took place being too emotive could affect their interpretations of the event. Specifically, both Participant 1 and 6 suggested that they would always wait a few hours after competition before they reflected because it would impact on the information they retained from that day, being that of too negative in nature which will impact on their confidence or to positive minimising learning from event. This could be suggested because when athletes perform well they take the performance for granted therefore they do not learn from their reflections (Hanton and Jones, 1999).

5.4 Strengths and Weaknesses

A key strength of this study is that through an in-depth qualitative approach golfers identified how performance enhanced as a result of the reflection process. With this in mind to help elite golfers improve performance and develop their game; effective reflective practice would be a worthy intervention. If golfers acknowledged that they lack awareness, reflective practice would a reasonable

strategy to adopt because golfers can identify specific areas for improvement, this would enhance better decision-making.

However a limitation within this study was the time the investigation took place; the golfers were currently in the offseason period of their season. This could impact on the information the golfers described during the interviews, being technical in nature because this is the period of the season where the golfers mainly make technical changes. Therefore this could be why, specific examples the individuals gave during practice were mainly related to technique, having done this study in the middle of the season, the individuals might use the reflections in a different way. With this in mind, the information they retained from post competitions would be a few months old, this could impact on the accuracy of events they have described, even though they wrote it down, they may have forgot what they were actually felt, the intensity of these feelings, which is very important when considering emotions (Sparrow, 2009).

In order to address the limitations above future research could investigate the reflective process within elite level golfers, which is longitudinal in nature. This would identify changes over a season as golfers move from technical to competition mode, recording the specific information they gather and how this information enhances their performance. This would also directly indicate how individuals specifically benefited from post competition and post practice showing difference between both phases of reflection.

The second strength within this study comes because of the depth of information's gathered. Firstly it gave a specific insight into the reflection process showing the difference process between post competition and practice. This investigation also showed clear indications, how this benefited their performance, which has not been specifically identified in any other study regarding elite golfers. This is strength because it clearly shows the direct process, which helps determine the benefits, associated with reflection

The participants within this study are very worthy, however a further limitation is that they are not professional; therefore this may not be a true indication of how the best players within the game reflect. Therefore, it would also be useful to identify what reflective practice professional golfers engage in, this would be

worthwhile investigation because it could give an insight to the in which professionals golfers reflect. The participants within this study all have ambitions to become a professional golfer therefore this would be a reasonable topic to consider. It would also guide future interventions for psychologists or coaches working with elite level golfers or aspiring professionals.

5.4 Practice implication

This study acknowledged, reflective practice needs to be individualised, this is beneficial to practitioners because it highlights the different ways of reflection, this can be adopted by the athletes in order for them to be most effective. It would also be advisable to suggest, that it is beneficial for golfers to find out what works best for them through monitoring awareness. This will be useful when competing, as golfers will become better at the reflective process, which in turn this will ensure golfers, will attain the benefits that have been shown during this study.

As a result of the study reflective practice has shown to be an effective tool to enhance confidence and coping as a result of post competition reflection, this will be useful for golfers when in the competition phase of their season. Therefore coaches or practitioners could help golfers become more confident or cope better by using reflective practice as an intervention (Connaughton, *et al.*, 2010). To elaborate on this reflective practice is a worthy intervention to enhance self-awareness and informs learning therefore reflective practice should be considered to enhance performance in this manner.

6.0 Summary and conclusion

This study found out what the reflective process of elite level golfers was, after practice and competition. It identified how they used this information to benefit their performance indicating why they used it in this way. The implication pointed out by this study suggests that reflective practice is a useful tool to enhance self awareness, learning and informing future practice, with this in mind, to enhance confidence and coping it is fair to say golfers attained more of these attributions from post competition reflections. A limitation of this study was that it was carried

out during the off season therefore the information gather tended to be technical in nature. Post competition data was taken from events that occurred 6 -9 months prior to this investigation. To enhance knowledge in this area it would be fair to suggest reflective practice could be investigated over a long period of time indicating what specific reflections would be most appropriate, during what point of the season. To emphasize further, what reflective process do professional golfers engage and why, this would be important when advising intervention in an applied setting.

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Appendix A

Interview guide

Explain to me what reflective practice is?

What does reflective practice mean to you?

Elaborate on this?

What are you currently doing?

Explain to me what you mean by?

Can you give more detail on this...?

So tell me how does this benefit your performance?

Is it actually benefiting your performance?

Give me some specific details?

So are you committing to the reflective process?

Why do you think this is important?

Why are you not committing to reflective practice?

Future practice

So it influences future practice?

How?

What do you now do, that you previously didn't?

How does this benefit your performance?

Can you give me specific detail about this ?

Informs learning

So you feel you are learning more about your game ?

What you mean by this?

How does it specifically help you ?

So you are saying you know what you have do technically now?

Can you give me details on this?

So how does this benefit performance?

Clarification... repeat what they have said!!!!

Self confidence

So what is self confidence ?

Explain this to me, give me any specific example of when this happened ?

How does reflection help this?

Why is this useful?

How is this used when, preparing for a tournament?

So can you clarify this?

Self awareness

So you told me you are now more aware?

Explain more about this?

What does this mean?

How does this impact on performance?

How do you think this will help future actions?

Decision-making?

Why is this important?

Why is this beneficial?

So you are saying because you have a clear focus of your strengths and weakness it has enhance your self awareness? Elaborate

Emotions

So you told me it impacts on your emotions, Explain what you mean by this?

How does it create more meaning to your reflections?

Why is this important to you ?

How does this benefit you? / performance?

Closing questions

So what are you going to do to ensure you maintain your reflections?

So how are you going to improve your reflections?

What are you going to differently in future

Why??

Explain more on this ?

Appendix B

UWIC PARTICIPANT CONSENT FORM

UREC Reference No:

Title of Project: A Qualitative Investigation into The benefits associated with
reflective practice in Elite Golfers

Name of Researcher: Zachariah Gould

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet dated for this evaluation study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
2. I understand that the participation is voluntary and that it is possible to stop taking part at any time, without giving a reason.
3. I understand that information from the study may be used for reporting purposes, but anonymity will be adhered to.
4. I agree take part in this evaluation of the benefits of reflective practice towards performance and understand that I will be recorded for research purposes.

Name of person taking consent

Date

Signature of person taking consent

* When completed, one copy for participant and one copy for researcher's