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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 Development of Hardiness in Elite Coaches

**(Dissertation submitted under the discipline of
Psychology)**

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**THE DEVELOPMENT OF HARDINESS IN ELITE
COACHES**

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Abstract

Research has recently outlined the significant increase in the amount and type of demands that are placed on coaches (e.g., Fletcher & Scott, 2010). Importantly, without sufficient coping mechanisms coaches are likely to be negatively affected by these demands, reducing their overall effectiveness. Hardiness has been suggested to be a stress buffering characteristic helping performers cope with the demands that they are placed under. However, the way in which hardiness is developed has not been examined in sports coaching populations. This study, therefore, sought to assess and examine how hardiness is developed among elite level sports coaches. Following a rigorous sampling procedure, national/international sports coaches ($n = 6$), all deemed to be high in hardiness, were selected to participate in semi-structured qualitative interviews in order to assess how they believed they had developed their high hardiness levels. The findings identified that experiences (significant experiences and exposure to demands), external support (social support and significant others) and transformational coping strategies (goal setting, reflective practice and preparation and planning) were all instrumental in influencing the development of hardiness among elite sports coaches. The implications of these findings are that through the sufficient use and utilisation of the themes identified, coaches that struggle to cope with the demands of elite sport, and coaches whom wish to make a successful transition from non-elite to elite level sport, may benefit by firstly increasing their hardiness levels, and as a consequence, also enhance their ability to cope with the stressful nature of elite sport. Limitations and future research directions are discussed.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

On April 27th 2012 it was announced that Pep Guardiola would be leaving his post as manager and head coach of FC Barcelona. Guardiola's reign lasting four years from 2008-2012, consisted of him creating what some have considered the most thrilling football team to have ever played the game, winning numerous trophies along the way. Among these trophies were 3 La Liga titles, 2 Champions League titles, 1 Copa Del Ray, 2 Uefa Super Cups and 2 Fifa World Club Cups. In light of his success, after just four years as manager, Guardiola's reasons for leaving were ultimately related to burnout. Burnout being identified as, "a withdrawal from [sport] noted by a reduced sense of accomplishment, devaluation/resentment of sport, and physical/psychological exhaustion" (Radaeke, Lunney, & Venables, 2002, p. 181). Indeed, Guardiola (2012) stated:

The reason is simple: four years is enough... I'm drained and I need to fill up. The demand has been very high and a manager must be strong... Time has taken its toll - I rise each day and don't feel the same. I am going with the understanding that I have done my duty... You can only recover by resting and getting away from everything. It would have been a bad idea to continue. Perhaps it would not have gone wrong but I have the perception that it would. It is my time to go. Now we are out of the two main competitions it is a good time to announce this. I did not want to continue with the confusion.

When comparing Guardiola's interview with the definition of burnout by Redaeke *et al.* (2002), it is clear to see that the vigorous demands and pressures of elite coaching, has evidently taken its toll on the physical and psychological state of the coach. As well as this, due to the high demands of success in elite level sport, being knocked out of two important competitions may have left Guardiola feel a reduced sense of accomplishment.

The above example is one of many, in a variety of sports, of elite coaches not being able to cope with the everyday demands and pressures put upon them. As the demands and stressors for coaches' increase with the modernisation and the results based significance of elite sport, coaches are becoming more susceptible to burnout and other stress induced issues (Bawa, 2010), and as a consequence are more likely to drop out. Therefore, in order to produce, keep, and sustain the

most influential coaches in elite sport for the development and nurturing of the future's most talented athletes, ways in which coaches may be better prepared to cope with the demands of elite coaching must be considered. One way in which coaches may be better prepared to cope with these demands is through the development and utilisation of the personality construct hardiness (Kobasa, 1979). Therefore, the aims of this current study are to gain a greater understanding of the underlying mechanisms related to development of hardiness. In accomplishing this, coaches may be able to learn, develop, and utilise the key mechanisms that may enhance their own hardiness, and therefore prepare themselves to deal and cope with the stressful demands of elite coaching. However, in order for people to better understand the demands of elite coaching, one must consider the actual complex nature of the coaching environment, and how this nature may possibly affect coaches' performance and well-being. In doing so, developing an understanding of the coaching process provides substance and worth to the practical implications that the development of hardiness can offer for elite level coaches.

CHAPTER TWO

LITERATURE REVIEW

2.0 Literature Review

2.1 The Nature of Coaching

“Coaches guide athletes’ improvements in physical, technical, mental, and tactical skills, as well as facilitating their personal and social development” (Fletcher & Scott, 2010, p. 127). Despite this, coaching has been generally perceived as a rationalistic process in which clear goals are easily achieved, thus failing to consider the many problems that coaches encounter on a daily basis. However, when one looks further into the many demanding aspects of the coaching process that a coach must consider, it is clear to see that this is inherently not the case. For example, recent research by Jones and Wallace (2005) suggested that goals set by the coach are many, dynamic and extremely challenging. In agreement, Saudy and Durand (1998) argued that the nature of coaching is complex, dynamic and uncertain. With this in mind, the outcomes of goals can never be predetermined due to the ever changing environment in which coaching exists. This is characterized by the complexity of human-to-human interaction and the relationships inherent within these interactions. Thus, engaging in the process has the potential to place huge demands and potential stress on a coach (Olusoga *et al.*, 2009).

Due to the uncertainty innate within the coaching process, coaching has been described as *structured improvisation* (Bordieu, 1977; Cushion, Armour & Jones, 2003). Structured improvisation, in the sense that, not all of the unpredictable facets of coaching can be planned and accounted for (e.g., the psychological state of an athlete prior to training and or competition). In light of this, due to the competitive nature of elite sport, each session must be beneficial for the athlete or athletes in order for them to progress and compete at the highest level. Therefore, developing the ability to improvise effectively and cope with the unpredictable facets consistent within elite coaching is vital for coaches in order to aid the flow, learning outcomes, and to reach the goals of each session for each athlete, thus placing considerable demand on elite coaches. Accounting for the many demands elite coaches encounter, it is no surprise that elite level coaches incur many negative side effects (e.g., stress and burnout), which can ultimately affect their job performance, health and wellbeing.

Athlete learning and development is influenced by a plethora of situational and personal variables and is therefore a challenging process in which coaches strive for effectiveness. This process is pivotal in attaining success as an elite coach, due to the results and performance based business in which an elite coach must operate. Indeed, a “coaches’ ambitions rest on what athletes learn, and how their increased capability translates into improved athletic understanding and, ultimately, performance” (Jones & Wallace, 2005, p. 120). An athlete’s engagement, learning and progression, are very much decided by the relationships and social interactions that exist between significant people within a coaching environment (Jones, Armour, & Potrac, 2002). However, this can be a difficult process as the individuals that exercise these relationships (e.g., athletes and coaches) may have contradictory values and beliefs (Jones & Wallace, 2005). Therefore, as an elite coach, trying to implement ideas and training methods can be inherently complex. For example, developing a trustworthy relationship with all of the performers in a football team clearly presents a demanding yet vital process within elite level coaching. Although demanding, it is imperative in order to keep each individual content and happy within the group, thus keeping the group harmonious, cohesive and focused on achieving the same goals.

In concurrence with this, current literature has considered coaching as not only a process of delivering knowledge but as a social activity that engages both coach and athlete (Cushion, Armour, & Jones, 2006; Jones, 2006). Further, Wenger (1998) implied that the coaching process includes complex implicit aspects (e.g., relationships, subtle cues, recognizable intuitions, tacit conversations, and underlying assumptions) and clear explicit aspects (e.g., roles, language, tools). Such implicit aspects are not fully taken into consideration in the traditional rationalistic and simple conceptualisation of coaching (e.g., Lyle, 2001). The multifaceted nature of coaching, and the roles that the coach must fulfil in attempting to achieve the aims of sports coaching only add to the pressure of succeeding within this climate (Fletcher & Scott, 2010). Ultimately, this pressure can affect the physical and psychological state of coaches. For example, an environment that consists of many situations that may be perceived as stressful (such as coaching), will increase the potential stress that an individual has to deal and cope with. As a result of this, research interest has grown within the area of

stress and coping in sports coaches, with a view to gaining a better understanding of how stress affects the way in which coaches operate (e.g., Fletcher *et al.*, 2010; Thelwell *et al.*, 2008).

2.2 Stress and Coping

A recent study by Fletcher, Hanton, and Mellalieu (2006) defined stress as, “An on-going process that involves individuals transacting with their environments, making appraisals of the situations they find themselves in, and endeavouring to cope with any issues that may arise” (p. 329). Taking this into consideration, it is clear that elite level coaching consists of many day-to-day situations that replicate this very same process. For example, an elite coach having to cope and deal with unsatisfactory standards of training from their athletes. Stressors that elite coaches may have to face are therefore diverse and multifaceted, consequently, their perceptions of the effects of stress can have great impact on how they deliver, act, perform, and essentially cope with the ever present demands within their sporting lives (Frey, 2007).

Stress is a widely researched area as its subsequent effects can be heavily detrimental to a person’s emotional, mental and physical well-being. However, until recently, there has been a gap in the literature created by the failure to examine the potential stressors and coping methods encountered and utilised by elite sports coaches. One study that has examined stress within sports coaching was produced by Thelwell *et al.* (2008), who identified that elite coaches experience both organizational (stressors relating to the environment that a coach works within) and performance (stressors relating to the performance of both a coach and their athletes) stressors. The organizational stressors that were identified consisted of team factors (e.g., team atmosphere), personal life (e.g., social and private life), leadership (e.g., organization), and environmental (e.g., finances and training/competition environment). Furthermore, the performance stressors identified consisted of: athletes’ performance (e.g., athlete coach-ability), and the coach’s own performance (e.g., pressure and competition issues). Similar findings were represented by Levy, Nicholls, Marchant, and Polman (2009) who examined organizational stressors in elite coaching. From these studies one would anticipate that the combination and levels of all of these stressors, whether each

stressor is appraised negatively or positively, and whether successful coping strategies are used, ultimately determine the amount of strain (a negative behavioural, physical or psychological response to a stressor) that a coach must endure (Fletcher *et al.*, 2006).

The findings from the study of Thelwell *et al.* (2008) suggest that coaches experience a range of 182 stressors. However, considering the amount of stressors that elite coaches are exposed to, little research has been carried out into how elite coaches cope with these stressors and strains put upon them despite the recent expansion of coach-stress research. Research that has attempted to address this issue (e.g., Levy *et al.*, 2009; Thelwell *et al.*, 2008) suggested that the strategies coaches use to cope efficiently are planning, utilizing their social support and through using psychological skills such as self-talk, imagery and relaxation techniques. Implementing these coping strategies within coach education and development programmes would prove to be beneficial for coaches who are making the transition into elite sport. For example, providing coaches with access to training opportunities to develop these coping strategies would seem appropriate, however, such opportunities are not currently available and therefore coaches are being ill prepared to cope, and operate, within such complex stressful environments. Taking this into consideration, the implications of a coach's failure to cope with the inherent demands of sport can, and may well, induce their susceptibility to 'burnout' (Keller, Eklund & Ritter-Taylor, 1999).

2.3 Burnout

Coaches that perceive stress as debilitating and do not have the required psychological attributes (e.g. hardiness) to cope with strain are suggested to be at risk of 'burnout' (Kelley, 1994; Kelley, Eklund & Ritter-Taylor, 1999; Martin, Kelley & Eklund, 1999a, 1999b). Burnout has been conceptualised as a chronic debilitating form of strain, and can be identified through whether an individual is experiencing three feelings (e.g., depersonalization, emotional exhaustion, and lack of personal accomplishment) towards whatever is compiling this strain upon them (Maslach, 1976, 1982; Maslach & Jackson, 1981). Depersonalization is the process in which one feels negatively detached when responding to others in a normally comfortable environment. Emotional exhaustion refers to one feeling

emotionally depleted and fully extended, and a lack of personal accomplishment refers to one feeling an increased level of incompetence and a decline in the feeling of achievement (Maslach & Schaufeli, 1993).

More recent research suggests that burnout is a much more present feature in the lives of modern day coaches (Goodger *et al.*, 2007). Goodger *et al.* (2007) summarised the findings of 23 studies, all of which investigated burnout in sports coaches. They concluded that there are three main correlates of burnout in coaches, these were; perceived stress (positively affiliated), commitment and social support (both of which were negatively affiliated). Therefore, a coach's negative perception of being subject to stress, combined with a lack of or decreased level of commitment and available social support, is suggested to increase the risk of burnout among coaches. Fletcher and Scott (2010) also suggested that burnout can be caused due to the perception of or actual feeling of extreme psychological stress in coaches. With the findings of these studies in mind, Hjälml *et al.* (2007) suggested that coaching at an elite level may possibly come with a considerable amount more potential stressors in comparison to coaching at a non-elite level (e.g., media scrutiny, visibility to general public and greater performance expectancy). Therefore, in awareness of these possible demands, one may suggest that elite coaches could be affected by burnout more than non-elite coaches. However, contrary to this, certain individuals are able to cope with stress more effectively than others through a eustress appraisal (positive) of a demanding situation and therefore may not be at risk of burnout (Kelly *et al.*, 1999). In trying to understand how certain individuals do so, research has paid much attention to the personality construct of *hardiness* (Fletcher *et al.*, 2010).

2.4 Hardiness

In trying to understand the differentiating factor that enables certain people to flourish in stressful situations compared to others, Kobasa (1979) suggested that the level of the personality characteristic 'hardness' was a key determining factor. Hardiness was described originally by Maddi and Kobasa (1984) as a personality trait that promotes envisioning stressful situations not as debilitating and negative, but rather as developmental and as a personal challenge. Early research carried

out by Kobasa (1979), suggested that hardiness is composed of three general characteristics that consist of control, challenge and commitment otherwise known as the 3C's. More recently these have been described in the study of Maddi (2005) as 'interrelated attitudes'. Those strong in control believe they are able to influence the outcome and directions of all aspects of life, through utilizing their skills and having a choice, as opposed to feeling passively helpless (Khoshaba & Maddi, 1999; Sheard & Golby, 2010). As suggested by Eschleman, Bowling, and Alarcon (2010), those strong in commitment are fully engaged in various domains of life, such as friends, work and family. This was suggested to be beneficial as it gives oneself a feeling of purpose, and also relates to the development of social relationships that can be highly useful during situations that are deemed stressful. Hanton, Evans and Neil (2003) suggested that when faced with situations of severe stress, committed persons place confidence in their ability to achieve goals through high levels of effort and persistence. Persons high in challenge believe that wisdom is harvested through experience and that continual growth is vital for accomplishment (Maddi, Kahn & Maddi, 1998). Kobasa (1979) also suggested that individuals high in challenge see changes in life as a challenge and as an opportunity, rather than as a threat to their everyday life. Maddi *et al.* (1984) suggested having high levels of the 3C's ultimately increases the hardiness level of that person. Having high levels of these interrelated attitudes is seen to improve a person's ability to positively cope with the effects of stress through seeing stressors and demands as an opportunity for growth, therefore reflecting why hardy people seem to flourish in stressful situations (Maddi, 2002, 2005, 2006).

"Personality hardiness is emerging as a pattern of attitudes and actions that helps in transforming stressors from potential disasters into growth opportunities" (Maddi, 2005, p. 261). In light of this understanding, hardiness has been well researched in a variety of different fields, those of which include sport performance (e.g., Maddi & Hess, 1992; Golby & Sheard, 2004; Sheard *et al.*, 2010), job performance and job satisfaction (e.g., Maddi, 2006), health and illness (e.g., Kobasa *et al.*, 1986; Maddi *et al.*, 1984; Maddi, 1987); and burnout (e.g., Alarcon *et al.*, 2009). What is clear from all of these studies is that high hardiness levels seemed to be related in a positive manner to all of the fields. For example, high hardiness levels were related to improved sport and job performance, increased

job satisfaction, lower health and illness issues and provided persons with a lower risk of becoming subject to burnout. All of which being due to high hardy persons being able to cope with the stressful nature of any given situation, through the ability to take stress and use it as facilitation rather than debilitation. This being a very useful characteristic to have as an elite coach, firstly to accept demanding situations as challenges and growth opportunities, but more importantly to stop the potential negative side effects of strain such as burnout affecting their everyday lives.

Despite its perceived importance in mediating the stress response in sporting populations, research into the impact of hardiness in sport has tended to focus on athletes. Consequently, research into hardiness in coaching is in its infancy and, therefore, little is known about the impact of hardiness on the stress response in coaches. However, some of the findings from the current sports performance literature on hardiness may be transferable to coaching. High levels of hardiness within sport have been related to performers coping more efficiently and adequately with stressors (Goss, 1994), and to performers having the ability or capability to resist burnout (Hendrix, Acevedo, & Hebert, 2000). As coaches have been suggested to be performers in their own right (Gould *et al.*, 2002), and therefore face similar demands to athletes, both of these findings have scope for their possible transfer to coaching. In addition, one finding that may be particularly transferrable from elite sports performers to elite coaches was found in the study of Golby *et al.* (2004). They found that rugby players operating at international level had significantly higher hardiness levels than when compared to non-elite rugby players. From this finding one may reasonably assume that high hardiness levels could be a vital prerequisite for sports coaches in making a successful transition from non-elite to elite level sport. This assumption gathers support from Deaner and Silva (2002), who suggested that athletes who make the transition from non-elite to elite sport are those that have specific psychological attributes that aid the adaption and adjustment. Therefore, trying to develop the psychological attributes associated with hardy personalities of coaches and performers may possibly make them more readily adept at dealing with the pressure and stress that comes with elite sport. However, an understanding of whether hardiness can be developed and learned is vital when exploring whether

coaches' possible increase in hardiness levels impacts on whether they can or cannot make the transition to elite coaching.

Khoshaba *et al.* (1999) suggested that hardiness is a personality style that can be successfully taught to and subsequently learned by an individual. Maddi (1987) demonstrated this within early hardiness research by successfully training individuals in how to become hardy. The results of Maddi's hardiness training resulted in the increase of an individual's hardiness, and as a consequence, the individuals' levels of objective and subjective strain were suggested to have decreased due to hardiness acting as a stress buffering characteristic. Khoshaba *et al.* (1999) suggested that hardiness is learned; therefore without hardiness training a high hardy coach must have learnt and developed this personality construct through his or her own experiences. With this in mind, an understanding of what such experiences have improved the hardiness levels of current elite coaches may be crucial for the specific education of future coaches, as it may aid their progression and transition to and into elite level coaching. However, the most knowledgeable coaches do not necessarily have high levels of hardiness; therefore this may also be crucial for aiding the introduction and promotion of the most knowledgeable coaches into sport. For the ultimate goal is to develop and progress coaching to a stage where the most knowledgeable coaches can make the transition to elite sport, as this would have the most beneficial impact on the performance of athletes.

2.5 Rationale

The demands of elite coaching are evident when one assesses the many implicit and explicit complexities that elite coaches must take into consideration during their everyday lives. In light of this, the potential increase of stressors that a coach may encounter when making the transition from non-elite to elite coaching can ultimately increase the risk of elite coaches perceiving these stressors as potentially threatening or harmful, therefore inducing strain upon themselves (Fletcher *et al.*, 2010). This can have negative performance implications on coaches who make this transition to elite sport, due to their increased susceptibility and risk of developing burnout. However, research suggests that the personality attribute of hardiness is inversely related to the negative perception of

stress and subsequently inversely directly and indirectly related to burnout (Kelley, 1994; Kelley *et al.*, 1999). Therefore, due to the demanding nature and potential strain imputed on elite coaches, developing coaches' hardiness could have a significant impact on reducing their susceptibility to burnout, and subsequent drop out from sport.

Whilst research provides much information into the potential impacts of hardiness, there is still little information and research into how hardiness is developed both in mainstream and sport psychology. As a result of this current gap within literature, very little research has assessed the levels and subsequent development of hardiness among elite coaches. With this in mind, gathering an understanding of how hardiness has been developed among a range of high hardy elite coaches would not only provide a greater understanding of the development of hardiness for sport psychology literature, but it would also be potentially fruitful for the education of future coaches whom which have aspirations to make the transition from non-elite to elite sports coaching. The findings of a study that may particularly assess how hardiness has been developed among elite coaches may therefore aid the increase of hardiness levels in future coaches. This may be accomplished by incorporating the findings of such a study into a specific section of coach education programmes that focuses on coach hardiness training. The potential practical impacts of this may essentially develop future coaches' ability to cope with the ever demanding nature of elite coaching. However, although hardiness training has been successfully used in the study of Maddi (1987), surely specific hardiness training that shares relevance to coaching and coaches' experiences would have a greater impact on increasing coach hardiness levels and therefore their ability to cope with the demands of elite sport.

2.6 Aims

As a result of the lack of existing literature that examines how hardiness levels are developed among elite coaches, the aim of this particular research study is to assess and examine how pre-determined hardy elite coaches believe they have developed their hardy personality. Through the use of qualitative interviews, this study will examine the certain critical experiences within, and outside of coaching that these coaches believe have allowed them to develop this personality

construct, and ultimately, how their experience and hardy personality has impacted on their success as an elite coach. The current study will hopefully gather insight into the specific development of coach hardiness, as a means of further educating and aiding future coaches whom which aspire to make the successful transition from non-elite to elite coaching.

CHAPTER THREE

METHODOLOGY

3.0 Methodology

This chapter outlines the procedures adopted to meet the aims of this research project. Importantly, given these aims, the section reports the rigorous sampling procedure adopted that allowed a 'hardy' sample to be obtained. In doing this, the main investigation (qualitative interviews) that examined the way in which elite coaches may develop hardiness could be conducted with enhanced validity.

3.1 Participants

Purposive criterion sampling was employed within this research study to gather information rich participants (Miles & Huberman, 1994; Patton, 2002). The criteria consisted of: level of the coach, coaching at the time of the study, and sport type. The participants in this study, therefore, were 18 elite level (elite was characterised in this study as coaches operating at national/international level depending on sport type) sports coaches (age range = 24 - 50 years, $M = 37.83$, $SD = 6.87$). The participants had coached, or were coaching at the time of the study, a variety of age groups ranging from international youth performers to senior international performers. The coaches operated mainly within team sports ($n = 16$), however there were also coaches of individual sports performers ($n = 2$). The sports were: association football ($n = 6$), field hockey ($n = 3$), netball ($n = 2$), ice hockey ($n = 1$), triathlon ($n = 1$), athletics ($n = 1$), and rugby ($n = 4$). The coaches within this study were also of both gender types, male ($n = 12$) and female ($n = 6$).

For the final interview process, the 18 participants were condensed down to six based upon their hardiness levels. Therefore, in order to distinguish the six most 'hardy' elite coaches among the 18 participants, each was asked to complete the Dispositional Resiliency Scale (DRS, Bartone *et al.*, 1989). The DRS was sent to each participant via email and when completed, it was asked for it to be sent back for data analysis. Once all of the participants' DRS scores were analysed, six of the 18 original elite coaches were identified as having the highest hardiness scores, and were consequently asked to be interviewed. The final six participants consisted of both gender types (male [$n = 5$] and female [$n = 1$]) and were of various ages (age range = 28 – 49, $M = 38.33$, $SD = 7.69$). These participants

were elite level coaches of five different sports: association football ($n = 1$), field hockey ($n = 2$), triathlon ($n = 1$) ice hockey ($n = 1$) and netball ($n = 1$).

3.2 Measures

3.21 Dispositional Resiliency Scale

The Dispositional Resiliency Scale (DRS, Bartone et al., 1989) was used in this study as a method for distinguishing participants by their overall hardiness scores. The DRS measured each of the three sub-components of hardiness; control, challenge and commitment for each participant in this study. The overall response scale for the DRS consists of 45 statements about general life that individuals often have differing opinions towards, with 15 items representing each hardiness sub-component. For every 15 items within each sub-component, 5 statements are positively phrased and 10 statements are negatively phrased. Each participant was asked to select the level of truthfulness of each statement on a 4-point Likert scale that was anchored at 0 (not at all true) and 3 (completely true). Combining all three of the hardiness sub-components scores for each participant provided an overall hardiness score that ranged from 0 to 135.

The DRS has been suggested to have many advantages over alternative hardiness measures, one being that each sub-component is of equal item size (15 items per sub-component) (Funk, 1992). Funk (1992) also suggested that another advantage over alternative scales was the incorporation of more positively phrased items. The DRS has also been shown to have high levels of internal consistency and sufficient levels of convergent validity for hardiness and its three subcomponents, with Cronbach alpha coefficients for hardiness, control, challenge and commitment being above 0.85, 0.66, 0.62 and 0.75 respectively (Bartone *et al.*, 1989).

3.22 Interview Guide

A semi-structured interview guide was developed that sought to question and gain a greater understanding of three critical experiences within each participant's lives that may have helped, or contributed to their high hardiness scores. Ryan, Coughlan and Cronin (2009) suggested that semi-structured interviews allow spontaneous and comprehensive responses through the use of open-ended

questions. Therefore, allowing the participant no restraint when answering would hopefully facilitate detailed and expressive accounts of the participants' experiences (DiCicco-Bloom & Crabtree, 2006). A pilot interview was conducted with a non-elite coach prior to interviewing the participants within the study. Reasoning for conducting the pilot interview was to first develop experience using the interview guide and to experience the interview process. Secondly, to become aware of, and eradicate, any issues with both the structure of the interview and the content of the interview guide (Thelwell *et al.*, 2010). The pilot interview also distinguished when, and what probes should be used within the interviews in order to develop a greater insight into the interviewee's experiences. Therefore, post pilot interview, slight modifications were made to the interview guide's questions and probes, as they were thought to enhance both the interviewing experience and to enhance the findings from each interview. Finally, the pilot interview also increased the awareness that the participants would not necessarily understand the concept of hardiness, and would therefore need a brief overview and explanation of this prior to the interview.

First, the interview guide consisted of an introduction explaining what was expected of each participant throughout the interview. Following this, the provision of a definition and a breakdown of the 3 sub-components of hardiness were used to generate and re-establish the participants' understanding of the concept of hardiness. This was thought to help aid the flow and information sharing during the interviewing process. The second and main part of the interview guide consisted of three main sections. Each section was based around the examination of a critical incident that had occurred within each participant's life that may have helped contribute to, and consequently develop their high levels of hardiness. Each examination started with the participants explaining the incident, and was followed by questions and different probes from the researcher that sought to gather more in depth information of the incident (e.g., "What did you learn from this critical experience or incident?", "How has this incident helped develop your hardiness level?"). After all three incidents were described, questioned and probed, a following conclusion that consisted of firstly how hardiness has impacted on their coaching, secondly, whether they would like to add anything further to their discussion, and thirdly a few summary questions relating to the nature of the

interview process (e.g., “How do you feel the interview went?”, “Did I influence you and your answers in any way?”, “Were you able to tell your full story?”).

3.3 Procedure

School ethical approval was obtained prior to starting the sampling process. Once approval was in place, all participants were contacted, asked to participate, and upon agreement, asked to complete an informed consent form. Once the final six participants had been selected based upon their hardiness scores established through completion of the DRS, they were re-contacted and asked to complete an interview, all of whom agreed. The six interview participants were sent a preparation booklet that included a brief copy of the interview guide one week prior to the interview (cf. Hanton *et al.*, 2007). The preparation booklet was sent to each participant for them to firstly understand what the interview would entail, but mainly for them to prepare three previously occurring critical incidents in their life that they believed had helped develop their high hardiness score, in order to share during the interview. This would specifically help them recall and reflect on the critical aspects of three hardiness developing incidents in their life, and it was therefore hoped that providing the participants with the preparation booklet would aid the flow and detail of the incidents being discussed during the interviews (Hanton *et al.*, 2007). It was also hoped that in providing a preparation booklet, the restricted possibility of potential limitations that may occur through the use of singular interviews (e.g., a lack of depth of information, a lack of trust and rapport, and a lack of useful data collection for the data analysis) would be evident, therefore increasing the trustworthiness of the study’s findings (Lincoln & Guba, 1985).

A critical incident approach was adopted in this study due to the recognition that the outcome of incidents may have great impact on the subsequent post-incident behaviour and attitude of an individual (Hanton, Cropley & Lee, 2009). Therefore, it was anticipated that this approach would best provide an enriched insight into the adopted underlying mechanisms that have aided the development of hardiness within the elite coaches in this study.

The interviews themselves were conducted in environments that the participants deemed comfortable, and were recorded with the use of a Dictaphone (each

interview lasting between 45-90 minutes) ready for transcription. As suggested previously, the interviews were semi-structured in nature, as this was to allow each participant the inheritance of similar questioning procedures, yet allowing the participants and the researcher the flexibility to expand on, probe, and further investigate the experiences that were discussed in the interviews (Patton, 2002).

3.4 Data analysis

An inductive conventional content analysis was employed within this study due to the exploratory nature of this investigation. This firstly involved immersion in the transcripts of each interview in order to understand and develop new insights from the data (Kondracki & Wellman, 2002). Following this, codes were derived through highlighting key words or phrases from the data that possibly lent to the development of hardiness. Alongside each highlighted word or phrase, codes were noted in the margin followed by the links in which each phrase made to the development of hardiness, thus allowing easier grouping of the data. Once this process was completed for all of the interview transcripts, a table was made for each set of similar concepts or codes. Each table was accompanied by the quotations from the interviews that related to that particular concept. This allowed not only greater organisation of the data, but also a visual representation that particularly helped in understanding the relationships between the data and the identification of possible themes from all of the interviews (Miles *et al.*, 1994). Each table that consisted of related common concepts between the interviews, resulted in subsequent themes being generated.

3.5 Trustworthiness

Lincoln *et al.* (1985) indicated that trustworthiness in qualitative research is related to the methods used in order for the results of a study to be worthy of attention. The methods used, seek to satisfy the four trustworthy indicators of credibility, transferability, dependability and confirmability (Lincoln *et al.*, 1985). Therefore, in order to satisfy these indicators, specific procedures were used within the data analysis section of the current study. A procedure used to enhance the reliability and validation of the study's findings, was to keep audit trails of each interview, a copy of each transcribed interview and copies of analysed coded transcriptions. Thus providing the opportunity for an individual to gather an understanding of how

and where themes were generated. Another procedure used to enhance the trustworthiness of the current study was the use of thick description of the participants within the study's participant section.

CHAPTER FOUR

RESULTS

4.0 Results

Figure 1 represents a hierarchical network of the themes and sub-themes that have emanated from this study. The first to third order theme hierarchical network format was adopted from the study of Anderson (2004), as providing the results of this study using a hierarchical network allows a visual representation of the results obtained and how each theme was derived from the interview process. The three themes that were developed from data analysis were: (a) experiences, (b) external support, and (c) transformational coping strategies, each seemingly crucial for the development of hardiness within elite coaches. Accompanying the network is a narrative explanation of the sub-themes found from the current study, and how each was derived from the interviews process. In line with similar approaches to presenting findings, quotes from the raw data are offered with the narrative to help the reader immerse themselves in the participants' experiences (Miles *et al.*, 1994).

4.1 Experiences

4.11 Exposure to demands

The second order theme of an individual's 'exposure to demands' was put in the brackets of experiences due to it involving all past stressors and demands that were considered to be potential learning situations. It emanated from each participant identifying various stressors that they were susceptible to, or had to cope with throughout all stages of their life. Indeed, one participant suggested:

I had undertaken a masters, I had about 37 hours of work as a coach and volunteering. I was coaching women's football at XXXX, I was coaching at two football development centres from Under 8's to Under 16's, and I also had a junior triathlon club that I was coaching twice a week. I was still an elite athlete at that point...

Statements of this sort were consistent across all participants suggesting that this should be deemed as an important factor when considering the development of hardiness across the sample of elite coaches. In support of deriving this theme, when asked how the exposure to so many demands contributed to the development of the participants' hardiness one participant suggested:

From both statements, it was understood that the participant's exposure to demands was a worthwhile process because of the learning that took place. Therefore, in this instance and across all of the participants, the learning process from this exposure seemed to influence the participant's perceptions of control over future demands, and was therefore noted as being a key contributor to the development of hardiness.

4.12 Significant experiences

Throughout all of the interviews, each participant explained that a significant experience was a contributor to the development of their high hardiness levels. This second order theme being an integral part of the first order theme of experiences, as the personally significant experiences discussed by the participants in the current study seemed to generate a greater learning process in comparison to general experiences. The significant experiences expressed by the participants ranged from experiences in sport, in previous careers or experiences when at school. For example, one participant suggested a significant experience at school as a means of developing his hardiness levels:

I went to XXXX High School and I remember first day I walk in and this kid says to me, "do you want to fight?"... I kind of look back and it was awful you know but it shaped who I am. You know I had to battle every day for everything, whether it was getting into the football team, whether it was playing rugby in XXXX or whether it was simply surviving the playground.

This being one example of a significant experience one participant had in school. However from this, the sub-theme of significant experiences was derived as a contributor to developing a hardy personality. As suggested above, this participant believed it "shaped who he is", and therefore it was interpreted in this study as a means of developing personality characteristics such as being hardy, and the attitudes within it, such as the interrelated attitudes of hardiness; control, commitment and challenge. Another quote reaffirming that these significant experiences can increase hardiness levels is, "I guess the learning from that experience is really taking stock of all the finer details... you've got to back yourself and show to the group you work with, that you are really are in control..." Again, linking to hardiness, this example referring to the learning gained from

significant experiences, and how this learning impacts the coach's future hardy behaviour through providing a perception of control to the athletes.

4.2 External Support

4.21 Social Support

During the analysis of the interview transcripts, it became increasingly clear that the participant's external support played an integral part in the development of hardiness. Within this, the second order theme of social support was established as a factor that aids the development of hardiness within elite coaches, due to the many references to which social support was made by the participants. For example, "My dad was my football coach as I got older and he instilled a lot of work ethic there, and complete team play... My mum was always there when I got home from school and we would do my homework with me." The interpretation of the many quotes similar to that of the participant above, was that social support played a contributing factor to the development of coach hardiness levels, not only because of the support given within stressful situations, but for the values that a person's social support instils within them. This interpretation being supported by the suggestions of another participant, who expressed, "...you are around your family more than your peers and therefore it is probably the beliefs and values they instil in you."

4.22 Significant Others

In relation to how others affect the development of one's hardiness, significant others seemed to play a key role in this, and therefore its identification as a second order theme to external support was established. Four out of the six elite coaches within this study suggested that significant others such as ex or current coaches, have contributed to shaping their knowledge, attitude, and behaviour during their everyday lives and careers. For example one coach suggested:

Probably not the good things but definitely the poor aspects like the people man managing me, the coaches, preparation, certain attitudes and I have taken that and I've gone right that is never going to happen on my watch as a coach. That has shaped my development as a coach because certain people were shouters, poor man managers etc. And I've taken that and said I am going to be a hybrid of all of those coaches.

Similar to that of the above, the consistent mentioning of how significant people have changed the attitude and behaviours of the elite coaches in this study seemed to influence its inevitability of contributing to the development of hardiness in elite coaches, and was subsequently identified as a sub-theme. The participants made the distinction between significant others and social support within their answers by outlining that the significant others were not always supportive and did not mainly provide positive influence through their behaviours and attitudes. For example, “I think having had a number of coaches that I have had as a hockey player, looking at them and taking all of the worst bits and taking them, and making sure I wasn’t like that.”

4.3 Transformational coping strategies

4.31 Goal Setting

Along with other coping strategies, goal setting was identified by most of the participants as a significant pre-mediating factor in the development and exercise of hardy attitudes. One participant suggested, “I had specific end goals in my playing career and in order to achieve those goals no one aspect could derail me... Yes, I think that hardiness impacts that through the commitment needed to achieve a goal.” Therefore, from this and other similar expressions regarding goal setting and goal orientations such as, “I knew I always wanted to become a coach so it really impacted on me”, it was interpreted and understood that the setting of goals can help develop elite coaches’ hardiness through increasing the three hardy interrelated attitudes. It was, therefore, identified as a second order theme within transformational coping strategies, as it seemed to be a strategy that can be used and utilised in order to enhance a coach’s attitudes of control, commitment and challenge within stressful situations.

4.32 Reflective practice

Another coping strategy that was expressed by all of the participants was the use of reflective practice after stressful events, in order to inform future behaviour. One participant stated:

I think that you experience a situation, you reflect on it and that reflection helps you deal with similar situations in the future... I reflect on everything, I

don't want to go into the theory of the reflective cycle but I think when you do something; you reflect on what went well, what didn't go so well and how I might make those changes... So for me reflection is a fundamental part of my coaching.

Reflective practice was identified as a coping strategy, due to its knowledge gains that help coaches deal and cope with stressful situations in the future. However, it was interpreted to influence hardiness development through attitude and behavioural changes. For example, through reflecting, one may gain knowledge and therefore learn from specific experiences, thus in similar future stressful situations one may have a greater perception of control over them, allowing them to cope more efficiently. "I know what's coming up... There's a sort of reflection on previous instances before they happen and I like to think I'm pretty tooled-up before they happen." Therefore in this scenario, through reflection, one would increase their hardiness through the enhancement of their perceptions of control in stressful situations. This coach would enhance these perceptions of control through reflecting on previous incidents in order to anticipate and cope with potential stressors in future stressful situations. Therefore, this enhancement provides the basis for reflection to be identified as another second order theme that contributes to the development of hardiness.

4.33 Preparation and planning

Finally, the last second order theme that was derived was the use of preparation and planning as a means of developing hardiness within elite coaches. Preparation and planning was thought to provide a base for which coaches can use and utilise in order for them to cope and deal with stressors. Throughout each interview transcript each coach makes reference to the needs of planning and preparation in order to cope, and to how it can develop their hardiness levels.

If you can react accordingly in fast situations, then having that 90-95% control and only having to react to the 10% will definitely help you as a coach... So having structures and having a contingency plan, dealing with the 'what if' scenarios, so when they happen in the game you have anticipated them and you are prepared for them.

In support of this participant's statement, each elite coach suggested that both planning and preparation were vital in order for them to cope with the stressful

situations that arise in elite sport. However, preparation and planning were interpreted to influence the development of hardiness through allowing the coaches to have greater control of the stressful environment in which they operate within.

CHAPTER FIVE

DISCUSSION

5.0 Discussion

The aims of the current study were to gather an understanding of the practical implications that aid or influence the development of hardiness amongst elite coaches. The results obtained from this study indicated that experiences, external support and transformational coping strategies all influence the development of hardiness amongst elite coaches. The discussion below represents how the findings of the current study relate theoretically to the development of hardiness among elite coaches, and the practical implications of exercising these within elite coach performance.

5.1 Theoretical & Practical Implications

Due to hardiness being composed of the three sub-components control, commitment and challenge, any way in which these sub-components can be developed should ultimately increase and further develop each coach's hardiness levels. Therefore, the themes identified as hardiness developing within this study are ultimately related to the development of these three sub-components. The ways in which the themes are related theoretically and practically to the development of hardiness are discussed below.

In the study of Maddi (2007), hardy military personnel were asked briefly about their experiences when growing up, each individual maintained the importance of their parents support, and the values in which their parents have instilled in them such as hard work, allowing them to cope and thrive more effectively in demanding situations. Similar to the findings of this study, each coach expressed that the values their parents have instilled in them have shaped their personality and attitude throughout their life. This suggests social support may potentially pay particular dividends to the development of hardiness within elite coaches. If hardy individuals are more effective at coping with stressors, it is therefore no surprise that the hardy coaches within this study cited their social support networks as being a key factor in being able to do so. In reference to the transactional stress theory (Lazarus & Folkman, 1984), an individual's resource to social support networks can help determine their appraisal of a situation as less stressful, ultimately allowing them to cope (Cohen, 1992; Mitchell, 2011). From these findings, it is possible that the social interactions inherently developed with, and

the motivational characteristics of an individual's social support, could enhance a coach's hardiness through coaches subsequently appraising stressful situations as challenges, rather than as threats to their everyday lives. Indeed, challenge is one of the sub-components of hardiness, therefore, each coach's appraisals of stressors may be positively altered through their use of social support, resulting in increases of hardiness and ultimately affecting the way in which coaches cope with stressors. With this in mind, the ways in which coaches operate with and utilise their social support is an important factor in increasing their hardiness levels, and should consequently be exercised by coaches in order to for them to be able to cope and deal with stressors in the coaching environment.

Another method, in which social support appeared to impact each coach's hardiness in the current study, was through coaches' using social support to inform their decision making within stressful situations. For example one coach stated, "My wife is an English girl with very limited knowledge of ice hockey, but she informs my decisions in coaching because these are the opinions and ones you value..." Schwarzer and Knoll (2007) suggested that members of a social network can provide the recipient of the support verbal assurance in terms of expressing that an individual is competent at dealing and coping with stressors. This could link to the increase of a coach's hardiness levels through the enhancement of their perceptions of control. For example, a coach using their social support as justification for their decision making, may play an important factor in increasing a coach's perception of control within the stressful decision processes that are evident within elite sport. Support for this assumption can be gathered from the study of Cash & Gardner (2011), who suggested that hardy individuals utilise social support through the acquisition of practical and emotional support. Therefore, the practical assistance from a coach's social support may be of particular utilisation during the decision making processes of elite sport. Thus being important in order for coaches to cope with the stressors these processes put upon them. Overall, the use and availability of social support is very much influential in the way in which coaches cope with stressors and must be utilised by coaches within elite sport. As well as the direct affects, the indirect effects of social support suggested above provide fruitful basis for the development of hardiness.

Although social support provides the much needed support for individuals to cope effectively within stressful situations, research suggests that significant others can shape individual's attitudes and future behaviour. Significant others are the people that occupy a perceived importance to an individual and whose opinions are perceived as important (Lackovic-Grgin & Dekovic, 1990). Significant others are suggested to shape an individual's attitudes and future behaviours through affecting their goal orientations and subsequent achievement motivation levels (Weigand *et al.*, 2001). In support of this notion, Brophy (1987) stated that the facilitation of an individual's goal orientations are affected by significant others within their life, such as coaches, teachers, parents and sporting heroes. However, in comparison to social support and the significant others suggested in the studies above, some of the significant others suggested in the current study were not always supportive, and subsequently affected and influenced the behaviours and attitudes of the participants through showing undesirable characteristics. In this study, significant others such as previous coaches were suggested to be a main source of the development of hardiness among elite coaches. Those significant others seemed to influence the participants' hardiness development in this study, through the participant's shaping and modelling their behaviour on their reflections of the significant other's positive and negative attitudes and behaviours within sporting environments. Therefore, shaping the participant's controlled behaviours and attitudes based upon how to act, as well as how not to act. The practical implications of utilising significant other's as behavioural influences are that coaches can further develop, and maintain hardiness through subsequently exercising control within stressful situations. However, this control they exercise can as suggested above, ultimately be influenced by their experiences with significant others and how they learn from those experiences.

Gould *et al.* (1999) highlighted that the investigation into experience is particularly important when trying to understand how individuals cope within stressful situations. However, in order to reflect and attain knowledge as a future coping mechanism in stressful situations, Hanton *et al.* (2007) implied that the significance of the experience was vital in order for this learning process to have basis and occur. Therefore, although stated as three individual sub-themes within this study, it is no surprise that each participant reiterated firstly, that the significant

experiences they have encountered and their exposure to demands throughout their lives was vital in attaining the development of coach hardiness. However, in order to achieve this development, a learning process must have to be made from these significant experiences and demands for it to impact on their future attitudes and behaviours. This learning process was suggested to be through the art of reflection.

The practical implications of the reflective process and using reflection as a coping strategy can ultimately develop hardiness through enhancing its three sub-components. Hanton, Cropley and Lee (2009) suggested that the participants in their study were able to replicate their perceptions and past behaviours from previous events in similarly stressful situations, through using previous experiences as a reference point for action behaviour. The similarities between the findings of both studies are clear; therefore due to both experience and reflection being derived as sub-themes within this study, coaches should be able to develop their hardiness levels through experiential learning and its impacts on the enhancement of their hardy attitudes of control, commitment and challenge. With this in mind, not all coaches learn from their experiences because they either cannot, or do not reflect sufficiently (Hanton *et al.*, 2007). The findings from the study of Hanton *et al.* (2007) are imperative to gaining an understanding of experiential learning, as they suggest that it involves cognitive processes that allow the attainment and adaption of knowledge, that guide one's action, reflection, and subsequent learning to take place from significant experiences. Therefore, as a practical implication, teaching coaches the importance of reflection, and how to reflect sufficiently on experiences, would enable them to learn from previous experience and therefore provide an evidence base that may possibly inform their future behaviour in similar experiences. One example of how sufficient reflection may increase coach hardiness could specifically be through the enhancement of control. For example, a coach that experiences a stressful encounter, reflects on that encounter, and learns from it effectively, may feel a possible increase in their perceptions of control when experiencing similar stressful encounters because of the learning process that took place. As a consequence of learning how to reflect effectively, it is possible that a coach may also see similar situations as challenges, providing the initial experience was not

coped with effectively. Lastly, conscious reflection could possibly be perceived as showing commitment to learning, and therefore reflection, as shown above, may further hardiness development through enhancing all of its three attitudes.

Another coping strategy identified as important was that of goal setting. Goal setting was suggested to play a key role in how each elite coach managed and coped with stressful situations, and as a consequence how they further developed their hardiness levels. One way current literature on goal setting may link to the development of coach hardiness is through the setting of process goals. For example, although the studies of Kingston and Hardy (1997) and Kingston and Wilson (2009) specifically focussed on the affects process goals have on injury rehabilitation, their findings suggest there may be a link between setting and achieving process goals and the development and application of hardiness. The findings of these studies suggest that goal setting enhances an individual's perceptions of control, self-efficacy and autonomy. Hardy individuals feel as though one is influential and in control of stressful situations (Kobasa, 1982). Therefore, as control is a sub-component of hardiness, enhancing an individual's perception of control would possibly increase their subsequent hardiness levels.

Building upon the implications that process goals may have on the development of coach hardiness, it is worthwhile considering the links between them, the self-determination theory (STD) (Deci & Ryan, 1985) and its sub-theory of the basic psychological needs. In particular, the findings of previous research have suggested that having a process focus and setting process goals can not only increase performer's intrinsic motivation through the facilitation of the three basic psychological needs of autonomy, competence and relatedness (Wilson & Brookfield, 2009) but also increase their adherence levels (Taylor & May, 1996). Therefore, if an increase in intrinsic motivation enhances adherence, then effectively, intrinsic motivation could be important in terms of enhancing an individual's commitment to everyday tasks. Hardy individuals believe that through showing commitment through persistence and effort, they can achieve their goals (Hanton *et al.*, 2003). Supporting the idea that process goals enhance commitment levels, research suggests that process goals positively influence intrinsic motivation, and therefore as a consequence, increase an individual's effort and persistence towards a task, ultimately leading to success (e.g., Boyd &

Yin, 1996; Duda & Nicholls, 1992; Duda & White, 1992; Ferrer-Caja & Weiss, 2000; Lens *et al.*, 2004; Walling & Duda, 1995). Process goal setting, therefore, may influence an increase in individual's commitment levels and should be exercised by individuals who are trying to develop their hardiness levels. As well as enhancing commitment and control, Deci and Ryan (2002) associated process goals with the perception of seeing difficult tasks as challenges, rather than as threats, thus somewhat linking to the hardiness interrelated attitude of challenge. Therefore, coinciding with the links shown above, all three sub-components of hardiness seem as though they can be developed through the setting of process goals. However, along with process goals, performance goals have been reported to have many motivational properties (Burton, 1989; Cianci, Schaubroeck, & McGill, 2010), and therefore performance goal achievement could also play a part in enhancing coach commitment and subsequent hardiness levels among elite coaches.

Although there is a real importance of goal setting and reflection in terms of stress coping strategies, research has also paid particular attention to preparation and planning as a means of readying oneself to cope and deal with stressful eventualities (e.g. Nicholls *et al.*, 2007; Weston *et al.*, 2009). Lazarus (1999) suggested that planning was a strategy that individuals use to exercise problem focussed coping methods. Problem focussed coping refers to individual's use of strategies in order to manage oneself and their environment (Lazarus, 1999). The elite coaches in the current study also noted that planning and preparation were the key components that allowed them to cope more effectively in performance. In light of this, through planning a coach can be more readily adept at facing and coping with the stressors that will arise within the complex environment of coaching. It's effectiveness as a coping strategy ultimately insinuates how it can influence the increase of coach hardiness levels through increasing a coach's control in stressful environments. For example, a coach who plans for a greater range of stressful eventualities within the coaching environment would possibly exercise more control over how to cope with those situations in comparison to an individual that did not plan. As well as increasing coach hardiness through the levels of control one may have over stressors, planning weekly schedules of what is needed to be achieved with their athletes for example would mean coaches

would have a tangible record of the effort they need to put in each week in order to achieve their planned goals. Thus, possibly indirectly enhancing a coach's commitment levels and ultimately increasing the further development of coach hardiness levels. Therefore, extensive planning and preparation may be crucial for coaches who are making the transition from non-elite to elite coaching not only for the development of stress coping strategies but also to develop and sustain hardiness levels that can impact positively upon their lives as coaches.

The seven sub-themes discussed were ultimately described as important factors that should be exercised, to enable non hardy coaches to develop their hardiness levels, and therefore, deal and cope with the stressors and demands that are ever present within the complex nature of elite sports coaching. Although the affects and practical implications of these sub-themes were mainly described to influence coach hardiness levels as individual concepts, a combination and mixture of these underlying mechanisms would be more beneficial to a coach's overall development of hardiness. This of course being because some of the themes may only focus on the development of one of the three sub-components of hardiness. Therefore, an excessive variance in the levels of each sub-component would cause imbalances and would possibly affect the nature in which coaches visualise, cope and behave in demanding situations. For example, if a coach had high levels of commitment but low levels of challenge, one may possibly be committed to all aspects of their life but see all of the demands faced as threats, thus having negative implications towards the way in which that coach coped with the stressors and demands faced. Therefore, from the findings of this study, coaches that wish to increase their hardiness levels and their effectiveness at dealing with stressful situations ultimately should experience, exercise and practice the themes discussed.

5.2 Strengths, Limitations and Future Research

One of the key strengths of the current study is the sample of participants used. Of course, each coach being of national or international level meant that each coach was more likely to have a greater value of experience within sports coaching. Therefore, all incidents shared that were based within the sports coaching environment would be rich in insight into the potentially more stressful nature of

elite sports coaching. As well as this, as the coaches operated at national or international level, it was more likely that there was a more extensive and greater amount of sports coaching demands that these coaches experienced in comparison to non-elite coaches. With this in mind, again in comparison to non-elite coaches, the elite coaches in the current study would have to be able to cope more effectively with the greater pressures and amount of stressors that are put upon them in order to maintain their success in coaching, and to maintain their health and well-being. This could possibly mean that their hardiness levels would and maybe are greater than non-elite coaches; however it has not been researched. If it was proven to be the case, gathering a coaching sample that has the potential to have greater hardiness levels, would therefore provide a more suitable sample for the examination of the development of hardiness amongst sports coaches, highlighting a particular strength of the study.

One other important strength of the current study is how the findings contribute to knowledge. Due to a current dearth in literature that seeks to understand how hardiness is developed, the findings of this particular study has a great contribution to knowledge due to it being a study that has not been replicated by previous researchers. The understanding of the development of hardiness among elite coaches has also not been researched, and therefore offers new insight into how coaches that wish to make the transition into elite coaching may possibly cope and thrive with the pressures and demands of the elite environment. The findings of this study, in particular the transformational coping strategies identified, would be extremely useful if taught within coach education programmes in order to help coaches be better prepared for the stressors that may arise within the elite coaching environment. Therefore, the findings of this study have the potential to help the most technically and tactically knowledgeable coaches make the transition into elite coaching, through helping these coaches deal with the stressors in which they will inevitably face and encounter within elite sport.

Given the strengths of this study, it is also important to understand the limitations of the study in order for future research within this area to prosper. One limitation of the study was the critical incident approach used in order to develop themes from the qualitative interviews. Each participant was asked to prepare three critical incidents that they believed were vital in the development of their hardiness for

questioning. However, one of the themes identified was significant experiences and therefore the construction of this theme may have been influenced from the critical incident approach used. Although the critical incident approach did allow the participants to better prepare themselves for questioning within the interview, another approach in which did not influence any of the sub-themes may have proved to be more successful at generating themes inductively. Therefore, future research into how hardiness may be developed should adopt a theme generating method that has as little influence as possible on the themes derived, providing more reliable findings.

Although the sample of participants was highlighted as a potential strength of this study, the assumption that elite coaches had higher hardiness levels in comparison to the non-elite coaches within this study and were therefore assessed could also be identified as a limitation. For hardiness levels are not only developed within sports coaching and therefore non-elite coaches may have possibly developed their hardiness levels in other walks of life. This creates avenues for future research within the area of hardiness for a study that seeks to compare and assess firstly, whether elite coaches actually have higher hardiness levels in comparison to non-elite coaches, and secondly, how elite coaches' hardiness developing strategies and experiences differ to non-elite coaches' hardiness developing strategies and experiences. This would not only provide proof of whether elite coaches do or do not have greater hardiness levels in comparison to non-elite coaches, but also it may provide a wider and more effective range of hardiness developing strategies that may be utilised by various levels of future coaches.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Summary and Conclusion

To conclude, the current study sought to achieve a greater understanding of how hardiness is developed among elite coaches. It sought to achieve this through a deeper look into what the participants believed were the critical incidents most affecting their hardiness development. In doing so, the findings emanating from this study were that experiences, external support and transformational coping strategies all had particular influence on the development of hardiness amongst elite coaches. Each theme also consisted of sub-themes, for example, experiences consisted of significant experiences and exposure to demands, external support consisted of social support and significant others and transformational coping strategies consisted of goal setting, reflective practice and preparation and planning. Therefore, in order for coaches to develop their hardiness, experiencing and utilising all of these sub-themes were suggested to have the biggest influence on achieving that development. These findings may be fruitful not only for coaches whom which have the aspiration to make the transition from non-elite to elite level coaching, but for coaches who struggle to deal with the demands and stressors that coaching at all levels is accompanied by. However, although these findings represent the ways in which coaches can develop their hardiness based upon how elite coaches have done so, further research should investigate the differences in hardiness levels between elite and non-elite coaches, and how different coaches at different levels have learnt and exercise hardy behaviours in order to cope with the stressors that they encounter within their sporting roles.

References

- Anderson, A., Miles, A., Robinson, P., & Mahoney, C. (2004). Evaluating the athlete's perception of the sport psychologist's effectiveness: What should we be assessing? *Psychology of Sport and Exercise*, 5, 255-277.
- Bawa, H. (2010). Personality hardiness, burnout and sport competition anxiety among athletics and wrestling coaches. *British Journal Of Sports Medicine*, 44, i57-i58.
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Boyd, M.P., & Yin, Z. (1996). Cognitive-affective sources of sport enjoyment in adolescent sport participants. *Adolescence*, 31, 283-295.
- Brophy, J.E. (1987). Socialising student motivation to learn. In M. D. Kleiber, (Ed.), *Advances in motivation and achievement* (pp. 181-210). Greenwich, CT: JAI Press.
- Burton, D. (1989). Winning isn't everything: Examining the impact of performance goals on collegiate swimmers' cognitions and performance. *The Sport Psychologist*, 3, 105-132.
- Cash, M.L., & Gardner, D. (2011). Cognitive hardiness, appraisal and coping: comparing two transactional models. *Journal of Managerial Psychology*, 26(8), 646-664.
- Cianci, A. M., Schaubroeck, J. M., & McGill, G. A. (2010). Achievement Goals, Feedback, and Task Performance. *Human Performance*, 23(2), 131-154.
- Cohen, J. (1992). Stress, social support, and disorder. In H. O. F. Veiel & U. Baumann (Eds.), *The meaning and measurement of social support* (pp. 109-124). New York: Hemisphere.
- Cushion, C. J., Armour, K. M. & Jones, R. L. (2006). Locating the Coaching Process in Practice: Models 'for' and 'of' Coaching. *Physical Education and Sport Pedagogy*, 11(1), 1-17.
- Cushion, C. J., Armour, K. M. & Jones, R.L. (2003). Modelling the Complexity of the Coaching Process, Coach Education and Continuing Professional Development: Experience and Learning to Coach. *Quest*, 55, 215-230.
- Deaner, H., & Silva, J. M. (2002). Personality and sport performance. In J. M. Silva & D. E. Stevens (Eds.), *Psychological foundations of sport* (pp. 48-65). Boston, MA: Allyn & Bacon.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

- Deci, E.L. & Ryan, R.M. (Eds.) (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- DiCicco-Bloom, B., & Crabtree, B. F. (2006). The qualitative research interview. *Medical Education, 40*, 314–321.
- Duda, J.L., & Nicholls, J.G. (1992). Dimensions of achievement motivation in schoolwork and sport. *Journal of Educational Psychology, 84*, 290-99.
- Duda, J.L., & White, S.A. (1992). Goal orientations and beliefs about the causes of sport success among elite skiers. *The Sport Psychologist, 6*, 334-343.
- Eschleman, K.J., Bowling, N.A., & Alarcon, G. (2010). A meta-analytic examination of hardiness. *International Journal of Stress Management, 17*(4), 277-307.
- Ferrer-Caja, E., & Weiss, M. R. (2000). Predictors of intrinsic motivation among adolescent students in physical education. *Research Quarterly for Exercise and Sport, 71*, 267-279.
- Fletcher, D., & Scott, M. (2010). Psychological stress in sports coaches: A review of concepts, research and practice. *Journal of Sports Sciences, 28*(2), 127-137.
- Fletcher, D., Hanton, S., & Mellalieu, S. D. (2006). An organizational stress review: Conceptual and theoretical issues in competitive sport. In S. Hanton & S. D. Mellalieu (Eds.), *Literature reviews in sport psychology* (pp. 321–373). Hauppauge, NY: Nova Science.
- Ford, I. W., Ekiund, R. C, & Gordon, S. (2000). An examination of psychosocial variables moderating the relationship between life stress and injury time-loss among athletes of a high standard. *Journal of Sports Sciences, 18*, 301-312.
- Frey, M. (2007). College Coaches' Experiences With Stress--"Problem Solvers" Have Problems, Too. *Sport Psychologist, 21*(1), 38-57.
- Funk, S.C. (1992). Hardiness: a review of theory and research. *Health Psychology, 11*, 335-345.
- Golby, J., & Sheard, M. (2004). Mental toughness and hardiness at different levels of rugby league. *Personality and Individual Differences, 37*(5), 933–942.
- Goodger, K., Gorely, T., Lavallee, D., & Harwood, C. (2007). Burnout in sport: A systematic review. *The Sport Psychologist, 21*, 127–151.

- Gould, D., Greenleaf, C., Guinan, D., & Chung, Y. (2002). A survey of U.S. Olympic coaches: Variables perceived to have influenced athlete performances and coach effectiveness. *The Sport Psychologist*, 16, 229-250.
- Gould, D., Guinan, D., Greenleaf, C., Medbery, R., & Peterson, K. (1999). Factors affecting Olympic performance: Perceptions of athletes and coaches from more and less successful teams. *The Sport Psychologist*, 13, 371–394.
- Guardiola, P. (2012). Pep Guardiola to end reign as Barcelona coach in summer. <http://www.bbc.co.uk/sport/0/football/17855980> [accessed 23 February 2013].
- Hanton, S., Evans, L. & Neil, R. (2003). Hardiness and the competitive trait anxiety response. *Anxiety, Stress and Coping: An International Journal*, 16(2), 167-184.
- Hanton, S., Cropley, B., Miles, A., Mellalieu, S., & Neil, R. (2007). Experience in sport and its relationship with competitive anxiety. *International Journal of Sport & Exercise Psychology*, 5, 28-53.
- Hendrix, A. E., Acevedo, E. O., & Hebert, E. (2000). An examination of stress and burnout in certified athletic trainers at Division I-A universities. *Journal of Athletic Training*, 35, 139-144.
- Hjälml, S., Kenttä, G., Hassménan, P., & Gustafsson, H. (2007). Burnout Among Elite Soccer Coaches. *Journal Of Sport Behavior*, 30(4), 415-427.
- Jones, R. L. (2006). How can Educational Concepts Inform Sports Coaching? In R.L. Jones (Ed.), *The Sports Coach as Educator: Re-Conceptualising Sports Coaching* (pp. 3-13). London: Routledge.
- Jones, R.L., Armour, K.M., & Potrac, P. (2002). Understanding the coaching process: A framework for social analysis. *Quest*, 54, 34-48.
- Jones, R. & Wallace, M. (2005). 'Another bad day at the training ground: Coping with ambiguity in the coaching context'. *Sport, Education & Society*, 10(1), 119-134.
- Kelley, B.C. (1994). A model of stress and burnout in collegiate coaches: Effects of gender and time of season. *Research Quarterly for Exercise and Sport*, 65, 48-58.
- Kelley, B.C., Eklund, R.C., & Ritter-Taylor, M. (1999). Stress and burnout among collegiate tennis coaches. *Journal of Sport and Exercise Psychology*, 21, 113–130.
- Khoshaba, D.M., & Maddi, S.R. (1999). Early experiences in hardiness development. *Consulting Psychology Journal*, 51(2), 106–116.

- Kobasa, S. C. (1979). Stressful life events, personality, and health: an inquiry into hardiness. *Journal of Personality and Social Psychology*, 37(1), 1-11.
- Kobasa, S.C. (1982). Commitment and coping in stress resistance among lawyers. *Journal of Personality and Social Psychology*, 42, 707-717.
- Kobasa, S.C., Maddi, S.R., Puccetti, M., & Zola, M. (1986). Relative effectiveness of hardiness, exercise, and social support as resources against illness. *Journal of Psychosomatic Research*, 29, 525-533.
- Kondracki, N. L., & Wellman, N. S. (2002). Content analysis: Review of methods and their applications in nutrition education. *Journal of Nutrition Education and Behavior*, 34, 224-230.
- Lackovic-Grgin, K., & Dekovic, M. (1990). The contribution of significant others to adolescents' self-esteem. *Adolescence*, 25(100), 839-846.
- Lazarus, R. S. (1999). *Stress and emotion. A new synthesis*. New York: Springer.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lens, W., Simons, J., Soenens, B., & Vansteenkiste, M. (2004). How to become a persevering exerciser? Providing a clear, future intrinsic goal in an autonomy-supportive way. *Journal of Sport and Exercise Psychology*, 20(2), 232-249.
- Levy, A., Nicholls, A., Marchant, D., & Polman, R. (2009). Organisational Stressors, coping and coping effectiveness: A longitudinal study with an elite coach. *International Journal of Sports Science and Coaching*, 4, 31-45.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Maddi, S. R. (1987). Hardiness training at Illinois Bell Telephone. In J. Opatz (Ed.), *Health promotion evaluation*. Stevens Point, WI: National Wellness Institute.
- Maddi, S. R. (2002). The story of hardiness: Twenty years of theorizing, research, and practice. *Consulting Psychology Journal: Practice and Research*, 54, 175-185.
- Maddi, S. R. (2005). On hardiness and other pathways to resilience. *American Psychologist*, 60(3), 261-262.
- Maddi, S. R. (2006). Hardiness: The courage to grow from stresses. *The Journal of Positive Psychology*, 1, 160-168.
- Maddi, S. R., & Hess, M. (1992). Hardiness and basketball performance. *International Journal of Sports Psychology*, 23, 360-368.

- Maddi, S. R., Kahn, S., & Maddi, K. L. (1998). The effectiveness of hardiness training. *Consulting Psychology Journal: Practice and Research*, 50(2), 78-86.
- Maddi, S. R., & Kobasa, S. C. (1984). *The hardy executive: Health under stress*. Homewood, IL: Dow Jones-Irwin.
- Martin, J. J., Kelley, B. C., & Eklund, R. C. (1999a). A model of stress and burnout in male high school athletic directors. *Journal of Sport and Exercise Psychology*, 21, 280-294.
- Martin, J. J., Kelley, B. C., & Dias, C. (1999b). Stress and burnout in female high school athletic directors. *Women in Sport and Physical Activity Journal*, 8, 101-116.
- Maslach, C. (1976). Burned-out. *Human Behavior*, 5, 16-22.
- Maslach, C. (1982). Burnout: A social psychological analysis. In J. W. Jones (Ed.), *The burnout syndrome: Current research, theory, interventions* (pp. 30-53). Park Ridge, IL: London House.
- Maslach, C., & Jackson, S. E. (1981). *Maslach burnout inventory: manual*. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., & Schaufeli, W.B. (1993). Historical and conceptual development of burnout. In W.B. Schaufeli, C. Maslach., & T. Marek (Eds.), *Professional burnout: Recent development in theory and research* (pp. 1-18). Washington, DC: Taylor & Francis.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd edn.). Thousand Oaks, CA: Sage.
- Mitchell, I. (2011). Social support and psychological responses in sport-injury rehabilitation. *Sport & Exercise Psychology Review*, 7(2), 30-44.
- Nicholls, A. R., Polman, R., Levy, A. R., Taylor, J., & Cobley, S. (2007). Stressors, coping, and coping effectiveness: Gender, type of sport, and skill differences. *Journal Of Sports Sciences*, 25(13), 1521-1530.
- Olusoga, P., Butt, J., Hays, K., & Maynard, I. (2009). Stress in Elite Sports Coaching: Identifying Stressors. *Journal of Applied Sport Psychology*, 21(4), 442-459.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.
- Raedeke, T.D., Lunney, K., & Venables, K. (2002). Understanding athlete burnout: Coach perspectives. *Journal of Sport Behavior*, 25, 181-206.

- Ryan, F., Coughlan, M., & Cronin, P. (2009). Interviewing in qualitative research: The one-to-one interview. *International Journal of Therapy and Rehabilitation, 16*(6), 309–314.
- Saury, J. & Durand, M. (1998). Practical Knowledge in Expert Coaches: On Site Study of Coaching in Sailing. *Research Quarterly for Exercise and Sport, 69*(3), 254-266.
- Sheard, M., & Golby, J. (2010). Personality hardiness differentiates elite-level sports performers. *International Journal of Sport and Exercise Psychology, 8*(2), 160-169.
- Schwarzer, R., & Knoll, N. (2007). Functional roles of social support within the stress and coping process: A theoretical and empirical overview. *International Journal Of Psychology, 42*(4), 243-252.
- Taylor, A.H., & May, S. (1996). Threat and coping appraisal as determinants of compliance with sports injury rehabilitation: an application of protection motivation theory. *Journal of Sports Science, 14*(6), 471–482.
- Thelwell, R. C., Weston, N. J. V., Greenlees, I. A., & Hutchings, N. V. (2008). Stressors in elite sport: A coach perspective. *Journal of Sports Sciences, 26*, 905-918.
- Walling, M.D., & Duda, J.L. (1995). Goals and their associations with beliefs about success in and perceptions of the purposes of physical education. *Journal of Teaching in Physical Education, 14*, 140-156.
- Weigand, D. A., Carr, S. S., Petherick, C. C., & Taylor, A. A. (2001). Motivational climate in sport and physical education: the role of significant others. *European Journal Of Sport Science, 1*(4), 1-13.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning and Identity*. Cambridge: Cambridge University Press.
- Weston, N. V., Thelwell, R. C., Bond, S., & Hutchings, N. V. (2009). Stress and Coping in Single-Handed Round-the-World Ocean Sailing. *Journal Of Applied Sport Psychology, 21*(4), 460-474.
- Wilson, K., & Brookfield, D. (2009). Effect of goal setting on motivation and adherence in a six-week exercise program. *International Journal Of Sport & Exercise Psychology, 7*(1), 89-100.

APPENDICES

Appendix A

Dispositional Resiliency Scale

Below are statements about life that people often feel differently about. Highlight a number to show how you feel about each statement. Read the items carefully and indicate how much you think each one is true in general. There are no right or wrong answers; just give your honest opinion.

| | Not at all | A little true | Quite true | Completely true |
|--|------------|---------------|------------|-----------------|
| 1. Most of my life gets spent doing things that are worthwhile | 1 | 2 | 3 | 4 |
| 2. Planning ahead can help avoid most future problems | 1 | 2 | 3 | 4 |
| 3. Trying hard does not pay, since things still don't turn out right | 1 | 2 | 3 | 4 |
| 4. No matter how hard I try, my efforts usually accomplish nothing | 1 | 2 | 3 | 4 |
| 5. I don't like to make changes to my everyday schedule | 1 | 2 | 3 | 4 |
| 6. The 'tried and true' ways are always the best | 1 | 2 | 3 | 4 |
| 7. Working hard does not matter since only the bosses profit by it | 1 | 2 | 3 | 4 |
| 8. By working hard you can always achieve your goals | 1 | 2 | 3 | 4 |
| 9. Most employees are simply manipulated by their bosses | 1 | 2 | 3 | 4 |
| 10. Most of what happens in life is just meant to be | 1 | 2 | 3 | 4 |
| 11. It's usually impossible for me to change things at training | 1 | 2 | 3 | 4 |
| 12. New laws should never hurt a person's pay check | 1 | 2 | 3 | 4 |
| 13. When I make plans, I'm certain I can make them work | 1 | 2 | 3 | 4 |
| 14. It's very hard for me to change a friend's mind about something | 1 | 2 | 3 | 4 |
| 15. It's exciting to learn something about myself | 1 | 2 | 3 | 4 |
| 16. People who never change their mind usually have good judgement | 1 | 2 | 3 | 4 |
| 17. I really look forward to training | 1 | 2 | 3 | 4 |
| 18. Politicians run our lives | 1 | 2 | 3 | 4 |
| 19. If I'm working on a difficult task I know when to seek help | 1 | 2 | 3 | 4 |
| 20. I won't answer a question until I really understand it | 1 | 2 | 3 | 4 |
| 21. I like a lot of variety in my training | 1 | 2 | 3 | 4 |
| 22. Most of the time, people listen carefully to what I say | 1 | 2 | 3 | 4 |
| 23. Day dreams are more exciting than reality for me | 1 | 2 | 3 | 4 |
| 24. Thinking of yourself as a free person just leads to frustration | 1 | 2 | 3 | 4 |
| 25. Trying your best at training really pays off in the end | 1 | 2 | 3 | 4 |
| 26. My mistakes are usually very difficult to correct | 1 | 2 | 3 | 4 |
| 27. It bothers me when my daily routine gets interrupted | 1 | 2 | 3 | 4 |
| 28. It's best to handle most problems by just not thinking of them | 1 | 2 | 3 | 4 |
| 29. Most good people and leaders are born, not made | 1 | 2 | 3 | 4 |
| 30. I often wake up eager to take my life up wherever it left off | 1 | 2 | 3 | 4 |
| 31. Lots of times, I really don't know my own mind | 1 | 2 | 3 | 4 |

| | | | | |
|---|---|---|---|---|
| 32. I respect rules because they guide me | 1 | 2 | 3 | 4 |
| 33. I like it when things are uncertain or unpredictable | 1 | 2 | 3 | 4 |
| 34. I can't do much to prevent it if someone wants to harm me | 1 | 2 | 3 | 4 |
| 35. People who do their best should get full support from society | 1 | 2 | 3 | 4 |
| 36. Changes in routines are interesting for me | 1 | 2 | 3 | 4 |
| 37. People who believe in individuality are only kidding themselves | 1 | 2 | 3 | 4 |
| 38. I have no use for theories that are not closely tied to facts | 1 | 2 | 3 | 4 |
| 39. Most days, life is really interesting and exciting for me | 1 | 2 | 3 | 4 |
| 40. I want to be sure someone will take care of me when I'm old | 1 | 2 | 3 | 4 |
| 41. It's hard to imagine anyone getting excited about training | 1 | 2 | 3 | 4 |
| 42. What happens to me tomorrow depends on what I do today | 1 | 2 | 3 | 4 |
| 43. If someone gets angry at me, it's usually no fault of mine | 1 | 2 | 3 | 4 |
| 44. It's hard to believe people who say their work helps society | 1 | 2 | 3 | 4 |
| 45. Ordinary work is just too boring to be worth doing | 1 | 2 | 3 | 4 |

APPENDIX B

PREPARATION BOOKLET

Preparation Booklet

The aim of this booklet is to help you prepare for your interview

Please bring this booklet to your interview

INTRODUCTION

Dear Interviewee,

I would firstly like to thank you once again for your consistent participation in my dissertation, it is much appreciated. As a reminder, your initial participation consisted of you completing a questionnaire called the Dispositional Resiliency Scale. The completion of this questionnaire was used to generate an overall hardiness score for you and the other willing participants. These results helped me develop an understanding of who had the highest hardiness scores among the elite coaches within my study. Of 18 elite coaches, your hardiness score meant that you were within the top 6 elite coaches for high hardiness levels in my study. However, these results although helpful, only provided me with a means of differentiating between low hardy and high hardy elite coaches.

... So where do we go next?

I am now interested in gathering an understanding of how hardiness is developed among high hardy elite coaches. To generate this understanding I have developed an interview guide that consists of questions relating to YOUR life experiences, and how these experiences may have impacted on your high hardiness score. The interview guide will consist of a brief introduction; questions that aim to assess 3 critical incidents within your life that you believe have helped develop your high hardiness score, and conclusive questions regarding the interview process.

However, please be aware that this interview is NOT trying to catch you out in any way or cause you any distress. I am only interested in learning from your experiences and consequently developing a greater understanding of how hardiness is developed among elite coaches. Hopefully, you may also find this process a developmental and eye opening experience that may impact your future coaching.

The next page provides an overview of the interview guide.

The Interview

The Interview Guide

Introduction

This will firstly consist of a brief overview of the study. Secondly, it will go through what is expected of you within the interview. Thirdly re-establishing the structure of the interview, and fourthly providing an overview of hardiness as a personality construct.

Critical Incidents

This part of the interview will form the main area of the interview, developing greater understanding of how hardiness is developed among elite coaches. It will consist of you describing one critical incident at a time. With each critical incident questions regarding the incident will be asked to generate further understanding. Examples of these questions are:

1. Did you have to be hardy during the incident/experience?
2. If so why?
3. What did you learn from this experience?
4. How has this contributed to your hardiness levels?
5. Did you have to reflect on the experience before it contributed to your hardiness levels?
6. If so how did you do so?

After all of the incidents have been discussed and questioned, further questioning on how you believe it may have impacted on your coaching will be asked. As well as this, questions asking how you believe coaches that make the transition from non-elite to elite coaching may be better prepared for its subsequent demands will be asked.

Conclusion

This section will firstly consist of questions asking for your opinion on how the interview went, and whether I led or influenced your answers in any way. Secondly whether you were able to tell your full story and thirdly, questions regarding any further additions that you may wish to discuss in relation to the incidents described.

... To help with your recall and discussion

The next page will provide space for you to write anything down that will help you recall anything from the 3 critical incidents that wish to discuss during the interview. I really

APPENDIX C

INTERVIEW GUIDE

Interview Guide

Introduction (not recorded)

Introduce the nature of the study

Introduce what is expected of them

Introduce the structure of the interview

Hardiness is a personality construct that helps buffer the effects of stress. It is composed of 3 interrelated attitudes called the 3 C's, Control, Commitment, Challenge.

Control being that individuals perceive to have a certain sense of control over all life's outcomes.

Challenge being that individuals perceive stressful, demanding situations as a personal challenge rather than as a threat to their everyday life.

Commitment being that individuals believe that through persistence and effort one is able to flourish in demanding situations.

From your high hardiness score you clearly have a high level of each of these attitudes.

Do you have any questions before we start?

Actual Interview (Recorded)

To start with, can you outline how important psychological characteristics like hardiness are for sports coaches to be able to do their job?

- Why are these important?
- How do coaches tend to develop these characteristics?

So now we're going to move on to talking about you and your experiences specifically. I'm going to ask you about 3 critical incidents that have allowed you to develop your hardiness. These can be within sport or outside of sport.

So can you start by describing the situation? (Repeat 3 times)

- a) Sport/Not in sport?
- b) If in sport, was it when coaching or playing?

- c) What was this incident?
- d) What coping methods did you use during this incident?
- e) Did and if so, why did you have to be hardy in this situation?
- f) What did you do to learn from your experience?
- g) How has this helped develop your hardiness?
- h) Did you have to reflect on your incident before it helped develop your hardiness?
- i) If so, how and when do you reflect on situations?

Thanks for that information, just some more general questions to finish

- a) How has hardiness impacted on your coaching?
- b) Given your experiences, how can coaches be better prepared to develop their hardiness that will allow them to succeed as a coach?
- c) Can these be implemented into coach education programmes?

Summary Questions

How do you think the interview went?

Did I lead or influence you in any way?

Were you able to tell your full story?

Is there anything you wish to add?