

Emotional Intelligence in Diverse Populations: Theory to Intervention

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EMOTIONAL INTELLIGENCE IN DIVERSE POPULATIONS: THEORY TO
INTERVENTION

An original contribution to knowledge

By

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A Thesis submitted in partial fulfilment of the requirements of the University of
Wolverhampton for the degree of Doctor of Philosophy

2010

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PUBLICATIONS

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Abstract

This research tested the relationship between Emotional Intelligence (EI) and mood states prior to performance, using two culturally diverse populations and using a mixed methodology. The objective was to explore whether there were cultural differences between the two samples thereafter exploring whether EI can be enhanced in the two cultures, using a psychological skills intervention. Phase 1 and 2 used the BRUMS-32 (Terry et al., 1999), and the EIS (Schutte et al., 1998) to investigate mood states and EI among a sample of UK wheelchair basketball players (phase 1: $n = 51$), and Ghanaian footballers (phase 2: $n = 70$). Five semi-structured interviews were also completed in phase 1. In phase 3 interventions (goal-setting, self-talk, relaxation and daily diaries) were used to enhance EI in a sample of UK wheelchair basketball players ($n = 6$) and Ghanaian football players ($n = 8$). Self-talk questionnaires, daily diaries, EIS and structured interviews were used to collect data during the intervention.

Phase 1 MANOVA results showed that EI was related to mood states associated with optimal and dysfunctional performance (Wilks' Lambda $_{8,7} = .01$, $F = 74.76$, $P = .00$, Partial Eta² = .99) and indicated that optimism and utilisation of emotions contributed significantly to variation in mood by performance. Four key themes emerged from semi-structured interviews: antecedents of emotions; emotion and performance; emotional intelligence; and coping with emotions. Results suggested that EI correlated with performance. Phase 2, MANOVA results showed that EI was related to mood states associated with optimal and dysfunctional performance (Wilks' Lambda $_{8,40} = .50$, $F = 7.82$, $P < .00$, Partial Eta² = .50) and indicated that emotion regulation and appraisal of other's emotions contributed significantly to variations in mood by performance. When seen collectively, results of phase 1 and 2 indicate that there were cultural differences between the two populations.

Phase 3 indicated that in both populations EI could be enhanced for some of the participants. Culture could be an explanation for the intervention only partially working. The EI theory or the EIS may only work in the culture it was developed in as it did not seem to detect changes in the Ghanaian sample.

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CHAPTER 1: Introduction

1.1 Background to Thesis

Emotions are part of everyday life; they give life its colour, intensity, excitement and misery (Wade & Travis, 1993). Baumeister, Vohs, DeWall, and Zhang (2007) stated “a life without emotion would seem to many people scarcely worth living, for it would lack much of the richness and variety of human experience” (p 168). Baumeister et al. (2007) explored whether emotions caused behaviour or if emotions were part of a feedback system. They discussed the relationship between emotions and behaviour and when each was experienced.

In his autobiography Oscar Pistorius (2009) described how emotions influenced his performance. He reflected upon the impact of nerves when building up to a competition, “I found the nervous tension that is inherent in the build-up to a race hard to handle. On the day before a race I am often so nervous that I am physically nauseous...” (p4). Whereas on the actually day of the race, “I always find twenty good excuses why I can’t run...but still I have to mentally work myself towards a healthy competitive state” (p4). He continued “if you can channel this nervous energy it can work to your advantage” (p4-5).

This is one of many situations in life that can incite emotions that may become intense and impair performance. In such instances the ability to recognise and understand how emotions influence behaviour is important. Academics describe this ability as emotional intelligence (EI; Mayer & Salovey, 1997; Petrides & Furnham, 2000). EI consists of the perception of emotions, use of emotions, and regulation of emotions. If an individual has high EI it is suggested that this person can control their emotions, utilise emotions adaptively, and learn from emotional experiences (Salovey & Mayer, 1990).

Evidence suggesting that emotions play an important role in the behaviour of individuals, is largely completed on Caucasian individuals without a disability living in the western world; therefore, research needs to explore the importance of emotions across other

cultures and subcultures. It is important to explore the extent to which these findings are representative of other populations. There is some evidence to suggest that emotions influence the behaviour of individuals with and without a disability in a similar way (Fung & Fu, 1995), but research in this area is limited. It was hypothesised that cultural differences will be found between the Ghanaian football (soccer) players and the UK wheelchair basketball players, in their EI profile. Another hypothesis was that there will be sub-cultural differences between athletes with and without a disability as well as athletes who have an acquired disability to those who have a congenital disability. Throughout the thesis, the term football will be used instead of soccer.

Qualitative and quantitative methods were utilised to address the research hypotheses. Quantitative data gathered in phase 1 and 2 helped test the link between pre-performance moods and EI in the two different populations. In phase 3 quantitative data helped assess an intervention intended to enhance EI. Qualitative methods were utilised in phase 1 and 3 to allow a more in-depth exploration of EI among these populations. The benefits of using a mixed methodology was that quantitative methods test the generalisability of theory whilst qualitative methods offer insight into issues important to the participants. Therefore, combining the two methods provided an extensive examination of the phenomena being researched (Castro & Coe, 2007).

1.2 The Importance of Applying Theory in Practice

Sport and exercise psychology has been criticized for the lack of applied research that strives to test the application of theory to practice (Lane & Terry, 2000; Lazarus, 2001; Biddle, 2000), especially in cross-cultural research (Schinke, Hanrahan, & Catina, 2009; Peters & Williams, 2009). Biddle (2000) contends that the field of sport and exercise psychology requires more research that tested intervention efficacy.

There has been an increase in research exploring EI in the sport and exercise psychology domain (Meyer & Fletcher, 2007). However, research applying EI theory to practice is limited (Meyer & Fletcher, 2007). The current doctorate study applied the theory of EI, to explore the relationship between EI and mood states prior to performance in culturally diverse populations, and then to develop interventions, which sought to enhance EI. The objective was to enhance participants control and utilisation of emotions to enhance performance. In doing so, research addressed requests for interventions that were tested in ecologically valid settings (Nicholls, Polman, & Holt, 2005).

1.3 Cultural Sport Psychology

Triandis (1994) defined culture as a “set of human-made objectives and subjective elements that in the past increased the probability of survival” (p. 22). Schinke, Hanrahan, and Catina, (2009) contended that culture included the following terms: “mainstream, or minority, ethnicity, race, and religion” (p. 5). These factors provided information, which described how a group of people, a community or a nation lives in its social and physical environment (Schinke et al., 2009). According to Peters and Williams (2009) culture included the following topics: socioeconomic status, gender, sexual orientation, race, cultural background, and ability status. Wentworth (1980) defined subcultures as an area of society that interacts and gave structure to the admission of members. They have different ideologies that form their structure and therefore, individuals within these subcultures undergo a process of socialisation to become familiar with these characteristics and become a member (Allison, 1982; Krawczyk, 1980).

Researchers and practitioners in sport psychology (SP) have called for increased attention to multicultural training models (Kontos & Breland-Noble, 2002; Martens, Mobley, & Zizzi, 2000). Schinke and Hanrahan (2009) indicated that further research was needed especially when devising theory driven intervention research. Researchers recommended

interventions to take culture into account to enhance efficacy (Parham, 2005; Hill, 1993), as cultural perspectives help determine what is meaningful (Martens et al., 2000). Kontos and Arguello (2005) discussed the concept of “worldview” (p. 37), which referred to the development of awareness and understanding of any cultural group that was preceded by an understanding of ourselves in relation to the world around us and specifically to the athletes with which we might work. Both the Association for Applied Sport Psychology (AASP) and the British Association of Sport and Exercise Sciences (BASES) have included sections on multicultural issues in their code of conduct.

One way to help with the worldview concept was discussed by Fisher, Butryn, and Roper (2003) highlighting the importance of examining and confronting one’s own biases, assumptions, and privileges. As well as the ways in which power, privilege, and praxis pertaining to SP research and practice could be addressed.

Within the field of sport and exercise psychology, a growing amount of attention has been directed to multicultural research (Schinke, Michel, Danielson, Gauthier, & Pickard, 2005). Duda and Allison (1990) explored cross-cultural research within the sport and exercise psychology literature. They reviewed 36 issues of the *Journal of Sport Psychology* from 1979 through 1987. The findings indicated a lack of attention devoted to issues of race and ethnicity. Only one paper (0.5%) included race and ethnicity as a categorical variable. In a recent follow-up examination, Ram, Starek, and Johnson (2004) explored the extent to which race, ethnicity and sexual orientation were acknowledged within the published sport and exercise psychology literature. Ram et al. (2004) reviewed 982 manuscripts published in the three top journals in sport and exercise psychology; the *Journal of Sport and Exercise Psychology*, *Journal of Applied Sport Psychology* and *The Sport Psychologist*. In comparison to Duda and Allison’s (1990) findings, the results suggested that there was an increase in papers that included reference to race/ethnicity (19.86%). However, there still remains little

serious and meaningful attention directed to both, except for one special issue of *The Sport Psychologist* (December, 1991), which was devoted entirely to “special populations” (i.e., working with black student-athletes, persons with mental disability, deaf athletes, and gay, lesbians, bisexual and transgender athletes (GLBT)).

Most theories devoted to psychological skill efficacy, although generally tested on athletes from the United States, Canada and the UK only, have been generalised to athletes from other cultures (Anshel, Williams, & Hodge, 1997; Elbe, 2003; Hayashi & Weiss, 1994; Marsh, Ascí, & Tomas, 2002; see section 9.2). There has been a growth in research investigating the influence culture has on emotions (Matsumoto, 1992, 1993; Mesquita & Albert, 2007), discussed in section 2.4.

Research in SP either compared athletes with a disability to athletes without a disability (Campbell & Jones, 1997), or discussed the way in which SP training programmes can be modified to suit the needs of athletes with a disability (Hanrahan, 1998; Travis & Sachs, 1991). In a few instances SP research seeks to develop understanding of the sport experience for athletes with a disability, for example, in transitioning out of sport (Martin, 1999). Research proposed that there were differences between athletes with a congenital disability and those with an acquired disability (see section 3.2). Research indicated differences in psychological skill usage between athletes with and without a disability (see section 3.1).

Research indicated there to be cultural differences in emotion regulation, appraisal of emotions (Mesquita & Albert, 2007), and optimism (Fisher & Chalmers, 2008), see sections 2.7, 2.8 and 7.3. If this is indeed the case, interventions developed to enhance EI modelled on western cultures in populations without a disability may be less or ineffective in other cultures and subcultures, explored further in section 2.7. In order to test this contention, two

populations will be utilised: a UK Wheelchair basketball sample (phase 1) and a Ghanaian football sample (phase 2).

1.4 Participants

There were two key reasons for selecting UK wheelchair basketball players and Ghanaian footballers as participants. Firstly, the need for research conducted with athletes from different cultures (Kontos & Breland-Noble, 2002; Martens et al., 2000; Schinke & Hanrahan, 2009) and sub-cultures (athletes with a disability: DePauw, 1988; Page, Martin, & Wayda, 2001; Sachs, 1988; Sherrill, 1999) in sport and exercise psychology has been well documented. Research has shown there to be cultural differences in mood (see section 2.4). Differences have also been found between mood and performance in different cultures and subcultures (see section 2.4). Research has started to investigate cultural differences in EI (see section 2.7). There is limited research exploring Ghanaian athletes and athletes with a disability. Therefore, exploring the EI profiles of these two culturally distinct populations may offer a contribution to cultural sport psychology and help practitioners become more culturally aware. Secondly, personal experiences enhanced access to these two distinct populations. Regarding the Ghanaian population, having grown up in Africa and being immersed in African culture, the ability to relate to and communicate with this population was enhanced. Having previously worked with a wheelchair basketball team in the United States the ability to relate and communicate with this population was also enhanced.

1.5 Conceptual Frameworks and Epistemologies

The acceptance of qualitative research in SP, especially applied SP has grown steadily (Krane & Baird, 2005). Before identifying the epistemological paradigm used, a clear differentiation between what a method, methodology and epistemology is needed. Letherby (2003) stated that a method is a tool or technique to collect data, whereas a methodology

provides the framework for analysing, evaluating, and probing the process of research.

Epistemology is a theory of knowledge or consideration of what is 'legitimate knowledge' (Letherby, 2003). There are various epistemology paradigms such as positivism, post-positivism, naturalistic constructivist, interpretive phenomenological, critical theories (e.g. feminism, Marxism), post-modernism and post-structuralism (Lather, 1991).

The current study followed the phenomenological approach in planning the interview guide, conducting the research, and evaluating and presenting qualitative results from phase 1 study 2 and phase 3. An interpretative phenomenological analysis (IPA) was used. IPA is where the researcher explores and tries to understand the lived experiences of participants (Creswell, 1998). The researcher discusses the human experiences of the phenomenon being studied to establish the structures of consciousness resulting from such experiences (Creswell, 1998; Flick, 2007). The phenomenological approach uses the analysis of important statements to generate meaning units and offer insight into the concept being investigated.

When using qualitative methods, a concern is the potential bias resulting from a researcher's personal life such as history, gender, socio-economic class, ethnicity and disability (Denzin and Lincoln, 2000). A person's biases could influence the validity and reliability of the data. Qualitative validity can be attained by employing procedures to verify the accuracy of the findings (Creswell, 2009); whilst qualitative reliability indicates that the approach used is consistent across different researchers and projects (Gibbs, 2007).

Silverman (2000) suggested that validity and reliability can be maximised by the way, data were collected and interpreted (see section 5.3.4). Kleinig (1991) believed that you must 'switch off' all external factors that could influence the phenomenon under investigation. The researcher must set aside their own prejudices, bracketing his/her experiences and beliefs. To facilitate bracketing, the researcher analyses their knowledge of the phenomenon to be researched so as to understand the constitutive elements and the relationship, of how they

interact. The researcher creates the norm and creates a generalisation based on this. The researcher must then be open to the experience of the phenomenon being researched (Kleining, 1991). The reality of the object is only perceived within the meaning of the experience of an individual (Creswell, 1998). Creswell (1998) stated that undergoing the bracketing process may be considered difficult for individuals. The researcher must determine how and in what way his/her personal experiences are incorporated into the study. Refer to sections 5.2 and 7.4 to review the outcomes of the bracketing process. The current study complied with Creswell's (1998) guidelines in using theory to guide the exploration of a phenomenon as well as the use of inductive reasoning to explore new meaning units presented by the participants (see section 5.3.5 for further details regarding the data analysis procedures).

1.6 Emancipatory Disability Research (EDR)

The importance of emancipatory research is the establishment of communication between the researchers and the participants, in order to determine and comprehend the practical and cultural needs of that population. The EDR paradigms' attempts to challenge power relations, it also confronts social oppression at the various levels they may occur (Oliver, 1992).

The six assumptions that the paradigm was based on were: accountability, empowerment, social model of disability, need for rigour, choice of method, and role of experiences (Barnes, 2001).

- **Accountability:** The procedure and findings of the research must be available to all participants and must be written in a way that all understand it. Participants were informed fully about the procedures at all times and were also given feedback on initial observations. Participants received drafts of the findings of the studies as well as overall findings of the PhD.

- Empowerment: The study must result in the research group being in a better position than it was before. The PhD research benefits populations from both studies as it has helped move the field forward. Participant's who were involved in the study benefitted as they learned about EI and were taught techniques to understand, control and utilise their emotions more effectively.
- The Social Model of Disability: The research should follow the Social Model of Disability. The model was implemented in both phase 1 and 3. This meant that participants were included when developing the study. Participants were also not seen as disabling but society was.
- The need for rigour and the choice of method: Methods should be logical, rigorous and open to scrutiny and methods most suitable for the population being researched. The methodologies used were the most appropriate to answer the research questions. The researcher believed that the methods were logical and rigorous.
- The role of experience: Participants' experiences should be placed firmly within their cultural context. The research was conducted in the participant's cultural context; the research took place in their natural environment e.g. the basketball court or the football field.

1.7 Structure of the Dissertation

Chapter 2, the literature review, discussed EI and its development over the last decade. Chapter 2 defined culture, EI, and emotions. It also explored the research that was conducted in those areas and the link between culture, mood, EI and performance, especially sport performance. The present PhD dissertation consists of three phases. The first two phases explored the relationships between EI, and pre-performance mood states within two culturally distinct populations.

The first phase was an exploratory phase. Chapter 3 introduced the wheelchair basketball population in more depth, by focusing on literature relating to the hypothesis for phase 1. It further explored research conducted with the population, as well as exploring differences within the population e.g. acquired versus congenital. Chapter 4, the quantitative study of Phase 1 was used to gain insight into the relationship between EI and pre-performance mood in the wheelchair basketball population from the UK. EI, emotions and performance, was further explored in a qualitative manner in chapter 5. Chapter 6 was an overall discussion that brought the two studies together.

The second phase was an exploratory phase. Chapters 7 focused on literature relating to the hypothesis for phase 2. It introduced the population; it explored the Ghanaian culture and further explored EI, mood and culture linking it to the Ghanaian culture. In Chapter 8, Phase 1 was used to gain insight into the relationship between EI and pre-performance mood in the Ghanaian population and to continue the exploration of EI and culture.

Phases 1 and 2 were used to gather data for the development of the final phase, the intervention stage. Chapter 9 reviewed literature, which was relevant for the hypothesis of the final phase, such as exploring different EI intervention programs and different psychological skills utilised in the present intervention and how culture may affect the skills. The rationale for the intervention studies was to explore whether there were cultural differences between the two populations, and to explore whether EI could be enhanced in both the populations. Chapter 10 discusses the wheelchair basketball population and Chapter 11 the Ghanaian population. Chapter 12 discussed differences and similarities between the two samples.

Chapter 13 was the overall conclusion of the PhD. It mentioned how the PhD contributed to the literature and how it brought new insight to the topic of EI and pre-performance mood states in culturally diverse populations. Chapter 14, the final chapter, reflected on the theories used and how the application of these theories worked.

CHAPTER 2: Literature Review

2.1 Introduction

After having defined and discussed emotions and explored the emotion-performance relationships, the chapter then explores EI research conducted in both general and sport psychology. The influence culture has on both emotions and EI is discussed throughout the chapter. The intention was to explore whether there are cultural differences in EI and emotions.

2.2 Emotions and Moods

In the current PhD, the terms mood and emotions were used interchangeably. Emotions are part of one of three fundamental classes of mental functions. These are motivation, emotion, and cognition (Mayer, Salovey, & Caruso, 2000). In this triad, emotions form the second stage, it was believed that they evolved across mammalian species, so they could signal and respond to changes in relationships between the individual and the environment (Mayer et al., 2000). Emotions follow no concrete time course but instead react to external changes in relationships (or internal perceptions of them) (Mayer et al., 2000). Each emotion develops behavioural responses to the connection, which makes emotions more flexible than motivations but less flexible than cognitions (Mayer et al., 2000). It is difficult to arrive at one single definition for emotion given the range and complexity of the different states that it must include. The definition used in the current study was that of Lazarus (2000). He defined emotions as “an organized psychophysiological reaction to ongoing relationships with the environment... what mediates emotions psychologically is an evaluation, referred to as an appraisal, of the personal significant for the well-being that a person attributes to this relationship (...relational meaning), and the process” (p.230). Lazarus’s definition was selected because it focused on appraisal and evaluation, which is

relevant to EI. EI incorporates being able to appraise one's own emotions, and understanding what is causing the emotion. This definition also accommodates Baumeister et al.'s (2007) theory on learning rules.

According to Baumeister and colleagues (2007) theory, emotions were part of a feedback system and behaviour pursued emotion. The authors proposed that emotions may be too slow to guide behaviour directly in a fast changing situation. Time was needed for the cognitive processing of the situation which then led to physiological changes. Emotions provoked behavioural impulses, but these did not always translate into actual behaviour. The authors believed that full-blown, conscious emotional experiences facilitated learning lessons and developed any associations between affect and behavioural responses. Baumeister and colleagues perceived that the anticipation of an emotion influences behaviour, instead of the emotion in itself and therefore, one can regulate the anticipated emotion and ultimately change it to an emotion one preferred. They suggested that emotions can cause behaviours but these were usually maladaptive and counterproductive. Instead they felt that human conscious emotion operated mainly in an optimal function when it influenced cognitive processes, which in turn were input into decision making and behaviour regulation processes. Baumeister and colleagues proposed a dual process of emotions. They brought forward the notion that people have automatic affective reactions; these were usually simple and rapid, and automatic affective reactions could cause behaviours. The second process was the full-blown consciously experienced emotional reaction. Baumeister et al. (2007) believed that one cannot control one's emotions as they believed the purpose of emotions was to control the individual. Baumeister et al. suggested that people control thoughts and behaviours and that they cannot directly alter their emotions. Therefore, they used indirect strategies to change their emotions (Gross, 1998). This notion linked in with Hanin's (2003) work on meta-experiences, which is explained in section 2.4.1. A meta-experience is knowledge, attitudes,

preferences (or rejections) and beliefs of a person's experiences (Nieuwenhuys, Hanin, & Bakker, 2008). This also linked in with EI (explained in section 2.6) as it includes appraising the emotion and regulating the emotion as well as using the emotion.

Another theory is that emotions do cause behaviour. Vallerand and Blanchard (2000) noted that emotion encompasses three main elements: physiological change, subjective experience, and action tendencies. Physiological changes indicated that when we feel an emotion, we experience some physiological changes, for example, when we are embarrassed, we may blush. Subjective experience referred to the conscious thoughts that an individual experienced during an emotion. Lastly, action tendencies referred to the actions that an individual took because of the emotions, s/he was experiencing. The notion that emotions influence behaviour has been believed in the past and was still current. Therefore, it was believed that both theories should be explained as participants could perceive emotions to influence their performance/behaviour.

2.3 Mood and Performance

Relationships between mood and human performance have been studied in a variety of domains (Lane, 2007). Research has shown that there is a significant relationship between mood and performance, in that mood affects performance. This relationship has been found in various areas, including work (Lee & Allen, 2002; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001), creativity (Grawitch, Munz & Kramer, 2003) and sport (Beedie, Terry, & Lane, 2000; Totterdell & Leach, 2001). Results showed that pleasant moods were usually linked with optimal performance and negative moods with dysfunctional performance. However, there were a few studies that showed that some negative moods facilitate performance (Beedie et al., 2000; Hanin, 1997; Schwarz & Bless, 1991). Hanin (2000) and Lane (2007) suggested that positive moods could also be debilitating towards performance.

Hanin (1978) developed a model known as the individualized zones of optimal functioning (IZOF; Hanin, 2000). Hanin (2000) discussed that athletes have their own zone of optimal state anxiety where they perform at their best (see Figure 2.1); outside that zone, the athlete is not able to perform at his/her best. The IZOF has further been developed to not only cover the state anxiety, but also include 96 affective states such as determination, pleasantness, and laziness. Therefore, for best performance, athletes needed to know what their best optimal zone of performance was for all moods. The IZOF (Hanin, 2000) was an “intraindividual framework that aims to describe, predict, explain, and control athlete’s optimal and dysfunctional experiences related to individually successful and poor performances” (Hanin, 2003, p. 3).

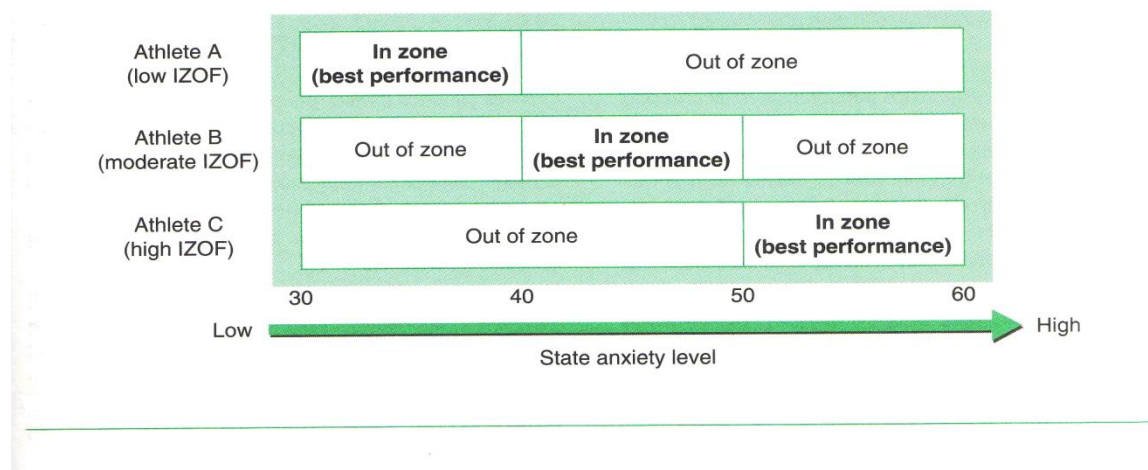


Figure 2.1: Individual Zones of Optimal Functioning, Weinberg and Gould (2003, p. 87).

Lane and Terry (2000) developed a conceptual model for performance and mood relationships (see Figure 2.2). Lane and Terry (2000)’s model was based on research using the Brunel Mood Scale (BRUMS, Terry, Lane, Lane, & Keohane, 1999) which explored the notion that pre-performance moods influenced performance.

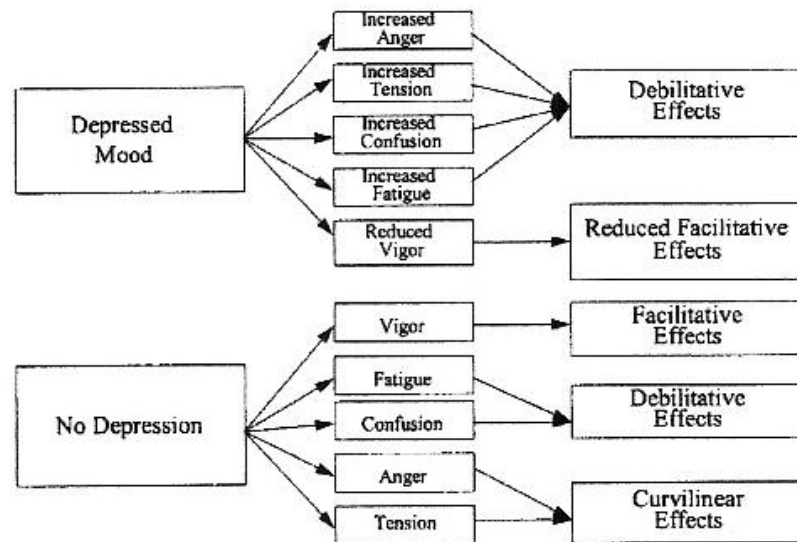


Figure 2.2: A conceptual model to predict performance from pre-performance mood, Lane & Terry (2000, p24)

Lane and Terry (1998, 2000) developed four hypotheses: Hypothesis 1 (H1) was that high anger, confusion, fatigue and tension and low vigour would be related to high depression scores. Hypothesis 2 (H2) was that relationships among the mood dimensions would be stronger in the depression group. Hypothesis 3 (H3) was that regardless of depression scores vigour would facilitate performance while confusion and fatigue would debilitate performance. The authors believed that tension and anger could enhance performance. The authors suggested that confusion would consistently affect an athlete's performance in a negative manner with or without the presence of depressed mood. Hypothesis 4 (H4) was that among the depressed-mood group anger and tension would debilitate performance, while in the no-depression group anger and tension would show a curvilinear relationship with performance.

Lane (2007) reviewed 20 articles testing Lane and Terry's (2000) model to explore whether these studies supported the four hypotheses. All 20 articles supported H1 (Lane, Terry, Beedie, & Stevens, 2004; Lane & Terry, 2005; Lane, Whyte, Terry, & Nevill, 2005; Lane, 2001; Lane & Lovejoy, 2001; Janover & Terry, 2002; Lane & Terry, 1998; Lane,

Terry, Karageorghis, & Lawson, 1999; Lane & Terry, 1999a, 1999b; Owens, Lane, & Terry, 2000; Lane & Terry, 2000; Lane, Terry, Beedie, Curry, & Clark, 2001; Lane, Whyte, Shave, & Wilson, 2003; Lane, Whyte, George, Shave, Stevens, Barney, & Terry, 2004; Hall, Lane, & Devonport, 2002; Lane & Levitt, 2002; Lane, Lane, & Firth, 2002; Fazackerley, Lane, & Mahoney, 2004; Lane et al, 2005). Nine studies tested H2; all studies had results supporting H2.

Only 12 out of the 20 studies tested H3 and H4. Seven of the studies found support for H3, whereas three only had partial support for H3. The other two studies (Fazackerley et al., 2004; Owens et al., 2000) found no support for H3. Only three studies supported H4, two studies (Janover & Terry, 2002; Owens et al., 2000) found no support for H4 and the other studies had partial support.

Lane, Terry and colleagues (2004) found that mood responses accounted for 31-41% of variance in performance on a cognitive task. Furthermore, the results showed that certain aspects of mood had a greater effect on performance than others. Especially optimal performance on the concentration grid was related to high vigour and low confusion, to the relations between depressed mood and anger, but not to levels of fatigue and tension. Only partial support was received for Lane and Terry's (2000) model, as results did not support the notion that fatigue had a negative effect on performance. A moderating effect of depressed mood was verified for the anger-performance relationship but not for the tension-performance relationship. In other words, anger was related with optimal performance in the non-depressed group and with dysfunctional performance in the depressed-mood group. This connection was stronger in Lane, Terry, et al.'s (2004) study than in previous studies where the opposite was commonly the case (Lane et al., 2001). These inconsistencies could be because the task was cognitive, whereas in previous studies the task had been physical. This could be due to the fact that the items for vigour on the BRUMS have equal relevance in both

physical and cognitive tasks, whereas fatigue items could be more related to physical tasks (Lane, Terry, et al., 2004). Lane and Terry's (2000) model can be utilised in EI if a participant was aware of which emotions were beneficial for him in performance situations than he can regulate and utilise these emotions in a manner that enhanced performance.

Lane, (2007) revised Lane and Terry's (2000) model as the model was based on the BRUMS (Terry et al., 1999), a shorter version of the Profile of Mood States (POMS, McNair, Lorr, & Droppleman, 1971), which was heavily based on negative moods. In the revised model (Figure 2.3) two additional pleasant mood states (calmness and happiness) were added and confusion was removed. The authors' decision to revise Lane and Terry's (2000) model was based on a number of reasons. Firstly, confusion was removed, as it was more a cognitive state than a mood state. Beedie (2005) argued that confusion was a manifestation of a mood state, rather than a mood state itself. A second reason was to include a greater number of positive mood states. This decision was based on applied work in which mood state responses were followed among biathletes training at altitude (Lane, Whyte, Godfrey, & Pedlar, 2003, 2005). Due to the influence of depressed mood on performance, the authors specifically explored its detection. Results indicated that when happiness was high, depressed mood was scored zero for each of the subscale items. Calmness was included as it could offer insight into the nature of tension and anger when experienced in the absence of depressed mood. Lane and colleagues (2005) believed that if athletes were using anger and tension to motivate behaviour, and were in control of these states, athletes should report feeling calm, angry and tense.

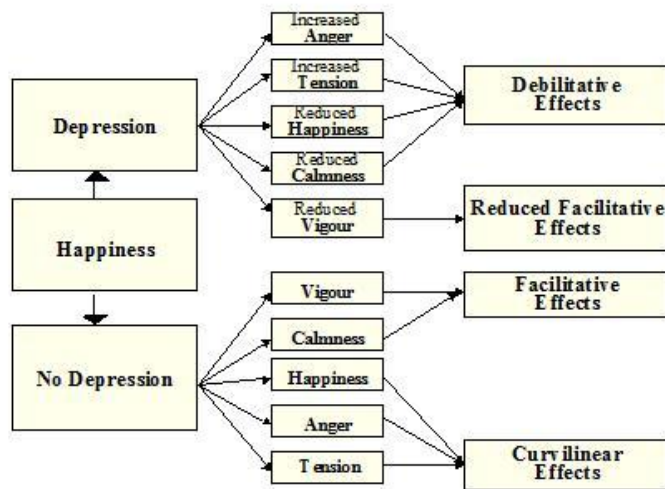


Figure 2.3: Revised conceptual model of mood-performance relationships, Lane (2007, p.22), arrows for happiness were included in the current figure.

The revised model focused on the influence and interaction between pleasant and unpleasant mood states and performance. Happiness could be linked with high self-efficacy and associated with enhanced performance. Therefore, Lane et al., (2005) included two additional hypotheses. The first was that happiness showed a curvilinear relationship with performance; the second was that calmness showed facilitative performance effects. The current study used the BRUMS (Fazackerley et al., 2004; Lane et al., 1999; Lane, Terry, et al., 2004) that had the positive mood states and confusion. Research showed how positive and negative emotions could possibly influence performance either in an optimal or dysfunctional manner. As previously mentioned EI helps with awareness of which emotions are beneficial for performance. EI also helped with regulation and utilisation of the emotions. The model however does not explore the role culture has on emotions and how it can influence performance, though it does indicate that there are individual differences.

2.4 Mood, Multiculturalism and Performance

Section 1.3 defined culture and sub culture, and indicated why cultural sport psychology was important. The current section expands upon this discussion and presents research exploring cultural differences in mood and performance.

2.4.1 *Ethnicity*

Emotional expression and meaning vary by culture as culture can be viewed as patterns of behaviour and for behaviour (Allison, 1982). As a person learns the rules for behaving in their culture, they have the chance to adopt and adapt these behaviours to suit their own beliefs (Krawczyk, 1980). A person becomes socialised into a certain role within its culture and by accepting and maintaining these rules of behaviour they ensure the continuity of their culture.

Research showed that basic emotions such as happiness, surprise, fear, anger, disgust and sadness are universally recognised and expressed (Ekman, 1999; Russell, 1994), whereas other researchers believed that emotions are part of a multi-componential phenomenon instead of a unitary one (Scherer, 1984; Lazarus, 1991). Mesquita, Frijda, and Scherer (1997) suggest that the emotion process has eight components, which are: 1) antecedent events, 2) emotional experiences, 3) appraisal, 4) physiological change, 5) change in action readiness, 6) behaviour, 7) change in cognitive functioning and beliefs, and 8) regulatory processes. The different emotion components do not automatically follow each other and not all of them may occur during one emotion. Each of these components could vary from culture to culture. EI is part of appraising the emotion and the regulatory process, the impact culture has on these two subscales are discussed below.

Research found differences between collectivistic and individualistic cultures be it cultural display rules (Matsumoto, 1990), or emotion regulation (Mesquite & Albert, 2007; Mesquita & Ellsworth, 2001; Butler, Lee, & Gross, 2007). Mesquite and Albert (2007)

proposed that norms for emotion and the endpoints of emotion regulation could vary across different cultures. Culture was not a predictor but was manifested in psychological processes. Basically, the way people appraise a situation constituted the emotional experience (Mesquita & Ellsworth, 2001). Cultural display rules are learned by different cultures that govern the display of emotion (Matsumoto, 1990). Research showed that the presence of another person can influence an emotional expression. For example, individualistic cultures, such as American's display sadness and disgust more in in-groups compared to collectivistic cultures, such as Japanese (Matsumoto, 1990) whereas, collectivistic cultures displayed anger more in out-groups. According to Matsumoto, these differences exist because in individualistic cultures, people are more tolerant of negative emotions. In collectivistic cultures, one would not display negative emotions in in-groups as this could disrupt the harmony in the group. An individualistic culture encourages individual needs, goals, desires, and values. It encourages members to become unique; hierarchical power and status differences in society are minimised. Collective cultures find the needs of others more important, members identify themselves through their group. A person's role, status and appropriate behaviour are clearly defined (Matsumoto, 1990).

Mesquita and Albert (2007) proposed that appraisal always takes place in the context of cultural models of self and relating (individualistic or collectivistic). People make sense of emotional situations in relation to the cultural meanings of being a (good) person in their culture. "Appraising is meaning making, and meaning making is always culture. Therefore, the emotional meaning of an event must be a cultural meaning" (Mesquita & Albert, 2007, p. 495). With cultural models Mesquita and Albert suggest social and psychological processes are full of meaning, and therefore carry culture. Cultural models refer to how culture organises relationships and understands what a person is or should be (Mesquita & Haire,

2004). The systematic approach and conceptualization of meaning is what cultural models theory is all about.

Emotion regulation had collectivistic and individualistic differences (Butler et al., 2007). Butler et al. (2007) found that habitual suppression of Americans holding Western-European values was associated with self-protection goals and negative emotions. Their findings suggested that many negative impacts of suppression may be moderated by cultural values. The Ghanaian culture is a collectivistic culture (Suh, Diener, Oishi, & Triandis, 1998) and the UK wheelchair basketball population is an individualistic culture.

An increase in research has investigated the link between mood and performance in different cultures (Lane, Soos, Leibinger, Karsai, & Hamar, 2007; Terry, Potgieter, & Fogarty, 2003; Guest, 2007; McGowan, McGowan, & Omifade, 1997). Guest (2007) found that there were differences in the motivational reasons for participating in football in a Malawian and American sample. Guest suggested that people from different cultures feel different emotions according to the situation, they also define success differently. The American team members saw sport as a competitive proving ground, an expressive outlet, and a site for self-improvement. The Malawians made meaning of sport where they can exhibit their abilities, a pastime, and a site for innate self-actualization.

McGowan et al. (1997) explored the cultural effects of emotions following ruminations on success and failure in sport. The sample consisted of African American and West African (Ghanaian) athletes. The results suggested that culture influenced emotions associated with memories of success or failure. The authors found that Ghanaians seemed to revel in the memories of their most successful experiences. No differences were found in remembering their worst performance. These differences could be explained by meta-experiences and meta-emotions (Hanin, 2003).

Hanin's (2003) meta-experiences and meta-emotions explain the link between mood and performance experiences. The IZOF model distinguishes between three interdependent levels of performance experiences. These levels are situational state-like experiences, relatively stable patterns of trait-like experiences and meta-experiences (see section 2.2 for definition). As athletes often reflect on their experiences in successful and unsuccessful performances meta-experiences can be developed. The current PhD explores if the mood patterns are similar across different cultures. Meta-experiences could be influenced by the person's culture. Research showed how culture could influence the emotions experienced and expressed. Therefore, culture needs to be taken into account when conducting emotion focused research.

2.4.2 Disability

An increasing body of research has explored the relationship between mood and performance among athletes with a disability (Campbell & Jones, 2002a; Fung & Fu, 1995; Henschen, Horvat, & Roswal, 1992; Mastro, Canabal, & French, 1988; Mastro, Sherrill, Gench, & French, 1987; Martin, 2003). However, research comparing psychological states of athletes without disabilities to athletes with a disability has found inconsistent results.

Research using the POMS (McNair et al., 1971) found there to be differences between athletes with a disability and athletes without a disability. Mastro et al. (1988) found that unsighted athletes reported higher tension and depression scores in comparison to their sighted counterparts. However, Mastro et al. (1987) found that female unsighted athletes reported higher tension scores than unsighted male athletes. The authors also found that unsighted male athletes reported a mood profile similar to that of their sighted counterparts. However, there are methodological limitations to the studies of Mastro and colleagues. In both studies, the authors used the "how do you feel over the past week including today" response time frame. This has been criticised for utilisation in sport research (Lane & Terry,

2000; Lane, 2007). Lane and Terry (2000) suggest that research seeking to explore pre-competitive mood states should utilize the “how do you feel right now” time frame as this captures mood states experienced relating to competition rather than the memory of mood during the previous week. Other research found there to be no significant differences in mood profiles and anxiety between athletes with a disability and athletes without a disability (Henschen, Horvat, & French, 1984).

Further, Beedie et al. (2000) were critical of studies comparing mood states between different populations when situational factors were not adequately controlled. As such research handles mood states as though they were stable, which they are not (Lane, 2007). Therefore, in such studies, it is difficult to attribute differences in mood to disability factors. Beedie et al. (2000) conducted a meta-analysis of published studies that utilised the POMS to either investigate relationships between mood and athletic performance or mood and performance outcomes. They found that mood states can predict performance outcomes.

Campbell and Jones (2002a) conducted a qualitative study which explored sources of stress in 10 athletes with a disability. Sports stressors including pre-event concerns and negative match preparation were similar to stressors reported in studies on athletes without disabilities (Jones, 1995). On the contrary, Cox and Davis (1992) found that wheelchair track and field athletes scored higher on items of anxiety control, confidence, and motivation than athletes without disabilities. The authors suggested that this difference could be explained by their experiences of being disabled and that mental toughness develops whilst coping with a disability. It is argued that pre-competitive emotional states of athletes with a disability relate to factors within a competition rather than to the nature of their impairment. This belief is consistent with proposals made in the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984). The Transactional Model of Stress and Coping mentioned that personal factors such as disability may influence appraisal, and consequently, emotions, by

determining what is salient for well-being in a given encounter. This may develop a person's understanding of an event and provide the basis for evaluating outcomes.

2.5 Emotional Intelligence

EI, a relatively new construct (Zeidner, Matthews, & Roberts, 2004), has gathered momentum due to proposals that measures of EI are related to a number of desirable outcomes. These include academic achievement, occupational success and satisfaction, and emotional health and adjustment (Matthews, Zeidner, & Roberts, 2002). Research was initiated in business settings (Goleman, 1995), and recently extended to sport (Zizzi, Deaner, & Hirschhorn, 2003); both domains are explored after a general overview of EI and the measures that assess it.

EI has caught the imagination of the general public, the commercial world, and the scientific community (Zeidner, et al., 2004). Zeidner and colleagues state that “the concept resonates with a current zeitgeist emphasising the importance of self-awareness and understanding” (p 372). EI redressed a perceived imbalance between intellect and emotion in the Western mind (Zeidner, et al., 2004). EI was connected with various areas of psychology such as neuroscience of emotion, self-regulation theory, studies of meta-cognition, and the search for human cognitive abilities beyond “traditional” academic intelligence (Zeidner, et al., 2004). In the past EI has been studied under the category of social intelligence. Only in the 1990's the term EI was first brought into mainstream psychology by Mayer and his colleagues (Mayer, DiPaolo, & Salovey, 1990; Salovey & Mayer, 1990). Current research distinguishes between ability EI (Mayer et al., 2000; Mayer & Salovey, 1997), trait EI (Petrides & Furnham, 2000, 2001; Petrides, Furnham, & Mavroveli, 2007) and mixed models (Bar-On, 1997; Goleman, 1995, 1998).

2.5.1 Ability Emotional Intelligence

According to Petrides and Furnham (2000) ability EI is concerned with abilities such as being able to identify, express and label emotions. Mayer and Salovey's (1997) defined EI as:

the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth (p. 10).

Ability EI consisted of four conceptually related psychological processes. Mayer, Caruso, and Salovey (2000) explained the four skill levels: Appraisal and expression of emotion was the lowest skill level. The next level up involved assimilating basic emotional experiences into mental life, such as weighing emotions against one another and against other sensations and thoughts. The third level involved understanding and reasoning about emotions. Each emotion follows its own specific rules. Each emotion changed according to its own characteristic rules; EI included the ability to perceive the emotions, know how they change and reason about emotions accordingly. The fourth and highest skill level included the management and regulation of emotions, such as knowing how to calm down after being really nervous or angry.

Mayer and Salovey's (1997) model of EI, an ability model, had four main areas of skill (a) perception, appraisal and expression of emotion, (b) emotional facilitation of thinking, (c) understanding and analysing emotion, and (d) reflective regulation of emotion. Perez, Petrides, and Furnham (2005) stated there were no distinct criteria for what established a correct response. For example, a tranquil lake, may on one hand make people feel relaxed and content, however if the person has come close to drowning this may bring intense negative emotions. Therefore, an ability test is redundant.

2.5.2 *Mixed Models*

Mixed models of EI rely on both cognitive and non-cognitive constructs. They combined the concept of EI and other skills and personal characteristics together. This added to the difficulty of viewing EI as an independent construct. It led to a weakness in measuring EI. Two mixed models of EI are explained in further detail: Bar-On's (1997) and Goleman's (1995, 1998).

Goleman's (1995) definition of EI was: "the abilities called here emotional intelligences, which include self-control, zeal and persistence, and the ability to motivate oneself" (Goleman 1995 p. xii). He later stated that "there is an old-fashioned word for the body of skills that emotional intelligence represents: character" (Goleman, 1995, p.28). Goleman's model of EI consisted of five main areas of skills (a) knowing one's emotions (self-awareness), (b) management emotions (self-regulation), (c) motivating oneself (self-motivation), (d) recognizing emotions in others (empathy), and (e) handling relationships. Goleman's theory of EI has broadened out. Researchers stated that Goleman's model was too open-ended to constitute a good and specific scientific theory (Meyer & Fletcher, 2007). If a theory covered too many areas then it made it difficult to measure. Matthews et al. (2004) mentioned that Goleman's theory should be used as a source of ideas as his theory has not been scientifically tested, and none of his work seems to be published in peer-reviews journals. However, Van Rooy and Viswesvaran (2004) did test Goleman's theory and suggested there to be adequate predictive validity. The model will need to be further tested scientifically, before using it to compare two culturally diverse populations.

Bar-On (1997) defined EI as "an array of noncognitive capabilities, competencies, and skills that influence one's ability to succeed in coping with environmental demands and pressures" (p.14). Bar-On's model consisted of five broad areas of functioning relevant to success: (a) intrapersonal skills (emotional self-awareness, assertiveness, self-regard, self-

actualisation, and independence), (b) interpersonal skills (empathy, interpersonal relationships, and social responsibility), (c) Adaptability (problem solving, reality testing, and flexibility), (d) stress management (stress tolerance and impulse control), and (e) general mood (happiness and optimism). Bar-On's EI theory was measured by the Emotional Quotient Inventory (EQ-i). The theory was not about reaching success but about striving for success (Mayer et al., 2000). Meyer and Fletcher (2007) mentioned that Bar-On's model should not be used in sports research, as it was a lower level of personality, below the Big Five (openness, conscientiousness, extraversion, agreeableness, and neuroticism).

2.5.3 Trait Emotional Intelligence

According to Petrides and Furnham (2000) trait EI was concerned with understanding, processing, and utilising emotions, empathy, assertiveness and optimism. Trait EI was defined as "a constellation of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies" (Furnham & Petrides, 2003 p.816). Trait EI related to behavioural tendencies and self-perceived abilities. Individuals who were high in trait EI were believed to be 'in touch' with their emotions, and that they could regulate their emotions in such a way that it promotes well-being (Furnham & Petrides, 2003). Trait EI was considered to be part of one of the lower levels of personality and correlates with four of the Big Five (Petrides et al., 2007). According to Petrides and Furnham (2000) trait EI usually consisted of 13-15 emotion-related behavioural dispositions, which were believed to affect the way an individual would cope with the demands and pressure put on him/her (Nelis, Quoidbach, Mikolajczak, & Hansenne, 2009). Petrides and Furnham's (2001) model had 15 areas of skill (1) adaptability, (2) assertiveness, (3) emotional appraisal (self and others), (4) emotion expression, (5) emotion management (others), (6) emotion regulation, (7) impulsiveness (low), (8) relationship skills, (9) self-esteem, (10) self-motivation, (11) social competence, (12) stress management, (13) trait empathy, (14) trait happiness and (15) trait

optimism (Petrides et al., 2007). Trait EI was used in the current PhD utilising Petrides and Furnham's (2000) definition relating to self-perceived abilities. It was believed that it was the best model that captured the components part of trait EI, such as emotional appraisal (self and others), and emotion regulation (self and others). It also only incorporates trait components and did not mix ability and trait; therefore, it was felt it can be measured more accurately than the mixed models of EI.

2.5.4 Measures of Emotional Intelligence

There were five measures that tested ability EI (see Table 2.1). The most common one was the Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2002).

Table 2.1 Summary of Ability EI Measures (modified from Perez, et al., 2005).

Measure	Authors	Structure
Emotional Accuracy Research Scale	Mayer & Geher (1996)	Unclear (4 factors)*
Emotional Intelligence Scale for Children	Sullivan (1999)	*
Multifactor Emotional Intelligence Scale (MEIS)	Mayer et al. (1999)	Total EI, 3-4 factors
Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)	Mayer et al. (2002)	Total EI, 3-4 factors
Typical-performance Emotional Management Test (TEMT)	Freudenthaler & Neubauer (2003)	Unclear*, 2 factors

* The structure and factors were not clearly indicated.

The MSCEIT, a 141-item inventory which was designed to measure the four branches of ability EI. The MSCEIT produced a global EI score as well as four branch scores. Meyer and Zizzi (2007) mentioned that EI measured by the MSCEIT was believed to be a true test of intelligence, and that one can determine right and wrong answers when assessed by experts. Problems with the measurement were that it took a few hours to complete and can

only be assessed by experts, and as previously mentioned, how can there be a right or wrong answer for how someone feels. Therefore, it was not used in the current PhD.

There are numerous measures testing trait and mixed models of EI (see Table 2.2). Very few of the measures have been developed with a clear theoretical framework (Perez et al., 2005). The EI measures that are most commonly used are discussed in more detail and a rationale for using the emotional intelligence scale (EIS, Schutte et al., 1998) was provided. The Trait Meta-Mood Scale (TMMS; Salovey et al., 1995) was one of the first measures of EI (Perez et al., 2005), and was loosely based on Salovey and Mayer’s (1990) model. It consisted of 30 items, which were grouped into three subcomponents: attention to emotion, emotional clarity and emotion repair. Mayer et al. (2002) suggested that there were reliability issues for the emotion repair scale, Meyer and Zizzi (2007) noted problems with the distinctiveness of some scales from personality factors.

Table 2.2 Trait and Mixed EI Measures (modified from Perez et al., 2005)

Measure	Authors	Structure
Trait Meta Mood Scale (TMMS)	Salovey, Mayer, Goldman, Turvey, & Palfai (1995)	3 factors, no Total score
Emotional Quotient Inventory (EQ-i)	Bar-On (1997)	Total EI, 5 factors, 15 subscales
Emotional Intelligence Scale (EIS)	Schutte et al. (1998)	Total EI, 4 factors***
Emotional Competence Inventory (ECI)	Boyatzis, Goleman, & Hay/McBer (1999)	Unclear* (4 factors)
Emotional Intelligence-based IPIP Scales	Barchard (2001)	7 scales, no Total EI
Emotional Intelligence Self-Regulation Scale	Martinez-Pons (2000)	3 factors no Total EI

Dulewicz & Higgs Emotional Intelligence Questionnaire	Dulewicz & Higgs (2001)	Unclear*
Trait Emotional Intelligence Questionnaire (TEIQue)	Petrides (2001)	4 factors, Total EI
Sjöberg Personality Test Battery	Sjöberg (2001)	13 factors*
Tapai Emotional Intelligence Inventory	Tapia (2001)	4 factors, Total EI
Swinburne University Emotional Intelligence Test (SUEIT)	Palmer & Stough (2002)	Total EI 5 factors**
Workgroup Emotional Intelligence Profile (Version 6) (WEIP-6)	Jordan & Troth (2004)	Total EI, 2 board scales and 5 subscales
Emotional Intelligence Scale	Van der Zee, Schakel, & Thijs (2002)	Unclear (3 factors)*
Wong & Law emotional intelligence scales (WLEIS)	Wong & Law (2002)	4 factors, Total EI
Lioussine Emotional Intelligence Questionnaire	Lioussine (2003)	Unclear (7 factors?)*

*The structure and factors were not clearly mentioned. **The SUEIT is now known as the Genos EI and has 7 factors and a global score. *** Different studies use a different factor structure this will be explored in further detail below.

The ECI (Boyatzis et al., 1999) assessed 20 components with four factors. It was a 7-point Likert-type scale, which multiple individuals completed to rate an individual on behavioural indicators of EI. There were several issues with the model. Results differed from study to study (Matthews et al., 2002). A very limited amount of this research was published

in peer-reviewed articles and therefore, it cannot be certain whether the measurement meets the accepted psychometric standards (Matthews et al., 2002).

Bar-On's measure of EI the EQ-i (Bar-On, 1997) was one of the widely used measures of EI. The inventory consists of 133 questions, 15 subscales and five factors. The scale had several overlaps with psychological measures, especially with psychological well-being as well as personality factors (Meyer & Zizzi, 2007). Perez et al. (2005) stated that the inventory was vague, as it was changed from a well-being questionnaire to an EI questionnaire.

The TEIQue (Petrides, 2001) focuses on Petrides and Furnham's (2000; 2001) model of trait EI. It consisted of 153 items, which were divided into 15 subscales and four factors and global trait EI. The four factors were well-being, self-control skills, emotional skills and social skills. The TEIQue and the EQ-i are both too long; therefore it was felt that they may not be the best measures to use as the Ghanaian population had an adult illiteracy of 58% (UNICEF, 2007). Furthermore, English was not the best way to express their emotions and some of the English words did not exist in Twi (a local language). Therefore, a shorter measure was thought to be the more appropriate methodology because it would create fewer problems when explaining the questionnaires to the participants. The author was relying heavily on questionnaires (in phase 2 and 3) and diaries (in phase 3). Refer to sections 8.1.3 and 11.1.3 to see how the author endeavoured to take this issue into account.

The EIS (Schutte et al., 1998) started off with 62 items, which were based on the theoretical model of EI developed by Salovey and Mayer (1990; Mayer & Salovey, 1997). Items displayed an adaptive tendency towards EI within the framework of the model. A 5-point Likert-scale was used to indicate to what extent the items described them; "1" meant that they "strongly disagree" and "5" meant that they "strongly agree". From the initial items only 33 were used in the EIS. The 33 items were selected by using an orthogonal-rotation

factor on the results from the 346 participants. The criteria used by Schutte and colleagues (1998) to select the 33 items, was an eigenvalue of 10.79 and items loaded at 0.49 and above. These items represented the three categories: appraisal and expression of emotion in the self and others, regulation of emotion in the self and others, and utilisation of emotions in solving problems. The scale showed evidence of validity; the scale was related to eight of nine measures of EI. Perez et al. (2005) mentioned that the EIS did not include all components of trait EI, as the EIS had four factors. However, they mentioned that it can be used as a short measure of global trait EI. The current PhD used a six factor model. The subscales were; appraisal of own emotions, appraisal of others emotions, emotion regulation, utilisation, optimism and social skills (Lane, Thelwell, Gill, & Weston, 2007). Different studies use the EIS either as a global EI score (Zizzi et al., 2003), or a four factor model (Petrides & Furnham, 2000; Saklofske Austin, & Minski 2003), or six factor model (Lane et al., 2007, Thelwell, Lane, Weston, & Greenlees 2008, Lane, Meyer, et al., 2009). The author of the current PhD was an author on the Lane, Meyer, et al. article. The benefits of using a six factor model, was discussed by Lane, Meyer, et al. (2009). They mentioned that it was important to be able to distinguish between emotions relating to self and others, especially in regulating emotions in self and others. Lane, Meyer, et al. (2009) ran a confirmative factor analysis and found acceptable values for the six factor model. For reliability and validity of the EIS refer to section 4.1.3. The reason for using the EIS was because it had been used in sports (Zizzi et al., 2003, Thelwell et al., 2008) and has been validated in sports (Lane, Meyer, et al., 2009). However, Lane, Meyer et al. recommended using a 19-item measure of the EIS. Another reason for using the measure was that self-report measures were commonly utilised in sports and it assessed trait EI. It covered most of the important trait EI components.

2.6 Emotional Intelligence and Performance

2.6.1 Business

The way individuals cope with the dynamic interactions, challenges, and demands faced in the occupational environment can be better understood by the information that emotions provide (Lazarus, 1991; Lazarus & Folkman, 1984). If humans understand their emotions better they may be able to change the way they think, which can assist in the production of an adaptive and productive work environment. Matthews and colleagues (2002) suggested that EI could be linked to various aspects of occupational life including performance, satisfaction, and coping with stress. These aspects are also relevant in the sports world (Crocker & Graham, 1995; Pensgaard & Duda, 2003), thereby reinforcing the potential effectiveness of EI to the study and practice of SP (Meyer & Fletcher, 2007). Research on workplace emotions has revealed that EI and appropriately regulating ones emotions can result in: (a) better coping strategies for dealing with job insecurity and job-related tension (Jordan, Ashkanasy, & Härtel, 2002), (b) enhanced ability to engage in collaborative conflict resolution (Jordan & Troth, 2002), (c) increased sales (Cherniss, 2000), (d) delivery of higher quality health care (Cherniss, 2000), (e) greater customer service and satisfaction (Ashkanasy, Härtel, & Daus, 2002; Salovey, Mayer, & Caruso, 2002), (f) enhanced health and improved work performance (Slaski & Cartwright, 2002, 2003), (g) better performance in job interviews (Ashkansay et al., 2002), and (h) more effective and successful leadership (George, 2000; Palmer, Walls, Burgess, & Stough, 2000). Four of the above outcomes are also important in elite sports. These four were coping with pressure and job insecurity (Gould, Eklund, & Jackson, 1992; Gould, Finch, & Jackson, 1993), collaboration and cooperation such as cohesion (Carron & Hausenblas, 1998; Carron, Spink, & Prapavessis, 1997), improved health (Mahoney, 2002), and leadership (Riemer & Chelladurai, 1995; Smith & Smoll, 1997).

Theories developed in the business world have been applied in the sports world and vice versa. Jones (2002) and Weinberg and McDermott (2002) discussed the link between the two domains. Jones was a sport psychologist who also worked with chief executives. He discussed key similarities in the following areas: organisational issues, leadership, high performing teams, stress and coping, and one-to-one coaching/consulting.

Weinberg and McDermott (2002) compared and contrasted sport and business leaders' perceptions regarding what makes for a successful organisation and found more similarities than differences. All participants said that leadership was related to the efficiency of organisations. Three higher-order themes became apparent concerning different aspects of leadership; the second higher-order theme was interpersonal skills. The second theme had four lower order themes two were: empathise with customer/employee, and listening skills, which are part of trait EI. The final factor that the authors explored was communication. Overall effective communication was believed to be essential to organisational success. Communication includes body language and tone of voice, which were part of trait EI. Jones (2002) and Loehr and Schwartz (2001) suggested that Psychological Skills Training (PST) was transferable to the corporate world and that knowledge from the business world may contribute to the sports world (Meyer & Fletcher, 2007).

2.6.2 Health Outcome and Behaviour

The Transactional Model of Stress and Coping (Lazarus, 1990; Lazarus & Folkman, 1984) stated that emotional reactions to a stressor was affected by how one appraised the stressor and the coping strategy used to deal with the stressor. The severity and the duration of the emotional and physiological stress reaction can potentially affect one's acute and chronic illness. EI could be one factor that mediates the relationship between stress and health (Extremera & Fernandez-Berrocal, 2002; Salovey et al., 2002; Schutte et al., 2002; Slaski & Cartwright, 2002). Slaski and Cartwright (2002) found that retail managers in the

UK with higher EI levels reported better levels of health and psychological well-being. Schutte et al. (2002) found similar results in the United States, in that they found positive relationships between EI and positive mood, self-esteem, and maintaining a positive mood even though a negative mood state was induced. The authors of both articles believed that the mechanisms responsible for the outcome could moderate the stress process and increase resilience, facilitate resistance against environmental factors that influences depressed mood and self concept. The results can be linked to the sports world, where athletes could face psychosocial stressors. The appraisal of a stressful situation affects not only the selection but also the implementation of a coping strategy, which would also affect performance (Gould, Guinan, Greenleaf, & Chung, 2002; Hanin, 1995, 2000; Lazarus, 2000; Robazza & Bortoli, 1998; Tenenbaum, Jones, Kitsantas, Sacks, & Berwick, 2003). These studies support the need to explore the link between EI and sports, to help develop interventions that help athletes cope with their potentially stressful sporting career.

2.6.3 Sport

SP researchers and practitioners have suggested that EI could be an important construct in the sport domain (Meyer & Fletcher, 2007). Initial research in sport has been beneficial in gaining an understanding of the link between EI and sport. However, the contrasting theoretical frameworks and assessment techniques cause confusion rather than clarity. Meyer and Fletcher (2007) further indicated that different definitions, conceptualizations, and assessment methods could produce a different EI profile for the same individual, which can cause some difficulty in the applied setting.

Emotions play an important part in the development and performance of athletes and teams (Botterill & Brown, 2002; Jones, 2002; Vallerand & Blanchard, 2000). To date, literature (Hanin, 2000; Jones, 2003; Lazarus, 2000) has mainly highlighted how factors such as emotional control and peak emotional experience may influence countless factors relevant

in the sport domain (e.g., motivation, anxiety, fun, objective performance). Research showed there to be a link between EI and sport (Meyer & Fletcher, 2007; Zizzi et al., 2003; Thelwell, Lane, Weston, & Greenlees, 2008). There was a need to better understand how emotions influence both objective and subjective outcomes in sport. Botterill and Brown (2002) state that “typically athletes just experience their emotional responses and do not stop to reflect on them critically and constructively” (p. 50). This reflection was a major part of EI as mentioned in section 2.5. Several of the EI components, such as perceiving emotion, or managing emotions, have been acknowledged to be important in maximising sport performance (Jones, 2003; Lazarus, 2000; Ravizza, 1998). Nonetheless, little research has explored the contributions of EI to performance in sport.

Zizzi, et al. (2003) discussed the relationship between EI and performance among college baseball athletes, 61 baseball players complete the EIS (Schutte et al., 1998). Results indicated modest support for the link between emotional skills (i.e., emotional awareness, control and utilisation) and athletic performance. They showed that EI was somewhat related to pitching performance but not to hitting performance. According to the authors, this difference could be because of the different nature of the two tasks and the definition of EI. The authors believed that time was needed to process the emotional states, initiate self-talk (ST), and change ones behaviour to cope with the present situation. This corresponds to what pitchers have to do, whereas hitters use skills that require a combination of vision, hand-eye coordination, timing, technique, and power; all of which must be demonstrated in a split-second. In studies that investigated mood states and performance, a relationship was found between EI and pre-competition mood (Lane, Thelwell, Weston, & Devonport, 2005; Lane, Soos, et al., 2005). It was suggested that emotionally intelligent athletes were more capable of attaining desirable emotional states before competition. Significant relationships have

emerged between EI and psychological skills usage including imagery, goal-setting (GS) and positive ST (Lane & Lowther, 2005; Lane, Thelwell, Lowther, & Devonport, 2009).

Thelwell, Lane, Weston, and Greenlees (2008) conducted a study exploring the relationship between EI and coaching efficacy. Results indicated that there was a significant correlation between coaching efficacy and EI (measured by the EIS). The authors found that it was important for a coach to be able to appraise his/her own emotions, regulate them as well as appraise others emotions.

2.7 Emotional Intelligence and Multiculturalism

2.7.1 Disability

Section 2.4.2 revealed that there were emotional differences in athletes with a disability compared to athletes without a disability. Coping with a physical disability provokes a range of responses such as fear, frustration, anxiety, anger, confusion, uncertainty, loss, despair and depression (McKenna, 2007). Dealing with these responses will help the individual deal with the disability. The emotional demands on these individuals are significant and the individual needs a way to manage these emotions (McKenna, 2007). Managing them would be important to the rehabilitation process (McKenna, 2007). Therefore, increasing the EI of individuals with a physical disability may improve their well-being and to help with the rehabilitation process (McKenna, 2007). Most of the research found on EI and disability was related to learning disabilities and not physical disabilities, or it was related to how the parents of children with a disability cope with their child being disabled.

2.7.2 Ethnicity

Researchers started to explore whether the EI construct can be generalised across different cultures (Ghorbani, Bing, Watson, Davison, & Mack, 2002; Parker, Saklofske, Shaunghnessy, Huang, Wood, & Eastabrook, 2005). Parker et al. (2005) suggested that EI

could “be a cultural-bound construct that reflects an emphasis among European and North American health care professionals” (p. 217). The ability to recognise emotions from facial expressions is a key component in most of the EI models. However, there is considerable cultural variability in the ability to read facial expressions (Parker et al. 2005). Parker et al. (2005) investigated whether the EI construct could generalise across cultures using a North American aboriginal population and a non-aboriginal sample from Canada. It was found that the aboriginals scored significantly lower than the non-aboriginals group on the total EI scale. They also scored lower on the interpersonal, adaptability and stress management scale.

Ghorbani et al. (2002) explored EI in an Iranian and American population. Overall correlations were similar between the two samples indicating that EI was processed similarly. Data showed that TMMS (Mayer & Gaschke, 1988) measures were associated with greater self-esteem and lower levels of depression, anxiety, and/or perceived stress. Differences were found in self-consciousness data and the association between private and public self-consciousness. The relation between private and public self-consciousness was more robust in the Iranian sample.

Fernandez-Berrocal, Salovey, Vera, Extremera, and Ramos (2005) explored cultural influences on the relation between perceived EI and depression. Their participants were from the United States, Chile, and Spain. Results showed that individualism versus collectivism was not a moderating effect in the relation between perceived EI and depression. They found there to be differences between masculinity versus femininity dimensions. They found that the relation between perceived EI and depression were more intense in feminine cultures.

The previous sections discussed how emotions may influence performance and that playing sports can be an emotional experience. An athlete’s emotional state before the game could potentially influence how she/he plays during the game (Butler, 1996). A summary of the key implications for each of the domains are given and are related to sport.

- Occupational performance: Enhancing EI can lead to better performance in the working environment. As stated above, the sport and business worlds have a lot of similarities, therefore, if one can improve occupational performance by enhancing EI, then EI should also enhance sporting performance.
- Occupational satisfaction: Enhancing EI can lead to job satisfaction. If you enjoy your job (being an athlete) then you will perform better at it. Therefore, if one enhances the optimism subcomponent of EI then job satisfaction should increase.
- Coping with stress in the occupational environment: Getting athletes to learn to cope with stressful situations, especially emotional situations will help them. Therefore, enhancing EI should enhance coping mechanism which in turn should enhance performance.
- Being able to regulate emotions will help improve work performance and leadership skills. Enhancing emotional regulation and utilisation of emotions will promote better leadership skills and enhance performance.
- EI and health outcome and behaviour are related. If one can regulate stress, then an individual will have a greater chance of staying healthy.

2.8 Present study Aims and Objectives

The aims of the present doctorate dissertation were to: (a) test the relationship between EI and mood states prior to performance (best and worst) in wheelchair basketball players from the UK and Ghanaian football players; (b) investigate whether EI can be enhanced in the two cultural samples; and (c) explore whether there are cultural differences across the two samples.

The hypotheses for the present dissertation were:

H1: that there would be significant differences between the Ghanaian and UK samples in mood prior to best and worst performance.

H2: that there would be significant differences between the wheelchair basketball sample and athletes without a disability from the UK.

H3: that there would be significant differences between athletes who acquired a disability compared to those with a congenital disability.

H4: that there would be significant differences in EI between the Ghanaian football population and the UK wheelchair basketball population.

H5: that the intervention will enhance EI in both populations.

CHAPTER 3: The Wheelchair Basketball Sample

The chapter first explores research conducted using disability populations in sport, relating to emotional experiences, psychological skills and EI. It then explores emotional differences between those individuals who acquired a disability and those who have a congenital disability.

3.1 Disability and Sport

Cox and Davis (1992) explored the psychological skills of elite wheelchair athletes, and how they differ to intercollegiate athletes without a disability. Athletes were asked to complete the psychological skills inventory for sports (PSIS; Mahoney, Gabriel, & Perkins, 1987). Results showed that the wheelchair track and field athletes scored better on the PSIS than track and field athletes without a disability. The authors proposed possible explanations for these differences. The first, since the wheelchair athletes were at an elite level, whereas the athletes without a disability were at a collegiate level. A second reason could be that the years of therapy that the athletes with a disability have experienced has helped them acquire coping skills, which they transferred to their sporting life. Individuals with a disability have to overcome tremendous challenges, both physically and psychologically and this process of overcoming adversity may result in enhanced coping skills. The authors cautioned that this was only a theory and that research needs to explore this possibility. Lane, Meyer, et al. (2009) suggested that psychological skills and EI are correlated (see sections 2.6.3 and 9.1) and therefore it is important to explore whether there are sub-cultural differences.

Campbell (1995) explored psychological well-being of participants in wheelchair sports. Campbell compared individuals with congenital and acquired disabilities. Campbell found that athletes with an acquired disability reported higher positive psychological well-being than those with congenital disabilities. Participants who had congenital disabilities reported higher trait anxiety and lower mastery and self-esteem. Campbell suggested that the

reason for the more positive psychological well-being amongst athletes with an acquired disability could be because these individuals had to develop coping skills to confront and accept their impairment.

As mentioned in section 2.4.2, Campbell and Jones (2002a) found 10 distinct sources of stress, which were pre-event concerns, negative match preparation, on-court concerns, post-match performance concerns, negative aspects of a major event, poor group interaction and communication, negative coaching style/behaviour, relationship issues, demands or costs of wheelchair basketball, and lack of disability awareness. Campbell and Jones (2002b) investigated cognitive appraisal of sources of stress experienced by male wheelchair basketball players. Their results supported previous research in that sources of stress may be appraised as a mixture of challenging, threatening, and causing harm or loss (Folkman & Lazarus, 1985; McCrae, 1984). This depended on how an individual interpreted the situation. Learning coping skills could enhance certain aspects of EI which in turn helps psychological well-being.

Fung and Fu (1995) explored psychological determinates between wheelchair sport finalists and non-finalists. Participants were from the Second National Games, held in China. Results showed that from the 15 potential variables included in the study, 12 were selected. The variables were commitment to training, trait anxiety, and the five variables from the POMS: tension, depression, anger, vigour, fatigue, confusion. Other variables related to attitudes towards sport participation. However, the four that played an important role in making a difference between finalists and non finalists were commitment to training, vigour, confusion and tension. Enhancing EI could help athletes achieve mood states that they perceived to be beneficial to performance, as Fung and Fu's (1995) study showed, emotions such as vigour and tension made a difference between finalists and non-finalists.

Lowther, Lane, and Lane (2002) investigated the relationship between self-efficacy, psychological skills and performance in amputee footballers during the amputee football world cup. Results showed that competition relaxation was related to self-efficacy and performance. Self-efficacy scores and performance scores were higher when participants utilised relaxation techniques in competition.

The above paragraphs indicated that there were differences between moods experienced prior to performance be it optimal or dysfunctional, there were also differences in the psychological skills used as well as sources of stress experienced.

3.2 Congenital versus Acquired Disabilities

There is little research exploring congenital physical disabilities, most research exploring the way in which individuals manage disability is focused on individuals with an acquired disability. People with an acquired disability usually go through a difficult adjustment process (COIL, 2007). They usually experience shock first, which then later develops into anger, denial, and grief over the lost functionality, body part, and image. Often self-esteem is reduced and concern about their future will be overwhelming (COIL, 2007). Over time people with an acquired disability accept and cope with their disabilities (COIL, 2007). Research found that people with spinal cord injuries have significant strengths and coping methods that research in the past had underestimated (Trieschmann, 1988; Cushman & Dijkers, 1991; Parker, Schaller, & Hansmann, 2003). Parker et al. (2003) suggested that changes in client emotions during rehabilitation following an acquired disability, was an area in need of further investigation. This suggests that individuals with an acquired disability are able to regulate their emotions better than those with a congenital disability. Persson and Ryden (2006) conducted a study exploring effective coping with a physical disability. Interviewing 26 people who learned to live with their disability, one of the themes found was 'change of values'. It referred to re-evaluating one's life and what was really important,

finding meaning with the disability; engage in new activities that do not conflict with the disability. Another theme was minimisation, this theme referred to minimising personal threat, which meant a person would focus on either real positive outcomes or would imagine such outcomes and would turn negative aspects into hope and positively perceived or interpreted experiences.

Individuals with a congenital disability usually learn to adjust physically and emotionally to their disability during maturation. Some may see themselves as a burden to the family, especially those with severe conditions and/or those that do not have much family support. Those living in a home may feel rejected by the family, especially if family members do not come and visit them (COIL, 2007). These factors could influence EI in that EI may be lower for these individuals. The current studies will assess whether there were differences in EI and pre performance mood states between athletes with a congenital disability or acquired disability.

The above two sections indicated that there were differences in mood and EI between athletes with a congenital disability compared to those with an acquired disability, athletes with an acquired disability seemed to be better at regulating their emotions. Athletes with a disability experienced different moods compared to those without a disability (Cox & Davis, 1992).

CHAPTER 4: Phase One, Study One

4.1 Study One: Method Section

4.1.1 Introduction

There were 47 clubs registered with the Great Britain Wheelchair Basketball Association. There were four divisions and a club can have teams in various divisions. There were a total of 72 teams (excluding junior teams) within these four divisions and approximately 600 players registered in the league. Thirty two clubs in the wheelchair basketball league were contacted regarding participation in the present study. Of the 11 clubs who replied to the email request, six agreed to participate, two clubs declined and three clubs responded initially, but later declined. In order to increase participant numbers players were also recruited at competitions on a convenience basis. Eight percent of the population took part in the present study.

4.1.2 Participants

Participants were 51 (Aged: $M = 30.48$ years, $SD = 12.78$, with 5 participants not indicating their age) wheelchair basketball players (Male $n = 40$, Female $n = 7$, with 4 participants not indicating gender). The ethnicity of the population was Caucasian ($n = 42$), African descendent ($n=2$), Asian/Middle Eastern ($n = 3$) and four unknown. Twenty-one participants had an acquired disability, 25 had a congenital disability and five did not mention their disability. Table 4.1 provides further demographic information. Following the recommendations of Porretta, Kozub, and Lisboa (2000), an attempt was made to obtain a representative sample. Six participants indicating they did not have a disability or had a minimal disability were removed from the original sample of 57 participants. The existing classification system for disability in wheelchair basketball was utilised in the present study to classify the level of disability (see Appendix A).

Table 4.1 Types of encountered disabilities and distribution according to gender of players

<i>Disability</i>	<i>Female</i>	<i>Male</i>
Spina Bifida	3	6
Spinal Injury	1	0
T-12 Incomplete	1	0
Cerebral Palsy	2	6
Paraplegic	0	13
Oosteogenesis impecta	0	2
Lower Limb Amputees	0	5
Becher muscular dystrophy	0	1
Broken back	0	1
Congenital deformation to hands and legs and double knee amputee	0	1
Diastrophic dysplasia nanism	0	1
Left lower limb amputee 1 digit left hand and 4 digits right hand	0	1
Pins in the knee	0	1
Ruptured anterior cruciate ligament	0	1
Sacral agenesis and weak leg muscles	0	1

4.1.3 Measures

Trait Emotional Intelligence was assessed using the EIS (Schutte et al., 1998). The EIS is a 33-item scale which is rated on a 5-point Likert-scale anchored from 1 = “strongly agree” to 5 = “strongly disagree”. In the present study, total trait EI was calculated as well as the six subcomponents of EI (Lane, Meyer et al., 2009): Appraisal of own emotions has 5-items, examples include ‘I am aware of the non-verbal messages I send to others’. Appraisal of others’ emotions has 7-items where examples include ‘I am aware of the non-verbal

messages other people send'. Optimism has 5-items where examples include 'I expect that I will do well on most things I try'. Regulation has 4-items where examples include 'Some of the major events of my life have led me to re-evaluate what is important and not important'. Social skills has 6-items where examples include 'I know when to speak about my personal problems to others'. Utilisation of emotions has 6-items where examples include 'When my mood changes, I see new possibilities'. Prior to the six-factor model of the EIS, internal reliability and 2-week test-retest reliability had been reported at $\alpha = 0.87$ and above, and $r = 0.78$ respectively (Schutte et al., 1998). Lane, Thelwell, Gill, and Weston (2007) used confirmatory factor analysis on a sample of athletes and found alpha coefficients for each subscale were over 0.70. In the present study, the alpha values for the six scales were 0.71 for appraisal of others, .66 for appraisal of own emotions, 0.68 for optimism, 0.72 for regulation, 0.62 for social skills, and, 0.73 for utilisation.

Mood was measured using the 32-item BRUMS (Terry et al., 1999; Terry, Lane, & Fogarty, 2003). The BRUMS was a shorter version of the POMS (McNair et al., 1971) and assessed anger, confusion, depression, fatigue, tension, and vigour. Anger items include 'Annoyed' and 'Angry', Confusion items include 'Muddled' and 'Uncertain', Depression items include 'Depressed' and 'Unhappy', Fatigue items include 'Exhausted' and 'Tired', Tension items include 'Nervous' and 'Panicky', and Vigour items include 'Alert' and 'Lively'. Calmness items include 'Calm' and 'Restful' and Happiness items include 'Satisfied' and 'Happy'. Items were rated on a 5-point Likert-scale anchored by "not at all" (0) to "extremely" (4). An acknowledged limitation of the POMS was the predominantly negative orientation of mood states. Therefore, subscales of happiness and calmness from the University of Wales Institute of Science and Technology Mood adjective checklist were included (UWIST; Matthews, Jones, & Chamberlain, 1990). It was proposed that the eight mood dimensions assessed offer a more balanced assessment of positive mood and negative

mood. In the current study, the eight mood dimensions, total mood, total positive mood and total negative mood were assessed.

Terry, Lane, et al. (1999, 2003) provided comprehensive evidence of factorial, concurrent and predictive validity of the BRUMS. The BRUMS was developed in three stages and was subjected to a rigorous validation process. Stage 1 established content validity, whereby a panel of experts and a group of adolescents reviewed an initial item-pool for comprehensibility. In stage 2, confirmatory factor analysis was used on a 24-item, six-factor structure. In the third stage, concurrent validity was determined by investigating relationships with previously validated scales. Terry, Lane, et al. (2003) validated the scale for use with adults, and altered the name of the scale to the BRUMS as the implication to adolescence no longer applied. The BRUMS has been used to assess mood in numerous studies in sport (Lane, 2007), education (Lane, Whyte, Terry, & Nevill, 2005; Thelwell, Lane, & Weston, 2007), exercise (Lane & Lovejoy, 2001), and health settings (Lane & Jarrett, 2005). Matthews et al. (1990) provided evidence of factorial validity for the UWIST. Internal consistency coefficients for subscales were: Anger, $\alpha = .80$; Calmness, $\alpha = .82$; Confusion, $\alpha = .76$; Depression, $\alpha = .72$; Fatigue, $\alpha = .82$; Happiness, $\alpha = .89$; Tension, $\alpha = .72$; and Vigour, $\alpha = .80$.

4.1.4 Data Collection

Paper and pencil: The traditional paper and pencil method was used for those who did not have Internet access or for those participants who preferred to complete questionnaires in situ.

On-line: Questionnaires were posted online for those athletes who wished to complete questionnaires online. A growing approach to data collection is to use online methods (Buchanan & Smith, 1999). One advantage to this approach is the quality of responses. Research indicated that respondents wrote longer and more self-disclosing comments on e-

mail open-ended questionnaires than they did on paper and pencil surveys (Schaefer & Dillman, 1998). Yun and Trumbo (2000) found a number of potentially important differences in the response characteristics of three groups (e-mail, paper and pencil, and web-surveys). The authors suggested that using multi-mode survey techniques improved the extent to which the sample represents the population, without biasing other results. However, it was argued that participants from studies that collected data via the internet population might not fully represent the target population they derive as participation requires access to a computer and the internet (Eyenbach & Wyatt, 2002) and computer literacy. Yun and Trumbo (2000) believed that there may be more advantages due to the rapid development of the Internet and web technology. Using traditional paper and pencil and online surveys enabled the researcher's access to participants who resided considerable distances away and also facilitated personal contact with participants.

4.1.5 Procedure

Ethical approval was received from the authors Institutional Ethics Committee. Once approval was received, the recruitment of participants proceeded as follows:

- (a) Secretaries and/or coaches of wheelchair basketball teams were contacted via email. They were asked to determine if their team would be interested in taking part in a project intended to determine relationships between pre performance mood states, and EI. The researcher then attended the games of volunteer participants providing an opportunity for participants to seek clarification regarding the research aims and objectives.
- (b) The researcher also took the opportunity to recruit more participants by approaching opposing teams.
- (c) The researcher attended a Wheelchair Basketball tournament to recruit more participants. Participants were given the choice to complete the BRUMS and EIS

questionnaires on paper or online. Those participants who chose to complete the questionnaires online were emailed a website link which brought them to the EIS and the BRUMS which they were asked to complete. Participants were asked to complete mood measures retrospectively and think back to how they felt before their best and worst performances in sport. Participants decided how to assess their best and worst performance, for example win/loss. Clearly, this is not a measure of mood, but a measure of a memory of mood, a meta-experience (Hanin, 2000, 2003).

4.1.6 Data Analysis

A repeated measures multivariate analysis of covariance (MANCOVA) was used to investigate the extent to which EI could explain differences in mood states by performance condition. Descriptive data was used to explore the differences between best and worst performance. A repeated measures multivariate analysis (MANOVA) was used to investigate the effect of mood by best and worst performance. The final statistical test explored correlations between mood states associated with best and worst performance and trait EI. Results were first analysed exploring total EI, total mood and positive and negative mood. The present study conceptualised trait EI using six subcomponents and single construct. The single construct was typically utilised in the literature (Lane, Soos, et al., 2005; Lane, Thelwell, et al., 2005; Zizzi et al., 2003). It was proposed that subcomponents of trait EI have different antecedents and consequences, whereas global EI gives an overall idea. The same was for the BRUMS; results were first explored by total scores than by the eight mood states.

A single sample t-test was run to determine whether the population in the current study was similar to the norm. Normative data used was data from Lane, Meyer, et al.'s (2009) study who collected from various student athletes in the UK. Lane, Meyer et al.'s study was used as there are no other studies in sport psychology that have conducted a

normative data study. Lane, Meyer and colleagues had a big sample size so using their data the t-test was run.

4.2 Results

Prior to running the main analysis, a series of MANOVA's were run to investigate the potentially moderating effects of gender, method of data collection, severity of disability, and whether the disability was acquired, or congenital (onset of disability). Ethnicity was not included as the sample sizes of the non Caucasian groups were too small and therefore, finding significant results would be minimal. Results indicated no significant differences in mood and trait EI by gender (Wilks' Lambda $_{17,33} = 0.75$, $F = 0.65$, $P = .83$, Partial Eta² = 0.25). There were also no significant differences between the two data collection methods pencil and paper versus online (Wilks' Lambda $_{17,33} = 0.57$, $F = 1.45$, $P = .18$, Partial Eta² = 0.43). No significant differences were found in severity of disability (Wilks' Lambda $_{34,42} = 0.23$, $F = 1.24$, $P = 0.23$, Partial Eta² = 0.50) and there were no significant differences in age (Wilks' Lambda $_{68,120} = 0.27$, $F = 0.70$, $P = 0.95$, Partial Eta² = 0.28). Lastly, no significant differences were found in the onset of the disability (Wilks' Lambda $_{17,33} = 0.63$, $F = 1.14$, $P = 0.36$, Partial Eta² = 0.37). Therefore, data were collapsed into a single dataset and analysed collectively.

Table 4.2: Descriptive Statistics of Mood States before Best and Worst performance

	Performance condition				<i>F</i>	<i>P value</i>	<i>Eta2</i>
	Best		Worst				
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Anger	1.11	1.70	4.72	4.12	41.17	>0.01	0.75
Confusion	1.21	1.40	3.85	3.47	28.03	>0.01	0.67
Calmness	8.10	2.78	5.30	3.32	29.60	>0.01	0.68
Depression	0.67	1.60	4.06	3.91	24.07	>0.01	0.63
Fatigue	2.65	3.27	3.87	3.32	6.73	0.02	0.32
Happiness	10.97	2.90	5.17	3.46	9.95	0.01	0.86
Tension	4.50	3.18	6.19	3.93	46.62	>0.01	0.42
Vigour	12.99	2.74	8.11	4.16	83.86	>0.01	0.77
Total Mood	2.16	0.69	0.41	1.11	92.12	>0.01	0.87

A repeated measures MANOVA of mood states by best and worst performance indicated a significant overall effect (Wilks' Lambda $_{8,7} = 0.01$, $F = 74.76$, $P > 0.01$, Partial $Eta^2 = 0.99$) with significant differences on all mood subscales (see Table 4.2). As results indicate, successful performance was associated with higher calmness, happiness and vigour coupled with lower anger, confusion, depression, fatigue, and tension.

Table 4.3: Descriptive Statistics for EI

	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>SD</i>
Appraisal of Others	2.57	4.57	3.61	0.49
Appraisal of Own	2.20	5.00	3.81	0.52
Optimism	3.00	5.00	3.90	0.52
Emotion regulation	3.25	4.50	3.93	0.38
Social Skills	2.14	4.14	3.24	0.40
Utilisation	2.50	5.00	3.76	0.52
Total EI	101.00	153.00	124.78	11.40

Descriptive data indicated that total EI ranged from 101 to 153 ($M = 124.78$, $SD = 11.40$) (see Table 4.3). It also indicated that social skills was the subscale with the lowest minimum and maximum scores. Emotion regulation had the highest minimum score but not the highest maximum score.

Table 4.4: Correlations between total EI and positive and negative mood in best performance (B) and worst performance (W)

	<i>Total EI</i>	<i>Positive B</i>	<i>Positive W</i>	<i>Negative B</i>	<i>Negative W</i>	<i>Total Mood B</i>
Positive B	0.57**					
Positive W	0.33*	0.39**				
Negative W	-0.11	0.03	-0.18	0.30*		
Total B	0.44**	0.87**	0.32*	-0.64**	-0.13	
Total W	0.30*	0.26	0.83**	-0.20	-0.71**	0.31*

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Results indicated that total EI did not correlate significantly with negative mood states in prior to best and worst performance (see Table 4.4). However total EI correlated with total mood states in best and worst performance.

Table 4.5: Correlations of the EI and mood states prior to best performance (B) and worst performance (W).

	<i>Appraisal of Others Emotions</i>	<i>Appraisal of Own Emotions</i>	<i>Optimism</i>	<i>Emotion regulation</i>	<i>Social Skills</i>	<i>Utilisation</i>	<i>Total EI</i>
Calmness B	0.31*	0.38**	0.24	0.24	0.15	0.42**	0.42**
Happiness B	0.23	0.41**	0.21	0.30*	0.37**	0.23	0.40**
Vigour B	0.32*	0.37**	0.43**	0.27	0.29*	0.46**	0.51**
Calmness W	0.19	0.39**	0.12	0.29*	0.24	0.24	0.34*
Depression W	-0.44**	-0.20	0.08	0.08	-0.21	-0.20	-0.26
Happiness W	0.26	0.26	0.07	0.13	0.29*	0.17	0.29*
Vigour W	0.18	0.28*	-0.04	0.19	0.36**	0.14	0.26

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Anger, confusion, depression fatigue and tension prior to best performance were not significant to any of the EI subscales or total EI. Anger, confusion, fatigue and tension prior to worst performance were not significant in any of the EI subscales or total EI. Emotion regulation was not significantly correlated to optimism or appraisal of others emotions but all other subscales correlated significantly with each other. Prior to best performance total EI correlated with calmness ($r = 0.42$, $p > 0.01$), happiness ($r = 0.40$, $p > 0.01$), vigour ($r = 0.51$, $p > 0.01$). Prior to worst performance total EI correlated with calmness ($r = 0.34$, $p = 0.02$), and happiness ($r = 0.29$, $p = 0.04$). For further significant correlations refer to Table 4.5.

A repeated measures multivariate analysis of covariance (MANCOVA) was used to investigate the extent to which trait EI could explain differences in mood states by best and worst performance condition. Results indicated that when trait EI was introduced as a covariate, the difference in mood states by condition was no longer significant, suggesting that trait EI could explain these differences (Mood State differences: Wilks' Lambda $_{8,37} = .91$, $F = 0.47$, $P = 0.87$, Partial Eta² = 0.09). There were no significant interactions between the six EI subscales and performance. However, the Sphericity Assumed test indicated that the differences by mood were associated with optimism and utilisation. A single sample *t*-test was used to determine whether there was a difference in EI between the UK wheelchair basketball population and normative data (Lane, Meyer, et al., 2009). The *t*-value of the current population was 1.98 showing a significant difference between the two groups ($p = 0.053$). Therefore the mean of the current sample of 124.78 was greater than the sample of Lane, Meyer et al.'s (2009) study of 121.62.

4.3 Discussion

Results indicate that mood responses are associated with variations in performance outcome and are consistent with the meta-analysis results of Beedie et al. (2000), who included participants with and without a disability. Beedie et al. reported that successful athletes reported lower tension, depression, anger, and confusion and higher scores for vigour than unsuccessful athletes. Results of the present study are compared to Devonport, Lane and Hanin (2005) who assessed mood states before best and worst performance retrospectively among a sample of student athletes without disabilities. Effect sizes for differences in mood states between best and worst conditions in the present study are stronger than those reported by Devonport et al. (2005). It should be noted that mood scores associated with successful performance are comparable in terms of the patterns and intensity of mean scores for each mood state reported by Devonport et al.

Previous research has demonstrated that athletes high in trait EI reported more positive mood states before successful performance and higher unpleasant mood states before unsuccessful performance (Lane, Thelwell, et al., 2005; Lane, Soos, et al., 2005). Lane, Thelwell, et al. (2005) used retrospective methods to measure mood states prior to best and worst performance in sport.

In the present study, results indicate that optimism and the utilisation of emotions have the strongest relationship with mood states. Theoretically, the ability to use emotion and to remain optimistic should show stronger relationships with mood states associated with sport performance contrary to social skills. Gendolla, Brinkmann, and Richter (2007) argued that mood influences performance through its relationship with effort. They demonstrated that mood's affective content influences motivation on tasks considered personally worthwhile. Sport performance is likely to require increased effort to bring about success and this quality is reflected in the nature of both optimism and utilisation of emotions. By contrast, social skills are characterised by the ability to share emotions with others and to support others rather than delivering a successful outcome in an achievement setting. The key difference is that social skills are concerned with others rather than oneself, whereas the utilisation of emotions is concerned with the relationship between emotions and performance outcome.

There is scant research that has explored the effects of subcomponents of trait EI on performance. In a study that investigated the relationship between trait EI and emotional task performance, Austin (2004) demonstrated that subcomponents of trait EI had a differential effect on performance, a trend that is consistent with the present study. Austin reported that the appraisal of emotions related with performance on two inspection time (IT) tasks, and utilisation of emotions and optimism were unrelated to performance. It is proposed that the different performance domains could explain contrasting findings between the two studies;

Austin used a laboratory task, whereas the present study used moods experienced in ecologically valid settings. Lane (2007) proposed that mood states experienced in personally meaningful settings are likely to produce the most significant results.

Descriptive data for participants in the present are comparable with those reported among athletes without a disability (Devonport et al., 2005; Lane, 2007; Lane, Soos, et al., 2005; Lane, Thelwell, et al., 2005). With a few differences tension scores for both best and worst performance are lower in the current study compared to Devonport et al. (2005), whereas depression and vigour are higher in the current study. The differences though, are minimal.

Zizzi et al. (2003) explored global EI in baseball players. The mean global EI for their study was 128.6, whereas the mean global EI in the current study is 124.78. Thelwell et al. (2008) explored EI in coaches, they did not explore total EI, however, they did report the mean scores for the individual subscales which ranged from 3.6 to 3.97 (with SD being between 0.38 to 0.47). In the current study, the subscales range from 3.24 to 3.93 (with SD ranging from 0.38 to 0.52). Looking at the subscales, the results were quite similar, which indicates that there are only small differences between UK coaches and UK wheelchair basketball players. Therefore, suggesting that there are no sub-cultural differences between the wheelchair basketball athletes and coaches, but that there may be cultural differences between the UK and the American sample. When a single sample t-test was conducted comparing the current data to Lane, Meyer et al.'s (2009) mean there was a significant differences between the two populations, suggesting there may be sub-cultural differences further research may be needed to further explore sub-cultural differences.

The results of the current study do not support those of Campbell (1995), as Campbell found there to be differences between those with a congenital and an acquired disability. The current study, however, found no differences, the Transactional Model of Stress and Coping

offers possible explanations for these findings. Disability level will be taken into account when assessing performance situations, and as such the impact of disability on mood will be factored out during the person-environment transaction. The transactional model views the person and the environment in a dynamic and bidirectional relationship (Lazarus & Folkman, 1984). Both perceptions of the environmental demands and perceived capability to respond to those demands will determine the effects of a stressor, including emotional responses.

Lazarus and Folkman (1984) proposed that the cognitive appraisal of a stressor involves both primary and secondary appraisals. During primary appraisal, an individual considers the personal significance of a situation as it relates to their personal beliefs, situational intentions, goal commitments and well-being. During secondary appraisal they consider coping responses intended to minimise harm or maximise gain (Snyder, 1999; Snyder & Lopez, 2002). During this process, an individual takes into account personal factors, including disability status, in establishing the nature of the challenges, implications for the self, and ability to respond. An individual will not pursue courses of action or specific performance outcomes if they are unrealistic based on personal and situational circumstances (Bandura, 1997). This is evident during secondary appraisal as the transactional process influences task selection and the effort expended in task completion. Therefore, even though there was a vast difference in disability, it should not impact EI and coping, as individual factors such as a person's impairment are taken into account. Therefore, participants who are lower functioning, and therefore, perform at a lower level of achievement do not necessarily report high levels of stress as long as the standard set as a goal is attainable. EI should benefit people in their appraisal of intense emotions stemming from difficulties in achieving performance goals, and this appears to apply to participants with different degrees of functioning.

As discussed in section 3.2 those with a congenital disability learn how to cope with the disability during maturation and those with an acquired disability go through various stages until they accept and cope with their disability (COIL, 2007). Both coping processes could explain why there are no differences between the two groups as it offers an insight into the way in which individuals learn to cope with their emotions.

Campbell and Jones (2002b) suggested that because athletes with a physical disability require external help to participate in physical activity, they tend not to associate low control over a situation with negative appraisal as they are used to receiving help and not always being in control. Therefore, although findings from the present study do not show differences in mood between athletes with and without a disability, it is proposed that this issue requires further examination to identify fully the role disability has in developing coping skills.

The current study could help practitioners working with wheelchair basketball players by helping them attain emotional states that enhance performance and reducing depression levels. Optimism and utilisation of emotions play a key role in influencing pre-performance moods and therefore, should be increased.

There are several limitations to the findings of the present study.

- a. The relatively small sample size detracts from the generalisability of findings to a wider population, and given the sensitivity of this population and difficulty in obtaining large sample sizes, further research is needed. However, even though the sample size is relatively small, the overall population of wheelchair basketball players in the UK was only 600. The small sample size used in the present study could mask possible gender differences. Terry, Potgieter, and Fogarty (2003) reported significant differences in mood states between males and females. In addition, the small sample size could mask the effects of severity of injury. There may be differences between athletes who were recently injured when compared to

those who have been in a wheelchair for much longer. Campbell (1995) found differences positive psychological well-being between those who having acquired disabilities compared to those with congenital disabilities. Qualitative methods might offer an approach to detailing the nature of EI in this population, in relation to gender, and severity of disability. In relation to culture the UK is a multi-cultural country just like the current sample. Therefore, this is not really a limitation as the western world has become a melting pot of culture (Hirschman, 1983; Jansen, 1992), such as the UK (Fortier, 2005).

- b. Retrospective measures of mood cannot be relied on to provide accurate measure of mood (see Terry, Stevens, & Lane, 2005), and given the notion that retrospective measures of mood are influenced by aspects of memory, it might not be surprising that EI, which asks participants to recall how they manage emotions from memory, correlated with mood measures. Participants should have completed the BRUMS indicated how they felt now when completing the EIS.
- c. It should be stressed that the present study used a correlational design, and it is argued that future research should study the effects of EI on mood states before performance using a longitudinal design.

CHAPTER 5: Study 2

The current study used semi-structured interviews to further explore the role of EI and emotion-performance relationships in a sample of wheelchair basketball athletes from the UK.

5.1 Pilot Study

A pilot study was conducted to test the interview guide and establish the suitability of questions relative to the research aims. These aims were to explore emotions, EI, emotion regulation, and how participants utilise emotions.

A phenomenological approach was utilised. In utilising this approach and in accordance with the recommendations of Creswell (1998, 2009), the researcher tried to be aware of her biases and personal experiences while developing the interview guide. This was taken into account when developing questions and probes for the interview guide. The interview guide was developed by researching the various EI components and by using the EIS as a guide to develop questions for the interview guide. Themes of enquiry were emotion regulation strategies, utilisation of emotions, impact of emotions prior and during performance, information about their impairment, and whether their disability caused emotional distress.

One interviewee volunteered to take part in a pilot study; he was a partially sighted male archer. He was a University lecturer, had been participating in his sport for 11 years, participated at the Paralympic games and won a few international competitions and medals. The interviewee was informed that information was confidential. At the end of the interview, the interviewee was asked which questions needed to be improved, if the ice breaker question was good enough, if he felt anything else needed to be altered. The researcher was informed there needed to be more of an introduction to the research aims, and the researcher needed to establish whether the interviewee was comfortable talking about their disability. It was also

apparent that the interviewee refrained from using the word disabled but referred to it as impairment. After researching the topic further, it became clear that impairment was the actual physical problem and disability was associated with the environment and society (Holmes, 2008). There are two main models of disability the medical model and the social model of disability. The medical model began to develop in the 19th Century (Kaplan, 1999). It viewed disability as being caused by medical symptoms. The impairments prevent the person from fully participating in society, and therefore, the person with a disability should adapt to fit into the non disability world. It focused on the disability rather than the needs of the person (Brittain, 2004). Whereas the social model suggested that society disabled people by creating attitudinal as well as physical barriers that prevent them from participating in society. The social model was founded in 1976 by the Union of the Physically Impaired Against Segregation (UPIAS) combined with the Disabled People's International (DPI) and the World Health Organisation (WHO; Siminski, 2003). UPIAS and DPI suggested a two-element model that included 'impairment' and 'disability'. Impairment included the functional limitations within the individual, which were caused by the physical, mental or sensory impairments that they may have. Disability, on the other hand, was the loss or limitations of opportunities to take part in the 'normal' everyday life of the community on an equal level with others due to social and physical barriers (DPI, 1982 cited in Siminski, 2003). The social model gave society the responsibility for problems faced by a person with a disability rather than just putting "blame" on the individual.

Due to the feedback received, participants were asked prior to taking part in the interview if they were willing to discuss their disability and the hurdles they faced. After the pilot study, the interview guide was altered significantly, questions were rearranged and removed to shorten the interview guide and to make the interview flow better.

5.2. Personal Experiences and Bracketing

Part of the phenomenological approach required the researcher to explore their personal experiences relating to the research being conducted. This is achieved by conducting a bracketing process. The author was asked how she would react if she were to become disabled. This question was asked to establish how these thoughts and feelings may influence the development of the interview guide as well as the interview itself. The author had previous contact with a wheelchair basketball team from the United States, as part of her Master's Degree internship. This involved travelling with the team, helping them on and off the bus, as well as teaching the players about psychological skills and being a person player's could come and talk to. At the beginning, the author had very little knowledge about the different disabilities, the players, and what they could and could not do. The players took their time to explain what they could and could not do. The coach also went through the various disability groups the players had, and what they could do in relation to wheelchair basketball. During the whole time, the author never felt uncomfortable or out of place. At the beginning, she would sometimes forget, when helping them off the bus, that some had no control over their legs. The more time she spent with the team the respect grew for each player and how they had coped with their disability and gotten on with their lives.

When first working with athletes with a disability, the researcher was not sure how she would cope if she were to become disabled. If she would be able to continue with her life and make the best out of it, or whether she would be a person who would give up and feel sorry for herself. During her time in the United States working with the wheelchair basketball team and meeting a lot of athletes with a disability she became aware of the vast amount of opportunities. It will not be easy and she would probably have a difficult time getting used to the change but she has met a lot of people who made her realise that no matter what happens you just have to make the best out of it. The author would probably feel sad, maybe even

depressed, probably angry wondering why this happened to her, and scared of how/if she would cope with it. Her social support would play a huge role in her coping with the new situation.

An assumption was made that there would be differences due to their experience, and whether they had an acquired or congenital disability. This bias was partly due to reading Cox and Davies (1992) article. The authors proposed that athletes who had an acquired disability learned coping skills and psychological skills during their rehabilitation phase. This resulted in the researcher expecting to find differences between participants who had a congenital disability and those who acquired their disability.

At all times the researcher had contact with her supervisory team to enhance the development of the interview guide and to ensure that it dealt with various components of EI and therefore, reducing the risk of incorporating personal biases and experiences. The pilot study helped with this process by asking the interviewee about the manner in which questions were asked and whether any additional questions needed to be added. Therefore researcher biases were minimised.

5.3 Study 2 Methods Section

5.3.1 Introduction

The aims were to explore EI, emotions, emotion regulation and how athletes utilised emotions. The study built on study 1 as it explored EI qualitatively and explored how or if emotions experienced prior to performance influenced performance.

5.3.2 Participants and Procedure

Five participants were interviewed. Two were interviewed via telephone and three participants completed face-to-face interviews. Telephone interviews were conducted as participants lived further away. Participants were four male and one female Caucasians. One participant was Sicilian, three were English and the fifth was Irish. Due to the small sample

size and willingness of participants to be interviewed all participants were included even though they were of different ethnic backgrounds. Participants were given pseudonyms to protect their identity.

Gerry, a 37 year-old male, had Spina Bifida, a congenital disability. He had two brothers without a physical disability and his parents were divorced. He used to work in a finance department for an advertising agency and then decided to go back to university and study social work. He had been playing wheelchair basketball for approximately 20 years in both the second and third division. His total EI was 122.

Marco, a 41 year old male, from Sicily had Spina Bifida. He had an older brother and an older sister who were both without a disability. He was a classroom assistant and had been doing this for six-years. Marco played wheelchair basketball as a child when he was around 10 or 11 and had been playing for a third division team for two years. His total EI was 130.

Janet, a 41 year old female, had Spina Bifida. She had six sisters and three brothers she did not mention whether they had a disability. She worked as a county disability officer and had been doing so for over 10 years. As well as playing wheelchair basketball Janet was also a coach. Her total EI was 142.

Max, a 26 year-old male from Ireland, was a double lower limb amputee. He had a two year old son, and was self-employed in real-estate. Max had his accident when he was 7 years old. Four months after the accident he was walking on false limbs. He had been playing wheelchair basketball for 16 years and started playing when he was ten years-old. Max also played wheelchair tennis on occasion. Max's interview was conducted via telephone. His total EI was 121.

Nathan, a 40 year-old male, was paraplegic. He was married and had two children. His injury was a sporting injury. He was a University lecturer, a researcher and consultant. Before his injury, he engaged in car racing, cycling, and playing football. Nathan got

involved in the game at the spinal unit about six months after his accident. Nathan's interview was conducted via telephone. His total EI was 117.

5.3.3 Interviews

The interviews were guided by a semi-structured interview guide (Patton, 1990). This interview guide consisted of 22 pre-established questions that focused on moods, performance, emotion awareness, regulation, and sources of stress amongst wheelchair basketball players. Questions were established by having meetings with the supervisory team, utilising the EIS and the EI theory. Questions included: "What are some of the positive emotions that you experience in sports?" "Talk to me about the most important competition you have played in?" and "To what extent would you agree with the [reference to specific emotion] results from the BRUMS questionnaire? Please explain." The interviews lasted between 30- 60 minutes and were all audio taped (with permission) for transcription purposes. Rohde, Lewinsohn, and Seeley (1997) compared telephone interviews to face-to-face interviews in assessing axis, I and II disorders and found there to be no differences between the two methods. Greenfield, Midanik, and Rogers (2000) also found no differences between the two data collection methods when exploring reports on alcohol consumption. In view of these findings the use of two methods of qualitative data collection were deemed to be acceptable for use in the present study.

5.3.4 Validity/Trustworthiness

Creswell (1998, 2009) developed eight verification methods to increase the validity of qualitative research. Seven of these methods were used in the present study:

1. Prolonged engagement and persistent observation- time was spent with the teams and participants in the current study by going to home and away games. The author also tried playing wheelchair basketball and trained with two of the teams. This was done to learn more about the sport and to develop a relationship with the players.

2. Triangulation- this was done observing players during training and games; pre and post interviews. Using different sources of data e.g. observation, and interviews to establish themes can help add validity to the study.
3. Peer review and debriefing- this was done by having the author and her second supervisor review, the interview guide and transcripts. To ensure that data were represented objectively the author and second supervisor coded the interviews both individually and during group meetings (Dale, 1996). The author and second supervisor had discussions about the themes until both agreed on the themes (Dale, 1996).
4. Clarification of researcher bias – the author noted down any bias she had. One way of discovering ones biases is by completing the interview intended for the participants. However, this was impossible as the researcher does not have a physical disability. Another way to overcome this was by analysing the data with supervisors. The biases identified were: Thinking that there will be differences on the basis of congenital or acquired disability (refer to section 5.2 for a detailed review).
5. Member checking - once the transcripts were transcribed, they were then e-mailed to each participant. The participants were asked to read for accuracy and make any necessary additions or corrections. The final draft of the report was also sent to the participants to again allow them to determine its accuracy. In all five transcripts, additional questions were included. This was done to obtain further information and clarity from the participants and getting them to elaborate. Follow up questions were answered by four of the participants. Follow up questions included: could you please give an example? Could you please explain this in more detail, or how did that make you feel and how did you cope with the situation?

6. Rich, thick description - The participants and their experiences are described in detail, this is done to convey the findings. This helps to make the results more realistic and richer and therefore, this can help add validity to the findings.
7. External auditing - an outside person, the researcher's supervisors, maintained contact with the researcher throughout the entire research process. This was done to achieve an objective assessment of the project therefore enhancing the validity of the study and results.
8. The eighth was presenting negative information, presenting information, which rejects the theory. No information was presented that contradicted the theory and therefore, this was not done in the present study.

5.3.5 Data Analysis

All interviews were transcribed verbatim. The transcripts were read and reread to acquire familiarity with the data. Once familiar with each participant's transcript, it was subjected to open coding in which the researcher went through the interview finding statements on how the individuals were feeling during successful and unsuccessful performance, and regulating emotions (Creswell, 1998, refers to this as horizontalization of data). Following open coding, the interview transcripts were explored to identify meaningful units of data, referred to as meaning units (textual description, Creswell, 1998). This complies with the phenomenological approach whereby important statements are analysed generating meaning units that give an essence of description. These meaning units are then clustered into themes (Creswell, 1998). The data analysis process was both inductive and deductive. Inductive approach was first used when coding the interviews, the interview transcripts were read and meaning units were developed. Once all interviews were coded, they were read again to then use deductive coding. Deductive coding was used to explore whether data supported previous research, theoretical propositions, and the quantitative data

collected in study 1 concerning EI, mood states and performance. The EI theory that guided this process was trait EI (Petrides & Furnham, 2001). Therefore, the interview data were explored for themes that were related to the definition of trait EI and the subcomponents of trait EI. The deductive coding also used the six subcomponents of the EIS which were appraisal of own emotions, appraisal of others emotions, emotion regulation, utilisation, optimism and social skills.

5.4 Results

The transcripts produced 46 pages of single spaced data (see appendix B). The analysis revealed four first order themes that cumulatively provided 19 second order themes (see Table 5.1). The results are presented by the first order themes and then further divided into the second order themes supported with quotations in a simple hierarchical table.

Table 5.1: First, second order themes and raw data

<i>First Order Themes</i>	<i>Second Order Themes</i>	<i>Raw Data</i>
Antecedents of Emotions	-Close game	<i>*It also depends on how close the game is</i>
	-Trying your best	<i>*I've tried my best and I can't think of an occasion where I didn't try my best so I'm happy with my performance</i>
	-Confusion	<i>*What's happening with the game, what do I need to do</i>
	-Emotion and Disability	<i>*Some people's attitude is that disabled people are aliens. We are not "normal". We should not be let out into the community.</i>
	-Emotion and Personal	<i>*I will feel 10 times worse than they are ever going to feel 'cause I think why you done that why did you do that and I take it with me</i>
	Attributes	
-On Court Events		<i>*I felt like I had eyes on the back of my head all the time...instead of having the confidence just to be thinking you're the man and keep playing</i>

Emotions and Performance	-Emotion and pre-performance	<i>*Whether you're in a good mood or not I think your mood has an impact on whether you're going to perform well or not</i>
	-Emotions and Performance	<i>*A little yeah too much aggression and you kind of go for too much but a little bit is good</i>
Emotional Intelligence	-Appraisal of Own and Other's Emotions	<i>*Frown upon that[not caring whether you won or lost] and interpret that as if you're not bothered</i>
	-Emotion Regulation and emotional expression	<i>*I can turn my moods on and off it's like a light switch</i>
	- Utilising Emotions	<i>*It's the anger of losing a match that motivates you to improve</i>
	-Optimism	<i>*If you go into anything planning to fail you will fail so you've got to be positive</i>
	-Social Skills	<i>*I am one for sort of cheering everybody else up</i>
Coping With Emotions	-Active Coping	<i>*I try to sort of you know kind of focus on what it is I'm trying to do</i>
	-Social Support	<i>*You're kinda relying on your teammates to pull you away</i>
	-Appraisal	<i>*I don't feel my disability causes me any kind of stress...you've got two choices...you either worry about it, or you get on with it</i>
	-Avoidance	<i>*How I deal with my stress is I move away from everybody</i>
	-Distraction	<i>*The best thing is to try and keep busy</i>
	-Venting	<i>*Sometimes you just can't, and you just might shout</i>

5.4.1 Antecedents of Emotion

The first order theme antecedents of emotions, presents those factors that were perceived as eliciting an emotional response. There were various factors that were perceived to provoke emotions, and sometimes these emotions were perceived to influence performance either in an optimal or dysfunctional manner. These factors were coded under six second

order themes including close game, trying your best, confusion, on court events, emotion and disability, and lastly emotion and personal attributes.

The first second order theme dealt with the end result of the game and was labelled close game. Gerry noted that the closer the game the more intense the emotions:

I think it also depends on how close the game is I mean if you're really pushing it and you worked your socks off for 40 minutes and you go and lose by 1 point then you're absolutely gutted and I have been gutted where I've you know sort of been a bit fed up and a bit pissed off and what have you.

The second theme was trying your best. All participants mentioned that they tried their best and that was all they could do. Gerry stated: "I just try and go out and try me best."

Confusion, the third subtheme was discussed by Marco and Max. Both participants noted how confusion influenced their performance in a negative manner. For Marco confusion was caused because he was a fairly new player. For Max, it was more trying to understand where the problem was coming from as he stated: "you start to question you know like where is the problem coming from...on court problems...you're not sure if it's you missing things...it's hard to put your finger on what's not going right with the team."

The second order theme on court events included events that happened during a game that caused emotional responses. Max mentioned that if he felt like he was being watched then that would hinder his performance. "...it actually brought my performance down, cause I would feel like I had eyes on the back of my head all the time." This anxiety of not performing well and having everyone watching was also mentioned by Janet.

The second order theme emotions and disability was discussed by all participants. This theme addressed other people's perspective of people with a disability, congruence with their own perceptions of disability and consequences for emotions. Marco commented that another person's attitude towards his disability could cause him to be angry and frustrated.

Gerry felt frustrated about being labelled as disabled. He commented about feeling uncomfortable being in the disability environment and having to mix “with these people because I was disabled.” Another example discussed by Gerry was in relation to his teammates of lesser ability. He noted that even though it was not their fault, their inability to catch a ball, still got him frustrated.

...and that can wind you up, it's sad to say it but it's true sometimes you know because you know you can pass the ball to them and they can drop it and that's not because of any other thing they just have a different ability to everyone else and that can wind you up sometimes.

Max and Janet both noted that having to rely on other people can be frustrating. Janet gave an example of having to travel with the team and having to rely on other people getting her on and off the bus.

The final subtheme emotion and personal attributes included a person's belief and their values; what they felt was important to them and how they may view life. In two cases a person's attributes influenced their emotion regulation and expressions. Janet was someone who hated letting people down, she got upset with herself every time she let someone down, especially teammates. She would rather miss a family wedding than training or a game. She felt that everyone else should be as committed as she was, if not she found it frustrating. It also upset her if she believed that she made someone unhappy or did something wrong, she could not deal with that very well. Gerry frequently indicated that one had two choices to let it bother you or to get on with it.

5.4.2 Emotions and Performance

The first order theme emotions and performance referred to how emotions influence or affect performance. The second order themes were emotions and pre-performance, and emotion and performance. The second order theme emotions and pre-performance had

participants identify different moods that they perceived as having the potential to influence performance when experienced prior to performance. For example, Gerry suggested “when you’re getting there whether you’re in a good mood or not I think your mood has an impact on whether you’re going to perform well or not.” Max described his perceptions regarding emotions pre-competition:

You need to be focused, gotta be nice and relaxed you are a little doped up and tensioned already ...if I’m like late for a match... I find it really hard to get eased back down and get back to that calm level ...you know you are starting your game and you haven’t got your, that’s where the heart beats coming from... a lot of anxiety and you are worried about letting the rest of the guys down ... [when you are] warm[ed] up you are totally there you know... everyone is dead relaxed and you are just in the zone.

Four participants perceived the need to be relaxed, calm and have nothing on their mind in order to perform well.

Two participants suggested that they needed an optimal level of stress to perform well and believed that being below or above the level affected their performance in a negative manner. Nathan perceived that if his stress developed into anger, this affected his performance in a negative way “your body just doesn’t think logically anymore...you have your anger, and you must vent it out on something.”

Positive emotions were also noted; positive emotions could have both an optimal and dysfunctional effect on performance. Gerry first believed that you did not need to cope with positive emotions. However, when reflecting upon this further he indicated:

If you think about the thing of focusing on what you are trying to do I think if you are in a bad mood or equally if you’re a bit giddy and a bit mucking about, pissing about then you’re probably not going to, like you say both of those emotions of being

negative... come back to the fact of when you coming in and you're doing your....you need to get into the zone, to focus on what you're doing because if you're too low or too high up here that is going to have an effect.

The second subtheme was 'emotion and performance'. In this theme participants discussed moods that could affect them during the game such as anxiety, anger and confusion. Max referred to his anxiety levels and attributed this to the feeling that everyone was watching him:

My biggest problem was, whenever I got sort of further individually, whenever I got called up and started doing a bit of Great Britain training, and that kind of stuff, and whenever I played for the juniors, whenever I get back to my club I kind of felt like there was pressure on me to perform better and it actually brought my performance down, cause I would feel like I had eyes on the back of my head all the time...like let people get on top of me instead of having the confidence just to be thinking you're the man and keep playing.

As a consequence of his perceived inability to manage these emotions Max experiences self-doubt.

Max noted that he needed to experience a bit of aggression and anticipation to perform well, however, if levels were too high, then his performance decreased. He felt that if you were too aggressive then you "force everything a little you know is not through confidence you are shooting." Max noted that he would rather like to be a bit tired as he thought he would play better.

I guess it's like it's probably a difference between muscle tiredness and head tiredness. I mean so if I felt less sleepy I'm like you know if I have a good warm up and taken a bit out of my muscles I think I would play actually better because I'm a

bit of a I'm pretty fast player it's probably good to slow down just a wee bit you know.

5.4.3 Emotional Intelligence

For the first order theme of EI, themes included regulating emotions (own and others), using emotions and being aware of your own emotions as well as emotions of others. It also incorporated how you dealt with other people's emotions. There were five second order themes, which were: appraisal of own and others emotions, emotion regulation (self and others) and emotional expression, utilisation of emotions, optimism and social skills. Emotion regulation and coping with emotions are related as both deal with managing emotions and therefore, could go under the same theme. However, it was felt that more understanding and awareness would be developed if the data was kept separate.

The first subtheme appraisal of own and others emotions included participants awareness of their emotions and others. The theme was discussed by all participants. Nathan was aware that he got stressed and annoyed with a coach if he perceived the coach to be having a personal go at him or with less able players. Nathan mentioned that "if I'm playing against people, athletes which aren't as able I don't try so hard consciously because I don't want to upset them...I want as many people to benefit from wheelchair basketball." He also noted that he can see that the coach got frustrated and understood it as he has been on the sideline and knew how frustrating it can be. However, there were times where one was not aware of one's emotions or even that one was stressed. Gerry believed that there were times where he did not realise he was stressed, and that he needed someone else to inform him that the way he is feeling is stress related.

The second theme was emotion regulation and expression of emotions. This subcomponent dealt with how participants regulated their own and others emotions, and emotional expression. For example, Janet disclosed that when tired, she found it difficult to

control her emotions; this led her to say something to a person who was annoying her and got snappy.

Some tried to hide how they felt by outwardly portraying that they were fine. Max noted that “You know you’ve been working to keep your outward appearance hello [I’m fine] like you know [where in actual fact] everything inside [you are] going raaa especially with your kid.” However, this was not always possible, though not all participants manipulated their body language to hide their emotions.

Earlier on, Marco discussed how other people’s attitudes towards people with a disability could cause him to be rather rude. “I have been rather rude. I once told a woman some time ago now, who I thought was patronising me...that I had seen a better attitude come out of a cow’s backside.” All participants mentioned that they got a bit short, sharp or agitated at times and took it out on the people in the vicinity. Gerry noted:

I’ve been playing basketball where someone has rubbed me up the wrong way and all sort of logical and rational thinking goes out the window, don’t it? And you know when you’re in there you’ll give as much as you get sometimes which I think is in many ways the natural way to react in an angry situation on the basketball court. Goes back to your adrenaline if someone rubs you up the wrong way you jump in, you’d like to think you’d pull away but you don’t always.

Janet perceived that she could control her moods:

I can turn my moods on and off it’s like a light switch, I know if I need to be in a good mood I’ll put myself into it. If I’m in a bad mood when I come here the moment I go in there I’m in a good mood ...I can do that you know cause it’s what I enjoy doing, it’s like you just turn it on.

Regulation of others emotions was also discussed. Janet tried to remove the other person’s “positiveness” to benefit herself and her team, especially if her team was losing the

game. Janet tried to wind up the opposition by reducing their concentration and influencing their mood. These could be small things such as a flick of the chair, and it motivated her even more if the referee did not notice this.

Utilisation of emotions, the third subtheme, dealt with using emotions to benefit performance. Participants mentioned that preparation was really important, especially the time just before the game, giving them time to relax and focus on the game. Nathan, Gerry, and Max describe using anger in different ways to enhance their performance. For Nathan anger could be motivational. It was the anger with himself after a match, especially if he did not perform well that affected him. Gerry felt that “channelling” aggression appropriately:

can have a positive effect on your performance, but equally if you let things get to you too much, then this could also have a negative impact on your performance as you will start to try too hard and make silly mistakes.

Max used aggression during a game, especially against a foreign team when the score was really tight and the opposition had a few really good points, then he got a bit aggressive, but this only happened against foreign teams. He commented that he felt more comfortable showing aggression against teams he rarely played against. Max believed that you do not have to cope with positive emotions but instead you “use them, you know what I mean when you are positive you’re up and your busy and you’re focused and you get stuff done and you know you’re positive.”

Optimism, the fourth subtheme, was discussed by all participants. Nathan stated: “if you go into anything planning to fail you will fail so you’ve got to be positive and try and extract the good things and ignore or make the bad things as small as possible I’m very conscious of that.” Janet indicated that she was a positive person. “I’m a really positive person that’s [why] I come away with it because I don’t like it to trouble me, if you’re not happy in life you’re not happy.”

The final subtheme, social skills, included encouraging others as well as complimenting them, it was also being aware when it was appropriate to discuss your personal problems with others. Nathan indicated that he wanted everyone to enjoy wheelchair basketball. Therefore, he did not want to put anyone off the game by winning against them or being too hard and aggressive with them. Gerry noted that if someone else was having a bad game, he tried to encourage them and tell them not to worry about it. He also mentioned that: “I am one for the sort of cheering everyone else up...to get everyone to try their best.”

5.4.4 Coping with Emotions

There were six subthemes related to coping with emotions, and they were active coping, social support, appraisal, avoidance, distraction and venting. Participants used various coping strategies to deal with emotions and stressful events such as ST, imagery, and GS.

The first subtheme, active coping, dealt with behaviours used to manage the situation causing stress. One strategy to manage a stressful situation was ST. Three participants mentioned using ST to calm themselves down. When coping with positive emotions Nathan used ST, saying things such as “hang on let's just get this into perspective, and you'll get it done, why are you getting excited about this...let's concentrate on this and do it properly.” Max spelled out a five letter word to calm down and to focus especially in a situation that causes him distress and anxiety.

Gerry noted that when he came to play a game and his teammates were winding him up, he tried to get focused and reminded himself why he was here, and what he was trying to achieve. He also removed himself from the situation to calm down “you probably know you're going to get a bit wound up...sometimes to pull away, and you know to calm down from the situation.”

Social support, the second subtheme, mentioned by all participants, included talking to others and getting guidance and support from others. Janet used to talk to her parents for emotional support or when she had a problem and needed some advice and guidance, but as both her parents passed away, she now felt she had no one. She mentioned: “I don’t want to talk to the coach don’t want to talk to the players, my friends have their own life aint interested.”

Appraisal, the third subtheme, was discussed by three participants. In this subtheme participants appraise and re-appraise the situation and then saw how they best dealt with emotions and the situation provoking emotions. Gerry mentioned that his disability at times was an inconvenience but that one had two choices in life, and he just accepted it and got on with life. Marco moved away to appraise the situation and tried to understand the other person’s stand point “everyone for a few minutes on the end quietly just thinking about things...looking at the other person’s point of view.... Maybe they weren’t so wrong and that sort of calms me down.” Nathan is a person who, as he stated, never comes away from a challenge.

Avoidance coping, the fourth subtheme, was mentioned by all the participants. In this subtheme participants remove themselves from an emotional situation either cognitively or physically. Janet noted that she was more upset with herself when she said something that she later on regretted, and went away as she liked to be on her own. Which in a team situation was not always possible, as she stated “and then [you] are put back into a team situation that’s quite difficult...it’s just trying to get back to the job at hand.”

Distraction, the fifth subtheme, was discussed by three of the participants. It entailed coping with stress by keeping busy, blocking it out and finding something else to do. To cope with the anxiety of performing well Max tried to block it out by keeping busy on court and using spontaneous and fast play so that he did not have to think about it. As Max mentioned:

the best thing is to try and keep busy like try and do something like instead of thinking of the thing that annoys you or you know staying in the place where you are annoyed ...and get yourself out of it by changing what your mind is working on.

Janet played on her game boy when stressed or prior to a game. It helped her relax her head.

Venting, the sixth subtheme, was mentioned by all participants and dealt with reacting to the stressor. The participants noted that at times one got a bit short, sharp, angry and agitated and that at times words got exchanged, or that they took it out on the people nearby. This was done to let off steam and deal with the situation, most participants mentioned that this may not always be helpful and the best way, but sometimes logical thinking did not work. Janet mentioned that she tried to stay happy but that “sometimes you just can't, and you just might shout.” Max mentioned that when he was angry he made more noise as he needed an outlet for the anger. He mentioned that aggression “comes out in noise you know and physical movements.” Marco mentioned that when he was angry and frustrated, he told people what he thought and this got them mad, and they closed the door in his face.

5.5 Discussion Section

The qualitative results exhibit support for different EI subscales. Results also indicate moods that influenced performance either in an optimal or dysfunctional manner. Lazarus (2000) suggested that emotion and stress should be considered as one topic because “emotion encompasses all of the important phenomena of stress” (p 231).

All participants were able to identify those moods they perceived as influencing their performance (Hanin, 2000, 2003; Hagtvet & Hanin, 2007; Hanin & Stambulova, 2004). Hanin (2000) mentioned that for some individuals' positive emotions such as happiness may be debilitating to their performance as was the trend in the current study. Two players perceived happiness as distracting them from focusing on the task at hand. Lazarus (2000) mentioned that any emotion could be counterproductive, unless it added additional

motivation to attend and concentrate. Another factor indicated was the level the emotion was experienced at. Participants indicated that they need to experience a particular emotion at a certain level. Totterdell (1999) mentioned that some people need to have a specific stress level to perform well. This was also supported by Hanin's (2000) IZOF model, which indicated that everyone has their own level of an emotion for optimal performance.

The current study indicated that anger was needed to perform well but if a certain level of anger was exceeded then it became dysfunctional. This was supported by Lazarus (2000). Robazza and Bortoli (2007) found that some athletes need a certain level of anger for optimal performance. The authors proposed that the athletes felt a certain amount of anger as helpful for performance as they believed they had control over their feelings and could therefore use the energising effect of the emotion on the task. In the current study anger was utilised to enhance performance as well as outperform an opponent. D'Urso, Petrosso, and Robazza (2002) found that coaches and players often utilise anger in order to outperform an opponent.

One participant indicated that if stress developed into anger than his performance could drop. This could be explained by Lane and Terry (2000) who discussed that if certain moods are combined, it could alter the influence on performance. They found that anger alone could have a positive effect on performance but if experienced at the same time as depression, then this could have a negative effect on performance. Another explanation could be Baumeister et al. (2007) theory on meta-beliefs. The authors' indicated that a person's meta-beliefs about an emotion could influence future performance, in that if a person believed that the emotion was dysfunctional towards his performance then it was likely that the emotion could hinder performance.

On court events that brought about emotional responses, such as having the feeling, they are being watched by their teammates were also noted by participants (Campbell &

Jones, 2002; Robazza & Bortoli, 2007; Jones, Swain, & Hardy, 1993; Hanton & Connaughton, 2002). Lazarus (2000) believed that anxiety in sport performance was expected, as he felt that an elite athlete's career was at stake at all times and therefore, could cause anxiety. Baumeister and colleagues (2007) mentioned that some situations could leave behind associations that could give rise to more automatic behaviours, so in the case with Max, he associated taking free throws with being watched by his teammates. Therefore, every time he was about to take a free throw, he automatically experienced anxiety. Baumeister et al. suggested that automatic responses usually stimulate avoidance tendencies. The authors indicated that the arousal component of emotion could be helpful in enhancing performance, especially if the crisis continues. They explained that the behaviour was already underway by the time the full blown emotion was experienced and therefore, the emotion would not alter the decision on how to act. However, the arousal could improve the individual's ability to carry on and hopefully succeed. In Max's case, it did the opposite, it made him too anxious, and he missed easy shots, in this case avoidance was not desirable. This could be related to Goleman's work on low confidence and being able to appraise one's own emotions. Goleman (1998) mentioned that if there was a lack of self-awareness than this was an obstacle to self-confidence. In other words, if one was not aware of one's own emotions then there was a greater chance of having a lower self-confidence level. Akerjordet and Severinsson (2004, 2007) mentioned EI was the ability to combine emotion and intelligence; it can help a person use their emotions in support to problem-solve and take decisions. A person who was more confident would be surer at making decisions.

The feeling of losing was much worse than the feeling of winning and a participant mentioned using this to motivate him to win games. This linked to Baumeister et al. (2007) who noted that people learned to anticipate emotional outcomes and therefore, behave in such a way that will pursue emotions that they prefer. The authors believed that emotions as a

feedback could potentially be very useful for goal pursuit, as it could guide behaviour towards the goal. Participants also indicated that a close game can be a lot more emotional than any other result. Baumeister et al. (2007) explained that the value of regret for learning may explain the “near miss” effect, which was when people had more regret after a near miss than after a failure that was not close to success.

A person’s personality and outlook on life can influence the way they cope with their emotions and stressful situations. Petrides and Furnham (2001) stated that trait EI was related to behavioural tendencies and self perceived abilities. This contention was partially supported by the current study as an individual’s personal attribute influenced the way in which they appraised a situation, the emotions experienced, and their regulation of those emotions. Gerry believed that you always had two choices; you could either let it get to you or not and just make the best out of the situation.

The role of EI in identifying and utilising emotions is apparent in the qualitative data. Participants discussed appraisal of their own and others emotions. People who were high in this were more sensitive to the feelings and emotions of others (Wong & Law, 2002), which was suggested in the current study. Appraisal of others emotions was linked to performance, if others were not confident enough, Nathan would help them feel better and reduce their tension. Salovey and Mayer (1990) mentioned that those high in EI would be able to regulate other people’s emotions and not let them impact their performance and emotions (Neubauer & Freudenthaler, 2005). Regulating other’s emotions, be it by enhancing pleasant emotions or by moderating negative emotions, was part of Mayer and Salovey (1997) model and was considered to be the most advanced skill (Neubauer & Freudenthaler, 2005).

One of the participants indicated trying to remove her opponent’s positive moods and attitude, especially if her team was not performing so well. A study conducted by Austin, Farrelly, Black, and Moore (2007) explored if EI had a dark side. Could those high in EI

manipulate other people's emotions? The authors found that Machiavellianism was not correlated with EI scores in the self-report measured. However, they did find that when using the MSCEIT that there was a correlation pattern which suggested that those high in Machiavellianism had problems managing and identifying their own emotions but could manage other people's emotions.

Another subcomponent of EI was optimism (Petrides & Furnham, 2000). One participant indicated that you need to be positive to win. Research showed that optimistic people perform better in most areas, such as education (Schulman, 1995), business (Corr & Grey, 1995; Seligman & Schulman, 1986), sports (Rettwe & Reivich, 1995; Seligman, Nolen-Hoeksema, Thorton, & Thorton, 1990), and politics compared to pessimistic people. Gordan (2008) mentioned that optimistic explanatory styles can lead to improved performance. Gordan investigated the link between optimistic explanatory styles and sport performance and found supporting results for the link between optimism and performance.

Baumeister et al. (2007) mentioned that automatic affective was when emotions caused behaviour; an example provided in the current study was where participants would shout and express their anger or frustration. There was no time to cognitively process the situation. One was just reacting to the situation. Later on a person then thought about it and processed the situation and learned from it for the next time s/he was in such a situation. One of the participants indicated that she could switch her moods on and off like a light switch so if she needed to be in a good mood, she could get herself in a good mood, especially when playing basketball. This linked in with Baumeister et al.'s (2007) work on anticipating emotions as she knew she enjoyed basketball, she could anticipate the emotions she was going to feel. Baumeister and colleagues mentioned that anticipation of emotional outcomes could be important, even if the person is experiencing an emotion, especially if it is an unpleasant emotion. This could motivate the person to act in a way that will convey mood

repair. Baumeister and colleagues believed that in the feedback system of emotions, emotions were an inner mechanism which rewarded and punished behaviours. They mentioned that one cannot modify emotions but one can control behaviours and thoughts. Therefore, various indirect skills are necessary to alter emotions (Baumeister, Heatherton, & Tice, 1994; Gross, 1998).

The current study also explored strategies intended to cope with emotions and to manage situations causing emotional distress. Emotion-focused coping involved managing emotional responses to stress. Emotion-focused coping strategies included avoidance, denial, emotional discharge, relaxation, acceptance, wishful thinking or social support. Participants in the current study identified the use of avoidance coping, and social support when dealing with intense and negative emotions. Problem-focused coping was defining the problem, generating another solution and then weighing the alternative in terms of the costs and benefits (DeGraff & Schaffer, 2008). Techniques used were problem-solving, planning, social support, or increasing efforts. Participants mentioned removing themselves from situations or even trying to keep busy. The players used different strategies to cope with their emotions or to get them to focus on the task at hand. Strategies ranged from playing game boy, using imagery, GS, relaxation and ST. Lane and Lowther (2005) mentioned that using imagery, ST and GS could enhance EI. The results of the current study suggested that coping with emotions should be a subtheme of emotion regulation, which is supported by Lazarus (2000), as he indicated that coping includes regulating and managing emotions.

Nathan saw each situation as a challenge and not as a threat. The way a person appraises and interprets a potential stressful event influences the way the person will respond to it (Lazarus & Folkman, 1984). Mikolajczak and Luminet (2008) found that those higher in EI are able to appraise a situation and see it more as a challenge than a threat.

The trends for the present study were contradictory compared to those found by Campbell and Jones (2002b). The authors explored the cognitive appraisal of sources of stress experienced by wheelchair basketball players and found that because athletes with a physical disability require external help to participate in physical activity, they tend not to associate low control over a situation with negative appraisal as they are used to receiving help and not always being in control. In the current study participants suggested that having to rely on others caused them more stress and frustration. Therefore, participants needed to learn how to regulate their emotions and their behaviours that were associated with them feeling frustrated when they had to rely on others.

Overall the qualitative study supported the emerging link between EI and mood states pre and during performance. The EI theory is applicable in the current population. Participants utilise EI to deal with emotional reactions caused by their disability. Practitioners utilising EI should be aware that attitudes from other people about a client's disability can cause emotional reactions, as well as different levels of disability within a team. Another issue that was raised was relying on others; this caused participant's to become frustrated. The study indicated that it would be beneficial for practitioners working with athletes with a disability in helping them develop techniques that will enhance appraisal of own and others emotions.

The current study had a few limitations, which influenced the way in which results should be interpreted and used. These are:

- a. The sample size was relatively small, and therefore, it prevents the data from being generalised particularly because of the sensitivity of the population, therefore further research is recommended.
- b. Participants had a variety of disabilities and there was also only one female in the sample. There were also different cultures in the sample (see section 4.3 as

to why this may not be a limitation). Therefore, future research should consist of equal numbers of male and female participants, as well as different disability groups. Alternatively research may focus on just one disability group such as congenital or acquired.

CHAPTER 6: Overall conclusion Phase 1

In conclusion, Hypothesis 2 and 3 were rejected, they were: that there would be significant differences between athletes with and without a disability and that there would be significant differences between athletes with an acquired disability in comparison to those with a congenital disability. Qualitative and quantitative findings supported an emerging link between trait EI and mood states associated with best and worst performance among wheelchair basketball players. Study 1 supported the contention that participants believed confusion to have a dysfunctional effect on performance and that calmness enhanced performance, study 2 also supported this trend. In both studies 1 and 2 different emotions appeared to have both an optimal and dysfunctional impact on performance. For example, happiness in study 1 was perceived to be optimal, whereas in study 2, two participants perceived it to be debilitating towards performance. Study 2 lend support to Hanin's (2000) IZOF model, that each participant has their own level of optimal functioning. The studies also lend support to the notion that positive emotions could have a debilitating effect on performance and negative emotions a facilitative effect (Hanin, 2000; Lazarus, 2000; Robazza & Bortoli, 2007).

Utilisation of emotions and optimism were linked to performance in studies 1 and 2. Results in study 2 suggested that if one could use an emotion such as anger appropriately it could enhance performance. One participant indicated being able to utilise happiness to help him perform better. In study 2 appraisal of others emotions seemed to impact performance, whereas in study 1 it seemed that optimism had a greater impact on performance. In study 2 a participant suggested that if one went into a game thinking one would fail then chances are greater to fail (Rettwe & Reivich, 1995; Gordan, 2008). As sport performance requires increased effort to succeed, optimism and utilisation of emotions could help. Therefore, practitioners should help athletes in learning how to utilise their emotions in an appropriate

manner and try and increase an athlete's optimism level. Study 2 gave examples of how EI could explain performance and how participants coped with their emotions to achieve optimal performance. These findings supported the notion that EI could help athletes attain the desirable mood states for stable and optimal performance (Zizzi et al., 2003).

Study 2 indicated that ST was one of the methods most frequently used and most often mentioned in regulating one's emotions (Depape, Hakim-Larson, Voelker, Page, & Jackson, 2006). Participants indicated that they seemed to be quite successful at using ST to regulate their emotions both during competition and training. The strategies varied from participants and dependent on individual preference and the situation they were needed for.

Practitioners needed to help athletes attain positive emotional states and reduce depression, especially happiness and vigour need to be increased. Results from study 2 indicated that appraisal of others emotions contributed in affecting mood states. Research should explore the extent to which intervention work designed to increase appraisal of others emotions, optimism and utilization of emotions is reflected with improved mood states before and during competition and enhanced performance.

Even though Hypothesis 2 was rejected the qualitative study discussed some factors that were related to athletes with a disability such as people without a disability's attitude towards disability, differences between different ability levels and relying on other people. The current studies suggest that EI has a mediating effect on performance. Therefore, if a person can improve their EI, this could then result in improving one's performance. Improving a person's EI will help them control and use their emotions to enhance performance outcomes.

The results from phase 1 suggest that culture could affect EI. Differences were found between participants from study 1 and Zizzi et al.'s (2003) baseball sample from the US, whereas there were no real differences between UK coaches and the wheelchair basketball

sample. Therefore, this suggests that culture could have a moderating effect on the link between EI and performance, instead of it being two different sports. Consequently, this suggests that the existing EI theory may need to be revised in order to accommodate these influences; this will be tested further in phase 2.

Future research should investigate relationships between trait EI and mood states in athletes with a disability across a range of sports and across different cultures. It should also explore the differences between athletes with an acquired disability and those with a congenital disability in greater detail.

CHAPTER 7: Phase 2: The Ghanaian Population

7.1 An Overview of Ghana

The Republic of Ghana is a small country located in West Africa. In July 2007, the population of Ghana was estimated to be 22,931,299 (Central Intelligence Agency [CIA], 2007). In 1957 Ghana became the first sub-Saharan country to gain independence (Salm & Falola, 2002) and was viewed as one of the most politically, economically, and socially stable countries in West Africa (Diehl, Hegley, & Lane, 2009). The next sections offer an overview of factors such as language and mood in the Ghanaian culture, how they are expressed and the value they have. The sections will also explore how these factors could influence EI.

7.1.1 Verbal and Nonverbal Languages

Verbal and nonverbal cues are ways to appraise someone's emotions. Be it by the tone of their voice or body language, it can say a lot about how a person is feeling. Matsumoto (2006a, 2006b) discussed various research that was conducted in nonverbal communication and cross-cultural research. However, as Matsumoto noted most of the research done in nonverbal communication was related to facial expression and found cultural differences not only in facial expression but also in the other nonverbal forms of communication, such as personal space. Therefore, it is important to explore and understand Ghanaian verbal and nonverbal communication as appraisal of emotions could be influenced by culture.

There are 79 languages spoken in Ghana, although the main languages are English (the official language) and nine tribal languages (Gordan, 2005). Twi is the most dominant language after English. Schools in Ghana teach in English, however, most Ghanaians spoke their local language at home (Diehl et al., 2009). Many conversations were a mixture of both English and a local language.

When greeting someone in Ghana one says "Hello", followed by "How are you?" The answer would be "I'm fine" or "I'm very fine." with the response usually given in a

monotone. In other cultures such as the UK, it could suggest that something was wrong. This is because in English culture, there is more of an enthusiastic response no matter how one was feeling (Diehl et al., 2009) and tone of voice is important. In Ghana, it is just a standard greeting which masks any personal feelings be it positive or negative (Diehl et al., 2009). Therefore, this denies Western English speakers of the clues such as tone of voice and expression to which they have to become accustomed to. Ghanaians can speak very loudly and animated, this may appear to foreigners as aggressive and confrontational. However, loudness and animation was used because the one who speaks the loudest is listened to (Diehl et al., 2009).

7.1.2 Mood and Ghanaian Culture

Previous research has found that in most languages one could translate the basic emotions (Mesquita et al., 1997). However, a study by Dzokoto and Okazaki (2006) found that in the Fante language in Ghana, there was no word for sadness or even loneliness. Furthermore, the word emotion did not exist in Fante instead the word they used was *atsinka* which covered both emotional experience and physiological states it meant “what one feels or senses inside” (Dzokoto & Okazaki, 2006 p. 127). Most of the emotion words in Fante make somatic references, such as anger in Fante was *ebufo* and literally translated it meant “chest-grow.” Dagbani, another local language spoken in the northern parts of Ghana did not have a word for emotions or a word equivalent to it like in Fante. Dagbani also did not have a word for loneliness. A lot of the words in Dagbani refer to the heart, for example, happiness was *suhipelli* meant white heart. In Fante, there were 16 emotions and in Dagbani, there were nine. Ghanaian culture was considered to be highly collectivistic (Suh et al., 1998); this could be one explanation why they are rarely alone and therefore, do not have a word for loneliness (Dzokoto & Okazaki, 2006). Another reason could be that they were able to use other words to describe that feeling.

Dzokoto and Adams (2007) mentioned that unique historical factors (e.g. slavery and colonisation) may have altered the experience and expression of emotions. Dzokoto and Adams (2007) discussed a book called *Changes* by Ama Ata Aidoo (1991), the authors used the book to analyse Ghanaian emotions and concluded that English was not sufficiently adequate to describe Ghanaian emotional experiences. However, the current researcher felt that translating the BRUMS into Twi would cause difficulty as Twi did not have as many words to describe, for example, the feeling of being tired, as the English language has. Vygotsky (1978) discussed language, culture and development suggesting that people utilise tools, such as speech and writing, to mediate their social environment, and that these tools were developed from the person's culture. Therefore, according to Vygotsky language is culture. This could mean that the mood may exist, but that they just do not have a word to describe it or use other words; however, further exploration is needed.

7.2 Ghana and Football

Sport is important to the Ghanaians, especially football; the passion for the sport is almost like a religion (Diehl et al., 2009), it is the number one sport in the country (Diehl et al., 2009). The importance of sport to the Ghanaian culture was highlighted in the 2006 World Cup when Ghana moved through to the final 16. After every match played by Ghana, the streets in Ghana were filled with people celebrating the achievements of their team, even after losing 4 - 1 to Brazil and Ghana being knocked out of the competition. It was also noticed when the African Cup of Nations was held in Ghana in 2008. Every time Ghana played, the stadiums were sold out and after the matches the people came to the streets to celebrate their team. The popularity developed an intensely competitive environment for matches at all levels, be it matches between villages to the Premier league, from youth to adult football (Diehl et al., 2009). Since the popularity of football develops an intense environment, athletes will have to develop strategies to cope with the demands placed on

them by their fans and the corresponding emotions that accompany these. EI can be one construct that can help regulate a person's emotions and cope with the emotional situations.

7.3 Emotional Intelligence and Culture

Section 2.4 indicated that there were cultural differences in emotion regulation (Mesquita & Albert, 2007; Matsumoto, 1992, 1993). Appraisal of emotions refers to the process of eliciting and differentiating of an emotional response (Scherer, 1997). Appraisal relies on cognitive processes of the environment or stimuli. Scherer (1997) found differences between appraisal profiles in Latin America and Africa in comparison to Europe, the Mediterranean Basin, Northern America, and Asia. Scherer noted that appraisal of external causation; immorality and unfairness of an emotion causing situation were influenced by culture.

A factor that influenced emotional expression and emotional experience was whether a person was idiocentric or allocentric. This reflects an individual level of individualism and collectivism, idiocentric refers to interest in oneself and having one's own way, whereas allocentric was characterised as being concerned with the interest of others. Matsumoto and Kupperbusch (2001) found that allocentrics who viewed negative films showed less negative and more positive emotions, whereas, the idiocentric participants masked their feelings in both the positive and negative films. Results also indicated that if another person was present there was more of an effect on the idiocentric sample than the allocentric sample.

Mesquita and Walker (2003) explored cultural differences in emotions and how emotional experiences could be interpreted. They suggested that cultural models are important to understand (whether one is a collectivistic or individualistic) and interpret a person's emotion. Cultural models influence differences in antecedent events, and differences in valence (pleasure and displeasure). For example, living conditions may vary as different cultures promote different types of events. Americans promote happiness and therefore, will

create events where happiness occurs. There are also differences in appraisal and expression of emotions. With appraisal Mesquita and Walker focused on agency appraisal, agency being taking responsibility for and control over the event. In Western culture claiming responsibility and personal sense are key in relation to success and personal achievement, whereas in the East Asian cultural the important factor is the interdependence of an individual and his/her social environment. Emotional experiences consist of the awareness of one's appraisal, state of action readiness, physiological upset or further cognitive components such as cognitive connotation and implications, and finally, evaluation of one's emotion. Emotional experiences involve reflecting between one's emotion and the social norm or expectations, the expected social reactions to the emotion and the implications of one's emotions for further social interaction (Mesquita et al., 1997). Other factors, which influenced appraisal of emotions, were discussed in section 2.4. To the knowledge of the current researcher, there is no research to-date that has explored cultural differences in emotion regulation and appraisal of own or other's emotions between the Ghanaian culture and other cultures.

The effect of optimism on well-being has been well researched (Andersson, 1996; Nes & Segerstrom, 2006). However, those variables which could influence optimism are not well understood (Fisher & Chalmers, 2008). Whilst the relationship between culture and optimism has been explored, the results are mixed (Ji, Zhang, Usborne, & Guan, 2004; Lai & Yue, 2000; Lee & Seligman, 1997; Sinha, Willson, & Watson, 2000). Some studies indicated cultural differences in levels of dispositional optimism (Eshun, 1999) whereas others did not (Ji et al., 2004). Nes and Segerstrom (2006) found that relationships between optimism and coping were not stable across culture. Research suggested that the cultural environment in which a person lives affects how the person perceives the world. Chang (1996) found that Asians were more pessimistic than Caucasians. The difference was explained by uncertainty

avoidance, by anticipating the worst outcome individuals are gaining a sense of control about uncertain future outcomes. Fisher and Chalmers (2008) conducted a meta-analysis. Twenty-two countries were represented in their meta-analysis. Optimum levels ranged from 73.58 (Brazil) to 48.83 (Japan); Ghana (only African country) had a score of 73.00. Fisher and Chalmers (2008) found that cultures which had lower individualism were more optimistic.

To summarise most of the cultural differences in emotions and various subscales of EI can be explained by the cultural model the people belong to. Therefore, cultural differences need to be taken into consideration as they could influence EI.

7.4 Personal Experiences and Bracketing

The author grew up in Africa; she lived there for 18 years and continues to go back frequently. She has lived in Ghana and Tanzania. She went to an international school and therefore, was always surrounded by pupils from various cultures, which influenced her a great deal. To ensure that her upbringing did not influence her research and the data analysis the researcher went through a bracketing process. The researcher expected there to be cultural differences between the two populations because one came from Ghana and the other from the UK. One reason for this expectation was because in the English language, there are many words to describe the same emotion such as being tired, whereas in other languages such as Twi, there are two words that describe this feeling. Body language is another factor, being able to read a person's body language is not always easy, especially if the person is not from the same culture as you own (Matsumoto, 2006b). It was also expected that religion would be a key tool to regulate emotions as the Ghanaian's are quite religious and seem to use prayer to deal with their problems. From personal experiences and observations, it seemed that Ghanaian's do not express their emotions in public. The assumption was made that differences would be found.

CHAPTER 8: Methods Section for Phase 2

8.1 Methods

8.1.1 Participants:

Three professional football clubs in Accra, Ghana were approached and asked if players from each club would volunteer participation in the study. There is little disability sport in Ghana and basketball is also uncommon; therefore Ghanaian footballers without a disability were selected. The author is aware that if differences are found they could be linked to culture, sport or disability. Phase 1 indicated that there were no differences between people with and without a disability therefore, the disability factor should not be a problem. Ghanaian football is not at the standard of European football and many players aspire to emigrate to play in Europe. Those who succeed usually start off playing in second division teams. Most of the players in the teams in Ghana are local, there are very few foreign players in their league, or if there are, they are from neighbouring countries. Seventy male participants (Age: 14-30 years of age, Age: $M = 19$ years; $SD = 3.06$) returned completed questionnaires. All participants spoke English and had some form of schooling and therefore, could read and write in English. Research methodologies typically identify the mean age for their sample; however, this is difficult to determine accurately with the Ghanaian population. Footballers in Ghana have two ages, their real age and their football age (Diehl et al., 2009). The phenomenon of misrepresenting ones age does not only occur in Ghana but across Africa and other countries across the world (Aforo, 2007). This issue is now being addressed using a magnetic resonance imaging (MRI) technology (Dvorak, George, Junge, & Holder, 2007). Players were asked to give their real age and not their football age, they were reminded that any information they gave the author was confidential and only mean age were indicated.

8.1.2 Measures

Refer to section 4.2.2 for a detailed description of the measures used in the current study, which were the BRUMS-32 (Terry et al., 1999; 2003) and the EIS (Schutte et al., 1998). The BRUMS was completed twice answering the questions how did you feel prior to worst performance and how did you feel prior to best performance.

8.1.3 Procedure

Questionnaires were administered on a one-to-one basis where the author supported each participant to ensure comprehensibility. As previously noted (sections 7.1.1, 7.1.2 and 2.5.4), English did not adequately represent Ghanaian emotions, consequently the researcher opted to explain the questionnaire, to each participant so that each emotion could be understood. Ten participants either did not understand a question or a word within a question. Others had problems understanding what some of the moods meant. In some cases, participants used a dictionary or asked friends to translate some or all questions into Twi. Following explanations some participants chose to take the questionnaire home and get a friend to help them with completion, an acknowledged limitation, as this could influence the validity of the study, as the friend may influence the answer given.

8.1.4 Data Analysis

Descriptive data was utilised to investigate the differences between best and worst performance. A repeated measure MANOVA was run to investigate the effects of best and worst performance. A further test investigated correlations between mood states associated with best and worst performance and trait EI. A single sample t-test was run to determine whether the Ghanaian sample was similar to the norm. Refer to section 4.2.4 for a detailed description. A repeated measures MANCOVA was run to explore to what extent EI could explain the differences in mood states by performance conditions. The results from Phase 1 were compared to the results from the current study by running a set of MANOVA's. The

reason for comparing the UK wheelchair basketball sample to the Ghanaian football sample was to identify whether there were cultural differences between the two populations however it should be noted that the differences could be related to other factors, for example, disability or sport. Phase 1 showed there were no sub-cultural differences between coaches without a disability and athletes with a disability.

8.2 Results

Descriptive statistics and repeated measures MANOVA for mood states by performance condition are contained in Table 8.1.

Table 8.1 Descriptive Statistics of Mood States before Best and Worst performance

	<i>Best</i>		<i>Worst</i>		F	Sig.	Partial Eta ²
	<i>Performance</i>		<i>Performance</i>				
	M	SD	M	SD			
Anger	2.49	3.61	5.46	4.32	36.08	>0.01	0.34
Confusion	4.27	3.76	6.79	4.02	18.42	>0.01	0.21
Calmness	9.57	3.47	7.31	3.38	17.29	>0.01	0.20
Depression	3.66	3.88	5.84	4.31	11.95	>0.01	0.15
Fatigue	4.44	3.53	6.31	3.79	15.81	>0.01	0.19
Happiness	10.30	3.38	7.60	3.97	18.72	>0.01	0.21
Tension	4.46	3.30	6.17	3.98	10.59	>0.01	0.13
Vigour	11.63	3.33	8.07	3.71	41.71	>0.01	0.38
Total Mood	1.66	1.13	-0.56	0.87	111.37	>0.01	0.62

A repeated measures MANOVA of mood states by best and worst performance indicated a significant overall effect (Wilks' Lambda $_{8,40} = .50$, $F = 7.82$, $P < .01$, Partial Eta² = .50) with significant differences on all mood subscales. Successful performance was

associated with higher calmness, happiness and vigour coupled with lower anger, confusion, depression, fatigue, and tension.

Table 8.2 Descriptive Statistics for EI

	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>SD</i>
Total EI	95.00	155	125.66	13.50
Appraisal of Others	2.00	4.71	3.25	0.58
Appraisal of Own	2.00	4.80	3.79	0.65
Optimism	2.60	5.00	4.19	0.52
Emotion regulation	2.50	4.75	3.91	0.60
Social Skills	2.43	4.29	3.32	0.40
Utilisation	2.50	5.00	4.02	0.54

The descriptive statistic information in table 8.2 showed total EI ranged from 95 to 155 ($M = 125.66$, $SD = 13.50$), showing a great range within the sample. Appraisal of own and others emotions had the lowest minimum scores however social skills had the lowest maximum scores.

Table 8.3: Correlations between Total EI, mood states prior to best (B) and worst performance (W)

	<i>Appraisal of Others</i>	<i>Appraisal of Own</i>	<i>Optimism</i>	<i>Regulation</i>	<i>Social Skills</i>	<i>Utilisation</i>	<i>Total EI</i>
Positive B	0.35**	0.12	0.22	0.21	0.34**	0.21	0.33**
Positive W	-0.04	0.02	0.05	-0.03	0.10	0.04	0.03
Negative B	-0.30**	-0.20	-0.36**	-0.20	-0.16	-0.22	0.33**
Negative W	-0.01	-0.02	0.00	0.23*	0.13	0.05	0.07
Total B	0.41**	0.21	0.38**	0.26*	0.32**	0.27*	0.42**

Total W	-0.02	0.03	0.03	-0.18	-0.03	-0.01	-0.03
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** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Correlations showed that total mood in worst performance (Total Worst) did not correlate with any of the EI subscales or total EI (see Table 8.3). However, total mood states in best performance (Total Best) was significantly correlated with all EI subscales except for appraisal of own emotions. Total EI correlated with positive moods in best performance (Positive Best) and negative moods in best performance (Negative Best). All EI subscales and total EI significantly correlated with each other except for optimism and appraisal of own emotions which were not significantly correlated.

Table 8.4: Correlations between mood states prior to best performance (B) and worst performance (W) and EI subscales

	<i>Appraisal of Others</i>	<i>Appraisal of Own</i>	<i>Optimism</i>	<i>Regulation</i>	<i>Social Skill</i>	<i>Utilisation</i>	<i>Total EI</i>
Anger B	-0.27*	-0.12	-0.33**	-0.17	-0.07	-0.25*	-0.28*
Confusion B	-0.37**	-0.24*	-0.39**	-0.22	-0.19	-0.20	-0.37**
Depression B	-0.23	-0.14	-0.34**	-0.13	-0.18	-0.23	-0.28*
Fatigue B	-0.09	-0.16	-0.25*	-0.19	-0.08	-0.14	-0.20
Happiness B	0.33**	0.13	0.07	0.14	0.26*	0.15	0.26*
Tension B	-0.26*	-0.18	-0.18	-0.10	-0.13	-0.10	-0.23
Vigour B	0.30**	0.21	0.35**	0.35**	0.40**	0.34**	0.44**
Depression W	0.10	-0.04	0.10	0.25*	0.19	0.13	0.15
Tension W	-0.07	0.11	-0.04	0.23*	0.16	0.02	0.08
Vigour W	0.13	0.26*	0.19	0.23	0.28*	0.20	0.29*

** Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Calmness prior to best performance did not correlate significantly with any of the EI subscales including total EI (it was not included in table 8.4). Anger, confusion, calmness, fatigue and happiness prior to worst performance did not correlate with any of the EI subscales including total EI. Total EI significantly correlated inversely with anger, confusion and depression prior to optimal performance and significantly correlated with vigour in best and worst performance. Vigour prior to optimal performance correlated with all EI subscales except for appraisal of own emotions (see Table 8.4).

MANCOVA results indicated that when trait EI was introduced as a covariate the difference in mood states by condition was no longer significant suggesting that EI could explain these differences (mood state difference: Wilks' Lambda $_{8,56} = .81$, $F = 1.69$, $P < .12$, Partial Eta² = .19). There were no significant interactions between the six EI subscales and performance. However, the Sphericity Assumed test indicated that differences by mood were associated with emotion regulation and appraisal of others emotions. A MANOVA was run to explore whether there were cultural differences (Ghanaian and UK population) between mood states prior to best performance (Wilks' Lambda $_{8,112} = 0.64$, $F = 7.75$, $P > 0.01$, Partial Eta² = 0.36) and worst performance (Wilks' Lambda $_{8,112} = 0.71$, $F = 5.80$, $P > 0.01$, Partial Eta² = 0.29). A MANOVA was also run to explore cultural differences between culture and EI (Wilks' Lambda $_{6,114} = 0.71$, $F = 7.73$, $P > 0.01$, Partial Eta² = 0.29). Results indicated that there were cultural differences in pre performance mood states and EI. A single sample *t*-test was used to determine whether there was a difference in EI between the Ghanaian population and normative data (Lane, Meyer, et al., 2009). The *t*-value for the Ghanaian sample was 2.5; it was found that there was a significant difference between the current sample and that of Lane, Meyer et al. (2009), significance was less than 0.05, suggesting that the mean of the current sample of 125.66 is greater than Lane, Meyer et al.'s of 121.62.

8.3 Discussion

The aims of the present study were to test EI and mood states prior to performance in a Ghanaian football sample, as well as explore cultural differences between the UK sample from Phase 1 and Ghanaian sample. Results indicate that appraisal of others emotions influenced Ghanaian football players. This suggests that the moods and emotions of others may affect the way the Ghanaian football players perform. Correlation results indicate the appraisal of others emotions and pre-performance mood states prior to best performance were linked. This could be related to the collectivistic cultural model as Ghanaians are seldom alone (Dzokoto & Okazaki, 2006), therefore, other people's emotions could be influential. Another factor is that collectivistic cultures value the groups needs and therefore, this could influence the emotions expressed and experienced, as a person may not want to influence the group dynamics in a negative manner. Allocentrics showed more emotions, especially positive emotions, whereas idiocentric people masked their emotions (Matsumoto & Kupperbusch, 2001). Thus Ghanaians, who are allocentrics, expressed their emotions which, in turn could have more of an effect on others.

Comparing the results of the current study to those reported by Devonport et al. (2005), differences were found. The authors explored emotional states in athletes prior to best and worst performance. However, Devonport et al. (2005) did not include happiness and calmness in the scale, it should also be mentioned that the authors did not indicate which country the participants were from. All mood states except vigour and tension were higher in the Ghanaian population in best performance. All mood states except tension were higher in worst performance in the Ghanaian sample. Tension was lower in the Ghanaian population in both best and worst performance.

Exploring the mean scores of the BRUMS best and worst results and comparing them to the results of phase 1, there were several differences between the two groups. When

comparing the trend and which emotions affected best and worst performance, then there were a few similarities, confusion, depression, anger, fatigue all had a negative effect on performance, whereas happiness, calmness and vigour were associated with positive performance. The Ghanaian's scored a lot higher on the negative mood states in both best and worst performance compared to the UK sample. This is an interesting finding as according to Matsumoto (1990) collectivistic cultures display positive emotions more than negative emotions. It could be that Ghanaians may display more positive emotions but actually need to feel more negative emotions. Further research is needed to explain these findings. As previously noted in the Ghanaian culture there were no translations for some emotions (Dzokoto & Okazaki, 2006). Another reason could be that, as Guest (2007) stated, people from different cultures could feel different emotions according to the situations, and therefore, could influence performance in a different way.

Another finding with the Ghanaian population was that not a single mood state correlated with an EI subscale in both optimal and dysfunctional performance. This contrasts with the wheelchair population; moods had some significant effect with appraisal of own emotions and social skills in both successful and unsuccessful performance. An explanation for this could be those with a higher EI remember moods, which influence performance more frequently and vividly. Another explanation could be linked to Hanin's (2003) work on meta-experiences. Participants recalled emotions in optimal performance more strongly and so therefore the correlation in optimal performance mood states was stronger with EI subscales compared to worst performance.

Zizzi et al. (2003) investigated global EI but did not consider each of the individual subcomponents. The mean score for total EI for Zizzi et al.'s study was 128.6, whereas in the current study it was 125.66. These differences could be attributed to cultural differences as the six subscales are influenced to some degree by culture. Thelwell et al. (2008) explored EI

in coaches; however, they did not look at total EI. They reported the mean scores for the individual subscales which ranged from 3.6 to 3.97 (with SD being between 0.38 and 0.47). In the present study, the mean range for the EI subscales was 3.25 to 4.19 (with SD ranging from 0.40 to 0.65). A one sample t-test was run comparing the Ghanaian sample to that of Lane, Meyer et al (2009) this indicated that there was a significant difference between the two samples, which supports the notion that there may be cultural differences. MANOVA results comparing the Ghanaian and the UK sample indicated that there were significant differences between the two populations.

Exploring the results of phase 1 and phase 2, appraisal of others and own emotion was lower in the Ghanaian sample. Optimism was higher in the Ghanaian sample, which was supported by Fisher and Chalmers (2008). They found in their meta-analytical study that Ghanaians scored higher on the Life Orientation Test (LOT, Scheier & Carver, 1985; Scheier, Carver, & Bridges, 1994) in comparison to most of the other populations. Emotion regulation was similar in both samples, social skills was slightly higher in the Ghanaian sample. However, as Ghanaian culture is considered to be collectivistic (Suh et al., 1998) the researcher would have thought the difference to be greater than it was. This could be due to the questions asked in the EIS (Schutte et al., 1998). Utilisation was higher in the wheelchair basketball sample. A reason for this could be culture related. Ghana is considered to be a more collectivistic culture thus showing negative emotions or using negative emotions is not accepted (Matsumoto & Kupperbusch, 2001) and therefore, may not be expressed or even utilised.

The current study had a few limitations which were:

- a) A relatively small sample size which therefore prevents generalisations of findings.

- b) The language barrier; the study was conducted in English, maybe different results would have been found if the questionnaires would have been translated into Twi. As earlier mentioned, English is not the best language to express emotions in Ghana.
- c) Age was also an issue as stated earlier in the methods section. There are two ages in Ghana the participant's actual age and the participant's football age. Maybe age should have been standardized so the age that is reported on their club cards should have been used.
- d) Another limitation was that some participants did not understand the questionnaires and needed the researcher to explain it to them.
- e) A further limitation is that some participants asked friends to help them translate the questionnaires which could result in different people having explained the questionnaire in different ways, which reduces the robustness of the study. If only one person had explained the questionnaire than this could have controlled it a bit better as the same meaning would have been given to the questions.
- f) A further limitation related to the different stages of emotional development, as a 14 year old is likely to score much lower than a 30 year old on the EIS (Mayer et al., 1999).

Future research should explore the robustness of the EI model in different non - English speaking cultures. This can be achieved by translating the EIS questionnaires into other languages and comparing this against results attained using the English version, or using a similar method to Terry, Potgieter et al. (2003) who developed the Stellenbosch Mood Scale (STEMS). The STEMS is a dual-language of mood, which is based on the POMS-Adolescents (Terry et al., 1999). On the one side of the questionnaire, the mood

words are in English on the other side, they are in Afrikaans and in between the two languages is placed the 5 point likert-scale. However, this may not be possible as some of the mood words do not exist in Twi. Future research should design cross-sectional and longitudinal studies, so that the researchers can emerge themselves into the culture. Research should explore if there is any change in EI over time in the group that they are researching. Another issue that needs to be explored are the factors that influence the development of EI, exploring whether they are different across different cultures.

Practitioners need to help Ghanaian athletes attain positive emotional states and reduce anger, confusion, fatigue, tension, and depression. It appears that increasing happiness, calmness and vigour will be beneficial for performance. Results from the study indicated that appraisal of others emotions and optimism are particularly influential in affecting mood states before optimal performance. In worst performance, appraisal of own emotions, emotion regulation and social skills exerted a significant impact upon pre-performance states. Research should investigate whether interventions, which enhance appraisal of others emotions and optimism also influence mood states prior to and during performance.

In conclusion, findings support an emerging link between trait EI and mood states associated with best and worst performance among Ghanaian footballers. The results also suggest that there were cultural differences in EI. For example, appraisal of others emotions seems to play an important role in the Ghanaian sample. The results indicated that EI subscales were not correlated with the same mood states prior to best and worst performance. Another difference was that the Ghanaians experienced higher negative emotions compared to the UK sample. Could this mean that the EI theory is not applicable across the two cultures? Could it mean that the BRUMS is not the right measure to assess mood states in the Ghanaian culture? The acknowledged limitations of the present study might detract from the

generalisability of findings, therefore further research is needed. Future research should investigate relationships between trait EI and mood states in Ghanaian athletes across a range of sports, gender and disability.

CHAPTER 9: Phase Three: The Intervention

The final phase was to teach the Ghanaian and the UK wheelchair basketball sample intervention techniques, such as GS, ST, relaxation and daily diaries that could help them enhance their EI. Whilst there is evidence of the effectiveness of EI training programs in occupational settings (Stein & Book, 2006), there is limited research that explores training programs in sport (Meyer & Fletcher, 2007).

As emotion regulation is part of EI (Mayer & Salovey, 1997; Salovey & Mayer, 1990), one method to help regulate emotions and successful performance is psychological skills (Thelwell, Greenlees, & Weston, 2006). Improving psychological state variables such as pre-competitive anxiety (Fletcher & Hanton, 2001), and self-efficacy (Lowther, Lane, & Lane, 2002) can lead to enhanced performance. Recent research showed the effectiveness of utilising psychological skills in developing EI (Lane, Thelwell, et al., 2009). Results found that ST was associated with appraisal of own and other's emotions, emotion regulation, and utilisation. GS was associated with utilisation of emotions and relaxation correlated with emotion regulation. Thus it was concluded that participants high in EI were more likely to utilise psychological skills. Psychological skills could also be used to enhance EI (Lane, Thelwell, et al., 2009). Therefore, enhancing EI should increase an athlete's ability to cope with a number of stressors, such as those experienced in competition and in everyday life.

9.1 Emotional Intelligence Interventions

Meyer and Fletcher (2007) argued that sport psychologists should try to enhance EI in athletes. As section 2.6 indicated, EI was related with enhanced performance (Van Rooy & Viswesvaran, 2004), well-being, and stress management (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). Previous research has found that EI is an important variable in leading a successful and happy life (Nelis et al, 2009).

Sport provokes a great deal of emotions, therefore, being able to regulate ones emotions is important. Hanin and colleagues (1995, 1997; 2000) as well as Lane and colleagues (2000) have discussed the various effects emotions can have on performance. Therefore, it would be important to be aware of one's own emotions and be able to regulate and utilise those emotions that promote optimal performance (Meyer & Fletcher, 2007; Botterill & Brown, 2002). It is important to determine whether EI can be enhanced, as literature indicated EI can be beneficial for well-being, job/academic success (Nelis et al., 2009), sporting performance and the quality of relationships, there has been a growth in interventions intended to enhance EI (Matthews et al., 2002; Grant, 2007). According to research limited EI intervention programs are based on theoretical models or have been rigorously tested (Nelis et al., 2009; Matthews et al., 2002).

Cherniss (2000) gave examples of different training programs which could help enhance EI; for example, management training, communication and empathy training with physicians, teaching police to handle conflict, stress management training, self-management training. Cherniss also discussed that it was important to prepare the learner for change; if the person was not willing to change, then there was not much point in trying to implement the training program. Furthermore, Cherniss mentioned that it was important to evaluate change, to maintain and encourage change.

Grant (2007) investigated the effects of two coaching training programs on coaching skills and EI levels. EI was assessed pre and post intervention using the EIS (Schutte et al., 1998) and coaching skills were assessed by the goal-focused coaching skills questionnaire (GCSQ; Grant & Cavanagh, 2007). The 13-week intervention consisted of 23 participants meeting weekly for two and a half hours. The theoretical components were: ethical and professional issues in coaching, theories of communication, goal setting theory and practice, and applied solution-focused coaching skills. The applied components were: giving and

receiving feedback, structured coaching and communication skills practice, and actual coaching sessions. Participants practised their skills during the coaching sessions and receiving feedback on those. Participants were also required to conduct formal workplace sessions and then write a reflective piece based on their experiences. Results indicated that EI increased post intervention.

The two-day program had a three week break between day one and day two of the program (20 participants). The same coaching skills as in the 13-week program were implemented in a compact fashion. Coaching skills increased significantly in the two-day program but EI did not. Grant (2007) concluded that the 13-week program was more effective in enhancing both coaching skills and EI. This supported the notion that EI can be enhanced, but as part of personality a longer period is needed to modify an individual's EI (Perez et al., 2005). It also suggested that EI did not need to be the targeted element in the intervention as with Grant's (2007) study the main focus was to alter coaching skills, which were behaviours associated with EI. One limitation with Grant's study was that data was collected pre and post but not during the intervention itself. Therefore, it cannot be determined how fast and when exactly change occurred.

Nelis et al.'s (2009) intervention study had 19 participants in the training group and 18 in the control group. The intervention incorporated teaching theoretical knowledge and emotions and having participants apply emotional skills to everyday life. The sessions were developed around Mayer and Salovey's (1997) four branch model (see section 2.5.1). Furthermore, they included work done by Scherer (2001) on multiple components of emotions and Ekman and Friesen (1971) work on facial expression as well as Gross's (1998) work on emotion regulation. EI was assessed using the French version of the TEIQue (Petrides, 2009). The researchers also assessed emotion regulation (Emotion Regulation Profile Questionnaire; Mikolajczak, Nelis, Hansenne, & Quoidbach, 2008), regulation of

others emotions (Emotional Management Abilities; Freudenthaler & Neubauer, 2005), emotion identification (Dimensions of Openness to emotional experiences-trait version; Reicherts, 1999; Toronto Alexithymia Scale; Bagy, Parker, & Taylor, 1994), and emotional understanding (Situational Test of Emotional Understanding; MacCann & Roberts, 2008). The intervention itself was four weeks long and consisted of sessions once a week for two and a half hours each. Sessions included short presentations; role plays; group discussions; two-person works; and readings (see Nelis et al., 2009 for a detail plan of the training). The participants completed the questionnaires 1 week prior to the first session, at the end of the fourth session and six months after the intervention. Participants were also asked to complete diaries daily about their emotional experiences. Participants of the control group completed the same measures at the same time but did not receive the intervention. Results indicated that EI could be enhanced and that the changes were persistent.

Devonport (2007) developed a longitudinal coping intervention (12 months) for elite netball players. The aim was to increase an individual's coping capacity and EI. The following EI components were addressed: self-awareness, self-management, social-awareness and relationship management. Twelve participants were assigned a mentor who helped them through the intervention packs. Devonport utilised a 3-stage model to develop the emotional and social competencies. The first stage was to prepare the participants for change, here the participants and mentors assessed EI sub-components and identified those where improvement was needed. The EQ-i was completed during this stage. The guidelines developed by Bar-On (2002) were used to help develop EI. EI components were: intrapersonal scale, interpersonal scale, stress management scale, adaptability scale and general mood (refer to Devonport, 2007). Stage two was the training phase and the third stage was the transfer and maintenance phase. Devonport indicated that those who utilised the EI pack perceived a number of benefits including greater emotional awareness, emotion

regulation, improved communication skills and enhanced ability to cope with and lead others. It is not clear when and how often the participants completed the EQ-i (Bar-On, 1997).

9.2 Psychological Skill Usage in Culturally Diverse Populations

Section 3.3 explored differences in psychological skills between athletes with and without a disability (Lowther, Lane, & Lane, 2002; Cox & Davis, 1992). As well as finding differences between athletes with a congenital disability and an acquired disability (Campbell, 1995) and finalists and non finalists (Fung & Fu, 1995), however phase 1 found no differences between the two. Other studies have conducted research on the role culture plays in psychological skill usage (Anshel et al., 1997; Elbe, 2003; Kim & Gill, 1997; Hayashi & Weiss, 1994; Marsh et al., 2002; Cox & Lui 1993; Wang et al., 2003).

Xinyi, Smith, and Adegbola (2004) performed a cross-cultural comparison of six mental traits (competitive trait anxiety, trait self-confidence, concentration, mental preparation skills, achievement motivation, and leadership skills) usage among Singaporean, North American, Chinese, and Nigerian professional athletes. Trait anxiety and mental preparation scores were significantly different between Chinese and Singaporean athletes. Chinese had the lowest scores for mental preparation. There were also significant differences on all the mental skills between North American and Singaporean athletes; and between the North American and Chinese athletes. The North American sample scored higher on all the six mental variables. No differences were found between North American, Chinese, and Nigerian athletes in competitive trait anxiety. This suggested that there were cultural differences in athletes' mental preparation for competition. Si, Rethorst, and Willimczik (1995) examined attribution theory applied to German and Chinese students. They found that Chinese students attributed success and failure in sports as more internal and controllable compared to their German counterparts. The authors proposed that this was because achievement motivation in Chinese culture was more socially orientated, so standards of

performing well were external related, whereas in Western cultures it was more individual motivation. Studies have also explored psychological skill usage among Chinese athletes (Cox & Liu, 1993; Wang, Huddleston & Peng, 2003). Wang et al. (2003) found that psychological skill usage among Chinese athletes was low, whereas Cox and Liu (1993) found that Chinese athletes scored higher in confidence, motivation, and total psychological skills in comparison to their American counterparts.

9.3 Present Study

The intervention developed focused on training athletes how to use specific skills to regulate their emotions, to utilise their emotions, and to appraise their own and others emotions. The current study sought to enhance the six subcomponents of EI. ST, GS, relaxation and diaries were used to enhance EI. Lane and Lowther (2005) found in their study that ST and GS significantly correlated with total EI.

Extensive research has been conducted in exploring the relationship between ST and performance (Rogerson & Hrycaiko, 2002; Halliwell, 1990; Mahoney & Avenier, 1977; Orlick, 1986; Landin & Hebert, 1999; Martin, 1993). Rushall (1984) proposed that ST should be task specific, positive and it should utilise mood words. ST can aid in preparing for performance, focusing attention, and creating best mood for performance (Bunker, Williams, & Zinsser, 1993; Williams & Leffingwell, 1996). It is considered to be an important technique for reasoning or problem-solving as well regarding feelings in self and others, which is part of EI (Depape et al., 2006).

Morin (2005) stated that the most important factor contributing to self-awareness was inner speech (self-talk). By self-awareness, Morin meant having the capability to become the object of your own attention. It is where the person “actively identifies, processes and stores information about the self” (p. 117). Therefore, it included being aware of own emotions, behaviour and general physical appearance, which are all part of EI. Morin mentioned that

when a person used ST, they can verbally identify, process, and store information about an individual's current physical and mental states, this included past and present behaviours. Morin proposed that a person can become self-aware when engaging in ST. Morin proposed that (a) ST causes self-awareness, (b) runs parallel to self-awareness and sustains it or (c) maybe ST is triggered by self-focus. Arathoon and Malouff (2004) conducted a study to minimise decreases in positive affect associated with losing. They got athletes to select one of five positive thoughts (e.g. something you did well in the game) and one of six coping thoughts (e.g. better luck next time) after losing a game. Results showed that there was a significant reduction in the decrease in positive affect compared to the control group. This supports the contention that positive ST can improve affect.

Depape et al. found that ST assessed by the self-talk scale (STS; Brinthaupt, Hein, & Krammer, 2005) and the self-verbalization questionnaire (SVQ; Duncan & Cheyne, 1999) was correlated with some of the subcomponents of EI. Total EI significantly correlated with spatial search (SVQ), behavioural-organisational (SVQ), affective (SVQ), and self-encouragement (STS). The four subscales of EI that Depape et al. (2006) assessed were self-management of emotions, social skills, empathy and utilisation of emotions. All four EI subscales correlated with ST. This supported the notion that ST and EI were correlated and therefore, ST was utilised in the current intervention study, participants in section 5.4 also indicated using ST to regulate emotions.

Research has shown the effectiveness of GS in enhancing sports performance (Locke & Latham, 1985; Thelwell et al., 2006, O'Brien, Mellalieu, & Hanton, 2009). Bawden (2006) suggested that GS could enhance performance for athletes with a disability; in learning not to think that they may be limited because of their disability. Limited research has explored EI and GS; however a study was conducted in Nigeria with visually impaired participants investigating how to increase motivation to work by either EI or GS (Eniola & Adebisi,

2007). Results indicated that EI and GS both contributed to an increase in motivation levels to do more work. Grant (2007; see section 9.1) used GS to enhance EI, and Lane, Thelwell, et al. (2009) also found correlations between EI and GS. Sutton (2004) mentioned that for a person to regulate their emotions they need to have goals. Sutton (2004) mentioned that for teachers to reach their academic goals, they may need to regulate their negative emotions. Therefore, GS should be used to help emotion regulation.

Research has shown that relaxation can help with sports performance (Williams & Harris, 1998). Bawden (2006) indicated that relaxation needed to reflect the disability of the athlete. This was because athletes may not have control over certain body parts, and when these were included in the progressive muscular relaxation (PMR) script it could cause frustration and therefore, instead of the athlete relaxing the exact opposite could happen. Bawden also indicated that when using deep breathing one had to be aware of those athletes that had limited use of abdominal muscles. Lane, Thelwell, et al. (2009) found that emotion regulation and relaxation were correlated and therefore, relaxation can potentially regulate emotions. Relaxation was also mentioned by a few of the participants in phase 1 study 2, as a method, they used to regulate their emotions. Bracket & Katulak (2007) indicated that deep breathing was used frequently to regulate emotions.

Daily diaries have been used frequently in health psychology; participants wrote about emotional experiences (Hopko, Armento, Cantu, Chambers, & Lejuez, 2003; Pennebaker, 1997). Nelis et al. (2009) used diaries for their intervention to get participants to understand their emotions. Participants had to report on one emotional experience and then analyse the emotional experience using the theory they were being taught. The Scottish Institute of Sport (SISport) suggested using diaries to raise emotional awareness (SISport, 2008). They suggested recording emotions over a period of time helped indicate which emotions push you to work harder. Bracket and Katulak (2007) got participants to write about an event that

happened during the day to raise emotional awareness of own and other's emotions. Studies were found that used emotion diaries however, the research did not indicate what the data was used for or purpose was of the diaries (Slaski & Cartwright, 2003).

The aim of the present phase was to enhance EI using the following psychological skills, ST, GS, and relaxation. Another aim was to explore cultural differences between the UK wheelchair basketball sample and the Ghanaian football sample. It was hypothesised that a) psychological skills will help enhance EI, b) the daily diaries will raise emotional awareness in both self and others, c) ST will help with emotion regulation as well as raising emotional awareness, c) relaxation will be utilised for emotion regulation, d) GS will be used for utilisation of emotions and e) that there would be cultural differences.

CHAPTER 10: Study 1-The Wheelchair Basketball Sample

10.1 Method

Researchers demonstrated the utility of EI in attaining and maintaining performance states desirable for optimal sports performance in athletes without a disability (Lane, Soos, et al., 2005; Zizzi et al., 2003). Chapters 4 and 5 explored perceptions of EI and sports performance among wheelchair basketball athletes, results suggested that experiences of athletes with a disability profiled were comparable with those evidenced among athletes without a disability. The current study implemented psychological skills to enhance EI.

10.1.1 Participants

At the start of the season, 13 players were eligible for inclusion in the present study. Due to a combination of injury, dropout and motivational issues, six Caucasian players (female $n = 1$) completed the intervention. Age range was between 14 and 56 years ($M = 37.70$, $SD = 14.24$). See Table 9.1 for participants' demographic information.

Table 10.1: Participant demographics

<i>Name*</i>	Age	Gender	Disability	Onset of Disability	Classification	Years of playing
<i>Phil</i>	56	Male	Paraplegic	Unknown	1	39 years
<i>Jesse</i>	38	Female	Rare skin disease on her feet	25 years ago	?**	4 months
<i>Ryan</i>	31	Male	Cerebral Palsy	N/A	2	14 years
<i>Craig</i>	45	Male	Paraplegic	16 years ago	1	13 years
<i>Marco</i>	42	Male	Spina Bifida	N/A	2.5	3 years
<i>Richard</i>	14	Male	hydro cefuls, bronchoplumary dysplasia	?***	3	1 year

*Names are pseudonyms, ** Person was not given a classification as a new player, ***

information was not given to the researcher, N/A not applicable

10.1.2 Measures

10.1.2.1 Emotional Intelligence

Trait EI was assessed using the EIS (Schutte et al., 1998). The EIS a 33-item scale which is rated on a 5-point scale anchored by 1 = “strongly agree” to 5 = “strongly disagree”. In the present study, total trait EI was calculated as well as the six subcomponents of EI. Refer to section 4.1.3 for further details on the questionnaire. As research in the past (see Chapter 9) assessed EI pre and post intervention, the researcher decided to assess EI pre, during and post intervention. This was done to identify how soon EI was enhanced.

10.1.2.2 Self-talk

A ST measure was developed to measure self-efficacy regarding the use of emotion focused ST (see appendix C), as no emotion focused ST measures existed. In developing a self-efficacy measure, the guidelines offered by Bandura (1997) were utilised as these have demonstrated practical utility in previous research (Lane, Devonport, & Horrell, 2004; Lane, Devonport, Milton, & Williams, 2003). An open-ended focus group was held with the team during their second meeting to explore which competencies were needed for successful emotion focused ST. The question asked was ‘what do you believe are competencies you need for successful emotion focused self-talk?’ The next step was to use the competencies and develop a self-efficacy measure. The phrase ‘how confident are you in your ability to [*insert competency*]’ was used as the basis for developing the self-efficacy measure (Bandura, 1997). It is acknowledged that Bandura (1997) used a 100-point scale (1-100) to assess confidence, arguing that efficacy estimates are best assessed using a rating scale analogous to a percentage. It was decided to anchor no confidence around the number zero. Logically, participants should find it easier to understand that zero refers to no confidence at all, rather than a score of one refers to no confidence at all.

10.1.3 Procedure

All volunteer participants completed informed consent forms before undertaking research related activities. In order to attain baseline data prior to engagement with interventions, participants completed the EIS (Schutte et al., 1998). The ST measure was completed in week three. Participants were then asked to maintain a daily diary for the duration of the intervention, as the author wanted to increase participant's awareness of how emotions could potentially influence performance. They were asked to record emotions experienced, perceived causes of emotions, behaviours intended to regulate emotions, and perceived outcome. The participants could choose how to keep the diary, for example, by sending a text message, writing in a book, or another medium. With one exception (who sent text messages) participants used a book or piece of paper to maintain their diary. Individual participants and the author met every Tuesday during their training session to discuss diary entries. Following three weeks of diaries, participants again completed the EIS to establish the impact of this awareness raising exercise on EI profiles. They then engaged with the intervention which lasted one season (end of August to beginning of April). To initiate the intervention, participants and researcher worked together to explore existing use of emotion focused ST and ways of enhancing emotion focused ST. The intention was to develop the use of this strategy in managing emotions. Participants practiced ST for the duration of the intervention which lasted 24 weeks, both in the presence of the researcher and in her absence. The diary was maintained to record participants' use of the ST in managing emotions. During the 24 weeks of the intervention, ST was introduced in week 3. Emotion focused goals were introduced in week 4. Relaxation was introduced in week 21. For ethical reasons all participants received the intervention package (Zaichkowsky, 1980). EIS data were collected in weeks 1, 3, 17, and 25; ST questionnaire data were collected in weeks 3, 17, and 25; Diary data were collected in weeks 1 to 24. All three psychological skills were used until the end of

the intervention. Post intervention structured interviews were conducted in week 26. The purpose of the interviews was to gain insight into perceptions of the interventions efficacy.

10.1.3.1 Pre-Intervention

Baseline data were collected for EI using the EIS (Schutte et al., 1998). Participants were asked to maintain a diary every day for three weeks. The main focus was for them to document how they felt and why they felt that way. They were also asked to write down their goals for the day and then reflect on the attainment of these goals the following day. This was done to encourage participants to become aware of how their moods could potentially influence their goals and performance. The diary entry was used to assess the participant's awareness of their own emotions and the impact of their emotions on their performance. Diary entries were discussed with the participants and were related to the EIS scores.

10.1.3.2 Intervention

Self-talk: Dairy entries were used to facilitate an educational workshop on ST. Participants were asked to write down ST statements they typically used, whether they were positive or negative, how often they used ST, and if it was more internal or external. This was done to raise awareness of ST usage in everyday life and sport. The educational workshop took place in week three introducing the topic of ST and how it could be used to control or use one's emotions in a game and practice situation. After the educational session, the researcher met up with individual participants and discussed what they wanted to work on and what word they would use (Zinsser, Bunker, & Williams, 1998) such as "relax" or "stay calm". Following this workshop, diaries and individual sessions were used to explore whether participants were using ST talk. Participants were asked to write in their diaries: if they felt ST helped, the struggles they had with using ST, and for what they used ST. Tasks that participants were asked to do were: using ST to regulate their emotions, for example, if they felt they were too nervous when taking a free throw, they were asked to use ST to calm down.

For optimism participants were asked to develop positive ST statements, such as “I can do it”.

Goal setting: An educational workshop was given in week 4 introducing the topic of GS. Explaining what GS was and how it can be used, participants were given a diagram (see appendix D) to demonstrate how they could record their emotion focused goals and how they could achieve those goals. Participants were asked to use SMARTER (Specific, Measurable, Adjustable, Realistic, Time frame, Enjoyable, and Recorded) goals when developing emotion focused goals for the season. Participants were asked during their individual sessions if they were working on reaching their goals and what their short-term goals were. Goals that participants could set were either to improve individual EI subscales such as becoming more aware of other people’s emotions, or GS could be used to achieve optimal mood states prior to performance. If participants failed to reach their short-term goals, the goals were assessed, and they would be asked why they felt they were not able to reach their goals, this was then used to help them develop new goals. This was the same if they exceeded their goals.

Relaxation: An educational workshop was given in week 21 on complete breathing (deep breathing) and active progressive muscle relaxation techniques. Athletes were informed how these two techniques could be of use before or even during a game to control their emotions. For example, participants were advised that they could use deep breathing to calm down before taking a free throw or prior to a game if they felt too nervous. They were also informed that it took a long time before they could use PMR full body check before or during a game. Following the education session, participants were guided through a practical experience of the two techniques. Participants were asked to get in a circle, get comfortable, and to sit up straight as best as they could. Deep breathing was completed first using instructions taken from Williams and Harris (1998; for the script see Appendix E), which got participants to take a deep breath inhaling by pushing their diaphragm down and forcing the

abdomen out, expanding their chest and raising their rib cage and shoulders slightly. The next technique was PMR; participants were asked to sit up straight the researcher then worked through the upper body muscles using Williams and Harris (1998) script. Only the upper body muscles were used as most of the team members were paraplegic and therefore, could not feel their legs and lower body (see appendix F for the script). For those who had control over their lower body, they were given the full script, so they could work on all muscles groups. After both relaxation scripts were read participants were asked to reflect on their experience, discussing what it felt like and how successful they thought they were in relaxing. Participants were reminded again that it took practice, and that they should continue practicing at home and were also asked to indicate in their diaries every time they used relaxation, for what they used it and if it helped.

Diaries: In the first week of the intervention, participants were asked to add to their diary entries if they felt they were aware of other people's emotions and how they felt another person's emotion affect them. This was done to get the participants to become aware of their emotions first and then to become aware of other people's emotions. Daily diaries were kept to increase awareness of emotions and the impact these emotions had on them and on others. The diaries were also used for participants to discuss any problems, they were having using the three psychological skills, how they were using them, for what they used them and anything else they felt like discussing relating to wheelchair basketball, and their emotions. Diaries were used to guide the individual session that were held with the participants.

10.1.3.3 Post Intervention

EIS and ST questionnaires were completed post intervention. The following week structured interviews were conducted with the participants gathering information on how they felt the intervention had benefitted them? Why they felt they had improved in certain areas or why they may not have improved? Were they satisfied with the intervention? Whether they

considered the changes they experienced to be significant to them. The diary entries and EIS helped guide the interviews.

10.1.4 Quantitative and Qualitative Data Treatment

For quantitative data a single-subject design was used. Research indicated EI to be part of personality traits and therefore, considered to be relatively stable (Grant, 2007). As such only one baseline was taken instead of a multiple-baseline as recommended by single-subject researchers (Bryan, 1987; Hrycaiko & Martin, 1996). The reason for using a single-subject approach was that participants could act as their own control, which solves the ethical issue when participants complete the intervention (Thomas, Maynard, & Hanton, 2007).

Bryan (1987) suggests that if the athlete and/or coach felt they had improved than that was more important than whether the data were significant or not. If participants had a low total EI then they needed to improve by at least 4 points for it to be meaningful, whereas if people had a high total EI then they had to improve by at least 2 points for it to be meaningful. These figures were used by exploring Grants (2007) results. These were not recommendations made by Grants; it was felt that a guideline was needed to explore the data. Grants data helped with developing these guidelines, in that both his studies were explored to see when change was significant and when not. For individual subscales the increase for low EI (mean score of 2) participants had to increase by 1.50 or more points and for those with a High EI (mean score of 4) it could be by 0.50 points.

All interviews were transcribed verbatim. The interview transcripts and diaries were then read and reread till the researcher was familiar with the data. Each transcript and the corresponding diary were subjected to open coding in which the researcher went through the interview and diary for meaning units, inductive coding was first used and then the interviews and diaries were coded again using deductive coding. This was done case-by-case. For further details on the phenomenological approach, please refer to sections 1.5 and 5.3.5. If

points, below, were mentioned increasingly, indicated that participants were increasing their EI:

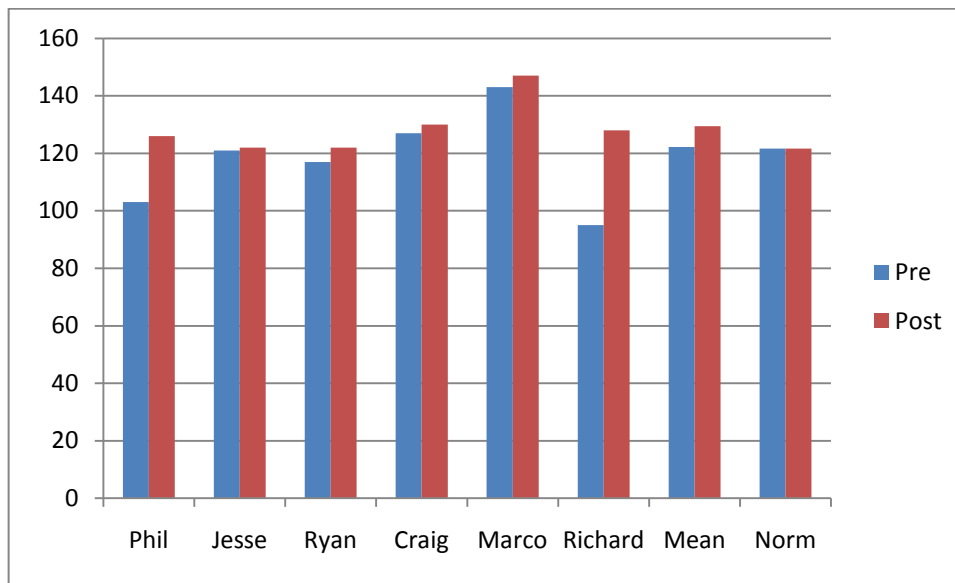
- If participants disclosed more information about their emotions, if they are aware of their emotions and the impact their emotions have on their performance.
- If they indicated other people's emotions and the impact those emotions had on them more frequently, how they dealt with it.
- How they used ST, relaxation or GS to cope with emotional situations, and if they indicated how it helped them to regulate their emotions.
- If they indicated how they used their emotions to benefit their performance.
- If they indicated being optimistic and also whether they indicated helping others and giving positive feedback.

10.2 Results

When exploring mean scores differences are masked and may indicate that the intervention had no significant effect (Zaichkowsky, 1980; Bryan, 1987). Therefore, exploring the data as case studies allowed the researcher to explore idiosyncrasies in responses to the intervention. It should be noted that fluctuations across weeks for each participant were expected as participants became more aware of the skills consisting of the subcomponents of EI and as additional interventions were introduced. As such the individual case studies will largely focus on pre and post interventions.

The results for each participant, mean Total EI pre- (122.2, SD = 15.58) and post-intervention (129.4, SD = 9.18), were compared to normative data (121.62, SD 14.42) which was taken from Lane, Meyer, and colleagues (2009) study (see graph 10.1). As Jesse did not have post intervention scores her scores from week 17 were used. The graph shows that most participants were able to increase their EI scores above the norm.

Graph 10.1 shows pre and post data for the sample and normative data.



10.2.1 Case study – Phil

Phil showed an immediate effect having received the intervention. From pre to post intervention Phil's total EI increased from 103 to 126 (see Table 10.2). This was comprised of improvements in the six subscales of EI. The most notable gains were in appraising other people's emotions, which increased by 1.26, appraisal of own emotions increased by 1. Social skills and utilisation increased by 0.84. Emotion regulation increased by 0.50. Optimism increased by 0.20. In relation to ST half way through the intervention his confidence to use ST dropped but post intervention it increased again and was higher than the baseline (see Table 10.3). Phil's ST improved a lot post intervention however, between the first time it was assessed (week 3) and the second time (week 17) it decreased.

Phil coached the team for approximately 3 years; however, he noted in one of our conversations, pre intervention, that he would rather play than coach. He expressed this frequently at the beginning of the season. After GS was introduced, Phil wrote in his diary that one of his goals was to control his "out bursts" letting the team know that he did not want to be a coach. He felt that one could not play and coach as this would cause a conflict between the players and the coach. Near the end of the intervention, he noted that he was still

not happy being a coach, but he mentioned in the post intervention interview that he had his “out bursts” under more control. This was also observed by the researcher and a few of the teammates commented that Phil was a lot calmer. Through the intervention Phil became more aware of his team’s emotions and his own.

Table 10.2: Phil’s mean scores for the subscales and total EI

	Week1	Week3	Week17	Week25
<i>Appraisal of Others emotions</i>	2.17	2.86	3.00	3.43
<i>Appraisal of Own emotions</i>	3.00	3.60	2.80	4.00
<i>Optimism</i>	3.60	4.00	4.00	3.80
<i>Emotion regulation</i>	3.50	4.50	4.00	4.00
<i>Social Skills</i>	2.83	3.12	3.17	3.67
<i>Utilisation of emotions</i>	3.33	3.00	3.83	4.17
<i>Total EI</i>	103	113	113	126

Post intervention Phil commented that he believed the team had been through a lot with players missing, a lot of new players but yet the team never gave up. According to Phil the team’s optimism levels improved.

Table 10.3: Phil’s ST results

Week3	Week17	Week25
660	650	890

In the post intervention interview Phil indicated that he used ST a lot and always had. When the coach was asked what effect the intervention had on the team he said that “you’ve actually raised the team.... Right whether it’s been your research or simply because somebody has took interest in us.”

Phil indicated in an interview in week 6 that low to no anger helped him perform well; he also indicated that he needed to be calm prior to the game. Phil mentioned that if he felt too tense or tired then he would not perform very well.

10.2.2 Case Study – Jesse

Jesse's results decreased immediately after she received the intervention (see Table 10.4). Data was not obtained post intervention as she failed to respond to e-mails or attend post intervention meetings; therefore, data needs to be interpreted with caution. Her total EI increased from pre intervention 121 to 122 in week 17. This consisted of improvements in the six subscales. The most notable gains were appraisal of others emotions, which increased by 0.71 and utilisation increased by 0.17. Appraisal of own emotions and optimism levels were relatively stable. Her social skills score decreased by 0.17 and emotion regulation scores decreased by 0.75. Her confidence to use ST dropped substantially (Table 10.5).

Table 10.4: Jesse's means score for the subscales and total EI

	Week1	Week3	Week17	Week25
<i>Appraisal of Others Emotions</i>	3.29	3.29	4.00	
<i>Appraisal of Own Emotions</i>	3.80	4.00	3.80	
<i>Optimism</i>	3.20	3.40	3.20	
<i>Emotion regulation</i>	3.75	3.50	3.00	
<i>Social Skills</i>	4.17	3.83	4.00	
<i>Utilisation</i>	3.83	3.83	4.00	
<i>Total EI</i>	121	120	122	

Jesse noted in an interview, in week 2, that she had experienced a nervous breakdown about three years prior to the research and was still trying to 'find herself'. In week 5, Jesse wrote that one of her goals was to become more aware of other people's emotions and become more understanding towards other people. In an interview in week 4 Jesse mentioned

that she considers herself to be a very honest person. She indicated that she was very conscious of what she required to cope with a situation, and speaking her mind was the way. She noted once she had spoken her mind, she dismissed it, but the other individual may not have. She did mention that she needed to develop more awareness of how it may influence another person. She also acknowledges that how she felt was written all over her face and can be heard in her voice. She continued to state that she did not understand why other people hid their emotions. From observations made by the researcher Jesse developed more of an awareness of other people's emotions over the course of the intervention.

Jesse did not play a single game for the team as she was never registered; the team manager had to register her. This brought about a lot of frustration and anger, especially when two able-bodied players joined the team and after the second week of training, they were registered.

Table 10.5: Jesse's ST results

Week3	Week17	Week25
530	350	

Jesse mentioned that she used ST, but she found it very difficult, and it required a lot of effort. She wrote in week 10, that she used ST to keep calm when a team situation was occurring, which she did not cope well with. She mentioned in her diaries that she utilised ST to keep control of her emotions and not to speak what was on her mind.

I would use the 'self-talk' mechanism to assist in my awareness of other players and 'pick' opportunities. Completely forgot until halfway through game [training game] – did make me more alert once I remembered but it took a lot of effort to do.

She mentioned that the more emotional she got, she forgot to use ST. "Sorry about self-talk guess, I'm just too emotional to be that focused at present." In week 18 she wrote that during one session, she used ST to "stay calm-using self talk - and I think I did rather

well- only snapping once that I recall...my goal next week is to try again.” She had fewer outbursts where she felt the need to say what was on her mind and kept it to herself. She was frustrated with certain team players and did not feel part of the team; this was indicated in her social skill scores, which decreased. This could also be why her optimism level did not increase as she was not given a chance to prove herself in the team. Furthermore, she felt that certain team members would not pass the ball to her even though she was in a position where she could have scored. She felt like the coach was more concerned with winning than building a team. The coach believed that Jesse thought she was always right just like Craig; hence these two players spend a lot of time arguing during training. The coach also felt that Jesse was a very static player staying in one position and thinking that the person with the ball needed to do the work to get the ball to her, whereas she should be doing the work and getting free so that the ball can get passed to her. This could explain her frustration as she felt her teammates were not passing her the ball even though she felt she was in the right position. Overall diaries and interview data indicated that Jesse improved appraisal of other’s emotions and emotion regulation.

10.2.3 Case Study – Ryan

From pre to post intervention Ryan’s total EI increased from 117 to 122 (see Table 10.6). However, post intervention scores for EI declined slightly. This comprised of improvements in the six subscales. The most notable gain was utilisation of emotions, which increased by 0.33. Appraisal of others emotions increased by 0.29. Appraisal of own emotions and optimism scores increased by 0.20. Emotion regulation scores were quite stable and social skills scores decreased by 0.17. ST scores fluctuated over the course of the intervention (see Table 10.7); there was an increase in comparison to the baseline. However, the second scores were slightly higher than the post-intervention scores.

Table 10.6 Ryan's mean results for the subscales and total EI

	Week1	Week3	Week17	Week25
<i>Appraisal of Others Emotions</i>	3.00	3.29	3.43	3.29
<i>Appraisal of Own Emotions</i>	3.80	4.00	4.00	4.00
<i>Optimism</i>	3.60	3.60	3.40	3.80
<i>Emotion regulation</i>	4.00	4.00	3.75	4.00
<i>Social Skills</i>	3.67	3.83	3.83	3.50
<i>Utilisation</i>	3.50	3.67	4.00	3.83
<i>Total EI</i>	117	122	123	122

Ryan was a very quiet person who did not give you much of an insight to who he was. Ryan kept to himself; he mentioned a few times that he was not able to read other people's emotions. Ryan needed a lot of sleep, and he commented that a lot of his problems were related to his impairment. As he noted he needed to be focused, once he was focused, he performed to his optimal level. However, if he was not then the 'wrong message' got sent to his brain and that could cause concentration problems.

Ryan did not get along with his father and lost his temper at times, especially when it concerned his father and basketball. When talking to Ryan, in week 5, he seemed a little aggressive. He noted a few times, during the individual sessions, having fought with his father "I nearly broke his neck" when asked why he said that "he really pissed me off big time it had all to do with basketball so. That I shouldn't be playing for this team." Ryan mentioned that when he got quiet that usually meant he was "boiling inside" and he noted that he did not like people messing with him if they did "then things happen that shouldn't... One of two things happens... a fight happens or worse." When observing Ryan, one would never perceive him to be aggressive; he seemed like a shy and quiet person. From his interview and diary entries, it was apparent that the way Ryan regulated his moods was by

letting out steam “I blew my top at him,” or walking away from the situation. The intervention did not seem to have helped Ryan much in being able to regulate his emotions and controlling his emotions. On court Ryan was a very individual player and only enjoyed playing with teammates who knew what they were doing. This he disclosed in week 10 saying that he did not play very well with certain players (names were not mentioned).

When talking to him about the intervention, and if it had helped him, he said it had helped him open up a bit more and talk about his feelings a bit more. Ryan mentioned that he has relaxed a bit more “before I used to bite people’s heads off.” So even though the scores did not reflect this, there was a chance that the intervention helped. Ryan believed that the intervention helped other players “It’s been positive I can see that in certain players.” But it has been a “slow process” and he believed that it has not been a “waste of time.”

Table 10.7 Ryan’s ST results

Week3	Week17	Week25
440	530	490

Ryan mentioned he would continue to use ST, as he felt it helped him. He indicated that he used ST to stay focused in a game, and he used it more for the technical elements of the game then as asked, to control his emotions. The coach believed Ryan was a fast player, had fast breaks but fell apart if he was marked too closely. In an interview Ryan mentioned that he needed to be calm, focused and active to perform well, if he was tired and tense then his performance would decrease.

10.2.4 Case Study - Craig

The researcher did not receive the second set of scores from Craig. He had not attended the training session and said he would post them to the researcher but the questionnaires were never received. The researcher asked for the questionnaires twice and Craig mentioned that he would email them but never did.

From pre to post intervention Craig's total EI increased from 127 to 130 (see Table 10.8). This consisted of improvements in the six subscales. The most notable gain was appraisal of other people's emotions, which increased by 0.43. Emotion regulation increased by 0.25, and optimism levels increased by 0.20, appraisal of own emotions and utilisation of emotions were quite stable. Whereas social skills decreased by 0.5. This trend was also apparent in ST (see Table 10.9) however, the baseline for the ST was missing.

Table 10.8: Craig's means scores for the subscales and total EI

	Week1	Week3	Week17	Week25
<i>Appraisal of Others Emotions</i>	2.57		2.71	3.00
<i>Appraisal of Own Emotions</i>	3.80		4.00	3.80
<i>Optimism</i>	4.40		4.40	4.80
<i>Emotion regulation</i>	4.25		4.25	4.50
<i>Social Skills</i>	4.33		3.83	3.83
<i>Utilisation</i>	4.17		4.50	4.17
<i>Total EI</i>	127		128	130

Craig's goal was to become more aware of other people's emotions, which he accomplished. In week 3 he mentioned "Yes, biting my tongue, thinking before I speak, that's my problem, I say what I think too soon don't put the words in the right order for public consumptions." Craig became more aware of his emotions. In week 3 he commented that the diary made him "think a bit about more about my emotional states opposed to just going on behind you know trailing a bit behind that's good." Craig caused some friction between team players as he was a very vocal person this irritated several of the players as he would converse a lot on court and occasionally because of all the talking provided game tactics to the opponent. Furthermore, because he spoke to his teammates, they were more concentrated on what he was saying then focusing on the game. During training sessions, he

and Jesse would have disagreements and exchange words, about where to be on court or about technical issues related to the sport. They would, hold up the training session to have their discussion and then get back to playing. Ryan did not enjoy playing with Craig.

In the post intervention interview Craig mentioned that he was “not very good at reading that [other people’s emotions]” and that was his “biggest problem,” but he stated he would continue working on it. He indicated that the reason for his social skill levels decreasing was because “must have been a bad day when I filled that form in.”

Table 10.9: Craig’s ST results

Week3	Week17	Week25
	850	920

Craig indicated in week 10 that he employed ST a lot more especially for certain tasks he was struggling with, like free throws, he would use it to get him focused, and in a calm state but also to remind him where he needed to aim the ball. One of the words he used was “corner”. The coach discussed that four years ago, Craig had no skill, and he started practicing on his shot for six months. He can now shoot but he is not a very fast player. He was a very static player. The coach thought that Craig believed he knew everything, and that he was always in the right. Craig believed that he needed to be happy, calm and alert to perform well. However, he also needed to feel a bit of tension.

10.2.5 Case Study – Marco

Marco started off with high EI scores (see Table 10.10). From pre to post intervention Marco’s total EI increased from 143 to 147. This comprised of improvements in the six subscales. The most notable gains were appraisal of other people’s emotions, which increased by 0.28, emotion regulation scores increased by 0.25. Social skills and utilisation increased by 0.17. Optimism scores stayed quite stable. Appraisal of own emotions scores decreased by

0.20. ST increased in week 17 but then decreased again post intervention but was still higher than baseline scores (see Table 10.11).

Table 10.10: Marco's mean scores for the subscales and total EI

	Week1	Week3	Week17	Week25
<i>Appraisal of Others Emotions</i>	4.43	4.43	4.71	4.71
<i>Appraisal of Own Emotions</i>	4.80	4.60	5.00	4.60
<i>Optimism</i>	4.00	4.20	4.40	4.00
<i>Emotion regulation</i>	4.25	4.25	4.75	4.50
<i>Social Skills</i>	4.33	4.00	4.67	4.50
<i>Utilisation</i>	4.16	4.00	4.83	4.33
<i>Total EI</i>	143	140	156	147

Marco mentioned having great interpersonal relationships with his team members except for Jesse. He joked around and to most people; one would think that he could cope with her comments, and that it did not really affect him but that was not the situation. In his interview, he mentioned that “she gets to me, she really does. I mean I’ve always been aware of my emotion, I think and other peoples as well I don’t know it’s just Jesse, I can’t help it, she gets to me.” The way Marco coped with Jesse was to remove himself from the situation and by using ST to stay calm.

Table 10.11 Marco's ST scores

Week3	Week17	Week25
820	910	870

Marco mentioned in week 10 that he utilised ST but found it difficult to implement during a game. Marco mentioned using the following phrases “come on, sort yourself out” or “that was stupid”. In week 17 Marco indicated that ST helped him “actually thinking more about it [taking a shot] now instead of just throwing” the ball like he used to. An example of

the ST he utilised was “slow down, take your time, shot,” though he also indicated that he only did this occasionally. He felt that the intervention helped or at least having someone there helping out, who was not the coach as the coach was there to help with the skill level the technical side of things. Marco mentioned that he used ST to regulate his emotions. He discussed with himself and explored all the possible negative consequences if he was not in control of his emotions. Marco’s diary entries and conversations with him indicated he was quite stable and did not show any drastic improvements in his awareness of emotions.

Marco mentioned in an interview that “happiness makes such a difference to how I do things and the same can be said for tension. If I feel tension or stress my performance is less than perfect, in whatever, I do.” From the interview in phase 1 study 2 Marco also mentioned that calmness or being at ease encouraged optimal performance.

10.2.6 Case Study - Richard

From pre to post intervention Richard’s total EI increased from 95 to 128 (see Table 10.12). The most notable gains in the six subscales were in appraisal of own emotions and optimism, which increased by 1.40. Richard’s social skills increased by 1.34, emotion regulation increased by 1.25, and utilisation increased by 1. Appraisal of other’s emotions fluctuated over the course of the intervention it then returned to the baseline score. Richard’s ST scores increased and then considerably decreased post intervention (see Table 10.13).

The improvements were evident in the observations that were made by the researcher, and by what the coach and his teammates mentioned about him. He became more of a team player and was more interested in the game. Previously, Richard seemed disinterested in the game and did not insert effort into becoming part of the team. When the researcher first met Richard, he seemed a little disinterested and bored with everything. Nearing the end of the intervention (week 20) and the season, Richard started showing more interested in the game and enjoyed training sessions. The increase in interest was noticed by his teammates. Once he

started showing interest in the team and his attitude started to change, his teammates started to get along with him. At first it was rather difficult at times to get a conversation started with Richard; even if the questions were open-ended he still would answer with either ‘yes’, ‘no’ or ‘don’t know’. Approaching the end of the intervention Richard revealed more about himself and had more to converse about. However, he still did not feel part of the team.

Table 10.12: Richard’s mean scores for the subscales and total EI

	Week1	Week3	Week17	Week25
<i>Appraisal of Others Emotions</i>	3.71	3.57	4.00	3.71
<i>Appraisal of Own Emotions</i>	3.20	3.80	4.00	4.60
<i>Optimism</i>	2.60	3.60	3.20	4.00
<i>Emotion regulation</i>	2.25	2.25	3.25	3.50
<i>Social Skills</i>	2.33	2.83	3.50	3.67
<i>Utilisation</i>	2.83	4.00	3.67	3.83
<i>Total EI</i>	95	112	124	128

Richard mentioned the way he previously dealt with his anger was to walk away. This had changed, the more aware he had become of his emotions as was evident when he discussed how ST has helped him. In the post-intervention interview, he stated “I feel that ST has helped me a bit cause I used to get really annoyed, and I used it to keep the anger inside me, and now I notice myself and I just get on with it.”

Table 10.13 Richard’s ST scores

Week3	Week17	Week25
480	550	350

Mid way through the season the coach believed Richard was a distraction and would rather not have him on the team. He would also not be the coach’s first choice, however, the coach felt like “there isn’t anyone else to pick from”. The coach believed that his perception

of how good Richard was, and Richard's perspective, were quite different. Phil did not feel that Richard would stay with the team as his friend dropped out. Approaching the end of the season the coach did agree that Richard had changed a lot.

Richard did not disclose what goals he had set for the season as he did not note them down in his diary as asked. Richard mentioned that he needed to be calm and relaxed during a game to perform well, if he was too active or angry then his performance dropped.

None of the participants discussed how they used relaxation other than using it when taking a free throw in training and during a game to calm down. Overall it seemed the team improved group cohesion through the intervention, as the coach mentioned that he felt the team benefitted "you've actually raised the team." The team started to work together more, and started to listen to one another. All participants improved their total EI to some degree. Appraisal of others emotions changed the most for four participants. For three participants social skills decreased. Emotion regulation improved for four participants and decreased for one participant, all other subscales varied between improving or staying stable.

10.3 Discussion Study1

In exploring the results, it was apparent that the intervention enabled each participant to achieve at least small improvements for enhancing total EI. Four participants slightly improved their EI between 1 and 5 points, Marco increased by 4 points, which was a significant increase considering he had a high EI score to start off with. This could be due to the ceiling effect, which relates to the fact that the measurement may not allow for higher scores, this could affect the true score of Marco's EI. Two participants improved EI by 23 and 33 points. Marco and Ryan reported their highest EI scores during the third data point collection. Whereas, Nelis et al. (2009) showed that interventions in enhancing EI usually sustain the change. For another two participants EI scores dropped right after starting the intervention, this was after keeping diaries for 2 weeks. As the diaries were used to develop

awareness of their emotions, this awareness may have gotten them to re-evaluate themselves, and they may have realised that they were not as aware of their own emotions, or other people's emotions as previously believed. Further research is needed to support this phenomenon.

A possible explanation for why participants' EI levels varied could be because some engaged with the program more than others and were ready for change and others were not (Cherniss, 2000). Poor adherence to mental skills programmes has previously been evidenced (Albinson & Bull, 1988; Devonport, 2007; Shambrook & Bull, 2001). Devonport (2007) suggests that some participants may not engage in an intervention because in order to do so, they must value change, understand the benefits of change, and be confident in making change. If participants were not willing to change and were not ready for change, then the chance of the intervention working is minimal. A further reason for poor adherence could be that the skills took a lot of effort as was highlighted by Jesse "[ST] did make me more alert once I remembered but it [ST] took a lot of effort to do." Another reason could be that participants focused on enhancing certain subscales of EI. Three participants mentioned focusing on one particular aspect of EI, such as Jesse focused mainly on enhancing appraisal of others emotions, whereas Phil was more focused on getting his out bursts under control. A further explanation could be that those high in EI were aware of the benefits of further enhancing the EI and therefore, saw the benefits. Alternatively they could have felt that there was no need for further training (Devonport, 2007). Whereas, those who had low EI may have been unable to accurately assess their emotional needs (Devonport, 2007).

Participants mentioned using deep breathing, mainly prior to taking a free throw to control their anxiety and to relax so that they can focus on the task and block out everything else around them. This was usually combined with ST, trying to help them stay calm or get in

the right state of mind for taking the free throw (Williams & Harris, 1998; Thelwell & Greenlees, 2001, 2003; Rogerson & Hrycaiko, 2002).

ST was frequently used in emotion regulation this participants indicated in their diaries and interviews. Morin (2005) mentioned that ST could help with self-awareness. To regulate one's emotions one must first be aware of them. Therefore, using ST to become aware of one's emotions and then using the ST to regulate those emotions would seem plausible in benefiting the current participants in increasing emotion regulation and becoming more aware of their own emotions.

Depape et al., (2006) reported there to be a positive relationship between EI and ST. Their findings lend support to the current study, participants mentioned using ST to regulate their emotions, and participants also used ST to cope with other people's emotions. Depape et al. (2006) mentioned that EI and ST had an impact on each other. The authors mentioned that ST could assist individuals in keeping their thoughts at the forefront of the persons attention and therefore, in the working memory to guide the individual in what action to undertake next.

The current study developed a self-efficacy scale for emotion focused ST which participants completed twice during the intervention and then post intervention. For two participants confidence in using emotions focused ST decreased. One factor that could have influenced the decrease was that the more aware the participants became of utilising emotion focused ST, they realised that they were not as confident as they had previously believed. Bandura (1998) mentioned that there are four principles to enhance efficacy. The first and most effective way is through mastery experiences. This could explain the reduction of scores. Maybe the participants tried using ST and felt they had failed so they may have not tried as hard the next time and that may be why they rated themselves lower. The second method of enhancing efficacy is through social models. Seeing others succeed can raise an

individual's belief in their own abilities. Therefore, if others fail then your own belief about your ability may decrease. The third method is through social persuasion; getting positive and realistic feedback can help an individual improve. The final method is through relying on one's physical and emotional states. Individuals read their emotional arousal and tension as signs of vulnerability to poor performance. Bandura (1998) stated that mood can influence the way you judge your efficacy in a task. Therefore, it could be that participants were in a bad mood and so rated themselves lower.

Depape et al. (2006) mentioned that some participants may not be aware or realise how much ST they used until they completed a specific task. This could explain why ST scores dropped as participants may have become aware of the amount of ST they used. This is supported as two of the participants mentioned that they realised that using ST was not as easy as previously thought.

The intervention program also consisted of GS, relaxation and diaries. Two participants indicated setting goals to become more aware of other people's emotions, and to stop to think before they spoke and hurt others with what they had to say. Phil wanted to control his outburst. Research has shown GS to be a successful tool in enhancing sports performance (Thelwell et al., 2006). Recent research showed there to be a link between EI and GS (Lane, Thelwell, et al., 2009; Grant, 2007). Even though participants were asked to set emotion focused goals most participants set performance focused goals, such as process and outcome goals. However, research indicated that one does not need to directly focus on enhancing EI (Grant, 2007).

Relaxation was mainly used for emotional regulation. Deep breathing was most frequently used to control emotions when taking a free throw. Relaxation is a technique that has been frequently used to regulate emotions, especially to calm down (Sutton, 2004). Lane, Thelwell, et al. (2009) found that emotion regulation and relaxation in competition were

significantly correlated. The main purpose of the diary was to raise awareness of own emotions (Nelis et al., 2009) and the impact other people's emotions had on the individual. The diary seemed to have helped participants become more aware of their own emotions.

Findings from the current study lend support to the notion that psychological skills training programs improve EI, which in turn benefits the performer, coach and SP consultant. The intervention can improve sports performance as it allows the athlete to control the emotions that the athlete perceives to hinder their performance. It allows the athlete to be able to utilise certain emotions to enhance performance if channelled in the right direction. It could also help athletes cope with major competitions and the anxiety that these competitions may provoke (Lazarus, 2000).

To conclude, results suggested that EI can be enhanced by using psychological skills. Though the increase varied between participants and therefore, further research is needed. Results should also be read with caution due to the small sample size and the missing data sets for some of the participants.

CHAPTER 11: Study 2: The Ghanaian Sample-Methodology

11.1 Method

Chapter 8 explored perceptions of EI and sports performance among Ghanaian athletes, results suggested that EI profiles of Ghanaian athletes were different to those of Western athletes; appraisal of other's emotions seemed to play an important role for the Ghanaian population. In order to further test this claim the study altered the intervention slightly to accommodate cultural differences. However, overall the intervention was the same so that the two studies could be compared.

11.1.1 Participants

There were 35 players eligible for inclusion in the present study. Due to a combination of injury, transfers and motivational issues only eight players completed the intervention. Age range was between 19 and 29 years of age ($M = 22.88$, $SD = 3.68$). As mentioned in section 8.5.1 the age of the Ghanaian participants should be read with caution. Three of the participants, who took part in phase 2, were the same age or younger in the current study. See Table 11.1 for demographic information.

Table 11.1 Participants demographic information

<i>Name*</i>	Age	Years in the premier league	Position	National Teams played for
<i>Kojo</i>	26	5 years	Right Full Back	***
<i>Kwame</i>	29	6 years	Left Full Back	U-17, U-20 and U-23
<i>Kofi</i>	19	2 and a half years	Striker	***
<i>Akwasi</i>	19	3 years	Defender	U-17 and U-20
<i>Ato</i>	25	5 years	Striker	Never
<i>Kobena</i>	21	1 year	Striker	U-17
<i>Kwesi</i>	20	***	Striker	Never
<i>Ebo</i>	24	***	Striker	Never

*Name are pseudonyms, **information not given

11.1.2 Measures

Refer to section 10.1.2 for the measures used and their validation and reliability.

11.1.3 Procedure

All volunteer participants completed informed consent forms before undertaking research related activities. In order to attain baseline data prior to engagement with interventions which intended to enhance EI participants completed the EIS (Schutte et al., 1998). However, eight weeks into the intervention the researcher realised that the team manager had not distributed the questionnaire to participants. This issue arose from a miscommunication, the team manager had stated that the team had completed the questionnaire, but he was referring to another questionnaire and not the EIS. Consequently, the first 3 weeks of diary entries were used for baseline data and then compared to the rest of the diary entries to explore how EI and its subscales had enhanced. Participants were asked to maintain a daily diary as the researcher wanted to increase participants' awareness of how emotions could influence performance. The participants were given a notebook and a pen each in which they could write their diary entries. As the team trained every day of the week the researcher met up with individuals during the week to discuss diary entries. Following three weeks of diary completion, they then engaged with the intervention which lasted four months (end of May to end of September). To initiate the intervention, participants and the researcher worked together to explore existing use of ST and ways of enhancing ST use. The intention was to develop the use of this strategy in managing emotions. Participants practiced ST for the duration of the intervention which lasted 18 weeks, both in the presence of the researcher and in her absence. The diary was maintained throughout the intervention. Emotion focused GS was introduced in week 5, and relaxation was introduced, in week 14. As previously mentioned English was not the most appropriate language for Ghanaians to

express their emotions, therefore participants were given the option to write in Twi, if they felt they could express themselves better in Twi. The participants were informed that the researcher would then get the diaries translated by an independent source and that their identity would never be revealed. All participants decided to write in English. EIS and ST questionnaires were completed in week 12 and 19; all techniques were used until the end of the intervention (week 18). Post intervention interviews were conducted in week 20.

11.1.3.1 Pre-Intervention

As baseline EI data were not available (see section 11.1.3) diary entries were used to explore EI and changes in EI. Diary entries were used to assess participant's awareness of their own emotions and the impact emotions have on performance. Refer to section 10.1.3.1 for detailed information about pre-intervention diaries.

11.1.3.2 Intervention

Self-talk: Educational workshops were given in week 3 introducing the topic of ST. In the first individual session the researcher also spoke to the participant to find out how much knowledge they had of ST, and whether they used it to see if any changes needed to be made so it would be beneficial to their culture and their needs (this was done with all the psychological skills). Refer to section 10.1.3.2 self-talk for more details on tasks completed.

Goal setting: An educational workshop was given introducing the topic of GS in week 5. Refer to section 10.1.3.2 goal setting for a detailed description.

Relaxation: An educational workshop on relaxation and the various techniques was given in the 14th week of the intervention. See section 10.1.3.2 for a detailed description. The difference in the current study was that the whole body was included instead of just the upper body.

Diaries: In the first week of the intervention participants were asked to add to their diary entries if they felt they were aware of other people's emotions and how they felt other

people's emotions affect them. Other than giving them the option of writing in Twi no other changes were made. See section 10.1.3.2 (diaries) for further details.

11.1.3.3 Post Intervention

EIS and ST questionnaires were evaluated and followed by semi-structured interviews intended to explore participants' perceptions of the intervention, and if they felt they had improved their EI levels. The EI subscales were used to facilitate exploration.

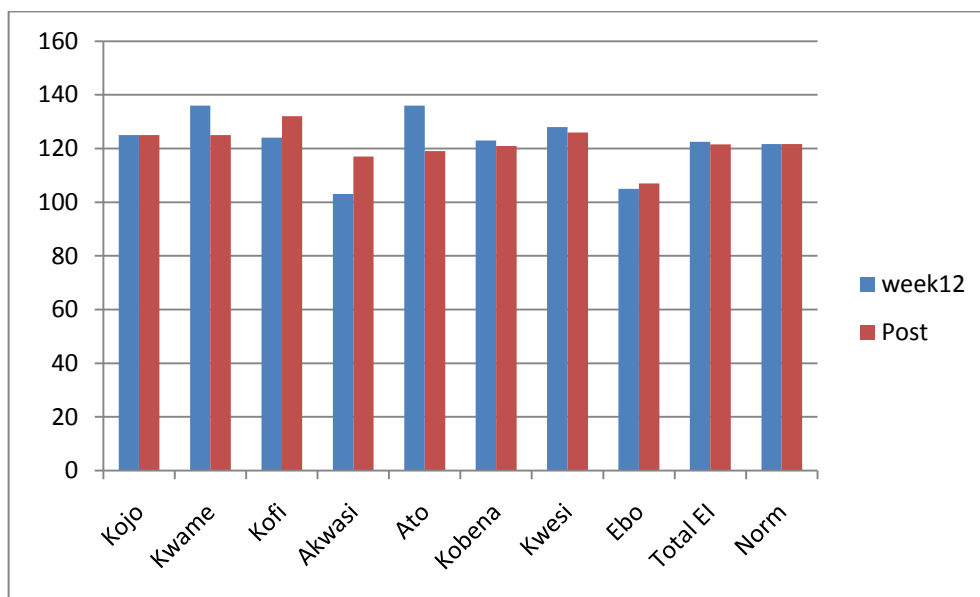
11.1.4 Data Analysis

Refer to section 10.1.4 for a detailed description of data treatment for both qualitative (interviews and diary) and quantitative data.

11.2 Results: Ghana Population

As noted in section 10.2 a case study approach was utilised. As previously noted no baseline data were collected. The data of each participant, total EI mean's from week 12 (122.5, SD = 12.48) and post intervention (121.5, SD = 7.48) were compared to normative data (121.62, SD = 14.42) taken from Lane, Meyer, et al. (2009), see graph 11.1.

Graph 11.1 Shows week 12 and post intervention data and normative data.



11.2.1 Case Study -Kojo

From the start of the intervention to post intervention Kojo's total EI was stable (see Table 11.2). Utilisation increased post intervention by 0.17, and appraisal of others emotions decreased by 0.15, whereas all the other subcomponents stayed the same. This was the same for ST (see Table 11.3).

Table 11.2: Kojo's means scores for the subscales and total EI

	Week12	Week19
<i>Appraisal of Others Emotions</i>	2.86	2.71
<i>Appraisal of Own Emotions</i>	4.00	4.00
<i>Optimism</i>	4.20	4.20
<i>Emotion regulation</i>	4.00	4.00
<i>Social Skills</i>	4.17	4.17
<i>Utilisation</i>	3.83	4.00
<i>Total EI</i>	125.00	125.00

Kojo did not disclose much in his diary entries about his emotions, he would say he was happy when the team performed well; he discussed a lot about the management and the coaches (this was mentioned in week 2). From what was mentioned one could interpret that he was frustrated with certain events that went on. He mentioned in week 10 that he had previously spoken to the coach about his queries. In response the head coach told Kojo that he wanted "to spoil his [the coach] job..., I [Kojo] want the management to sack him [the coach] which I don't." Kojo mentioned this in an individual session in week 14. The critiques made to the coach were in relation to the formation the team was playing, the majority of the team felt the formation was an inappropriate style for the players. Due to these comments by Kojo, the head coach decided to bench Kojo. Therefore, Kojo made the decision not to disclose his thoughts, complaints, and other queries to the coach anymore. As the results

indicated he had low awareness of other people's emotions. This could explain why there may have been friction between him and the coach.

Kojo was frustrated and angry with the management and their lack of organisational skills. He gave an example, in week 14, the preparation prior to an important game that they ate an hour before the game and got their jersey's half an hour before the game. He felt that on account of these poor management skills the team lost the game. Blaming others and other events possibly meant that his emotion regulation skills were not as high as indicated by the EI scale. However, no matter what the situation, he always felt before a game that the team would bring home victory; which was reflected in the optimism scores. From the above examples, one could allude to that Kojo was aware of his own emotions but not very aware of other people's emotions.

Throughout the weeks of the intervention, he did not seem to disclose more information in his diaries that suggested that he enhanced his EI levels. Whenever the researcher interviewed Kojo, he always discussed the technical side of the game. The researcher tried to get Kojo to disclose more information about his emotions by asking how he controlled his emotions in certain situations but the researcher did not get very far.

Kojo mentioned using ST more for the technical element of the game, the same with GS even though he was asked to implement them when dealing with an emotional situation.

Table 11.3 Kojo's ST scores

Week12	Week19
820	820

The only time he discussed his emotions was when discussing the emotions that he felt could benefit his performance. However, this took a lot of probing to get answers from Kojo. He indicated that he did not like to be calm and relaxed before a game as he felt the calmer he was the more risks he took. He would rather be a bit tense at the beginning. As

feeling calm made him feel uneasy, and he did not take any risks. He indicated that feeling calm and relaxed made him believe he was safe and untouchable. As he stated this was not how football worked. Therefore, he tried to use ST to overcome it.

11.2.2 Case Study - Kwame

From onset of the intervention to post intervention Kwame's total EI decreased from 136 to 125 (see Table 11.4). Appraisal of others emotions improved by 0.43. The most notable decrease was optimism, which decreased by 1. Emotion regulation decreased by 0.75, appraisal of own emotions decreased by 0.60 and social skills decreased by 0.50. Utilisation of emotions stayed stable. ST also decreased (see Table 11.5).

Table 11.4: Kwame's means scores for the subscales and total EI

	<i>Week12</i>	<i>Week19</i>
<i>Appraisal of Others Emotions</i>	3.43	3.86
<i>Appraisal of Own Emotions</i>	4.60	4.00
<i>Optimism</i>	4.60	3.60
<i>Emotion regulation</i>	4.75	4.00
<i>Social Skills</i>	4.00	3.50
<i>Utilisation</i>	3.83	3.83
<i>Total EI</i>	136.00	125.00

Kwame's diary entries in the first week revealed him feeling body pain, and being tired. When no pains were present he felt "good and not tired". He indicated in week 14 that whenever his team lost a match, he, could not eat nor sleep, it also brought about unhappiness and sadness. A day prior to a match he mentioned that he was feeling "okay and really thinking about the match." This was reflected in the EI results as the scores indicated he was aware of his own emotions. However, his appraisal of his own emotions scores decreased; however, this was not reflected in his diary entries, as he continued to indicate emotional

awareness. Kwame was called up for try-outs with the National team in week 10. However, he was not selected as the player he was supposed to replace recovered from his injuries. He mentioned being devastated for not getting selected, that he was really upset and could not understand why he was not selected. He mentioned how it impacted his performance, and that he could not sleep because of this information.

Optimism and religion were utilised to cope with not getting selected. Kwame noted that it was not over “until God says it’s all over because I have all confidence that one day I will call for the national assignment.” Kwame wrote about how he felt and how this may affect his training or his match performance. “By God’s grace I am doing ok this morning and also for good health and good condition to go with and hoping that it will reflect in training this morning.” Kwame referred to God a lot more nearing the end of the intervention. The decrease in optimism could be related to him not getting picked for the national team, though the decrease in optimism scores was not indicated in his diary. He kept stating that he believed they would win each game.

Table 11.5 Kwame’s ST scores

Week12	Week19
790	750

Kwame noted, in his diary and individual sessions, using ST a lot more to get focused and calm down. ST happened in Twi as he felt more comfortable using Twi. He would use words such as ‘relax.’ He also discussed that if a player got badly injured, this got him nervous as he started to think that this may happen to him. He overcame this by using ST saying that he was “still on the pitch” and so that he should continue and play his best. After a bit of probing Kwame indicated that he needed to be calm and energetic to perform well. He felt that if he was tired, he did not perform well.

11.2.3 Case Study - Kofi

From onset of the intervention to post intervention Kofi's total EI increased from 124 to 132 (see Table 11.6). The most notable gains were optimism, which increased by 1.20. Appraisal of own emotions increased by 0.40, social skills increased by 0.34 and utilisation increased by 0.17. Appraisal of others emotions, stayed stable and emotion regulation decreased by 0.75. Kofi's ST also increased (see Table 11.7).

Table 11.6: Kofi's means scores for the subscales and total EI

	<i>Week12</i>	<i>Week19</i>
<i>Appraisal of Others Emotions</i>	3.43	3.43
<i>Appraisal of Own Emotions</i>	3.80	4.20
<i>Optimism</i>	3.40	4.60
<i>Emotion regulation</i>	4.25	3.50
<i>Social Skills</i>	3.83	4.17
<i>Utilisation</i>	4.00	4.17
<i>Total EI</i>	124.00	132.00

The first diary entries did not disclose much, he would write that he felt 'good', and he was 'happy' with his performance. However, in week 9, Kofi mentioned in one interview that a supporter came up to him and told him they were disappointed by his performance. This got him angry and this anger led him to want to prove to everyone how wrong they were. He felt that sometimes supporters knew your potential better than you knew it, and therefore, they put extra pressure on you to make you understand that "you can do better than what you did."

On the field, he used ST to keep himself going, to keep himself motivated, even if things were going wrong. He mentioned, in week 10, that during the game he had "no one to psych me up on the pitch" and therefore, used ST to do this. He continued and stated that

during half time “the coach or a psychologist can help out” to motivate him and “psych” him. This was supported by the ST scores which increased.

Table 11.7 Kofi’s ST scores

Week12	Week19
1060	1080

In an interview Kofi indicated that if he had “good concentration towards the game” then this would help his performance and if he were active that would give “good concentration.” He mentioned that he needed to experience a certain level of nervousness to perform well, as well as anger, to motivate him. He suggested in week 12 that during a game anger could be caused by an opponent or referee making a bad call. He mentioned that if he noticed that his opponent was “putting up more or out playing us” then this got him angry and that would motivate him to play better instead of letting it affect him in a negative manner. However, if the anger was directed at his own team then this could make him lose concentration and therefore, decrease his performance. This supported the notion that he was aware of his own emotions, but that he had little control over the emotions of others.

11.2.4 Case Study – Akwasi

From onset of the intervention to post intervention Akwasi’s total EI increased from 103 to 117 (see Table 11.8). The most notable gains were appraisal of others emotions, which increased by 1.29, social skills increased by 0.67, appraisal of own emotions increased by 0.60, and optimism increased by 0.40. Emotion regulation decreased by 0.25 and utilisation decreased by 0.50. His confidence to use ST decreased (see Table 11.9).

Table 11.8: Akwasi's means scores for the subscales and total EI

	<i>Week12</i>	<i>Week19</i>
<i>Appraisal of Others Emotions</i>	1.71	3.00
<i>Appraisal of Own Emotions</i>	3.00	3.60
<i>Optimism</i>	3.20	3.60
<i>Emotion regulation</i>	4.00	3.75
<i>Social Skills</i>	3.00	3.67
<i>Utilisation</i>	4.33	3.83
<i>Total EI</i>	103.00	117.00

Towards the researcher Akwasi's portrayed being very shy and quiet which made it difficult to communicate with him in general, let alone in discussing his emotions, in the first few weeks. In week 6, he wrote feeling unhappy and nervous because he could not defend very well the day before in training. Further along the intervention Akwasi mentioned that before a game, he tried to avoid contact with everyone, as what they said, may affect him in a negative way, and he may get distracted and focus on what they said, rather than concentrating on the match ahead of him.

Akwasi mentioned feeling unhappy because he was tired. He felt that his unhappiness was related to the fact that the team had lost most of their games. He also indicated feeling nervous; this had partly to do with him not being happy with his performance. The anxiety was produced because of the fear of not being picked for the team. Akwasi mentioned in week 12 that he realised that the team did not communicate well with each other when they were all tired. Akwasi felt that the tiredness of the team and lack of communicate made the difference between winning and losing.

Table 11.9 Akwasi's ST scores

Week12	Week19
930	840

One method Akwasi used to regulate his emotions was to avoid situations, which caused him to lose his concentration before a game. He mentioned using ST during a game using phrases that would help him calm down and stay focused.

Again it was not easy for the participant to discuss which emotions he felt could influence his performance; participants usually mentioned that it was in the hands of God if they played well or not. After asking a few questions he revealed that he believed when he was tired, unhappy and tense than this would hinder his performance. He mentioned that happiness was important to his performance. He also indicated that if he was unhappy he would use ST to try and get in a better mood.

11.2.5 Case Study - Ato

Post intervention indicated that total EI decreased substantially for Ato from 136 to 119, whereas ST scores increased (see Table 11.11). Appraisal of others emotions decreased by 0.86, utilisation decreased by 0.83, appraisal of own emotions decreased by 0.60, optimism decreased by 0.40, and emotion regulation decreased by 0.25. Social skills stayed the same (see Table 11.10).

Diary entries, in the first weeks, revealed that when he woke up that he was feeling well or that he was feeling tired. However, no further information was given when trying to get him to expand in the individual sessions he did not have much to add. Later Ato discussed dreams, which woke him up. The dreams would leave him feeling sad; he would try and understand the dream. Praying was utilised frequently to regulate his emotions.

Table 11.10: Ato's means scores for the subscales and total EI

	<i>Week12</i>	<i>Week19</i>
<i>Appraisal of Others Emotions</i>	3.57	2.71
<i>Appraisal of Own Emotions</i>	3.60	3.00
<i>Optimism</i>	5.00	4.60
<i>Emotion regulation</i>	4.50	4.25
<i>Social Skills</i>	4.00	4.00
<i>Utilisation</i>	4.33	3.50
<i>Total EI</i>	136.00	119.00

Ato gradually began to share his joy and disappointments, for example, he was selected to play for the national team in a game they had in Tanzania. However, he was dropped; he indicated this did not affect him. Ato indicated that he was not happy with the organisers of the Football Association (FA) and how they managed people. It upset him that they tell a person he is dropped from the team and then called up and expected him to be at the airport to board a flight to Tanzania. He stated that he appreciated training with the professional players who were playing abroad. Despite him not playing for the national team he wrote that he felt 'fine'. He was happy to have been there and seen the national team draw against Tanzania. He wrote that he wanted to arrive in Ghana as swiftly as possible as he desired being there for his clubs first match in the Top 4 competition, and he was "very happy" to be back in Ghana. When asked in the individual session about the event, he mentioned that at first he was disappointed when thinking he was not going to go, but he also believed that it was a good sign that they showed interested.

Ato like a lot of the other players used prayer to get motivated and encouraged; he wrote: "It [prayers] boosted me for the morning training." He also mentioned that he was

“very happy for the strength” he received after praying. He used prayer as a coping mechanism if he had a terrible dream, he would pray about it and feel better.

Table 11.11 Ato’s ST scores

Week12	Week19
820	980

Despite losing several games, Ato kept his optimism and believed that they were going to win the game, as he wrote in week 15 “I woke up and was optimistic that we will win the game...me and some of the players, we were all sure of victory. However, after the game I was very sad because we were not able to win the game.” This was reflected in his optimism scores, which were above average. Diary entries indicated that he was aware of his own emotions and could regulate them.

He alluded to using ST for encouragement, especially when preparing for a game when he was not feeling very confident. Ato mentioned that being happy helped him perform better he also felt that he needed to feel alert and active.

11.2.6. Case Study - Kobena

Post intervention scores indicated a drop in total EI from 123 to 121(see Table 11.12), this was also apparent in his confidence in using ST (see Table 11.13). Appraisal of others emotions increased by 0.43, optimism decreased by 0.60, emotion regulation decreased by 0.25, appraisal of own emotions decreased by 0.20, social skills decreased by 0.16 and utilisation decreased by 0.16.

For Kobena, it was all about scoring a goal, as he wrote in week 3, be it in training or a game, he had to score a goal, he placed a lot of pressure on himself. He dreamt about “a goalkeeper preventing me from scoring” this made him unhappy and nervous as he was not able to score the day before in training. Kobena mentioned in an individual session, that he felt furious with himself because he could not score and that meant he did not perform well.

He continued and stated that, even if he attempted to score and did not because the goalkeeper saved the ball, he would still feel furious and sad the whole day. For him scoring meant everything as he felt that “football is all about scoring no matter how you play if you didn’t score, you are a loser. So for me scoring, I become very happy.” He elaborated and mentioned that “if I didn’t play anything for the past 90 minutes and didn’t touch the ball but at the end of the day I score, I came all happy. I can play well but didn’t score I don’t feel happy.” We discussed that maybe he was putting too much pressure on himself. It brought about unhappiness and nervousness and that could impact him not scoring because he was feeling too tense. After the discussion, he stated that he was working on changing his “negative emotions to positive ones.” Following that entry he mentioned that he was happy with himself because he was noticing how his negative attitude was gradually changing to a positive one. The discussions and the diary helped Kobena become more aware of his emotions and the impact they had on his performance.

Table 11.12 Kobena’s Means scores for the subscales and total EI

	Week12	Week19
<i>Appraisal of Others Emotions</i>	2.43	2.86
<i>Appraisal of Own Emotions</i>	3.80	3.60
<i>Optimism</i>	4.60	4.00
<i>Emotion regulation</i>	4.00	3.75
<i>Social Skills</i>	3.67	3.83
<i>Utilisation</i>	4.33	4.17
<i>Total EI</i>	123.00	121.00

Kobena referred to feeling anxious because he felt if he made mistakes the coaches would shout at him or doubt his abilities. This fear of not pleasing the coaches scared him. He mentioned that if he did not impress the coach he felt he would be benched. Kobena

approached the researcher, in week 10, to discuss his sleep issues and also asked if it was okay to talk to someone else about one's problems. The researcher asked whether it had helped him talking and writing in his diary about his problems and feelings if this was the case then maybe it was not a bad idea to talk about what was going on as long as one trusts the person. He smiled and said okay.

Table 11.13 Kobena's ST scores

Week12	Week19
860	770

He mentioned using ST to alter his negative emotions and beliefs into more positive ones. He also used ST during games to get himself to focus and motivate himself. Kobena indicated that feeling a bit of fatigue would help his performance. As feeling tired would 'push' him because he knew that if he was tired during a game then so were his opponents. He would utilise ST to encourage himself to continue playing, "I have a big heart to play more, and my opponent is also tired."

11.2.7. Case Study – Kwesi

Post-intervention total EI scores decreased from 128 to 126 (see Table 11.14); whereas Kwesi's ST scores increased (see Table 11.15). Appraisal of others emotions improved post intervention by 1 point. Appraisal of own emotions and emotion regulation stayed stable. Optimism decreased by 0.40, social skills decreased by 0.50, utilisation decreased by 0.67.

If Kwesi was in a good mood than he enjoyed things, for example, he mentioned enjoying training a lot one day because of the mood he was in before training. He wrote:

I am a type of person when I am going in for a match when you see me you might think I am afraid because you no see me as a happy person you no see me as you

know, you only see my facial expressions and you be thinking I am not ready but this is what I am.

Table 11.14: Kwesi's means scores for the subscales and total EI

	<i>Week12</i>	<i>Week19</i>
<i>Appraisal of Others Emotions</i>	3.00	4.00
<i>Appraisal of Own Emotions</i>	4.00	4.00
<i>Optimism</i>	4.20	3.80
<i>Emotion regulation</i>	4.00	4.00
<i>Social Skills</i>	4.17	3.67
<i>Utilisation</i>	4.17	3.50
<i>Total EI</i>	128.00	126.00

Kwesi mentioned in an individual session in week 14, that before a match he took his time to relax and focus on the match. He used imagery to imagine possible situations in a match that could happen and then employed ST to encourage himself to play the game and to stay calm and focused. However, he also stated that he needed to feel the pressure and tension. He elaborated that in one game, he felt the pressure and the whole team felt the pressure to perform well. The game he discussed was the final game of the competition and the team as well as Kwesi wanted to prove to the fans that they were a good team and wanted to win. Prior to the game, the coach left the team to talk among themselves and Kwesi felt the talk was very positive and that the whole team wanted to “bring back” the team.

Kwesi set himself high expectations. Even though the coach and fans told Kwesi he performed well in the previous season, he saw it differently. The reason for this was because he did not score a goal in the season. During one training session, they had a shooting drill, and he was not hitting the target, this got him furious. It occupied him until the next morning he kept on wondering why he had missed the target and was talking to himself on how he

needed to direct his leg to the goal post, this was in week 8. In training, they had a friendly game, and he got the ball on target but the goalkeeper saved. He was happier with himself as the ball hit the target. From his diary entries, it seems that his appraisal of own emotions stayed stable. It was also apparent that he became more aware of other people's emotions.

Table 11.15 Kwesi's ST scores

Week12	Week19
820	840

Kwesi mentioned using ST to try and encourage himself and to stay calm and focused on the task. He mentioned being calm, relaxed and feeling a bit of tension benefits his performance.

11.2.8. Case Study – Ebo

Post-intervention total EI scores increased from 105 to 107 (see Table 11.16). His ST scores also increased (see Table 11.17). Emotion regulation increased by 1.50 and social skills increased by 0.17. Utilisation stayed the same. Appraisal of others emotions decreased by 0.14, optimism decreased by 0.40 and appraisal of own emotions decreased by 0.84.

Table 11.16 Ebo's means scores for the subscales and total EI

	<i>Week12</i>	<i>Week19</i>
<i>Appraisal of Others Emotions</i>	2.43	2.29
<i>Appraisal of Own Emotions</i>	4.00	3.16
<i>Optimism</i>	3.60	3.20
<i>Emotion regulation</i>	2.75	4.25
<i>Social Skills</i>	3.00	3.17
<i>Utilisation</i>	3.50	3.50
<i>Total EI</i>	105.00	107.00

Diary entries and interviews indicated that he was aware of his own emotions. At the beginning of the intervention, he mentioned a situation where he was not selected for the team to play their next match, this shocked him. The way he coped with this news was to go home and not communicate with anyone. It motivated him to train intensely at the next training session. Furthermore, he did not want anyone to be aware of the pain he was feeling or show any indication of a “poor attitude.”

Ebo wrote in week 5 that he sat by himself and was reflecting on a game that the team had lost. He was wondering why he had missed so many goal chances. It bothered him and even though his fans had told him that he had contributed, he was still not happy with himself and decided that he would never let that happen again. Ebo mentioned that he was aware of other people’s emotions, but he did not let this affect his own emotions. He mentioned in week 10 using ST to regulate other people’s emotions.

Near the end of the intervention Ebo described, in an individual session, a game that they had lost in the competition. Prior to the game, the coach stated that as six key players were no longer part of the team, the team should get a draw out of the game. Ebo was furious because he felt the coach had “let the team down for the first time before we went to the park.” He believed that because the coach had no confidence in the team, they had given up before they had even started to play the game.

Ebo discussed the formation of the team and indicated that the formation they were playing was not beneficial. He “pleaded” with the coach. However, the coach stated that the team will continue to play the formation until they perfected it. Ebo was mad but he did not want to pursue this matter as he was afraid if he did not do as the coach stated, then he would not be featured in the next game.

Another example was that one of the management communicated in a disrespectful manner with the players. Ebo felt that this was not necessary, and that it was quite hurtful for

him and the other players to hear. The individual tried to get the team to feel guilty by mentioning how much money had been invested in the team, and yet they were still losing. Ebo expressed that this was not fair and not the way to speak with professional players. He perceived encouragement to have been better as he believed the team knew that a lot was invested in the team. Ebo gave support to the players telling them not to worry about it, that they should not let it bother them. He was aware of other people's emotions and how his teammates were suffering. He tried to encourage them to carry on trying their best, and not lose their spirit that victory will come and that the team will be able to bring back past glory.

He discussed a game against his former club and how he had to perform well he had to show his former team what a great player he was, and that he could not disgrace himself in front of his former team. He also prayed to God to help him make a difference in the match against his former club. Before going to play the match, he said he had no negative thoughts and was 100 percent focused on the game and that was why he scored a goal in the game.

Table 11.17: Ebo's ST scores

Week12	Week19
480	520

Ebo mentioned that happiness enhanced his performance, whereas he felt that anger decreased his performance. He also mentioned that being confused about the formation and not knowing if the team would manage to play together in this new formation caused him to perform poorly.

It should be noted that all players indicated using goal setting but goals were related to improving their game and getting to Europe. It was difficult to get them to set goals focused around EI aspects. Deep breathing was used for free kicks and penalties. Overall the team started to communicate more with each other, especially during a match which they felt

helped increase performance. Overall most of the players showed a reduction in total EI. There is not a single subscale that increased or decreased for all the participants.

11.3 Discussion Study 2

When exploring EIS scores from the eight participants, it appears three improved their total EI scores, for another four total EI scores decreased, and with one participant there was no difference. Those who enhanced their EI did so by: 2, 8 or 14 points. Kofi had a relatively high EI therefore; an increase by 8 points was significant. Two participants decreased their total EI by two points, whereas the other two participants decreased their EI by 11 and 17 points this was a substantial decrease in EI.

As there was a need for cultural sensitivity the EIS scores were not explored on their own as they indicated that the intervention may not have worked. Therefore, exploring the qualitative data brought more insight whether the intervention worked or not and helped indicate any differences the Ghanaian culture may have experienced. The diary and interview data suggested that the intervention did work for a majority of the participants. EI was increased mainly in appraisal of own and other's emotions. There was also evidence that emotion regulation and utilisation of emotions increased for players. Optimism was high for all the participants, and it seemed to have stayed stable over the course of the intervention. This could suggest that in some cultures the EIS cannot detect change, even if change occurred.

Reasons for there being differences in EIS scores were discussed in section 10.3, which were:

1. Not buying into change: as Cherniss (2000) stated for an intervention to work athletes need to want to change, and they need to be ready to change. However, in the Ghanaian sample it is hard to tell whether the participants wanted to change, or if they said so because they believed that it was what the researcher wanted.

2. Not engaging in the intervention (Devonport, 2007): poor adherence (Albinson & Bull, 1988) could indicate that there was a problem with getting participants to use the skills being taught (Shambrook & Bull, 2001).
3. Having specific goals and objectives and when those were reached, an individual may stop with the intervention (Devonport, 2007).
4. Different levels of EI and emotional awareness (Devonport, 2007): those who have a higher EI may see the benefits of learning about strategies to deal with their emotional responses.
5. Participants may not have seen the immediate benefit of the intervention (Devonport, 2007).

Another reason for this could be that the theory and measures of EI may not have accounted for the role of a cultural framework (Kim, 1999). Researchers have indicated that tests developed are based on certain aspects that are relevant to the culture these measures were developed in (Greenfield, 1997; Suzuki & Kugler, 1995). Therefore, the measures of EI, such as the EIS (Schutte et al., 1998), are likely to reflect cultural values of the society they were created in. As previous chapters have indicated, culture does play a role in various components of EI. Kim (1999) suggested that the cultural approach of EI would obtain a profile of socio-emotional abilities, which helped ensure a more comprehensive view into the persons functioning in different areas. For example, in individualistic cultures individuality is important, whereas in collectivistic cultures the group dynamics is important which is not reflected in the EIS. Questions are asked about being aware of other people's emotions however; there are no questions, which explore how emotions could influence the group dynamics. Religion is another important factor in the Ghanaian society; therefore, a theory of EI developed in the Ghanaian society would probably have incorporated religion as a tool to regulate emotions. Other issues are that questions and the theory are very general and

therefore, do not take into account different situations so do not incorporate in-group and out-group differences, which Matsumoto (1990) indicates as being important in how and what emotions are being expressed.

For two participants, their self-efficacy in using emotion focused ST decreased. As discussed in the UK sample (section 10.3) this could be because athletes became more aware of using ST and realised they were not as confident as previously believed (Bandura, 1998). Another reason could be that some participants may not be aware of the amount of ST they use (Depape et al., 2007; see section 10.3).

Another explanation could be as Diehl et al. (2009) proposed; Ghanaian's do not ask questions and will indicate that they understand, even if they do not. Ghanaian athletes try to please coaches and sport psychologists, as they believed this helped them further their career. This could affect appraisal of others emotions and regulation of others emotions, as players would hide their own thoughts and feelings to please the coaches and/or sport psychologist. Therefore, having them become more aware of their emotions and exploring how this may influence their performance might be a difficult task, especially when they were then asked to discuss it with the researcher in the interviews.

After the team manager did not give the questionnaires to the players the researcher decided she would do it herself and would help them with the questionnaire. Due to this the participants may have scored themselves higher, to please the researcher than when they completed the questionnaire a second time on their own. Two of the participants whose scores decreased were helped the first time by the researcher.

Kim and Gill (1997) mention that subscales/factors could influence the results. They found that in Korean youth athletes a three-factor model of the IMI provided better fit than the four-factor model or the one-factor model.

Another reason why EI scores may have decreased by 11 and 17 points could be that participants may not have understood the questions the first time. Therefore, after going through them a second time they may have grasped the questions a bit better and therefore, the answers may have changed. As the intervention was shorter compared UK sample, the Ghanaians had less time to enhance EI. The questionnaire was only completed twice this could have decreased the chance of familiarity with the questions and the concept of EI. This suggested that it took time for EI to be enhanced, and it may take time for participants, especially the Ghanaians to grasp the concept of EI.

As English was not the participant's first language, therefore, even though the researcher explained the questions to the participants they may still not have understood and as previously mentioned Ghanaians did not like to ask questions. Ghanaian literacy was mentioned in section 2.5.4 this could affect the results. The researcher tried to overcome these hurdles by explaining the questionnaires to the participants and by reading the questions to them. A further reason could be that the intervention did not have a lasting effect and after the intervention was ended participants stopped using the skills they have learned and therefore, the scores decreased, however Nelis et al (2009) stated that EI improvements had a lasting effect. Unfortunately, it was not possible to determine if the scores were lower than the baseline scores, because they were missing. However, as previously mentioned, EI seemed to have improved when referring to the diaries.

Ghanaians are very religious; 68.8% of the Ghanaians are Christian, 15.9% are Muslim, 8.5% practice traditional religion, 0.7% practice other religions, and 6.1% practice no religion (CIA, 2007). Throughout the week, religious Ghanaians found time to pray. For example, football players prayed before training and after training and also before, during and after games, observations made by the researcher supported this with the current sample. All the participants indicated in their diaries or interviews praying every morning. Diehl et al.

(2009) suggested that for a lot of the athletes their performance was in the hands of God. This was also indicated in the diaries of two players, for example, Kwame mentioned that it was not over “until God says it’s all over.”

Watts (2007) suggested that religion was a multifaceted phenomenon and different parts of religion contribute to emotion regulation, such as beliefs and practice. Watts indicated that each could be used in emotion regulation. He mentioned that religious practice pays attention to the role of mediation in emotion regulation. However, he also discussed that there was very limited research on the topic of emotion regulation and religion.

The religious framework can help contribute to emotion regulation, especially in making sense of events and circumstances that would normally be emotionally destabilising. McIntosh, Silver, and Wortman (1993) found that religious parents coped better with the loss of a child. This was because the coping was mediated through social support, cognitive processes and finding meaning. Watts (2007) noted if emotions were independent of cognition, it was hard to see how religious beliefs could influence emotion; however, a cognitive approach can make it easier to understand how religious beliefs were relevant to emotional life.

Rudski (2004) suggested that religious individuals are likely to be more optimistic. It was the researcher’s experience that Ghanaians are optimistic and tried to see the good in a difficult task. However, the scores from the intervention studies were quite similar, the UK sample ranged from a score of 2.60 to 4.80 and in the Ghanaian the optimism scores ranged from 3.20 to 5. However, as indicated earlier on in the discussion the researcher is not sure if the EIS worked in the Ghanaian sample. Qualitative data in the Ghanaian population indicated that they Ghanaians were always optimistic and that they will do well in everything they try. During the individual session and diaries participants indicated being religious, and that it was in the hands of god; they also mentioned before every game that they would win

the game. Fischer and Chalmers (2008) found in their meta-analytical investigation that Ghanaian's were one of the nations to score the highest on the LOT (Scheier & Carver, 1985; Scheier et al., 1994). The current study revealed that Ghanaian footballers did not believe in failure and they all thought that one day they will play in Europe. As Kwame indicated, "by God's grace I will play for Europe by the end of the season." Furthermore, the players were all very religious, so if something went wrong the way they coped was by praying.

Dreams seemed to be important to the players; they believed each dream carried a message. The players tried to understand the dream and prayed because of the dream, especially if it was a bad dream. Wilkinson (2006) discussed that the dreaming mind used vivid imagery to process emotional states of the mind which were implicit and not available to the consciousness. These emotional states seek to emerge through dreams into the consciousness. Jungian theory explained that dreams were forms of expression taken from everyday issues and concerns. This was supported by one Ghanaian athlete when discussing bad dreams about not scoring. Reiser (2001) mentioned the content of dreams and their emotional problems confront the dreamer. This was also indicated in the current study as the participants were confronted by their dreams, its meaning and understanding them. This links into appraising one's emotions and understanding the emotions, being aware of your dreams, understanding them, and why they cause an individual distress can help regulate the emotions that are caused by the dream.

The fear of being benched was mentioned by four participants. They wanted to impress the coach and make sure that they play every game or at least get selected for every game. This relates to what Lazarus (2000) said that playing sports was a job and athletes dealt with the consequences of maybe getting fired if they did not perform well. Steinberg, Dornbusch, and Brown (1992) found that fear of failure could be predictive of increased academic performance in individuals from a more collectivistic culture, whereas fear of

failure was associated with problems in individuals from a more individualistic culture (Conroy, 2001). Further research is needed in whether fear of failure would be equal to increase sports performance. The current study suggested it would, as one athlete mentioned that when he was not selected to play, he trained harder the next training session.

The results of the current study suggest that mood catching (Totterdell, 2000) should be part of EI. Three participants who mentioned appraisal of others' emotions also indicated having to use coping methods to not let other people's emotions influence his own emotions.

In the current study GS was mainly used for performance outcome goals or personal goals such as wanting to transfer to a European club, instead of having more emotion focused goals. Relaxation was frequently utilised for achieving the right state of mind for free kicks and penalties, such as being calm, relaxed and focused and was combined with ST. As mentioned in section 10.3, there was a link between GS and EI (Lane, Thelwell, et al., 2009). Diaries were utilised in discussing not only their emotions, but also discussing dreams they had. Lane, Thelwell, et al. (2009) found there to be a link between EI and relaxation used in competition.

To conclude, the present findings suggested that culture needs to be taken into consideration when working with athletes from different cultures. H4 was supported indicating that there would be cultural differences between the two populations. H5 was partially supported, which was that the intervention would enhance EI in both populations. The differences found were: the fear of being benched was linked with wanting to please the coach, this influenced appraisal of others' emotions and regulating others' emotions as players would hold back on their thoughts and emotions to keep the coaches happy. Other differences were the importance of dreams, religion and optimism, mentioning appraisal of own emotions more than appraisal of others' emotions compared to the UK population. The questions arise what other methods could have been used to assess EI and whether EI was improved, were

the differences really cultural differences or were they found due to the measure used to assess EI? These and more questions will be explored in chapter 12 and 13.

CHAPTER 12: Overall Discussion of Phase 3

The current chapter discusses the overall findings of the two interventions.

Similarities and differences between the two samples are explored, as well as addressing factors that influenced the efficacy of interventions intended to enhance EI.

Participants of both studies discussed perceiving similar moods such as calmness to promote optimal performance and for most participants fatigue related to negative performance. The UK sample made more reference to appraising others emotions. In the Ghanaian sample only three mentioned being aware of other people's emotions and how that might impact their performance. This could suggest that there may be a problem with the EIS, as in phase 2 it was suggested that appraisal of others emotions has an impact on pre-performance mood states. The Ghanaians also referred more to individual performance that brought about emotional reactions, such as not scoring. When exploring diary data it seemed that both populations improved appraisal of own emotions and emotion regulation.

The Ghanaian population relied a lot on religion and used prayer to regulate their emotions and as a coping mechanism. The UK sample made no reference to God or religion, though as the sample size was relatively small no generalisations should be made. Furthermore, the Ghanaians discussed their dreams and how they affect their performance and mood the next morning. This was not discussed by any of the UK samples. Meyer (1998) discussed the importance of dreams in Ghanaian culture. Meyer indicated that dreams were the link between the past and the present. Dreams were considered to be part of reality, which will come true (Jedrej & Shaw, 1998). These two factors should be taken into account when assessing EI.

Both populations used GS more for performance tasks than emotion focused goals, though three participants in the UK sample mentioned using GS for appraising their own emotions and others emotions. This does not necessarily have to be a problem as Grant's

(2007) study suggested that GS can contribute to increasing EI, even if it is not emotion focused. Lane, Thelwell, et al. (2009) have suggested that EI and psychological skills are correlated, and their study did not explore emotion focused goals, just GS in general.

ST seemed to be a successful skill in both populations to regulate emotions, be it, own emotions or those of others to attain optimal performance. Diaries were a useful tool to get participants to become more aware of their own emotions and emotions of others, as well as the impact emotions have on performance. Relaxation was beneficial in regulating emotions, especially when taking free throws or penalties and free kicks. Therefore, these three techniques should be used in interventions enhancing EI.

The EIS caused a few problems during the intervention as it did not seem to detect the differences in the Ghanaian sample. Parker et al. (2005) suggested that EI could be a cultural-bound construct which may only reflect emphasis among Europeans and North Americans. As was suggested in section 11.3 if the EIS or even the theory of EI has been developed in the Ghanaian culture the questions could have been different, more focus would probably have been placed on emotions in in-groups and using religion to regulate emotions.

The benefits of the current studies were that they were relatively long in comparison to most EI interventions which usually are 2-day workshops or 13 weeks, usually meeting with participants once a week. This was the same with the UK sample as the researcher and the participants met once a week for 25 weeks, whereas, in the Ghanaian study, participants and researcher met daily for 19 weeks. The benefit of having longer interventions allows the researchers to immerse themselves into the environment and build rapport with the participants.

There were a few limitations for both studies. Literature showed that EI was quite stable (Grant, 2007; Petrides, 2009) it would have been beneficial to test this by collecting more than one baseline. As the EIS assesses self-perception it may not be as stable (Davies,

Lane, & Devonport, submitted) as previously believed, this was also supported by the qualitative data from the UK intervention. Furthermore, having more data collection points during the intervention could have been beneficial to learn more about when exactly EI increased and at what rate it increased. Another factor that would have been helpful would have been to develop workbooks to assess the participant's usage of relaxation, ST, and GS and not just relying on their diary entries as not all participants enjoyed completing diaries. The intervention should have also incorporated imagery alongside ST as results found in phase 1 indicated that athletes may utilise imagery to regulate or utilise their emotions. Two Ghanaian participants mentioned using imagery to regulate their emotions combined with ST. A further limitation to the study is that the qualitative data from the Ghanaian study may have been influenced by participants wanting to please the researcher (Diehl et al., 2009). However, the researcher tried to control this by informing participants there are no right or wrong answers.

For the UK sample more preparation should have been done in considering that new players would be joining the team at all times. For the Ghanaian population more emphasis should have been placed on emotion focused interventions, even if the athletes kept on discussing skills and factors on how to improve their game performance. The researcher should have given out the questionnaires herself and not relied on the team manager. Furthermore, it may have been more beneficial to have the whole group complete the questionnaires together. If they had questions, the researcher could have addressed them and other athletes may have benefited from, or other athletes could have translated the question into Twi for the athlete who was struggling with a certain question. A further limitation is that no self-reference measure of competitive performance was given to the participants. A further limitation to the Ghanaian study was that the researcher came near the end of the

season; the study should have been started at the beginning of the season so that it could have run either the same length of time as with the UK sample or the whole season.

To conclude, phase 3 has shown that EI can be enhanced especially in the UK sample but that there were more difficulties in enhancing EI in the Ghanaian sample. The reason for these differences have been explored in section 10.3 and 11.3 but to summarise: (a) maybe the EIS is not sensitive enough to detect small increases in EI, (b) another reason could be that the questionnaire or even the theory of trait EI is culture specific, (c) maybe the Ghanaian sample did not buy into the intervention, or (d) the questionnaire should have been translated into Twi for the Ghanaian sample. However, further research is needed as there were a few problems with the Ghanaian sample, and therefore, it would be better to explore others ways of assessing EI and not by using questionnaires.

Future research should assess performance in the intervention to investigate the link between enhancing EI and performance further, instead of relying on what participants mentioned in the study on how the intervention may have improved their performance. Future research should assess a skill or overall team performance in competition. It should also assess differences between team and individual sports and the benefits of enhancing EI using psychological skills training. Research should also explore the differences in EI between non-athletes versus athletes.

CHAPTER13: Overall Discussion and Conclusion of the PhD

The aims of the present doctorate dissertation were: (a) to test the relationship between EI and mood states prior to performance in UK wheelchair basketball players from the UK and Ghanaian football players. (b) To investigate whether EI can be enhanced in the two different cultural samples and (c) to explore whether there are cultural differences, in EI profiles as well as in the intervention, this aim will provide a summary of the cultural differences found. The objectives changed slightly during the course of the PhD, this will be discussed in further detail.

Aim 1: Results from phase one supported the emerging findings that there was a link between EI, mood states associated with best and worst performance among wheelchair basketball players. The qualitative data, suggested that participants perceived confusion as dysfunctional towards performance and that calmness enhanced performance. All three phases showed similarities in mood states which athletes perceived to promote optimal performance such as calmness. Depression was perceived to be debilitating towards performance (Lane & Terry, 2000; Hanin, 2000). Participants from the studies mentioned that anger could be utilised to enhance performance (Lazarus, 2000; Hanin, 2000; Robazza & Bortoli, 2007). They also indicated that fatigue did not always have a negative effect on performance (Lane et al., 2004). Both samples discussed optimism being important for optimal performance (Bandura, 1998). The Ghanaian population mentioned going into a game expecting to win, no matter the outcome of the previous games.

The qualitative study of phase 1 supported the link between psychological skills being used to regulate emotions. Participants indicated using relaxation, GS and ST to cope with emotional situations. ST was the skill utilised most frequently. Some of the present PhD studies suggested that EI had a mediating effect on performance and psychological skills. A moderating effect is a variable that affects the direction of the relationship, whereas a

mediating effect explains the relationship (Baron & Kenny, 1986). Psychological skills can be used to increase EI and thus influence performance. Lane, Thelwell, et al. (2009) suggested that those higher in EI utilise more psychological skills, therefore, if one enhances EI then one will enhance psychological skills, which can enhance performance.

Aim 2: Results indicated that some participants could enhance EI and some could not. A few issues started to arise while analysing the data of the Ghanaian study, it became apparent that the EIS did not detect changes in the Ghanaian sample. The intervention studies brought about various methodological issues. It seemed that the measurement was not applicable to other cultures. The diaries seemed to indicate a lot of these differences. The diaries indicated that EI may have been enhanced in most of the Ghanaian participants but this was not apparent in the EIS results. However, as mentioned in chapter 12 it could be that qualitative data was influenced by the Ghanaians wanting to please a person of authority.

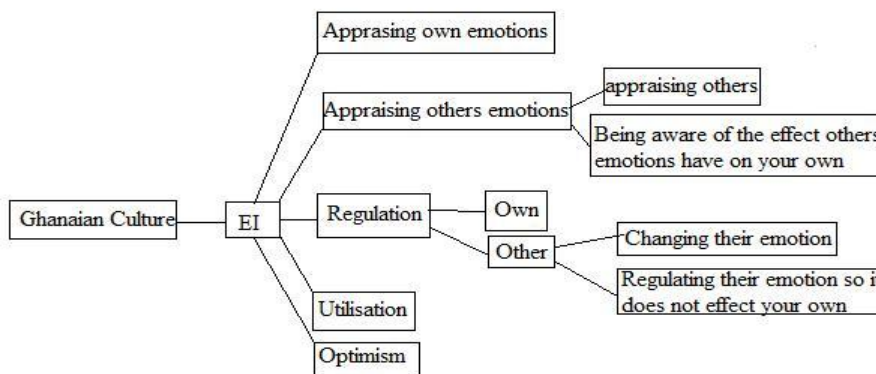
Aim 3: Each of the phases indicated there to be cultural differences. There were contradictory findings in Phase 1 as no sub cultural differences were found between athletes with a disability and coaches without a disability, but differences were found between student-athletes (which were taken as the norm) without a disability and the wheelchair basketball sample. Study 2 indicated that participants had to regulate emotional responses caused by their disability. Such as having to rely on other people to help them or attitudes of others towards their own disability, as well as their own emotional responses towards athletes with less motor function compared to them.

Phase 2 results indicated that the Ghanaian's experienced higher negative emotions prior to both best and worst performance compared to the UK sample. No EI subscale correlated with the same mood state prior to best and worst performance in the Ghanaian sample, whereas in the UK population appraisal of own emotions and social skills correlated with some of the same mood states. Optimism was higher in the Ghanaian population.

Culture seems to have a moderating effect on EI and psychological skills and therefore, on performance. EI seems to vary between different cultures and thus culture could explain the differences between athletes from the different populations. Culture acting as a moderating effect would seem plausible as previous research has found that culture influenced emotional expression and understanding emotions (Matsumoto 1990; Mesquita et al., 1997; Mesquita & Albert 2007), which was also supported in the current studies. This could support the notion that culture could influence EI. Another factor, which some models of EI suggest, was that emotion regulation needs to include both regulating their own emotions, and others emotions (Jordan & Lawrence, in press).

The following two models were developed using the results found. Different EI components were found to have different value in the different samples.

Figure 13.1 EI and the Ghanaian sample



The Ghanaian study in phase 2 suggested that emotion regulation and appraisal of others emotions were important, especially in relation to optimal and/or dysfunctional performance (section 8.3). This was, however, not apparent in phase 3 as only two participants mentioned other people’s emotions, and mentioned how others emotions influence their own emotions. Phase 3 also had Ghanaians discuss their own emotions and regulation of own emotions more (section 11.3 and 12). The findings from phase 3 suggested mood catching (Totterdell, 2000) should be part of EI theory, as participants mentioned that

someone else's emotions could influence their own emotions and therefore, had to regulate them (section 11.3). Figure 13.1 is the model for the Ghanaian population and how EI components were important to the Ghanaian population.

Figure 13.2: EI and the UK sample

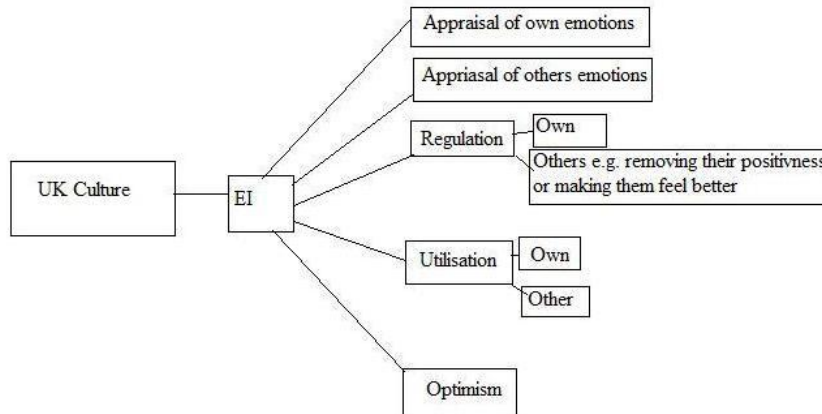


Figure 13.2 shows the different EI components that were important to the UK sample. Phase 1 study 1 indicated that optimism and utilisation of emotions (own) were important to the UK sample (section 4.3), whereas study 2 suggested that appraisal of own and others emotions, regulation, optimism and utilisation were important (section 5.5 and 6). Phase 3 had participants discuss emotion regulation, appraisal of own and others emotions (section 10.3).

The current PhD has contributed to the literature as it has demonstrated that culture needs to be taken into consideration when working with athletes. It suggests that each individual should be seen as just that, an individual, and interventions should be tailored to the individual (Terry, 2009; Parham, 2005; Hill, 1993; Kontos & Arguello, 2005; see section 1.3). The PhD also contributed to utilising psychological skills to enhance EI and that the two constructs were linked. This will help coaches and SP practitioners working with athletes from different cultures enhancing EI. Sport psychologists working in non Western countries should be aware that the theories and constructs they use may not have been tested on athletes

from different cultures, as the techniques may not work as effectively as in the culture they were developed in.

No definite conclusion can be drawn, if the intervention was successful or not, due to the weakness of the EIS, and language issues, for example, that in the Ghanaian languages, there is no word for loneliness, as language is culture (Vygotsky, 1978). A further issue was with qualitative data as discussed in chapter 12, such as participants trying to please the researcher (Diehl et al., 2009). However, the researcher did try and control for this. This suggests though that an alternative method of assessment needs to be developed. However, a few recommendations can be made, though these should be tested further. EI interventions tailored around athletes with a disability need to teach athletes skills to cope with other people's attitudes towards their disability as well as strategies that will help them cope with having to rely on other people. In the Ghanaian population, it is important for participants to learn to regulate other people's emotions and not let that influence their own performance. Religion needs to be included as a strategy to regulate emotions. Practitioners also need to help athletes cope with fear of failure or being benched by the coach. Diaries and ST seemed to be the most effective strategies to enhance EI in the two populations.

If this study was done again the results would probably be different because a different researcher from a different culture would be conducting the study this could affect the outcome of the results. The theory may have been different as well had it been developed in a different culture. Religion and dreams are important in the Ghanaian culture these may have been included in the theory of EI, if it were developed in Ghana. Therefore, future research needs to collectively move the field forward and conduct research that does qualitative analysis and validates the measure first before any further research is conducted with the EIS. Even though the current PhD had a small sample size this should not stop researchers from overlooking the matter and disregarding the issues that were found with the

EI measures and theory. The PhD has started the exploration and has started to set some foundation stones; future research now needs to move the field and research forward. Another issue that needs to be explored are the factors that influence the development of EI, exploring whether they are different across different cultures.

To summarise, the current studies found there to be cultural differences in EI between the two populations. Phase 1 and 2 suggested that different subcomponents of EI influenced best and worst performance. Optimism and utilisation was found to contribute in mood variation by best and worst performance in the UK population, whereas in the Ghanaian population it was emotional regulation and appraisal of other's emotions. Phase 3 indicated that both populations could partially enhance their EI. The current PhD seemed to suggest that EI was not transferable across different cultures as the method of assessing EI may not be applicable in the Ghanaian culture. This was apparent in Phase 3 when faced with a few challenges while using the EIS (Schutte et al., 1998). Some of the changes in EI that were indicated in the diaries and interviews were not shown in the EI scores. It also became apparent that the theory of EI needed to be developed further keeping different cultural aspects in mind. Therefore future research should explore the theory of EI and its assessment measures further and test the theory and measures in different cultures and subcultures.

References

- Aforo D.A. (2007). Age cheating marring football. *Ground Report*. Retrieved 15.05.2007, from <http://www.groundreport.com/Sports/AGE-CHEATING-MARRING-FOOTBALL>
- Aidoo, A.A. (1991). *Changes: A love story*. London: Women's Press.
- Akerjordet, K., & Severinsson, E. (2004). Emotional intelligence in mental health nurses talking about practice. *International Journal of Mental Health Nursing*, 13, 164-170.
- Akerjordet, K., & Severinsson, E. (2007) Emotional intelligence: A review of the literature with specific focus on empirical and epistemological perspectives. *Journal of Clinical Nursing*, 16, 1405-1416.
- Albinson, J., & Bull, S.J. (1988). *A Mental Game Plan: A Training Program for all Sports*. London, ON: Spodym.
- Allison, M. (1982). Sport, culture and socialization. *International Review for the Sociology of Sport*, 17, 11-37.
- Andersson, G. (1996). The benefits of optimism: A meta-analytic review of the life orientation test. *Personality and Individual Differences*, 21, 719-725
- Anshel, M.H., & Sutarso, T. (2007). Relationships between sources of acute stress and athletes' coping style in competitive sport as a function of gender. *Psychology of Sport and Exercise*, 8, 1-24.
- Anshel, M.H., Williams, L.R.T., & Hodge, K. (1997). Cross-cultural and gender difference on coping styles in sport. *International Journal of Sport Psychology*, 28, 141-156
- Anshel, M.H., Williams, L.R.T., & Williams, S.M. (2000). Coping style following acute stress in competitive sport. *The Journal of Social Psychology*, 140, 751-773.
- Arathoon, S.M., & Malouff, J.M. (2004). The effectiveness of a brief cognitive intervention to help athletes cope with competitive loss. *Journal of Sport Behavior*, 27, 213 – 229.

Ashkanasy, N.M., Härtel, C.E.J., & Daus, C.S. (2002). Advances in organizational behavior: Diversity and emotions. *Journal of Management*, 28, 307-338.

Austin, E.J. (2004). An investigation of the relationship between trait emotional intelligence and emotional task performance. *Personality and Individual Differences*, 36, 1855-1864.

Austin, E.J., Farrelly, D., Black, C., & Moore, H. (2007). Emotional intelligence, Machiavellianism and emotional manipulation: Does EI have a dark side? *Personality and Individual Differences*, 43, 179-189.

Bagby, R.M., Parker, J.D., & Taylor, G.J. (1994). The twenty item Toronto Alexithymia Scale-2: Convergent, discriminate and concurrent validity. *Journal of Psychosomatic Research*, 38, 33-40.

Bailey, W., Nowicki, S., & Cole, S. (1998). The ability to decode nonverbal information in African American, African and Afro-Caribbean, and European American adults. *Journal of Black Psychology*, 24, 418-431.

Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. New York: W.H. Freeman.

Bandura, A. (1998). Personal and collective efficacy in human adaptation and change. In J. G. Adair, D. Belanger, & K. L. Dion (Eds.), *Advances in psychological science: Vol. 1. Personal, social and cultural aspects* (pp. 51-71). Hove, UK: Psychology Press.

Retrieved on 31.03.2009 from: <http://www.des.emory.edu/mfp/BanduraPubs.html>

Barchard, K.A. (2001). *Seven components potentially related to emotional intelligence*.

Retrieved on the 31.03.2009 from: <http://ipip.ori.org/newMultipleconstructs.htm>

Barnes, C. (2001). 'Emancipatory Disability research: Project or Process'. Retrieved on 31.03.2009 from:

www.leeds.ac.uk/disabilitystudies/archiveuk/Barnes/glasgow.lecture

- Bar-On, R. (1997). *The Emotional Quotient Inventory (EQ-i): Technical Manual*. Toronto: Multi-Health Systems.
- Bar-On, R. (2002). *Bar-On Emotional Quotient Inventory: Short: Technical manual*. Toronto, Canada: Multi-Health Systems.
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical consideration. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baumeister, R.F., Heatherton, T.F., & Tice, D.M. (1994) *Losing control: How and why people fail at self-regulation*. San Diego, CA: Academic Press.
- Baumeister, R.F., Vohs, K.D., DeWall, C.N., & Zhang, L (2007). How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review*, 11, 167-203.
- Bawden M. (2006). Providing sport psychology support for athletes with disabilities. In J. Dosil (Eds). *The Sport Psychologist's Handbook: A Guide for Sport-Specific Performance Enhancement*. Chichester, UK: John Wiley & Sons, Ltd.
- Beedie, C.J. (2005). If the POMS measures it, then it's a mood isn't it...? Paper presented at the International Society of Sport Psychology conference, Sydney Australia, August 14-19, 2005.
- Beedie, C.J., Terry, P.C., & Lane, A.M. (2000). The Profile of Mood States and athletic performance: Two meta-analyses. *Journal of Applied Sport Psychology*, 12, 49-68.
- Biddle, S. (2000). Psychology of sport and exercise: Present and future. *Psychology of Sport and Exercise*, 1, 1-5.
- Botterill, C., & Brown, M. (2002). Emotion and perspective in sport. *International Journal of Sport Psychology*, 33, 38-60.

- Boyatzis, R.E, Goleman, D., & Hay/McBer (1999). *Emotional competence inventory*. Boston: HayGroup.
- Brinthaupt, T.M., Hein, M.B., & Kramer, T.E. (2005). The Self-Talk Scale: Development, higher-order factor analysis, and validation. Manuscript submitted for publication.
- Brittain, I. (2004) Perceptions of disability and their impact upon involvement in sport for people with disabilities at all levels. *Journal of Sport & Social Issues*, 28, 429-452
- Bryan, A.J. (1987). Single-subject designs for evaluation of sport psychology interventions. *The Sport Psychologist*, 1, 283-292.
- Bracket, M.A., & Katulak, N.A. (2007) The emotionally intelligent classroom: Skill-based training for teachers and students. In J. Ciarrochi & J. D. Mayer (Eds.), *Applying emotional intelligence: A practitioner's guide*. New York: Psychology Press.
- Buchanan, T., & Smith J.L. (1999). Using the internet for psychological research personality testing on the World Wide Web. *British Journal of Psychology*, 90, 125-144.
- Bunker, L., Williams, J.M., & Zinsser, N. (1993). Cognitive techniques for improving performance and building confidence. In J.M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance*. (2nd Ed., pp. 225-242). Mountain View, CA: Mayfield.
- Butler, E.A., Lee, T.L., & Gross, J.J. (2007). Emotional regulation and culture: Are the social consequences of emotion suppression culture-specific? *Emotion*, 7, 30-48.
- Butler, R.J. (1996) *Sports psychology in action*. Oxford, UK: Butterworth-Heinemann.
- Campbell, E., & Jones, G. (1997). Pre-competition anxiety and self-confidence in wheelchair sport participants. *Adapted Physical Activity Quarterly*, 14, 96-107.
- Campbell, E. (1995) Psychological well-being of participants in wheelchair sports: Comparison of individuals with congenital and acquired disabilities. *Perceptual and Motor Skills*, 81, 563-568.

- Campbell, E., & Jones, G. (2002a). Sources of stress experienced by elite male wheelchair basketball players. *Adapted Physical Activity Quarterly*, *19*, 82-99.
- Campbell, E., & Jones, G. (2002b). Cognitive appraisal of sources of stress experienced by elite male wheelchair basketball players. *Adapted Physical Activity Quarterly*, *19*, 100-108.
- Carron, A.V., & Hausenblas, H.A. (1998). *Grouping dynamics in sport* (2nd ed.) Morgantown, WV: Fitness Information Technology.
- Carron, A.V., Spink, K.S., & Prapavessis, H. (1997). Team building and cohesiveness in the sport and exercise setting: Use of indirect interventions. *Journal of Applied Sport Psychology*, *9*, 61-72.
- Castro, F.G., & Coe, K (2007). Traditions and alcohol use: A mixed-methods analysis. *Cultural Diversity and Ethnic Minority Psychology*, *13*, 269-284.
- Central Intelligence Agency (2007). World Factbook. Retrieved December 13, 2007, from <https://www.cia.gov/library/publications/the-world-factbook/geos/gh.html>
- Chang E.C. (1996). Cultural difference in optimism, pessimism, and coping: Predictors of subsequent adjustment in Asian American and Caucasian American college students. *Journal of Counseling Psychology*, *43*, 113-123.
- Cherniss, C. (2000). Social and emotional competence in the work place. In R. Bar-On & J.D.A. Parker (Ed). *The Handbook of Emotional Intelligence: Theory, Development, Assessment, and Application at Home, School, and in the Workplace*. Jossey-Bass A Wiley Company: San Francisco, p433-458.
- COIL (2007) Understanding physical disability. Retrieved on 3.32009 from: http://www.coil.org/index.php?option=com_content&task=view&id=79&Itemid=2
- Conroy, D.E. (2001). Fear of failure: An exemplar for social development research in sport. *Quest*, *53*, 165-183.

- Corr, P.J., & Gray, J.A. (1995). Attributional style, socialization, and cognitive ability as predictors of sales success. *Personality and Individual Differences, 18*, 241–252.
- Cox, R., & Davis, R., (1992). Psychological skills of elite wheelchair athletes. *Palaestra, 8*, 16-21.
- Cox, R.H., & Lui, Z. (1993). Psychological skills: A cross-cultural investigation. *International Journal of Sport Psychology, 24*, 326-340.
- Creswell, J.W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Creswell, J.W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approach*. Third Edition. London, UK: Sage.
- Crocker, P.R.E., & Graham, T.R. (1995). Emotion in sport and physical activity: The importance of perceived individual goals. *International Journal of Sport Psychology, 26*, 117-137.
- Cushman, L., & Dijkers, M. (1991). Depressed mood during rehabilitation of persons with spinal injury. *Journal of Rehabilitation, 57*, 35-38.
- D'Urso, V., Petrosso, A., & Robazza, C. (2002) Emotions, perceived qualities, and performance of rugby players. *The Sport Psychologist, 16*, 173-199.
- Dale, G.A. (1996). Existential phenomenology: Emphasizing the experience of the athlete in sport psychology research. *The Sport Psychologist, 10*, 307-321
- Davies, K.A., Lane, A.M., & Devonport, T.J. (submitted). Validity and reliability of a brief emotional intelligence scale: The BEIS-10. *Journal of Individual Differences*.
- Deci, E.L. (1980). *The psychology of self-determination in human behavior*. New York: Plenum Press.
- DeGraff, A.H., & Schaffer, J. (2008). Emotion focused coping: A primary defense against stress for people living with spinal cord injury. *Journal of Rehabilitation, 74*, 19-24.

- Denzin, N.K., & Lincoln, Y.S. (2000). *Handbook of Qualitative Research*, London: Sage Publications.
- Depape, A.M.R., Hakim-Larson, J., Voelker, S., Page, S., & Jackson, D.L. (2006). Self-talk and emotional intelligence in university students. *Canadian Journal of Behavioural Sciences*, 38, 250-260.
- DePauw, K.P. (1988). Sport for individuals with disabilities: Research opportunities. *Adapted Physical Activity Quarterly*, 5, 80-89.
- Devonport, T.J. (2007). Emotional intelligence and coping process amongst adolescent populations: A case study of student athletes. In A.M. Lane (Eds), *Mood and Human Performance: Conceptual, Measurement and Applied issues* (pp. 165-186). New York: Nova Science Publishers, Inc.
- Devonport, T.J., Lane, A.M., & Hanin, Y.L. (2005) Emotional states of athletes prior to performance-induced injury. *Journal of Sports Science and Medicine* 4, 382-394.
- Diehl C.D.P., Hegley, A., & Lane, A.M. (2009). Working with Ghanaian athletes. In R.J. Schinke & S.J. Hanrahan (Eds) *Cultural Sport Psychology*. Champaign, IL: Human Kinetics.
- Duda, J.L. (1992) Motivation in sport settings: A goal perspective approach. In G. C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 57-91). Champaign, IL: Human Kinetics.
- Duda, J.L., & Allison, M.T. (1990). Cross-cultural analysis in exercise and sport psychology: A void in the field. *Journal of Sport & Exercise Psychology*, 12, 114-131.
- Dulewicz, S.V., & Higgs, M.J. (2001). *EI general and general 360 user guide*. Windsor, UK: NFER-Nelson.
- Duncan, R.M., & Cheyne, J.A. (1999). Incidence and functions of self-reported private speech in young adults: A self-verbalization questionnaire. *Canadian Journal of Behavioural Science*, 31, 133-136.

- Dvorak, J., George, J., Junge, A., & Holder, J. (2007). Age determination by magnetic resonance imaging of the wrist in adolescent male football players. *British Journal of Sports Medicine, 41*, 45-52.
- Dzokoto, V.A., & Adams, G. (2007). Analyzing Ghanaian emotions through narrative: A textual analysis of Ama Ata Aioo's novel *Changes*. *Journal of Black Psychology, 33*, 94-112.
- Dzokoto, V.A., & Okazaki, S. (2006). Happiness in the eye and the heart: Somatic referencing in West African emotion lexica. *Journal of Black Psychology, 32*, 117-140.
- Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P.D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology, 86*, 42-51.
- Ekman, P. (1999). Basic emotions. In T. Dalgleish & M. Power (Eds.). *Handbook of Cognition and Emotion* (pp. 45-60). Sussex, U.K.: John Wiley & Sons, Ltd.
Retrieved on the 02.03.2009 from:
http://www.paulekman.com/pdfs/basic_emotions.pdf
- Ekman, P., & Friesen, W.V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology, 17*, 124-129.
- Elbe, A.M. (2003). Die sportliche Leistungsorientierung von deutschen und amerikanischen studentischen Leistungssportlerinnen [Sport achievement orientation in female German and US-American competitive sport students]. *Psychologie und Sport, 1*, 28-37.
- Eniola, M.S., & Adebisi, K. (2007) Emotional intelligence and goal setting an investigation into interventions to increase motivation among visually impaired students in Nigeria. *British Journal of Visual Impairment, 25*, 249-253.

- Erickson, S.J., & Feldstein, S.W. (2007). Adolescent humor and its relationship to coping, defense strategies, psychological distress, and well-being. *Child Psychiatry and Human Development*, 37, 255-271.
- Eshun, S. (1999). Cultural variation in hopelessness, optimism, and suicidal ideation: A study of Ghana and US college samples. *Cross-Cultural Research*, 33, 227-238.
- Extremera, N., & Fernández-Berrocal, P. (2002). Relation of perceived emotional intelligence and health-related quality of life of middle-aged women. *Psychological Reports*, 91, 47-59.
- Eysenbach, G., & Wyatt, J. (2002). Using the Internet for Surveys and Health Research [Electronic Version]. *Journal of Medical Internet Research*, 4. Retrieved 8.12.2006 from <http://www.jmir.org/2002/2/e13/#ref3>
- Fazackerley, R., Lane, A.M., & Mahoney, C. (2004). Mood and performance relationships in wakeboarding. *Journal of Sport Behavior*, 27, 18-30.
- Fernandez-Berrocal, P., Salovey, P., Vera, A., Extremera, N., & Ramos, N. (2005). Cultural influence on the relation between perceived emotional intelligence and depression. *Revue Internationale De Psychologie Sociale*, 18, 91-107.
- Fisher, L., Butryn, T.M., & Roper, E.A. (2003). Diversifying (and politicizing) sport psychology through Cultural Studies: A promising perspective. *The Sport Psychologist*, 17, 391-405.
- Fisher, R., & Chalmers, A. (2008). Is optimism universal? A meta-analytical investigation of optimism levels across 22 nations. *Personality and Individual Differences*, 45, 378-382.
- Fletcher, D., & Hanton, S. (2001). The relationship between psychological skills usage and competitive anxiety responses. *Psychology of Sport and Exercise*, 2, 89-101.

- Flick, U. (2007). *Qualitative Sozialforschung: Eine Einführung*. Hamburg, Germany: Rowohlt's Taschenbuch Verlag.
- Folkman, S., & Lazarus, R.S. (1985). If it changes it must be a process: A study of emotions and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48, 150-170.
- Folkman, S., & Mosowik, J.T. (2004). Coping: Pitfalls and Promise. *Annual Review of Psychology*, 55, 747-774.
- Fortier, A. (2005). Pride politics and multiculturalist citizenship. *Ethnic and Racial Studies*, 28, 559-578.
- Freudenthaler, H.H., & Neubauer A.C. (2003, July). *The localization of emotional intelligence within human abilities and personality*. Poster presented at the 11th Biennial Meeting of the International Society for the Study of the Individual Differences (ISSID), Graz, Austria.
- Freudenthaler, H.H., & Neubauer, A.C. (2005). Emotional intelligence: The convergent and discriminate validities of intra- and interpersonal emotional abilities. *Personality and Individual Differences*, 39, 569-579.
- Fung, L., & Fu, F.H. (1995). Psychological determinants between wheelchair sport finalists and non-finalists. *International Journal of Sport Psychology*, 26, 568-579.
- Furnham, A., & Petrides, K.V. (2003). Trait emotional intelligence and happiness. *Social Behavior and Personality*, 31, 815-824.
- Gendolla, G.H.E., Brinkmann, K., & Richter, M. (2007). Mood, motivation, and performance: An integrative theory, research, and applications. In A.M. Lane (Ed.), *Mood and human performance: Conceptual, measurement, and applied issues* (pp. 35-61). New York: Nova Science Publishers, Inc.

- George, J.M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations, 53*, 1027–1055.
- Ghorbani, N., Bing, M.N., Watson, P.J, Davison, H.K., & Mack, D.A. (2002). Self-reported emotional intelligence and functional dissimilarity of higher-order processing in Iran and the United States. *International Journal of Psychology, 37*, 297-308.
- Gibbs, G.R. (2007). Analyzing qualitative data. In U. Flick (Ed.). *The Sage Qualitative Research Kit*. London: Sage.
- Goleman D. (1998). *Working with Emotional Intelligence*. New York: Bantam
- Goleman, D. (1995). *Emotional Intelligence*. New York: Batnam Books.
- Gordon, R.A. (2008). Attributional style and athletic performance: Strategic optimism and defensive pessimism. *Psychology of Sport and Exercise, 9*, 336-350.
- Gordon, R.G., Jr. (ed.), (2005). *Ethnologue: Languages of the World*, Fifteenth edition. Dallas, Tex.: SIL International. Retrieved December 13, 2007 from Online version: <http://www.ethnologue.com/>
- Gould, D., Eklund, R.C., & Jackson, S.A. (1992). 1988 U.S. Olympic wrestling: I. mental preparation, precompetitive cognition, and affect. *The Sport Psychologist, 6*, 358-382.
- Gould, D., Finch, L.M., & Jackson, S.A. (1993). Coping strategies utilized by national champion figure skaters. *Research Quarterly for Exercise & Sport, 64*, 453–468.
- Gould, D., Guinan, D., Greenleaf, C., & Chung, Y. (2002). A survey of U.S. Olympic coaches: Variables perceived to have influenced athlete performance and coach effectiveness. *The Sport Psychologist, 16*, 229-250.
- Grant, A.M. (2007). Enhancing coaching skills and emotional intelligence through training. *Industrial and Commercial Training, 39*, 257-266. Retrieve on 19.03.2009 from: <http://www.emeraldinsight.com/Insight/ViewContentServlet?Filename=Published/EmeraldFullTextArticle/Articles/0370390503.html#0370390503001.png>

- Grant, A.M., & Cavanagh, M.J. (2007). The goal-focused coaching skills questionnaire: Preliminary findings. *Social Behavior and Personality*, 35, 751-760.
- Grawitch, M.J., Munz, D.C., & Kramer, T.J. (2003). Effects of member mood states on creative performance in temporary work groups. *Group Dynamics: Theory, Research, and Practice*, 7, 41-54.
- Greenfield, P.M. (1997). You can't take it with you: Why ability assessments don't cross culture. *American Psychologist*, 52, 1115-1124.
- Greenfield, T.K., Midanik, L.T., & Rogers J.D. (2000). Effects of telephone versus face-to-face interview modes on reports of alcohol consumption. *Addiction*, 95, 277-284.
- Gross, J.J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2, 271-299.
- Guest, A.M. (2007). Cultural meanings and motivations for sport: a comparative case study of soccer teams in the United States and Malawi. *Athletic Insight*, 9, 1-18. Retrieved on the 22.04.2008 from:
<http://www.athleticinsight.com/Vol9Iss1/CulturalMeaningandMotivation.htm>
- Hagtvet, K.A., & Hanin, Y.L. (2007). Consistency of performance-related emotions in elite athletes: Generalizability theory applied to the IZOF model. *Psychology of Sport and Exercise*, 8, 47-72.
- Hall, R., Lane, A.M., & Devonport, T.J. (2002). Relationships between mood and anxiety among runners: test of two conceptual models. *Journal of Sports Sciences*, 20, 63-64.
- Halliwell, W. (1990). Providing sport psychology consulting services in professional hockey. *The Sport Psychologist*, 4, 369-377.
- Hanin, Y.L., & Stambulova, N. (2004). Sport Psychology, Overview. In C.Spielberger (Ed.) *Encyclopedia of Applied Psychology* (pp. 463-477, V.3). New York: Elsevier Inc.

- Hanin, Y.L. (1978). A study of anxiety in sports. In W.F. Straub (Ed.), *Sport psychology: An analysis of athlete behavior* (pp. 236-249). Ithaca, NY: Movement.
- Hanin, Y.L. (1995). Individualized zones of optimal functioning (IZOF) model: An idiographic approach to performance anxiety. In K. Henschen, & W. Straub (Eds.), *Sport Psychology: An Analysis of athlete behavior* (pp. 103-119). Longmeadow, MA: Movement Publication.
- Hanin, Y.L. (1997). Emotions and athletic performance: Individual zones of optimal functioning model. *European Yearbook of Sport Psychology*, 1, 29-72.
- Hanin, Y.L. (2000). Successful and poor performance and emotions, In: Y.L. Hanin (Ed), *Emotions in sport*, (pp 157-188). Champaign, IL: Human Kinetics.
- Hanin, Y.L. (2003). Performance related emotional states in sport: A qualitative analysis. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 4(1), Art. 5. Retrieved on 15.10.2008 from <http://nbn-resolving.de/urn:nbn:de:0114-fqs030151>
- Hanrahan, S.J. (1998). Practical considerations for working with athletes with disabilities. *The Sport Psychologist*, 12, 346-357.
- Hanton, S., & Connaughton, D. (2002) Perceived control of anxiety and its relationship to self-confidence and performance. *Research Quarterly for Exercise and Sport*, 73, 87-97.
- Hayashi, C.T., & Weiss, M.R. (1994). A cross-cultural analysis of achievement motivation in Anglo-American and Japanese marathon runners. *International Journal of Sport Psychology*, 25, 187-202.
- Henschen, K., Horvat, M., & French, R. (1984). A visual comparison of psychological profiles between able-bodied and wheelchair athletes. *Adapted Physical Activity Quarterly*, 1, 118-124.

- Henschen, K.P., Horvat, M., & Roswal, G. (1992). Psychological profiles of the United States wheelchair basketball Team. *International Journal of Sport Psychology*, 23, 128-137.
- Hill, T.L. (1993). Sport psychology and the collegiate athlete: One size does not fit all. *Counseling Psychologist*, 21, 436-440.
- Hirschman, C. (1983). America's melting pot reconsidered. *Annual Review of Sociology*, 9, 397-423
- Holmes, E.B. (2008) Impairment rating and disability determination. *eMedicine Specialties*
Retrieved on 22.03.2009 from: <http://emedicine.medscape.com/article/314195-overview>
- Hopko, D.R., Armento, M.E.A., Cantu, M.S., Chambers, L.L., & Lejuez, C.W. (2003). The use of daily diaries to assess the relations among mood state, overt behavior, and reward value of activities. *Behavior Research and Therapy*, 41, 1137-1148.
- Hrycaiko, D., & Martin, G.L. (1996). Applied research studies with single-subject designs: Why so few? *Journal of Applied Sport Psychology*, 8, 183-199.
- Jansen, C. (1982). Inter-ethnic marriages. *International Journal of Comparative Sociology*, 23, 225-235.
- Janover, M.A., & Terry, P.C. (2002). Relationships between pre-competition mood and swimming performance: Test of a conceptual model with an emphasis on depressed mood. *Australian Journal of Psychology*, 54, S36-37.
- Jedrej, M.C., & Shaw, R. (1998). Dreaming, religion, and society in Africa, In M.C. Jedrej, & Shaw, R. (Eds). *Dreaming, Religion and Society in Africa*. Leiden, The Netherlands: E.J. Brill.

- Ji, L. Zhang, Z., Usborne, E., & Guan, Y. (2004). Optimism across cultures: In response to the severe acute respiratory syndrome outbreak. *Asian Journal of Social Psychology*, 7, 25-34.
- Jones, G. (2002). Performance excellence: A personal perspective on the link between sport and business. *Journal of Applied Sport Psychology*, 14, 268–281.
- Jones, G., Swain, A., & Hardy, L. (1993). Intensity and direction dimensions of competitive state anxiety and relationships with performance. *Journal of Sports Sciences*, 11, 525-532.
- Jones, J.G. (1995). More than just a game: research developments and issues in competitive anxiety in sport. *British Journal of Psychology*, 85, 449-478.
- Jones, M. (2003). Controlling emotions in sport. *The Sport Psychologist*, 17, 471-486.
- Jordan P.J., & Troth A.C. (2004). Managing emotions during team problem solving: Emotional intelligence and conflict resolution, *Human Performance* 17, 195-218.
- Jordan, P.J., & Lawrence, S.A. (in press). Emotional intelligence in teams: Development and initial validation of the workgroup emotional intelligence profile – short version (WEIP-S). *Journal of Management & Organization*.
- Jordan, P.J., & Troth, A.C. (2002). Emotional intelligence and conflict resolution: Implications for human resource development. *Advances in Developing Human Resources*, 4, 62-79.
- Jordan, P.J., Ashkanasy, N.M., & Härtel, C.E.J. (2002). Emotional intelligence as a moderator of emotional and behavioral reactions to job insecurity. *Academy of Management Review*, 27, 361-373.
- Kaplan, D. (1999). The definition of disability. The Center for an accessible society. Retrieved on 3.03.2009 from: <http://www.accessiblesociety.org/topics/demographics-identity/dkaplanpaper.htm>

- Kim, B.J., & Gill, D.L. (1997). A cross-cultural extension of goal perspective theory to Korean youth Sport. *Journal of Sport & Exercise Psychology*, 19, 142-155.
- Kim, E.S. (1999). Emotional intelligence assessment: Working with culture. *Multicultural Matters*. Retrieved on 02.03.2009 from:
<http://www.indiana.edu/~div16/MultiCultural.html>
- Kleining, G. (1991) Methodologie und Geschichte qualitative Sozialforschung. In U. Flick, E. v. Kardorff, H. Keupp, L. v. Rosenstiel & S. Wolff. *Handbuch Qualitative Sozialforschung* (pp.11-22). München, Germany: Psychologie Verlags Union.
- Kontos, A.P., & Breland-Noble, A.M. (2002). Racial / ethnic diversity in applied sport psychology: A multicultural introduction to working with athletes of color. *The Sport Psychologist*, 16(3), 296-315.
- Kontos, A.P., & Arguello, E. (2005). Sport psychology consulting with Latin American athletes. *Athletic Insight*, Retrieved April 21, 2007, from
<http://www.athleticinsight.com/Vol7Iss3/LatinAmerican.htm>
- Krane, V., & Baird, S.M. (2005). Using ethnography in applied sport psychology. *Journal of Applied Sport Psychology*, 17, 87-107.
- Krantz, J.H., Ballard, J., & Scher, J. (1997). Comparing the results of laboratory and World-Wide Web samples on the determinants of female attractiveness. *Behavior Research Methods, Instruments, & Computers*, 29, 264- 269.
- Krawczyk, Z. (1980). Sport and culture. *International Review for the Sociology of Sport*, 15, 7-18
- Lai, J.C.L., & Yue, X. (2000). Measuring optimism in Hong Kong and mainland Chinese with the revised life orientation test. *Personality and Individual Differences*, 28, 781-796.

- Landin, D., & Hebert, E.P. (1999). The influence of self-talk on the performance of skilled female tennis players. *Journal of Applied Sport Psychology, 11*, 263–282.
- Lane, A.M. (2001). Relationships between psychological skills and pre-competition emotion. Paper presented at the British Psychological Society Conference., Blackpool
- Lane, A.M. (2007). The rise and fall of the iceberg: development of a conceptual model of mood-performance relationships. A.M. Lane (ed.), *Mood and human performance: Conceptual, measurement, and applied issues* (pp1-34). New York: Nova Science Publishers, Inc.
- Lane, A.M., & Jarrett, H. (2005). Mood changes following golf among senior recreational players. *Journal of Sports Science and Medicine, 4*, 47-51.
<http://www.jssm.org/vol4/n1/6/v4n1-6text.php>
- Lane, A.M., & Levitt, P. (2002). The influence of depressed mood on other mood states and cohesion. *Journal of Sports Sciences, 20*, 67.
- Lane, A.M., & Lovejoy, D.J. (2001). The effects of exercise on mood changes: The moderating effect of depressed mood. *Journal of Sports Medicine and Physical Fitness, 41*, 539-545.
- Lane, A.M., & Lowther, J.P. (2005). Relationships between emotional intelligence and psychological skills among athletes. *Journal of Sports Sciences, 23*, 1253-1254.
- Lane, A.M., & Terry, P.C. (1998). Prediction of athletic performance from mood: Test of a conceptual model. *The Psychologist*, p.109.
- Lane, A.M., & Terry, P.C. (1999a). Mood states as predictors of performance: A test of a conceptual model. *Journal of Sports Sciences, 17*, 606.
- Lane, A.M., & Terry, P.C. (1999b). *The conceptual independence of tension and depression. Journal of Sports Sciences, 17*, 605-606.

- Lane, A.M., & Terry, P.C. (2000). The nature of mood: Development of a conceptual model with a focus on depression. *Journal of Applied Sport Psychology, 12*, 16-33.
- Lane, A.M., & Terry, P.C. (2005). Test of a conceptual model of mood-performance relationships with a focus on depression: A review and synthesis five years on. Paper presented at International Society of Sport Psychology (ISSP) 11th World Congress of Sport Psychology, 15-19 August, Sydney, Australia.
- Lane, A.M., Beedie, C.J., & Stevens, M.J. (2005). Mood matters: A response to Mellalieu. *Journal of Applied Sport Psychology, 17*, 319-325.
- Lane, A.M., Devonport, T.J., & Horrell, A. (2004). Self-efficacy and research methods. *Journal of Hospitality, Leisure, Sport and Tourism Education, 3*, 25-37.
- Lane, A.M., Devonport, T.J., Milton, K. E., & Williams, L (2003). Self-efficacy and dissertation performance among Sport students. *Journal of Hospitality, Leisure, Sport and Tourism Education 2*, 59-66.
- Lane, A.M., Lane, H. J., & Firth, S. (2002). Relationships between performance satisfaction and post-competition mood among runners. *Perceptual and Motor Skills, 94*, 805-813.
- Lane, A.M., Meyer, B.B., Devonport, T.J., Davies, K., Thelwell, R., Gill. G.S., Diehl, C.D.P., Wilson, M., & Weston, N. (2009). Validity of the Emotional Intelligence Scale for use in Sport. *Journal of Sports Science and Medicine, 8*, 289-295.
- Lane, A.M., Soos, I., Leibinger, E., Karsai, I., & Hamar, P. (2005). Emotional intelligence, mood states and successful and unsuccessful performance. *Journal of Sports Sciences, 23*, 1254.
- Lane, A.M., Soos, I., Leibinger, E., Karsai, I., & Hamar, P. (2007). Validity of the Brunel Mood Scale for use with UK, Italian and Hungarian athletes. In A.M. Lane (Ed). *Mood and Human Performance: Conceptual, Measurement, and Applied Issues*. (pp-119-130). New York: Nova Science Publishers, Inc.

- Lane, A.M., Terry, P.C., Beedie, C.J., & Stevens, M. (2004). Mood and concentration grid performance: The moderating effect of depressed mood. *International Journal of Sport and Exercise Psychology*, 2, 133-145.
- Lane, A.M., Terry, P.C., Beedie, C.J., Curry, D.A., & Clark, N. (2001). Mood and performance: test of a conceptual model with a focus on depressed mood. *Psychology of Sport and Exercise*, 2, 157-172.
- Lane, A.M., Terry, P.C., Karageorghis, C.I., & Lawson, J. (1999). Mood states as predictors of kickboxing performance: A test of a conceptual model. *Journal of Sports Sciences*, 17, 61-62.
- Lane, A.M., Thelwell, R., Gill, G., & Weston, N. (2007). Confirmatory factor analysis of the Emotional Intelligence Scale on an athletic sample. *Journal of Sports Sciences*, 25, 312.
- Lane, A.M., Thelwell, R., Lowther, J.P., & Devonport, T. (2009). Relationships between emotional intelligence and psychological skills among athletes. *Social Behaviour and Personality: An International Journal*, 37, 195-202.
- Lane, A.M., Thelwell, R., Weston, N., & Devonport, T. (2005). Emotional intelligence, mood states and performance. *Journal of Sports Sciences*, 23, 1254-1255.
- Lane, A.M., Whyte, G.P., George, K., Shave, R., Barney, S., & Terry, P.C. (2004). Marathon: A fun run? An investigation of mood state changes among runners at the London Marathon. Paper presented at the annual conference for the British Psychological Society, Imperial College, April 15th-17th, 2004.
- Lane, A.M., Whyte, G.P., Godfrey, R., & Pedlar, C. (2003). Adaptations of psychological state variables to altitude among the Great Britain biathlon team preparing for the 2002 Olympic Games. *Journal of Sports Sciences*, 21, 281-282.

- Lane, A.M., Whyte, G.P., Godfrey, R., & Pedlar, C. (2005). Relationships between mood and perceived exertion among elite biathletes at altitude. Paper presented at the International Society of Sport Psychology (ISSP) 11th World Congress of Sport Psychology, 15-19 August, Sydney, Australia.
- Lane, A.M., Whyte, G.P., Shave, R., & Wilson, M. (2003). Mood state responses during intense cycling. *Journal of Sports Sciences*, *21*, 352-353.
- Lane, A.M., Whyte, G.P., Terry, P.C., & Nevill, A.M (2005). Mood and examination performance. *Personality and Individual Differences*, *39*, 143-153.
- Lather, P. (1991). *Getting smart: Feminist research and pedagogy with/in the postmodern*. New York: Routledge.
- Lazarus, R.S. (1990). Theory-based stress measurement. *Psychological Inquiry*, *1*, 3-13.
- Lazarus, R.S. (1991). *Emotion and Adaptation*. New York: Oxford University Press.
- Lazarus, R.S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist*, *14*, 229-252.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
- Lee Y.T., & Seligman, M.E.P. (1997). Are Americans more optimistic than Chinese? *Personality and Social Psychology Bulletin*, *23*, 32-40.
- Lee, K., & Allen, N.J. (2002). Organizational citizenship behavior and workplace deviance: The role of affect and cognitions. *Journal of Applied Psychology*, *87*, 131-142.
- Lefcourt, H.M. (2001). The humor solution. In C.R. Snyder (Ed.) *Coping with stress: Effective people and processes*. New York, NY: Oxford University Press Inc.
- Letherby, G. (2003). *Feminist Research in Theory and Practice*. Philadelphia, PA: Open University.

- Lioussine, D.V. (2003, July). *Gender differences in emotional intelligence*. Poster presented at the 11th Biennial Meeting of the International Society for the Study of the Individual Differences (ISSID), Graz, Austria.
- Locke, E.A., & Latham, G.P. (1985). The application of goal setting to sports. *Journal of Sport Psychology*, 7, 205-222.
- Loehr, J., & Schwartz, T. (2001). *The making of a corporate athlete*. Boston: Harvard Business School Press.
- Lowther, J., Lane, A.M., & Lane, H.J. (2002). Self-efficacy and psychological skills during the amputee soccer world cup. *Athletic Insight*, 4, <http://www.athleticinsight.com/Vol4Iss2/SoccerSelfEfficacy.htm>
- MacCann, C., & Roberts, R.D. (2008). New paradigms for assessing emotional intelligence: Theory and data. *Emotion*, 8, 540-551.
- Mahoney, M., & Avenier, M. (1977). Psychology of the elite athlete: An exploratory study. *Cognitive Therapy and Research*, 1, 135-141.
- Mahoney, M.J., Gabriel, T.J., & Perkins, T.S. (1987). Psychological skills and exceptional athletic performance. *The Sport Psychologist*, 1, 181-199.
- Mahoney, M.P. (2002). *Alcohol consumption and drug use among former major league baseball players*. Unpublished doctoral dissertation, Temple University, Philadelphia.
- Marsh, H.W., Ascí, F.H., & Tomas, I.M. (2002). Multitrait-multimethod analyses of two physical self-concept instruments: A cross-cultural perspective. *Journal of Sports and Exercise Psychology*, 24, 99-119.
- Martens, M.P., Mobley, M., & Zizzi, S. J. (2000). Multicultural training in applied sport psychology. *The Sport Psychologist*, 14, 81-97.
- Martin, G.L. (1993). *A mental preparation program for hockey players*. Unpublished manuscript, University of Manitoba.

- Martin, J.J. (1999). A personal development model of sport psychology for athletes with disabilities. *Journal of Applied Sport Psychology, 11*, 181-193.
- Martin, J.J. (2002). Training and performance self-efficacy, affect, and performance in wheelchair road racers. *The Sport Psychologist, 16*, 384-395.
- Martinez-Pons, M. (2000). Emotional intelligence as a self-regulatory process: A social cognitive view. *Imagination, Cognition and Personality, 19*, 331-350.
- Mastro, J., Canabal, M., & French, R. (1988). Psychological mood profiles of sighted and unsighted beep baseball players. *Research Quarterly for Exercise and Sport, 59*, 262-264.
- Mastro, J., Sherrill, C., Gench, B., & French, R. (1987). Psychological characteristics of elite visually impaired athletes: The iceberg profile. *Journal of Sport Behavior, 10*, 39-36.
- Matsumoto, D. (1990). Cultural similarities and differences in display rules. *Motivation and Emotion, 14*, 195-213.
- Matsumoto, D. (1992). American-Japanese cultural differences in the recognition of universal facial expressions. *Journal of Cross-Cultural Psychology, 23*, 72-84.
- Matsumoto, D. (1993). Ethnic differences in affect intensity, emotion judgments, display rules, and self-reported emotional expression. *Motivation and Emotion, 17*, 107-123.
- Matsumoto, D. (2006a). Are cultural differences in emotion regulation mediated by personality traits? *Journal of Cross-Cultural Psychology, 37*, 421-437.
- Matsumoto, D. (2006b). Culture and nonverbal behavior. In Manusov, V., & Patterson, M. (eds.). *Handbook of nonverbal communication*. Thousand Oaks, CA: Sage.
- Matsumoto, D., & Kupperbusch, C. (2001). Idiocentric and allocentric differences in emotional expression, experience, and the coherence between expression and experience. *Asian Journal of Social Psychology, 4*, 113-131.

- Matthews, G., Jones, D.M., & Chamberlain, A.G. (1990). Refining the measurement of mood: The UWIST Mood Adjective Checklist. *British Journal of Psychology*, *81*, 17-42.
- Matthews, G., Zeidner, M., & Roberts, R.D. (2002). *Emotional Intelligence: Science and Myth*. Cambridge, MA: MIT Press.
- Mayer, J.D., & Geher, G. (1996). Emotional intelligence and the identification of emotion. *Intelligence*, *22*, 89-113.
- Mayer, J.D., & Gaschke, Y.N. (1988). The experience and meta-experience of mood. *Journal of Personality and Social Psychology*, *55*, 102-111.
- Mayer, J.D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D.J. Sluyter (Eds), *Emotional development and emotional intelligence: Educational implications* (pp. 3-31). New York: Basic Books.
- Mayer, J.D., Caruso, D.R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, *27*, 267-298.
- Mayer, J.D., DiPaolo, M., & Salovey, P. (1990). Perceiving affective content in ambiguous visual stimuli: a component of emotional intelligence. *Journal of Personality Assessment*, *54*, 772-781.
- Mayer, J.D., Salovey, P., & Caruso, D.R. (2000). Models of emotional intelligence. In R. Sternberg (Ed.), *Handbook of Intelligence*. Cambridge, UK: Cambridge University.
- Mayer, J.D., Salovey, P., & Caruso, D.R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT): User's manual*. Toronto: MultiHealth Systems.
- McCrae, R.R. (1984). Situational determinates of coping responses: Loss, threat, and challenge. *Journal of Personality and Social Psychology*, *46*, 919-928.

- McGowan, R.W., McGowan, S.J., & Omifade, A. (1997). Cultural effects: Affects following ruminations on success and failure in sports. *Perceptual and Motor Skills*, 85, 1339-1343.
- McIntosh, D.N., Silver, R.C., & Wortman, C.B. (1993). Religion's role in adjustment to a negative life event: Coping with the loss of a child, *Journal of Personality and Social Psychology*, 64, 812-821.
- McKenna, J. (2007). Emotional intelligence training in adjustment to physical disability and illness. *International Journal of Therapy and Rehabilitation*, 14, 551-556.
- McNair, D.M., Lorr, M., & Droppleman, L. F. (1971) *Profile of mood states*. San Diego, CA: Educational and Industrial Testing Service.
- Mesquita, B., & Albert, D. (2007). The cultural regulation of emotions. In J.J. Gross. *Handbook of Emotion Regulation*. New York: Guildfort Press.
- Mesquita, B., & Ellsworth, P.C. (2001). The role of culture in appraisal. In K.R. Scherer & A. Schorr (Eds.), *Appraisal processes in emotion: Theory, methods, research*. New York: Oxford University Press.
- Mesquita, B., & Haire, A. (2004). Emotion and culture. In Spielberger, C.D (Eds.) *Encyclopedia of Applied Psychology* (pp. 731-737, V1). New York: Elsevier Inc.
- Mesquita, B., & Walker, R. (2003). Cultural differences in emotions: A context for interpreting emotional experiences. *Behaviour Research and Therapy*, 41, 777-793.
- Mesquita, B., Frijda, N.H., & Scherer, K.R. (1997) Culture and emotion in *Handbook of cross-cultural psychology: Vol. 2. Basic processes and human development*. (pp. 255-297), Boston: Allyn & Bacon. Retrieved on 11.03.2009 from <http://www.affective-sciences.org/publication/539>

- Meyer, B. (1998). 'Make a complete break with the past.' Memory and post-colonial modernity in Ghanaian Pentecostalist discourse. *Journal of Religion in Africa*, 28, 316-349.
- Meyer, B.B., & Zizzi, S. (2007). Emotional intelligence in sport: Conceptual, methodological, and applied issues. In A.M. Lane (Ed). *Mood and Human Performance: Conceptual, measurement and applied issues* (pp. 131-152). New York: Nova Science Publishers, Inc.
- Meyer, B.B., & Fletcher, T.B. (2007). Emotional intelligence: a theoretical overview and implications for research and professional practice in sport psychology. *Journal of Applied Sport Psychology*, 19, 1-15.
- Mikolajczak, M., & Luminet, O. (2008). Trait emotional intelligence and cognitive appraisal of stressful events: An explanatory study. *Personality and Individual Differences*, 44, 1445-1453.
- Mikolajczak, M., Nelis, D., Hansenne, M., & Quoidbach, J. (2008). If you can regulate sadness, you can probably regulate shame: Associations between trait emotional intelligence, emotion regulation and coping effectiveness across discrete emotions. *Personality and Individual Differences*, 44, 1356-1368.
- Moraes, L.C., & Salmela, J.H. (2009). Working with Brazilian athletes. In R.J. Schinke & S.J. Hanrahan (Eds) *Cultural Sport Psychology*. Champaign, IL: Human Kinetics.
- Morgan, W.P. (1980). The trait psychology controversy. *Research Quarterly for Exercise and Sport*, 51, 50-76.
- Morin, A. (2005). Possible links between self-awareness and inner speech: Theoretical background, underlying mechanisms, and empirical evidence. *Journal of Consciousness Studies*, 12, 115-134.

- Multi-Health Systems Inc. (2009). Emotional Intelligence: Human Capital. Retrieved on 03.07.2009 from: <http://www.mhs.com/eihc.aspx?id=Consultants>
- Nelis, D., Quoidbach, J., Mikolajczak, M., & Hansenne, M. (2009). Increasing emotional intelligence: (How) is it possible? *Personality and Individual Differences*, 47, 36-41.
- Nes, L.S., & Segerstrom, S.C. (2006). Dispositional optimism and coping: A meta-analytic review. *Personality and Social Psychology Review*, 10, 235-251.
- Neubauer, A.C., & Freudenthaler, H.H. (2005). Models of emotional intelligence. In R. Schulze, R.D. Roberts (Eds.) *Emotional Intelligence: An International Handbook* (pp. 31-50) Götting, Germany: Hogrefe & Huber Publishers.
- Nicholls, A.R., Polman, R.C.J., & Holt, N.L. (2005). The effects of individualized imagery interventions on golf performance and flow states. *Athletic Insight*, 7, <http://www.athleticinsight.com/Vol7Iss1/ImageryGolfFlow.htm>
- Nieuwenhuys, A., Hanin, Y.L., & Bakker, F.C. (2008). Performance-related experiences and coping during races: a case of an elite sailor. *Psychology of Sport and Exercise*, 9, 61-76.
- O'Brien, M., Mellalieu, S., & Hanston, S. (2009). Goal-setting effects in elite and nonelite boxers. *Journal of Applied Sport Psychology*, 21, 293-306.
- Oliver, M. (1992). Changing the social relations of research production? *Disability, Handicap & Society*, 7, 101-114.
- Orlick, T. (1986). *Psyched for sport: Mental training for athletes*. Champaign, IL Leisure Press.
- Owens, A.J.N., Lane, A.M., & Terry, P.C. (2000). Mood states as predictors of tennis performance: A test of a conceptual model. *Journal of Sports Sciences*, 18, 559-560.

- Page, S.J., Martin, S.B., & Wayda, V.K. (2001). Attitudes toward seeking sport psychology consultation among wheelchair basketball athletes. *Adapted Physical Activity Quarterly, 18*, 183-192.
- Palmer, B., & Stough, C. (2002). *Workplace SUEIT interim technical manual*. Version 2. Swinburne University of Technology.
- Palmer, B., Walls, M., Burgess, Z., & Stough, C. (2000). Emotional intelligence and effective leadership. *Leadership and Organizational Development Journal, 22*, 5-10.
- Parker, J.D.A., Saklofske, D.H., Shaughnessy, P.A., Huang, S.H.S., Wood, L.M., & Eastabrook, J.M. (2005) Generalizability of the emotional intelligence construct: A cross-cultural study of North American aboriginal youth. *Personality and Individual Differences, 39*, 215-227.
- Parker, R.M., Schaller, J., & Hansmann, S. (2003). Catastrophe, chaos, and complexity models and psychosocial adjustment to disability. Redorbit news. Retrieved on 3.3.2009 from:
http://www.redorbit.com/news/science/8181/catastrophe_chaos_and_complexity_models_and_psychosocial_adjustment_to_disability/#
- Patten, C.A., Harris, W., & Leatherman, D. (1994). Psychological characteristics of elite wheelchair athletes: The Iceberg Profile. *Perceptual and Motor Skills, 79*, 1390–1390.
- Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods* (2nd Ed.). Newbury Park, CA: Sage Publications, Inc.
- Paulsen, P., French, R., & Sherrill, C. (1990). Comparison of wheelchair athletes and non-athletes on selected mood states. *Perceptual and Motor Skills, 71*, 1160-1162.
- Pennebaker, J.W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Sciences, 8*, 162-166

- Pensgaard, A.M., & Duda, J.L. (2003). SYDNEY 2000: The interplay between goal orientations, emotions, coping, and performance of Olympic-level athletes. *The Sport Psychologist, 17*, 253-267.
- Perez, J.C., Petrides, K.V., & Furnham, A. (2005), Measuring trait emotional intelligence. In R. Schulze, & R.D., Roberts (Eds), *Emotional Intelligence: An International Handbook* (pp.181-201), Ashland, OH, Hogrefe & Huber.
- Persson, L.O., & Ryden, A. (2006). Themes of effective coping in physical disability: An interview study of 26 persons who have learnt to live with their disability. *Scandinavian Journal of Caring Sciences, 20*, 355-363.
- Peters, H.J., & Williams J.M. (2006). Moving cultural background to the foreground: An investigation of self-talk, performance, and persistence following feedback. *Journal of Applied Sport Psychology, 18*, 240-253.
- Peters, H.J., & Williams, J.M. (2009). Rational for developing a cultural sport psychology. In R.J. Schinke & S.J. Hanrahan (Ed) *Cultural Sport Psychology*. Champaign, IL: Human Kinetics.
- Petrides, K.V. (2001). *A psychometric investigation into the construct of emotional intelligence*. Doctoral dissertation, University College London.
- Petrides, K.V. (2009). Technical manual for the Trait Emotional Intelligence Questionnaire (TEIQue; 1st ed., 1st printing). London: London Psychometric Laboratory.
- Petrides, K.V., & Furnham, A. (2000). On dimensional structure of emotional intelligence. *Personality and Individual Differences, 29*, 313-320.
- Petrides, K.V., & Furnham, A. (2001). Trait emotional intelligence: psychometric investigation with reference to established trait taxonomies. *European Journal of Personality, 15*, 425-448.

- Petrides, K.V., Furnham, A., & Mavroveli, S. (2007). Trait emotional intelligence: Moving forward in the field of EI. In G. Matthews, M. Zeidner, & R. Roberts (Eds.). *Emotional intelligence: Knowns and unknowns* (Series in Affective Science). Oxford: Oxford University Press.
- Pistorius, O. (2009). *Blade Runner*. London, UK: Virgin Books.
- Porretta, D., Kozub, F., & Lisboa, F. (2000). Documentary analysis of survey research in adapted physical activity: 1984-1998. *Adapted Physical Activity Quarterly*, 17, 286-298.
- Ram, N., Starek, J., & Johnson, J. (2004). Race, ethnicity, and sexual orientation: Still a void in sport and exercise psychology? *Journal of Sport & Exercise Psychology*, 26, 250-268.
- Ravizza, K. (1998). Increasing awareness for sport performance. In J.M. Williams (Ed.) *Applied sport psychology: Personal growth to peak performance* (pp. 171-181). Mountain View, CA: Mayfield Publishing.
- Reichert, M. (1999). Dimensions de l'ouverture emotionnelle (DOE): Concept theorique, instrument et validation. In 8th Congress of the Swiss Society of Psychology: *Fribourg*.
- Reiser, M.F. (2001). The dream in contemporary psychiatry. *American Journal of Psychiatry*, 158, 351-359.
- Rettew, D., & Reivich, K. (1995). Sports and explanatory style. In G.M. Buchanan, & M.E. P. Seligman (Eds.), *Explanatory style* (pp. 173-185). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Riemer, H., & Chelladurai, P. (1995) Leadership and satisfaction in sport. *Journal of Sport & Exercise Psychology*, 17, 276-293.

- Robazza, C. & Bortoli, L. (2007). Perceived impact of anger and anxiety on sporting performance in rugby players. *Psychology of Sport and Exercise*, 8, 875-896.
- Robazza, C., & Bortoli, L. (1998). Mental preparation strategies of Olympic archers during competition: An exploration investigation. *High Ability Studies*, 9, 219-235.
- Rogerson, L.J., & Hrycaiko, D.W. (2002). Enhancing competitive performance of ice hockey goaltenders using centering and self-talk. *Journal of Applied Sport Psychology*, 14, 14-26.
- Rohde, P., Lewinsohn, P.M., & Seeley, J.R. (1997). Comparability of telephone and face-to-face interviews assessing Axis I and II disorders. *American Journal of Psychiatry*, 154, 1593-1598.
- Rudski, J. (2004). The illusion of control, superstitious belief, and optimism. *Current Psychology*, 22, 306-315.
- Rushall, B.S. (1984). The content of competition thinking. In W.F. Straub, & J.M. Williams, (Eds.), *Cognitive sport psychology* (pp. 51–62). Lansing, NY: Sport Science Associates.
- Russell, J.A. (1994). Is there universal recognition of emotion from facial expression? A review of cross-cultural studies. *Psychological Bulletin*, 115, 102-141.
- Ryan, R.M. (1982). Control and information in the interpersonal sphere: An extension of cognitive evaluation theory. *Journal of Personality and Social Psychology*, 43, 450-461.
- Sachs, M.L. (1988, Spring). Sport psychology's neglected population: Persons with disabilities. *AAASP Newsletter*, 8-9.
- Saklofske, D.H., Austin, E.J., & Minski, P.S. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Differences* 34, 707–721.

- Salm, S.J., & Falola, T. (2002) Culture and customs of Ghana. Greenwood press, Retrieved December 12, 2007, from University of Wolverhampton ebrary Database.
- Salovey, P., & Mayer, J.D. (1990). Emotional intelligence. *Imagination, Cognition, and Personality*, 9, 185-211.
- Salovey, P., Mayer, J.D., & Caruso, D. (2002). The positive psychology of emotional intelligence. In C.R. Snyder, & S.J. Lopez (Eds.), *Handbook of positive psychology* (pp. 263-278). Washington, DC: American Psychological Association.
- Salovey, P., Mayer, J.D., Goldman, S.L., Turvey, C., & Palfai, T.P. (1995). Emotional attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-Mood Scale. In J.W. Pennebaker (Ed.), *Emotion, Disclosure, and Health* (pp. 125-154). Washington, DC: American Psychological Association.
- Schaefer, D.R., & Dillman, D.A. (1998). "Development of a Standard E-Mail Methodology." *Public Opinion Quarterly* 62, 378-97.
- Scheier, M.F., & Carver, C.S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4, 219-247.
- Scheier, M.F., Carver, C.S., & Bridges, M.W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063-1078.
- Scherer, K.R. (1984). Emotion as a multicomponent process: a model and some cross-cultural data. In P.R. Shaver (Ed.), (pp. 37-63). *Review of personality and social psychology*, Vol. 5. Beverly Hills, CA: Sage.
- Scherer, K.R. (1997). Profiles of emotion-antecedent appraisal: Testing theoretical predictions across cultures. *Cognition and Emotion*, 11, 113-150.

- Scherer, K.R. (2001). Appraisal considered as a process of multilevel sequential checking. In K.R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, methods, research* (pp. 92–120). New York: Oxford University Press.
- Schinke, R.J., & Hanrahan, S.J. (2009). *Cultural Sport Psychology*. Champaign, IL: Human Kinetics.
- Schinke, R.J., Hanrahan, S.J., & Catina, P. (2009). Introduction to cultural sport psychology. In R.J. Schinke & S.J. Hanrahan (Ed) *Cultural Sport Psychology*. Champaign, IL: Human Kinetics.
- Schinke, R.J., Michel, G., Danielson, R., Gauthier, A., & Pickard, P. (2005). Introduction to cultural sport psychology: Special edition. *Athletic Insight*, 7, 1-6. Retrieved on the 24.06.2009 from: <http://www.athleticinsight.com/Vol7Iss3/IntroPDF.pdf>
- Schulman, P. (1995). Explanatory style and achievement in school and work. In G. M. Buchanan, & M. E. P. Seligman (Eds.), *Explanatory style* (pp. 159–171). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Schutte N.S., Malouff, J.M., Hall, L.E., Haggerty, D.J., Cooper, J.T., Golden, C.J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167-177.
- Schutte, N.S., Malouff, J.M., Bobik, C., Coston, T.D., Greeson, C., Jedlicka, C., Rhodes, E., & Wendorf, G. (2001). Emotional intelligence and interpersonal relations. *The Journal of Social Psychology*, 141, 523-536.
- Schutte, N.S., Malouff, J.M., Simunek, M., McKenley, J., & Hollander, S. (2002). Characteristic emotional intelligence and emotional well-being. *Cognition and Emotion*, 16, 769-785.

- Schutte, N.S., Malouff, J.M., Thorsteinsson, E.B., Bhullar, N., & Rooke, S.E. (2007). A meta-analytic investigation of the relationship between emotional intelligence and health. *Personality and Individual Differences, 42*, 921-933.
- Schwarz, N., & Bless, H. (1991). Happy and mindless, but sad and smart? The impact of affective states on analytic reasoning. In P. Forgas (Ed.), *Emotion and social judgment* (pp. 55-71). Oxford, UK: Pergamon.
- Scottish Institute of Sport (2008). A guide to recovery from Scottish institute of sport. Retrieved on the 5.11.2009 from:
<http://www.sisport.com/sisport/files/Recovery%20Booklet%2008.pdf>
- Seligman, M.E.P., & Schulman, P. (1986). Explanatory style as a predictor of productivity and quitting among life insurance salesmen. *Journal of Personality and Social Psychology, 50*, 832–838.
- Seligman, M.E.P., Nolen-Hoeksema, S., Thornton, N., & Thornton, K.M. (1990). Explanatory style as a mechanism of disappointing athletic performance. *Psychological Science, 1*, 143–146.
- Shambrook, C.J., & Bull, S.J. (2001). *Adherence Issues in Sport and Exercise*. London, UK: Wiley.
- Sherrill, C. (1999). Disability sport and classification theory: A new era. *Adapted Physical Activity Quarterly, 16*, 206-215.
- Si, G., Rethorst, S., & Willimczik, K. (1995). Causal Attribution Perception in Sports Achievement: A Cross-Cultural Study on Attributional Concepts in Germany and China. *Journal of Cross-Cultural Psychology, 26* (5), 537-553.
- Silverman, D. (2000). *Doing Qualitative Research: A Practical Handbook*. London: Sage.
- Siminski, P. (2003). Patterns of disability and norms of participation through the life course: empirical support for a social model of disability. *Disability & Society, 18*, 707-718.

- Sinha, B.K., Willson, L.R., & Watson, D.C. (2000). Stress and coping among students in Indian and Canada, *Canadian Journal of Behavioural Science*, 32, 218-225.
- Sjöberg, L. (2001). Emotional intelligence: A psychometric analysis. *European Psychologist*, 6, 79-95.
- Skinner, E., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin*, 129, 216-269.
- Slaski, M., & Cartwright, S. (2002). Health and emotional intelligence: An exploratory study of retail managers. *Stress and Health*, 18, 63-68.
- Slaski, M., & Cartwright, S. (2003) Emotional intelligence training and its implications for stress, health and performance. *Stress and Health*, 19, 233-239.
- Smith, R.E., & Smoll, F.L. (1997). Coach-mediated team building in youth sports. *Journal of Applied Sport Psychology*, 9, 114-132.
- Snyder, C.R. (1999). Hope, goal-blocking thoughts, and test-related anxieties. *Psychological Reports*, 84, 206-208.
- Snyder, C.R., & Lopez, S.J. (Eds.) (2002). *The handbook of positive psychology*. New York: Oxford University Press.
- Spielberger, C.D., Gorsuch, R.L., & Lushene, R.E. (1967) *State-trait anxiety inventory*. Palo Alto, CA: Consulting Psychologist Press.
- Stein, S.J., & Book, H.E., (2006). *The EQ Edge: Emotional Intelligence and Your Success*. Mississauga, Canada: Wiley, John & Sons Ltd.
- Steinberg, L., Dornbusch, S.M., & Brown, B.B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. *American Psychologist*, 47(6), 723-729.

- Suh, E., Diener, E., Oishi, S., & Triandis, H.C: (1998). The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *Journal of Personality & Social Psychology, 74*, 482-493.
- Sullivan, A.K. (1999). The emotional intelligence scale for children. *Dissertation Abstracts International, 60*, 69.
- Sutton, R.E. (2004). Emotion regulation goals and strategies of teachers. *Social Psychology of Education, 7*, 379-398.
- Suzuki, L.A., & Kugler, J.F. (1995). Intelligence and personality assessment: Multicultural perspectives. In J. G. Ponterotto, J.M. Casas, L.A. Suzuki, & C.M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 493-515). Thousand Oaks, CA: Sage.
- Tapia, M. (2001). Measuring emotional intelligence. *Psychological Reports, 88*, 353-364.
- Tenenbaum, G., Jones, C.M., Kitsantas, A., Sacks, D.N., & Berwick, J.P. (2003). Failure adaptation: Psychological conceptualization of the stress response process in sport. *International Journal of Sport Psychology, 34*, 1-26.
- Terry P.C., Lane, A.M, Lane, H.J., & Keohane, L. (1999) Development and validation of a mood measure for adolescents: POMS-A. *Journal of Sports Sciences, 17*, 861-872.
- Terry, P.C. (2009) Strategies for reflective cultural sport psychology practice. In R.J. Schinke & S.J. Hanrahan (Eds) *Cultural Sport Psychology*. Champaign, IL: Human Kinetics.
- Terry, P.C., Lane, A.M., & Fogarty, G.J. (2003). Construct validity of the Profile of Mood States – A for use with adults. *Psychology of Sport and Exercise, 4*, 125-139.
- Terry, P.C., Potgieter, J.R., & Fogarty, G.J. (2003) The Stellenbosch Mood Scale: A dual-language measure of mood. *International Journal of Sport and Exercise Psychology, 1*, 231-245.
- Terry, P.C., Stevens, M.J., & Lane, A.M. (2005). Influence of response time frame on mood assessment. *Stress Anxiety and Coping, 18*, 279-285.

- Thelwell, R.C., & Greenlees, I.A. (2001). The effects of a mental skills training package on gymnasium triathlon performance. *The Sport Psychologist, 15*, 127-141.
- Thelwell, R.C., & Greenlees, I.A. (2003). Developing competitive endurance performance using mental skills training. *The Sport Psychologist, 17*, 318-337.
- Thelwell, R.C., Greenlees, I.A., & Weston, N. (2006). Using psychological skills training to develop soccer performance. *Journal of Applied Sport Psychology, 18*, 254-270.
- Thelwell, R.C., Lane, A.M., & Weston, N.J.V. (2007). Mood states, self-set goals, self-efficacy and performance in academic examinations. *Personality and Individual Differences, 42*, 573-583.
- Thelwell, R.C., Lane, A.M., Weston, N.J.V., & Greenlees, I.A. (2008). Examining relationships between emotional intelligence and coaching efficacy. *International Journal of Sport and Exercise Psychology, 6*, 224-235.
- Thomas, O., Maynard, I., & Hanton, S. (2007). Intervening with athletes during the time leading up to competition: Theory to Practice II. *Journal of Applied Sport Psychology, 19*, 398-418.
- Totterdell, P. (1999). Mood scores: mood and performance in professional cricketers. *British Journal of Psychology, 90*, 317-332.
- Totterdell, P. (2000). Catching moods and hitting runs: Mood linkage and subjective performance in professional sport teams. *Journal of Applied Psychology, 85*, 848-859.
- Totterdell, P., & Leach, D. (2001). Negative mood regulation expectancies and sports performance: An investigation involving professional cricketers. *Psychology of Sport and Exercise, 2*, 249-265.
- Travis, C.A., & Sachs, M.L. (1991). Applied sports psychology and persons with mental retardation. *The Sports Psychologist, 5*, 382-391.

- Triandis, H.C. (1994). *Culture and Social Behavior*. New York: McGraw-Hill.
- Trieschmann, R. (1988). *Spinal cord injuries: Psychosocial, social, and vocational rehabilitation* (2nd ed.). New York: Demos.
- UNICEF. (2007). At a glance: Ghana. Retrieved June 18, 2007, from http://www.unicef.org/infobycountry/ghana_1878.html
- Vallerand, R.J., & Blanchard, C.M. (2000). The study of emotion in sport: Historical, definitional, and conceptual perspectives. In Y.L. Hanin (Ed.), *Emotions in Sport* (pp. 3-37). Champaign, IL: Human Kinetics.
- Van der Zee, K., Schakel, L., & Thijs, M., (2002). The relationship of emotional intelligence with academic intelligence and the big five. *European Journal of Personality, 16*, 103-125.
- Van Rooy, D.L., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. *Journal of Vocational Behavior, 65*, 71-95.
- Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.
- Wade, C., & Travis, C. (1993). *Psychology*. New York, Harper and Row.
- Wang, L., Huddleston, S., & Peng, L. (2003). Psychological skill use by Chinese swimmers. *International Sports Journal, 7*, 48-55.
- Watts, F. (2007). Emotion regulation and religion. In J.J. Gross (Eds.) *Handbook of Emotion Regulation*. New York: The Guilford Press.
- Weinberg, R., & McDermott, M. (2002). A comparative analysis of sport and business organizations: factors perceived critical for organizational success. *Journal of Applied Sport Psychology, 14*, 282-298.

- Weinberg, R.S., & Gould, D. (2003). *Foundations of sport and exercise psychology (3rd Eds)*. Champaign, IL: Human Kinetics.
- Wentworth, W.M. (1980). *Context and Understanding: An Inquiry Into Socialization Theory*. Elsevier, New York.
- Wilkinson, M. (2006). The dreaming mind-brain: A Jungian perspective. *Journal of Analytical Psychology, 51*, 43-59.
- Williams, J.M., & Harris, D.V. (1998). Relaxation and energizing techniques for regulation of arousal. In J.M. Williams (3rd Eds) *Applied Sport Psychology: Performance Growth to Peak Performance*. Mayfield Publishing Company: London, UK.
- Williams, J.M., & Leffingwell, T.R. (1996). Cognitive strategies in sport and exercise psychology. In J.L. Van Raalte & B.W. Brewer (Eds.), *Exploring sport and exercise psychology* (pp. 51–76). Washington, DC: American Psychological Association.
- Wong, C.S., & Law, K.S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly, 13*, 243-274.
- Xinyi, Z., Smith, D., & Adegbola, O. (2004) A cross-cultural comparison of six mental qualities among Singaporean, North American, Chinese, and Nigerian Professional athletes. *International Journal of Sport and Exercise Psychology, 2*, 103-118.
- Yun, G.W., & Trumbo, C.W. (2000). Comparative response to a survey executed by post, e-mail, & web form. *Journal of Computer-Mediated Communication 6(1)*. Retrieved on 03.04.2007 from: <http://jcmc.indiana.edu/vol6/issue1/yun.html>
- Zaichkowsky, L.D. (1980). Single case experimental designs and sport psychology research. In C.H. Nadeau, W.R. Halliwell, K.M. Newell, & G.C. Roberts (Ed), *Psychology of Motor Behavior and Sport- 1979* (pp. 171-179) Champaign, IL, Human Kinetics.

Zeidner, M., Matthews, G., & Roberts, R.D. (2004). Emotional intelligence in the workplace:

A critical review. *Applied Psychology: An International Review*, 53, 371-399.

Zinsser, N., Bunker, L. & Williams, J.M. (1998). Cognitive techniques for building confidence and enhancing performance. In J.M. Williams (3rd Eds) *Applied Sport Psychology: Performance Growth to Peak Performance*. Mayfield Publishing Company: London, UK.

Zizzi, S.J., Deaner, H.R., & Hirschhorn, D.K. (2003). The relationship between emotional intelligence and performance among college baseball players. *Journal of Applied Sport Psychology*, 15, 262-269.

Appendices

Appendix A

RULES, REGULATIONS AND CLASSIFICATION FOR WHEELCHAIR BASKETBALL

Below is a simplified version of the rules of wheelchair basketball. Overall the sport is similar to the running game with a few differences.

Dribbling: a dribble is when a player with the ball bounces the ball and pushes the chair simultaneously or, places the ball on his/her lap. Takes one or two pushes of the chair, bounces the ball, places the ball on his/her lap, pushes once or twice. A player is forbidden to:

- Dribble the ball with both hands at the same time
- Allow the ball to rest in one hand while dribbling
- Push the chair more than twice whilst the ball is resting on the lap

If a player does any of the above then the possession is given to the opposing team.

The ball is thrown into play from the sideline or end line within 5 seconds.

Fouls

1. **Personal Foul:** A personal foul is a foul by a player on an opponent involving contact with his/her person or chair. *Penalty:* throw-in from the sideline or end line by the opposition
2. **Shooting Foul:** A personal foul on an opponent or opponent's chair whilst that opponent was in the act of shooting for basket. *Penalty:* 2 free throws (or 3 if outside the 3 point line) awarded to the player fouled if they did not score as they were shooting; if they scored, 1 free throw allowed.

Free Throws

The shooter takes up a position behind the free through line (front wheels may be over the line). He/she must take the shot within 5 seconds. Other players (2 attackers, 3 defenders may take up position on the key markings around the restricted area. No other player may touch the ball until it touches the ring. The rules of the game were gotten from the following website: http://www.gbwna.org.uk/simplified_rules.htm

Classification in wheelchair basketball is based upon sport specific tests of shooting, passing, rebounding, pushing and dribbling, rather than a medical diagnosis or muscle function examination. There are eight classifications based upon functional ability to play Wheelchair basketball (Classes 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, and 5(minimal)), the higher the classification number the greater the basketball skills. Athletes are given a numerical point value based on their classification status with the maximum points allowed on the floor at one point is 14, unless they have a woman playing with them. They then get one point more or if they have a junior on the team. If they have a junior female on the team then they get two extra points (for further information please see the following website: <http://iwbf.org/>)

Appendix B

Interviews

Interview Janet

R: Tell me a bit about yourself, work, family, hobbies, sport anything else

JANET: Anything about me?

R: Yeah

JANET: DEMOGRAPHIC INFO HAS BEEN REMOVED TO PROTECT THE IDENTITY OF THE PERSON

R: No that's fine. Tell me a bit about wheelchair basketball.

JANET: Wheelchair basketball?

R: Yeah I am supposed to pretend I don't know anything about the game

JANET: Right wheelchair basketball basically it's the same as the running game couple of rules that are different 1 is that you've got to remain seated at all times as you know and we don't have the double dribble rule erm I've been involved in both the wheelchair game and the running game. I got involved in the running game before the wheelchair game which is quite bizarre but that's only through you know friends as a child and that been probably playing since we're 14 so but erm cause at my age you got invited to do everything you did every sport so if you went down and did track racing you did basketball as well erm but it weren't my first sport. Wheelchair basketball to me [laugh] I don't know what you want me to say there is so much that I can tell you about wheelchair basketball I was a table officiate, I've done the referee's course, I'm a coach, I'm a player, coach juniors, I coach girls, and I coach the senior team so like I said it's kinda my whole life if I'm not playing it I'm planning it [laugh].

R: How did you get involved in it?

JANET: How did I get involved erm like I said down at junior national championships is first time I played in the NAME REMOVED junior team that was a spinal injury's club from NAME REMOVED and they used to go down to national wheelchair championships and their national basketball championships I played for them there were only 6 of us but erm we were pretty active kids so we were rather successful we were national championships 3 years running but even at stage I wasn't a wheelchair basketball player I was a track athlete which is really bizarre but I think it was because of my speed I was on court because of my speed and not my shooting skills so that's it what was the questions?

R: Next questions what are the personal commitments necessary to play wheelchair basketball at a high level?

JANET: Personal commitments I think you have to do an awful lot of commitment if you, if you want to play recreationally there is no commitment that's fine you can have fun you can do what you want but I think if you want to play in a national league team you have to be fairly committed it's alright if you're playing in the third division and you're not bothered and you just do it purely I won't say fun cause if it's not it's got to be fun at an international level you've got to be more committed you kind of give up your family and friends in a way a lot of cases I mean so much I mean I missed one of my brother's weddings [laugh] I've missed so many family duo's erm I've wanted to be there but I've not want to let the team down. I don't know how you're defining commitment erm training I hate missing training sessions and things like that I think that's commitment you know it's commitment to the whole team it's not letting me down cause I don't mind letting me down but I feel sorry for the rest of the team and I don't like letting people down that's why I'm upset that I'm late for you tonight cause I hate letting people down so yeah I think it's all those things to me you know the being on time, the being there, everything that goes round it you know you've got to be committed to it sometimes it's frustrating when everybody else is not as committed as

you but you've got to go beyond that because it's what you want to achieve personally as well so.

R: Can you describe some of the pressures that you experience as an athlete?

JANET: Yeah missing your brother's wedding [laugh] a lot of it is family pressure its external thingy you know that...the game is easy I... that's the easy part plus ones you're on the floor you're a ?? you're doing what you like and it's fun so when you are doing what you like it's not a pressure cause you don't go to something that you don't enjoy the pressure is if you ... if you're playing at club level... the level of the players is different to international level so the expectations are a little bit higher so in the club level I think the pressure is quite easy my pressure is trying to help other people **cause** I coach as well remember before because you are one or two steps ahead your pressure is trying to bring those up to a similar level ah but personally because I am so busy with worrying about with what everybody else is it takes a load of pressure of me ah so I don't really get too much pressure I don't like to do things wrong if people are not happy I feel that pressure you know if I feel like I've let people down because I am trying to help them achieve their goals and then they don't or they take things personally if maybe I'm putting pressure on them I find that a pressure cause I don't ever want to do that to people because in its always got to be fun aint it that's my pressure have I explained that well? Do you know what I'm trying to say?

R: Yes

JANET: Do you know what I am trying to say I don't feel it so much now I might have felt it about 20 years ago everything I did even if it was just the ball bouncing of my wheel was like oh no everybody's seen that they are going to take me of and put me on the bench you reach the stage where you think coaches sub me now because I am not doing what he wants and I understand you know he's got to change things but you don't understand as a youngster do you?

R: yeah. What other main sources of stress that you experience resulting from personal life, work, sport social?

JANET: Erm time commitments really because the most successful you get the more people want you to help them alright I get asked to do an awful lot of things and I find it really really difficult to say no to people and so as soon as they ask me can you help me with this I say yes and so all of a sudden I have got absolutely loads of stuff in my day and that is my biggest stress learning how to manage my time and let people down I don't deal with that very well but that's personal stress. Other than the usual everybody's individual pressures you know can't get places, don't want to let people down, you know got no money [laugh] what else and that's probably it really.

R: Can you please expand on the "you can't get to places". In what do you mean transportation, Accessibility, or something else?

R: To what extent do you think your impairment is a source of stress? For example for like time management, getting places, getting things organised do you think your impairment has an influence on that? Does it increase the level of stress or not at all?

JANET: Erm well not so much now with transport like cause I can drive now I can get where I want so it's not so much of a stress when I were a youngster before I 18/19 when I passed my test I had to rely on my parents taking me everywhere that was a real stress you know umm that was a real problem and I had to miss training and all that I didn't like that cause I didn't want to let people down umm that's a stress. I don't think my impairments I've not really had too many problems I mean at international level when we travel right on um when we go away on planes and you go as a team quite often you take able-bodied people along with you you know they are staff that come with you umm and I find that difficult having to rely on other people so if you've got like 12-16 wheelchairs and they are all loaded on a bus and you set off and you decided you need a break and they've decided they are only going to

take one wheelchair off so you can maybe nip to the toilet or something like that, now that's a hassle to me, I don't like that I don't like having somebody else's chair umm I like to have my own chair I don't like being made to feel bad because erm they don't want to get me chair off or can't be bothered cause I don't see it's a hassle to get 16 chairs off cause I think about if I were walking around I'd just do it but that's cause erm but that's I understand what it feels like you know yeah [small pause] yeah that's a hassle when you're travelling you have to rely on other people like getting on if we have to go say on a bus umm and they are lifting people on and off and erm if there is a few yeah I accept it's a problem right and I know it's hard work I don't need them to keep putting it in my face you know what I mean you know I know it's tough for them but don't keep telling me cause I feel bad enough that they have to help us on you know sometimes I would rather get off meself and then they'll say no we don't want you to get injured we don't want you to bang your legs or something like that and I think I do it every day of my life just let me go that hassles me so that's in relation to transport but I just have to keep biting my tongue.

R: So how do you cope with that to rely on others?

JANET: I know it's going to happen so [laugh] so umm I try keep my mouth shut because the moment I say something I can't let it go so I say don't say something don't say something right that's it but the only time it's easy now because you get used to it and you know it's going to happen it's when you're tired so if you've had a long journeys or long days that's when you lose it because everybody is tired and I've got a problem with that bit I can't keep me mouth shut when I'm tired I'm not good when I'm tired I need my sleep and as you know I've not had much sleep over the last few days so [laugh] I'm not too bad I'm relaxing. But yeah just when you're tired you get a bit snappy you're not intentionally doing it and I'm sure that when I go away the moment I've said something to somebody I feel 10 times worse than they are ever going to feel cause I think why you done that why did you do that and I take it with me so but there you go. Yeah that's it main thing travelling on planes and buses yeah or when you're relying on other people.

R: Using some of the stressful situations that you've identified how does the stress you experience affect you behaviourally do you have..?

JANET: Say that again what was the first part?

R: the examples you have just described of stress situations how does how do you react to them

JANET: How do I react to them...?

R: Behaviourally, Physically, emotionally?

JANET: umm...

R: Except for telling them that....

JANET: Yeah ooh no I just tell them I am not one of these people that's got it out that because that's not my style all in all I try and stay happy but sometimes you just can't and you just might shout and I'll say what I've got to say and then I'll quiet like that because I'm upset with meself so I'll go away I like to be on me own then I don't like to be in team situations if you've been in a situation like that and then are put back into a team situation that's quite difficult it is difficult but it's just trying to get back to the job at hand but it is in here you know right okay right I've got to do this and umm what's going to happen about that after and it just stays in your head but I'm trying to put it away while I'm dealing with that I have to deal with but it don't leave me don't get me wrong I don't think it leaves even though you focus it's still there [pause] because you are waiting for that apology after do you get what I always think you should apologise if you know you've done wrong you know so.

R: A coping strategy is any method you use to deal with a stressor to lessen its negative impact there are many different ways to cope with stress for example ignoring it, positive

self-talk, relaxation, eating chocolate, going on a holiday, what are some of the methods you use to cope with stress?

JANET: Umm well [pause] thing is because I'm so busy [laugh] I just do all the time I like to busy myself if I'm busy I find it easier to deal with stress when I'm not busy I don't cope well [chuckle] so I think it's just a way it's always blocking out innit and finding something else to do I mean if, if I'm on court I always go back to what I like doing different parts of the game, things I'm good at umm I love making assists, I love shooting from certain spots so I try and bring them in you know to calm me down in a game or umm or if I'm not, I don't really go on holidays you know because you said go on holidays all my holidays are cause of work, every holiday I go on is involved in sport, so I've got leave coming up and I'm actually going to well basketball championships so even though I'm not playing I associate it with sport umm I mean I went down to Wimbledon last year umm because it's sport I can't help it umm I don't say its relaxation I think I've had about 3 holidays in my life what I can actually call holidays where I've actually sat down and you know I don't like not as a child because my parents do those but where I've actually relaxed and it is a bizarre concept cause...

R: Well everyone is different

JANET: You know where you sit down and sun bath yeah its great ah I like this its great but as soon as I've come back from holiday I want to get back on it ??? I want to do everything I've been doing so... I don't know if I've answered that question

R: Yeah

JANET: But but the other thing I do I like playing on gameboys or I sit in a chair and it just relaxed your head like if I'm travelling on buses to games and things like that I like to do that cause you know sometimes eh it takes you out of old manta I mean you've talked about negative things it takes you out of all of that cause people like sat and talking about what's going to go wrong in the game so thought erm messing about on concentrating sadly I play tetras it's a really rubbish game

R: No its not it's a good game [laugh]

JANET: It's the worst game in the world it's so exciting on the last bricks you know and now they've got a new different one so I tend to do that and I do that a lot umm I don't I mean even though I like music and that if we're in the car or travelling sort of on my own to games and things like that I like to blast out some good music I sing I just sing the whole way you know umm but I am not one of these that wears CD players in that situation you know that's quite an irritation to me actually I think get them of you look so stupid but you know its everybody to their own innit you know [laugh].

R: In your experience are there and situational or personal factors that influence how you cope successfully with stress?

JANET: Well I don't...in recent times I don't think I've dealt with stress as well perhaps the reason being all my sport I used to be quite proud what I had achieved in it, it all had to do with the family particular my mum and my dad umm both parents passed away and I'm kind of always doing...like doing everything for your parents aren't ya and you know you can't wait to go and tell them what you've done and you can't wait to tell them where you're going check that out yet your sounding board has disappeared it took me a while to get over that I have started to now cause I don't want to talk to the coach don't want to talk to the players my friend's have got their own live and aint interested you know so yeah it's weird innit you are just umm it's something that you have to learn the book, the book kind of stops with you so you just sit making up erm different, it's like all these scenarios going on in your head right you've got load of them and you're kind of picking and choosing which one you want on I don't know if I'm explaining myself well there but that's what I do yeah I know I know it's even in a game situation I kind of know what's happening before I'm getting there plus I'm picturing where I want to be you know what I want to do I can turn my moods on and off

it's like a light switch I know if I need to be in a good mood I'll put myself into it. If I'm in a bad mood when I come here the moment I go in there I'm in a good mood (snaps fingers) like that I can do that you know cause it's what I enjoy doing it's like you just turn it on.

R: Alright

JANET: That's how I feel that's how I feel with basketball that's what it does to me if ever I have a down day I go play basketball you know like some people talk to trees I take my basketball out and I'm happy.

R: that's good

JANET: No it does you know the moment I'm going I can feel myself getting happy so even though it might be a really miserable session I feel good that I came and did it.

R: Right. Are there any emotions that help you play better in sport like perform better?

JANET: It's when people are focused umm [pause] I always play better when everybody else is focused right and everybody is focused on the game I don't like people messing about [chuckle] I've come here to do a job and umm yeah so it's great having fun but it's knowing when to right all games should be fun, cause aren't they, you should have a bit of team spirit and everything else but it's got to be done in a positive focused way so people sort of are not on line with me there it don't work for me I don't know. I don't know what question you've asked now what did you ask me ask me that question again.

R: What positive emotions do you experience that make you play better? Or any emotions that make you play better.

JANET: yeah just generally when things are going well obviously when things are going well I'm playing its easy innit you know everybody is playing well, you're shooting well, you're passing well, I love making assists, I love making great assists cause I feel good about it as it's not about me and I'm a play maker so there is nothing better than seeing somebody making a great shot of your pass you know so yeah I don't know if I'm helping you with them.

R: Yeah you are

JANET: Go on

R: What emotions do you experience that hinder your performance?

JANET: I just said that people are not...

R: That people are not focused?

JANET: Yeah I don't like it when they don't care.

R: Yeah but are there any emotions from you personally not just from others like when you are in a bad mood I mean I know that as soon as you get to basketball you are in a good mood.

JANET: I do yeah I do

R: there is nothing...

JANET: nothing what?

R: from you any emotions so as soon as you get there you are happy and forget about everything else, always play the best?

JANET: ummm

R: except the outside factors

JANET: Yeah they outside factors you know things are not working yeah, yeah if things are not going well in your life, if you've got family things you know, my sister's not been well lately it's in your head you are thinking about it you know just general illness and things like that you know I can't think of anything is that terrible?

R: No

JANET: eh is that terrible that I can't

R: No no. How do you cope with negative emotions or emotions that you perceive to be harmful? This doesn't just have to be, I mean I know you mentioned that your life is sport, but it doesn't just have to be for sports.

JANET: yeah

R: Any negative emotions that you perceived to be harmful and how you cope with them.

JANET: I can't stand negative people [laugh] that's awful innit? I'm not very good, I think generally I am really positive about life, so because I am really positive I try and dodge negative people [chuckle] I don't like them in my life umm but that's awful innit? Umm I can't understand why people aren't positive and outgoing and want to enjoy their life you know umm [pause] I don't I can't give you an answer [voice raised a bit sounding bit frustrated] Go on give me that question again so I can think of something that I can say to you

R: No it's alright if there is nothing to say there is nothing to say.

JANET: I know people are negative alright I will give you some negative scenarios that I've had recently right I used to coach the under 15's team and they actually let me go as coach cause they didn't like my coaching skill right and that really upset me

R: yeah

JANET: umm I forget the words they used but they weren't appropriate at the time and it really really wound me up because you think like you are doing all this planning you give everything to the kids because you want them to be successful umm they said I was to dictatorial which I found quite offensive because I think there is a differences between that and pushing your players and trying to get the best out of them and it really wound me up and I found and the whole thing in terms of being negative umm I just didn't handle that really well at all and umm I want... I wanted to come right away from basketball cause I thought *all* that I had given and then I was seen as am I doing the right thing as I didn't handle that very well at all cause things I do in life I like to be successful and then move on to the next thing I don't like to be let go cause I have not done the right thing you know what I mean so I don't deal with things like that well you know cause I'm, if you set, cause you set your own goals don't you even in a team situation and as a coach you want to be successful and nobody wants to experience failure and umm that's failure to me I don't like to fail you know it doesn't matter how small your goal is you want to be successful I didn't like that I didn't enjoy it.

R: How did you deal with it?

JANET: How do you deal with it?

R: Yeah

JANET: umm they are back out of my life again now you know so under 15th have gone apart from the fact that my juniors go to the under 15th and I actively encourage them and I will do everything to get them in to the under 15th I'm just cutting off with dealing with them at the moment what will happen when I've had about a year to live with it [chuckle] no it's a year now then I'll get on with it but at the moment it's best to keep away because I know I'll say the wrong thing so that's what I tend to do and it's almost like just run away from it for a while don't yeah take yourself out of the scenario that's all [pause] but I do get upset but generally I'm a really positive person that's why I come away with it because I don't like it to trouble me because if you're not happy in live your not happy and I like to stay happy gone on.

R: Alright umm now we are going to look at the questionnaire you filled out...

JANET: umm that means nothing now in relation to what I've said [laugh]

R: just 1 quick question though before we start you left restfulness blank for your worst competition

JANET: Didn't I?

R: Naa

JANET: ah

R: So I just need a score for restfulness

JANET: It's probably a long time ago in the, what worst competition?

R: Yeah the worst competition

JANET: umm well [long pause] I just don't remember what I put on that

R: That's fine

JANET: my worst I don't know just put it somewhere in the middle cause I'm ah I won't say I'm restful because when I've had my worst competition well no that's not fair because when I had my worst competition it just stays in me head [chuckle] you know what I mean and I think about it till the next day it's only it's only a day generally just keep it in me head so I won't say I'm restful so which one fits that one...is that fair?

R: Yeah

PAUSE

JANET: Yeah okay

R: Alright going through the questionnaire then this is where it gets interesting umm there was quite a big difference between the moods score experienced between best and worst competition. So I would like to unpack that a bit and discuss it a bit more.

JANET: Yeah go on

R: Alright with vigour, vigour being that you were active, alert, energetic and lively when you played really well you had the highest score which is 16.

JANET: yeah

R: whereas when you played badly you only had a score of 6.

JANET: right

R: So it seems that vigour has a huge part in how you play.

JANET: yeah it does do you want me to expand?

R: No I would rather you go into more detail in the how you felt when you played really good and really bad and the difference there. These are all numbers to me but if you could go into more detail about how you felt, and if you knew why you felt the way you did. I know the best competition you picked was when you beat Germany.

JANET: Yeah I did yeah. Yeah but the thing is you get on a high I don't like losing and I don't like failing and sometimes when you get the worst competitions and things are not going well that's why the two extremes are so far apart there is no in between with me plus I have such a winning mind set I don't deal with failure very well so I think that's why they are so far apart I don't.

R: Well this was filled out before you actually went to play the game.

JANET: Oh alright sorry I'm not with you right okay

R: So I mean...

JANET: It's that going across the line innit like on court off court.

R: So did you fill it out after the game?

JANET: I can't even remember

R: The questionnaire that you filled out asked for how you felt before a competition that you performed badly in...

JANET: Oh yeah go on

R: So using that and the other one was how you felt before a competition when you played successfully so according to the scores here there was a huge difference whereas you just said when you go on to play basketball you forget everything else and you are happy.

JANET: Yeah

R: But the scores don't quite agree with that

JANET: Well I don't get why then [laugh]

R: Nor do I

JANET: Well no as soon as I get on court and things are going well I'm playing I'm on a high and that's it you just are on a roll so sometimes I mean in the Germany game I put down didn't I?

R: Yeah

JANET: I think before the Germany game umm if I remember rightly umm there was a situation [chuckle] which it don't say in that really so it were the physio going on about the ability of some of the players that was really umm I weren't happy about it so that's probably where that comes from in there

R: Alright

JANET: But I can't tell you that you see [chuckle] because that's because that's an international confidentiality clause.

R: Alright

JANET: There you go what stays in the room stays in the room [laugh] what?

R: No nothing it's the same with you whatever is said here stays here.

JANET: No I'm just saying no it's that's it cause sometimes like, like before a game you're just trying to find ways to relax aren't you so you're on a different tempo aren't you so you're trying how can I explain it you're you just like to be as relaxed as you can be its just a vitality extreme are feelings if you feel totally relaxed when you go on and you not care in the world [tape turned around] when you are totally relaxed and you are happy and you just you know you got you feel better but sometimes little things creep in don't they

R: yeah

JANET: Into your head you know and you start thinking this is Germany

R: I should have to beat Germany

JANET: Yeah so yeah so one way you are trying to relax and then other way you have like a panic mode going on otherwise on the other side chill out and that's kinda what's happening to me trying to find that in between

R: How do you find that in between or when you are playing and you have those things creeping into your mind like you having to win against Germany how do you switch those voices off?

JANET: Well that's what I'm saying there are loads of these little pictures going on.

R: So with the pictures that....

JANET: Na umm it's just me I mean I can't I just don't know how to explain it I just don't know how to explain it it's really really bizarre when I go on court it just all disappears it's like okay it's game time and umm it's just me and the game umm what I've got to do what haven't I got to do umm before we played Germany we had lots of discussions anyway with the team and everything you know so I probably just erm got pals don't you, you just sit and talk to them and when you've had enough you just say shh right I need time go away you know or you're sitting on the bus singing really dodgy songs to yourself. I mean I don't know I don't know what to say you know in terms of how you deal with them everyone is different I just try to get into a really positive mind set you know I mean in the Germany game umm the German captain, cause you get to know the players like NAME REMOVED the German captain you know you start thinking about how you are going to deal with them you know what do I need to do what winds NAME REMOVED up, how can I wind her up right okay well if that don't happen who else can I wind her up it's little it's not so much wind up it's about you know it's taking their positiveness away from them so you know I know if umm you know what roles you are going to get when you go on to court and you know who you are going to mark and who you are likely to end up marking I know it moves around you've got forwards, guards but you kinda know you are going to deal with each player when you have seen them as many times as I've seen them [pause] you start thinking about those things

so you know what can I do and it don't always go your way so, so when it's not going your way that's when it goes wrong do you know what I mean?

R: Yeah

JANET: but it's just little things if they're minor they are really silly little irritating things just a little flick of the chair and it's quite satisfying sometimes it's just a satisfaction that the ref hasn't seen it or but it's quite motivating to you as an individual and it's not just about it's not I don't think it's just about ultimately winning cause you are not really in control of that are you, you might think you are but you're not you know there's 5 players 7 on the bench and a coach oh and the opposition you know so.

R: Is there anything else you think I need to know that concerns the sources of stress that you experience or coping behaviours?

JANET: Umm no I don't think I cope very well with umm conflict you know people that once it's gone you know that want to go on you know and just generally people that aren't positive and don't want to play the game to the level I want to do or or individuals, I'm not good with individuals that umm go out of the way to upset the rest of the team, you know these you know the people I mean that just get at you and get at you and I don't deal with them very well so it's the usual thing disassociate yourself with them I try and do that as much as I can but it's not always easy I'm not saying it is and I'm not saying I don't get stressed cause I do go home and sit there and think about it and get my tetras out and go to bed and hope it's gone in the morning. I hope it helps you.

R: Yeah it does thanks a lot

Interview Max (phone interview)

R: Tell me a bit about yourself work, family, hobbies, sport, anything.

MAX: DEMOGRAPHIC INFO HAS BEEN REMOVED

R: Cool alright tell me a bit about wheelchair basketball. Yeah just a bit about the sport.

MAX: Um well I don't know where do you start same as able-bodied basketball there is no difference really it's something I guess I don't know my mum kinda heard about when I was only 11 and we were like in the hospital and somebody mentioned wheelchair basketball he brought me along gave me a go I kinda thought it was going to be a load of people in wheelchairs who couldn't move very fast and do nothing much but it was totally different it was really competitive I don't know just something I got hooked on and stuck with it ever since because it is such a high performance sport it's like you are at your peak you know every time you're playing it you know sweat like nothing [laugh]

R: So how soon after um you got injured did you start playing basketball?

MAX: Um well I had me accident when I was 7 so I started pretty much playing basketball when I was about 10 or 11 so 3 years so that's huge. I mean if I had heard about it sooner I would have been playing sooner you know what I mean

R: Ah okay

MAX: it wasn't the least of me getting over my injuries or anything.

R: Yeah okay.

MAX: I was walking in like 4 months time after the accident.

R: Oh okay cool

MAX: Yeah

R: What are some of the personal commitments necessary to become a wheelchair basketball player and stay at the level that you are at?

MAX: Umm I guess it just takes constant training you need to be dedicated to be going and want the player and you're not getting a match every week so it's kind of hard you know whenever you are training with goals so far away and you're not playing for a month's time and you still have to train a few days a week you know its dedication basically. But its more

it's not drag cause you like the sport it's not like you are going off basketball cause you've got a competitive edge and you want to go and beat people [laugh] and it's exciting to get a comeback at.

R: Okay cool. Can you describe some of the pressures have experienced as an athlete.

MAX: Some of the pressures

R: Yeah

MAX: Umm...

R: Expect of course getting harassed by sport psychologists [laugh]

MAX: [laugh] that's been the biggest one so far

R: [laugh] yeah

MAX: No um I'm not sure I guess, I guess it's just um whatever my biggest problem was whenever I got sort of further individually whenever I got called up and started doing a bit of Great Britain training and that kind of stuff and whenever I played for the juniors whenever I get back to my club I kind of left like there was pressure on me to perform better and what it woulda actually brought my performance down cause I would felt like I had eyes on the back of my head all the times [laugh] you know what really like let people get on top of me instead of having the confidence just to be thinking you're the man and keep playing you know what mean so that probably put more pressure on myself so mostly the pressure that other people of other people watching you perform would be the biggest problem for me.

R: So how did you cope with that pressure having them watch you, watch your every move?

MAX: Erm I don't know I guess after a few weeks of not playing very well you kind of forget about you know and things kind of comeback themselves it's like whenever you have time to think about what you are doing like when if you've got free throws or like somebody is watching it for 30 seconds and then you have to take a shot in front of everybody it's a tough one it's like you're playing like in the middle of a game and it's all so fast and spontaneous you don't have time to think about the pressures so it's basically I probably keep myself keep the pressures of me by being really busy on the court umm and not having time to think about you know everything is fast you know I play everyone fast so I don't have time to think about who is watching me [laugh].

R What are the main sources of stress that you experience resulting from your personal life, work, sport, social life?

(his son in the back ground making noise)

MAX: um I'm not sure give me that question again

R: The main sources of stress that you experience in various aspects of your life so not just in sport but anything else.

MAX: Umm I guess the most recent one would be being a parent [laugh as son was making noise in the background] yeah like a lot to think about you are responsible for somebody else I guess you have a lot of stuff to teach children of the rights and wrongs of life a lot more and bigger and bigger questions so probably being a parent the most recent one and also trying to succeed in my self-employment as well as basketball you know not something that would stress me during the week at all you know I go on and play if I play well great if I play bad oh well that was a crap session but you know matches are high stress but that would be every other weekend.

R: Yeah

MAX: But yeah.

[son joining in on the conversation]

R: Do you think that your disability or impairment impact your stress a bit more does it make things more stressful that you are in a wheelchair?

MAX: Umm I'm not sure maybe more for maybe more frustrating cause you know there are certain things you can't get to them. Whereas you know I can work on my property and stuff

and if I need stuff done I can like in the garden or anywhere you know really heavy or difficult stuff I ought to get someone else come over and give me a hand you know what I mean it's like that's probably the most frustrating thing.

R: Yeah

MAX: but yeah

R: Now that you are a parent how does that affect you how does the stress affect you behaviourally? Or physically? Emotionally? Cognitively? Yeah how do you know that you are stressed how does the stress show itself in what you do?

MAX: Ummm I would be more agitated you know it's like if anybody puts something more on my plate I am ready to wow you know anybody is on my case asking me questions telling me stuff I need to do I am like I have had enough right now time out [laugh]

R: Are there any cognitive reactions that you have things that you think about or don't think about?

R: Are there any physical reactions to stress? Such as getting sick? Headaches or anything else?

R: Are there any emotional reactions to the stress?

R: Right what happens to you when you are under stress to your performance of and how do you deal with it?

MAX: Umm basketball you see that's the problem I actually don't deal with it that well you know what happens to my performance I get a lot of self doubt I would be umm again I would totally totally be putting myself under more pressure than anyone else possibly could you know and its all self made pressure you know that would be the main problem.

R: Could you expand a bit more like give me an example of what sort of things go on in your mind? What sort of self doubt thoughts?

R: Alright that's sport how about other like as a parent when you are stressed how do you feel you perform like as a parent differently when you are stressed?

MAX: umm yeah I would say so you are not just as I don't know yeah you definitely perform differently it's like you know I guess you are not just in control and calm as you normally are so you know things would get on your case a bit more.

R uhu alright

MAX: It is really hard you know you've been working to keep your outward appearance hello like you know everything inside going raaa especially with your kid.

R: A coping strategy is any method you use to deal with the stressor to lessen the negative impact. There are many different ways of coping with stress for example ignoring it, using positive self-talk, relaxation and other. What do you use? Like alcohol, drugs, eating, gym, holidays all those are ways of dealing with it or not dealing with it. What do you do when you are totally stressed?

MAX: The gym actually helps me.

R: The gym okay

MAX: Yeah both basketball and going to the gym you know like for exercise so that would help me when I am I guess when I am on court I would be thinking positive thoughts you know I try to you know instead of saying no no I will trying to say yes all the time in my head you know I've also got a technique where I you know it stops me thinking about what people what everybody else is watching or whatever I've got like a timing thing in my head I've only picked this up like last season. It's like a timing thing its sort of 5 I actually spell a word out in my head I bounce the ball twice and that's two letters and then I get the other 3 letters when I am shooting for them and I've actually it takes the whole like as soon as they go right you've got 2 shots and I am heading towards the free throw line I am straight away going oh no like 2 shots here I am having to take 2 shots you should be making these you've been playing for 15 years come on everybody is here like GB players there's coaches you know

and in my head straight away now I've got this thing where I just time this time in my head that helps me not think about all the rest it frees your arm up you know when ever you've got all that stress on it your arm is kinda seems not very relaxed and you pull your shot short it can like end up being 2 foot short [laugh] totally embarrassed so yeah I've got a technique that works for me.

R: Is it the same word that you use every time or just any 5 letter word?

R: Alright cool. In your experience are there any personal or situational factors that influence how you cope successfully with stress where you've mentioned for the basketball the counting thing is there anything else like personally that you do to cope with stress?

MAX: Umm I'm not sure there is nothing I can think off.

R: Do things like accessibility and stuff like that stress you out or not at all?

MAX: Not in the way things in life actually stress you know what I mean

R: yeah

MAX: like totally different level ?? like I am not in a wheelchair full time so I don't experience that I walk on artificial legs so you know

R: yeah alright

MAX: So no so much for myself but when you are going out with the guys in a wheelchair and you can't use the loo's and stuff like that it's got to get in the back side

R: I would like to explore the emotions that you have experienced resulting stress in sport and every day activities. Starting with sport are there any emotions that you are aware of that help you play better?

MAX: Aggression

R: Okay aggression

MAX: a little yeah too much aggression and you kind of go for too much but a little bit is good and a little bit of anticipation you know before the game and stuff helps you perform better too.

R: Any emotions that hinder your performance?

MAX: Umm...

R: too much aggression anything else?

MAX: Umm hangover, hangovers are never a good thing for playing.

R: Yeah they sure aren't [laughing].

MAX: The whole lack of sleep thing you know staying up all night ?? No I'm not actually sure. Too much aggression and too much nerves again you know low confidence [pause] like you need to be really big headed you know you need to be like and that's not me I find it really hard to be arrogantly big headed and that's what you need to be you need to be like thinking you are just one of the best guys out there or the best guy out there.

R: I don't know arrogance might get in the way. [Pause]Can you think of any helpful emotions that you've experienced in your work life, social life that make you perform better? Work better? Be more social?

MAX: mmm not sure you've stumped me aah I'm not sure at all in work life

R: work life, parent life any life just life in general

MAX: determination does that qualify?

R: yeah

MAX: do you want to work? Do you want to be getting somewhere.

R: Are there any emotions that hinder you work life, social life like that are just not helpful?

MAX: Give me one second that's the house phone

R: yeah sure no problem

[on the phone in the back ground]

MAX: just give me a few minutes Caren

R: yeah sure no problem

MAX: Okay that's me back

R: Yeah where were we yeah anything that hinders you from doing well in your personal life, sport life, work life, social life, parent life, life?

MAX: life

R: life

MAX: are these like psychological things kinda?

R: emotions just emotions it does have to I mean it can be psychological but emotions yeah like if you are in a bad mood, good mood

MAX: like all those stuff that I've already said like, like if I'm in a bad mood it's like nothing is going right you know.

R: alright. How do you cope with negative emotions or emotions that you perceive to be harmful? Like when you are in a bad mood what do you do to either get back into a good mood or to not let bad mood affect you?

MAX: I don't know the best thing is to try keep busy like try and do something like instead of thinking of the thing that annoys you or you know staying in the place where are annoyed you and try and get yourself out of it by changing what your mind is working on.

R: Are these coping strategies affective?

MAX: Yeah definitely like a lot stress kinda... like having too much to do you're you know like you're loss cause you don't know what angle to take it all from whereas if you get stuck and get something done like a total relief just to be going somewhere then worrying about what you have to do.

R: How do you cope with positive emotions or emotions that you perceive to be helpful? I know it seems like a weird question why would you want to cope with it but hey...

MAX: umm I'm not sure hang on a second. What's up oh no my son's watching a DVD here. How do I cope with positive emotions?

R: yes

MAX: I would say you just sort of wouldn't cope you kinda like use them you know what I mean when you are positive you up and your busy and you're focused and you get stuff done and you know you're positive.

R: Alright we are going to go through the questionnaire that you filled out if you don't remember what you wrote but that's fine as I do.

MAX: Oh no

R: Na don't worry it's not that bad and just talk about it and like discuss why you felt certain emotions and stuff like that. Alright vigour you had the same scores which was 16. Sixteen is the heights you can get. It's the one where you talked about umm your best and worst performance and how you felt before. It didn't say what game you were thinking about but umm when you had a bad game you had a happiness score of 4 and when you had a good game you had a happiness score of 8. So happiness seems to be a huge mood that affects the way you play. Can you go into a little more detail there?

MAX: is this like after or?

R: No this is before, this is before you

MAX: before the game

R: yeah

MAX: yes okay so the 4 was before and the 8 was after?

R: no they were both for before the game

MAX: both for before

R: yeah the 4 is when you had a bad so how you felt before you had a bad game and the 8 was before your good game the best game you ever played.

MAX: It's just like preparation you know if you're like if you are meant to be there like half an hour at latest before a match and you are really pushing it for time and you have to drive

really fast and get there on time and just all a little bit more stress you know what I mean you need to be focused, gotta be nice and relaxed you are a little bit doped up and tensioned already so whenever you get on the court whenever you thought you can have 20minutes or so to warm up you know just maybe this something that happens to me quite a lot cause I am like always running late [laugh] if I'm like late for a match this always happens to me and I find it really hard to get eased back down and get back to that calm level you know for like shooting and stuff and whenever you start off and warm up badly and you are missing the easy shots you shouldn't be missing it just eats away at the rest of it so you know you are starting your game and you haven't got your that's where the heart beats coming from so you are starting to gain you are already a lot a anxiety ...and you are worried about letting the rest of the guys down so I guess that's where the happiness level comes from the games warm up you are totally there you know you've got everyone going well for you, you haven't gotten a sore head and you are not thinking man do I need to go to the loo for this match everyone is dead relaxed and you are just in the zone.

R: Alright your calmness score for your worst game was 0 and for best was 3. So calmness is not yeah you don't like to be too calm when you play?

MAX: well I would probably like to be more calm but I find it hard to be calm. [Pause] I would like to be more. I get really doped up on a lot of my matches I guess it's becoming like I said the only thing that I can do to deal with it is to play fast and I don't have time to think about what I'm actually doing like slow play builds pressure whereas I can play spontaneously a lot better than I can play slowly and controlled and that's probably the only way I sort of get it out of myself on court I have another good session or a good warm I'll just totally you know I'll start off by some spontaneous playing hopefully I will get something else happening that's where my confidence boost will come back if it works yeah.

R: So calmness is one of the things you would like to work on.

MAX: Totally

R: Alright I am sure I can think of something we can do for that. Umm anger whereas before you said you like being having a bit aggression to perform better here in you scores it says that when you play badly you had a score of 11 for anger and only a score of 2. So anger doesn't seem to have such a big impact. It impacts you more in a negative way.

MAX: So the angrier I am the worse I play?

R: yeah basically

MAX: Yeah I guess I guess that could be right enough... if you are angry you force everything a little you know it's not through confidence you are shooting you're shooting cause you're kinda worked up and you probably give everything a wee bit too much so and that's all it takes like to be level with the balls wobbling and come back out and stuff you know and a wee bit of tense with your shots so yeah anger would be yeah I'm not actually like I it would be rarely that I would get roared up on a game you know there are some players on my squad you just love that you know that's what they are playing for and it would be like they like to exchange the words of the players all the time on court like pure aggression whereas I kinda I guess I kinda rambles me I like people liking me and I like people getting along with people you know but the odd times when you are playing a team you don't know like across the foreign tournament you know whenever something like that comes up you are like you know maybe you are tight on score the guys have had a couple of really good points or you get a real good defense you are like rrraa you know that something a bit of aggression kinda comes out but against teams you know and stuff that's not a thing I really like that much it adds to the tension and that's all I need.

R: Yeah your tension score was quite high for your bad game when you played really badly you had a score of 15 out of 16 and for your best performance you had a score of 6. So you

do need a bit of tension I guess but yeah that's another thing we need to work on get that tension level down a bit.

MAX: I wonder what was my best game I was thinking about.

R: I have no idea you

MAX: I wonder what it was.

R: Yeah so would I but I have no idea. Umm confusion when you played badly you had a score of 5. It seems you were confused about certain aspects of the game. What would that be? What confused you when you played the game?

MAX: umm I guess umm you start to question you know like where the problems are coming from umm you know on court problems you know like it's like you are you're not sure if it's you missing things or if you know it's basically it's hard to put your finger on what's not going right with the team when you've got a bit of self doubt on there so that's probably where the confusion is coming from. It's like it's like you know sometimes you run certain players on the court and the whole thing just goes wrong sticky you know it's really hard to see movement and I just can't see a way around it you know I would be like you know I guess certain players aren't sure what way to play as a team yet that's probably where the confusion is coming from. We were actually D5's over at that match over in Stoke Mandeville that time that was a big part of it yeah.

R: I think that might be the game you commented on

MAX: yeah definitely for the bad game [laugh] that was one of the worst of our career for sure.

R: And I was there to watch it

MAX: and you had to watch it typical we do honest play better you know the odd times [laugh] awful.

R: Alright for fatigue you had a score of 1 and 0 so there isn't much of a difference.

MAX: for what sorry?

R: Fatigue when you were tired.

MAX: Fatigue yeah I know. Na it wouldn't be I actually think it umm probably play a bit better if I'm slightly tired.

R: No it was the other way around

MAX: oh was it.

R: yeah when you played really badly you had a score of 1 and when you played good you had a score of 0.

MAX: ummm

R: It's nothing big

MAX: umm I guess it's like it's probably a difference between muscle tiredness and head tiredness. I mean so if I felt less sleepy I'm like you know if I have a good warm up and taken a bit out of my muscles I think I would play actually better because I'm a bit of a I'm pretty fast player it's probably good to slow down just a wee bit you know.

R: What are some of the coping strategies that you use like when you are playing the game the bad game to get back into the game?

MAX: like some spontaneous play something that umm you know that's a strength of mine spontaneous play is a strength of mine cause I've got a bit of speed I'm a fast player so I might try and do like a break move or driving the key or something that's left hand thinking well if you are in a bit of a rot you are like taking outside shots all the time it's really hard you are messing up 4 or 5 it's really hard to have the confidence next time to put them in when you couldn't even get the first one you know so if you take a more more like an easier point more a higher percentage point which would be something spontaneous like a fast break or even fast breaks are dodgy cause you are the lead man up the court it's like 5 seconds of you having the ball while you are thinking about the shot you are just about to take so even

that is a wee bit tricky but umm on the whole I guess I guess I try not to go for too much as well you know I wouldn't throw up crazy shots and try I try and take something that's umm again a higher percentage or even possibly you know if I've missed a few shots I'm going to avoid going for the shot its between me and somebody else I would lure a player and give the shot to somebody else go for a team player rather than an individual.

R: okay do you use different coping strategies for the different moods and emotions that you feel so when you are angry do you use something different then when you are tense to cope with it?

MAX: ummm I guess whenever you are angry you make more noise eh? So you are like so you've got like an outlet for it you would be like you know you are visibly aggressive you know the aggression comes out in noise you know and physical movements rather if you are tense you are more like it's all like kinda inside you know you keep it bottled up you are like you are thinking it's all stuff that you are thinking in your own head and you are trying not show it to other people you are trying to remain calm on the outside yeah same as everyday life [laugh].

R: That's it basically is there anything else that you think I need to know about the sources of stress you experience or your coping behaviours, factors that influence coping?

MAX: mm no not that I can think off.

R: Okay well that is it then.

Interview Nathan (phone)

R: Do you have time now Nathan?

NATHAN: Yeah yeah

R: Perfect. Alright then let's start. Tell a bit about yourself, work, family, hobbies, sport.

NATHAN: DEMOGRAPHIC INFO HAS BEEN REMOVED

R: Alright Great, Tell me a bit about wheelchair basketball pretending I have no clue what it is [laugh].

NATHAN: Wheelchair basketball is a fantastic sport [laugh], I was once told it's a sport that chooses you once you're in a wheelchair and I think it's true. It allows People with all sorts of disabilities to compete on a theoretical equal playing field and it gets them exercise, makes them concentrate, makes them work under pressure, makes them think about how to do things in a different way, you meet loads of different people, yourself included and all sorts of things which are really good.

R: Great alright umm how did you get involve in wheelchair basketball?

NATHAN: Well, I was introduced to it in my spinal unit in the hospital after my accident

R: How soon after your accident did you get involved with it

NATHAN: Umm oh I suppose I had a few games while I was in hospital so probably about 6 months

R: Ok, that's quite fast

NATHAN: I didn't play after I left hospital for quite a few years after that because it wasn't till I moved with my job, I actually moved into an area where they had a basketball team.

R: They don't have wheelchair basketball everywhere do they [Laugh]?

NATHAN: No, no that's right

R: Did you play any sports before your injury?

NATHAN: Well, my injury was a sporting injury.

R: Oh okay

NATHAN: I was a car racing accident, which I used to compete in. British Championship level, umm and obviously I used to play; that was the only really competitive sport I did I did

cycle riding, theoretically competitive but mainly for fitness reasons for my other races, I used to play a bit of football, but mainly just for enjoyment really.

R: Ok right, what are some of the personal commitments necessary to become a wheelchair basketball player and stay at the level you are at?

NATHAN: The personal commitments, well, we have to make sure you make training, make sure you make matches, the rest of your life tends to... when your organising your life you have priorities a basically you have to make sure the rest of your life misses those dates, but it doesn't always happen like this weekend we've got a match on Saturday but I've got a social commitment with my university mates in Sheffield and I will probably not be in a fit state to play a basketball match [laugh]

R: [laugh] yeah can you describe some of the pressures you have experienced as an athlete?

NATHAN: Urm, Pressures? There's the individual pressures you put upon yourself, umm try to improve your game, score that basket and making sure you beat that player next time or making sure you're picked for the squad. Urm, and the team pressures which wheelchair basketball puts on you because at the end of the day it's a team sport and no individual can win a game and the team has to win a game and you have to be prepared to make sacrifices for the good of the team so that may mean you've got to go to training on a night when you want to do something different but it may mean you've got to play in a position you don't want to, or play in a position you don't like playing in because the balance of the team is just better like that. So does that answer your question?

R: Yes it does. What do you do to help cope with those pressures, both individual and team pressures?

NATHAN: Individual pressure; I try to set myself a realistic target, I try and be objective about those and compare my performances against objective measures rather than subjective measure, it's very easy to fall into opinion but you've got to be careful, that you know, say you score 10 points against a team last year I'm going to score 12 points against them this year, or something like that.

R: okay yeah

NATHAN: And if you don't achieve those goals you've got to analyse your own performance, it may be because you were not playing in the same position as you played last year or whatever, or maybe they thought you scored too many points last year and they put a seriously big bloke on you or something like that, you need to justify that to yourself and at the end of the day if you can go home and say, well I've tried my best and I can't think of an occasion where I didn't my best so I'm happy with my performance, if I was in a situation where I thought; I could have done that and tries a bit harder that's when I find I deal with those sorts of pressure not so well.

R: Alright, what are the main sources of stress you experience resulting from personal life, so family, work?

NATHAN: The main stresses that I?

R: Yeah.

NATHAN: Well obviously I'm worried about my family all the time, making sure my children are performing as well as they should at school, is that the sort of thing?

R: Yes, Yeah.

NATHAN: I obviously concerned with my wife, making sure she's happy with life and I'm performing all the tasks she's set me. As far as works concerned a suppose the main stresses are sometimes you've got deadlines like I've got 100 assignments to mark before tomorrow or sometimes I have students which aren't performing s well as I know they should a maybe I need to change the way I'm teaching, sometimes we have students which are disruptive in class I guess although that doesn't tend to be a problem I don't know really, Is that...

R: Yeah, that's perfect. What about sports related stress, so the game itself, coaches, sport administration?

NATHAN: I definitely get nervous before a match which I guess is down to some sort of stress. Which is good because if you don't feel any stress whatsoever you don't perform as well. I always try because I was introduced to a little model at a management course **stress and comfort panic model** I don't if you're aware of it and I'm very conscious of what area of the model I am at that particular occasion so my comfort zone gets smaller and smaller, so I do consciously push myself to stretch and not panic but that is also good from time to time. Umm ooh But as far as the match is concerned I suppose if I know I'm playing up against a player that is better than me which believe it or not does happen sometimes [laugh], I suppose that's when I get most stressed because I think well what can I do this time to minimise their effectiveness and maximise my own and also are we losing as a team because of this player that I'm trying to play against, he's well on top of me and therefore causing the most damage to the team. But I don't regard that as a bad thing, just, sort this bloke out but at the end of it I enjoy the challenge, I've never come away from chance, but sometimes its normal you get really annoyed at yourself because you haven't done, it was obvious he was going to do that, why didn't you cover that because that's when I feel probably most mad with myself. Does that answer your question?

R: Yes it does. Any stress with your coaches or sport administration? Do that they stress you out?

NATHAN: Not really, I suppose the only time I get a bit stressed with the coach is when they personally have a go at me but it's some of the less able players that sometimes the coach gets annoyed with them and I look after them if they're trying something that they've just not capable of doing. That's when they get stressed out. The other thing, sometimes the coaches get very stressed because it is frustrating being on the sidelines, I've been there myself and it's not a professional sport we're playing everybody's there ultimately to enjoy themselves and if you get too upset with them playing they won't turn up again. So I suppose that...well again sometimes umm [pause] one of the coaches I supposed he used to pick on me a bit but then again I thought why is he picking on me and no picking on somebody else I just didn't get upset about it and just get on with it.

R: Okay any social pressure sources of stress even?

NATHAN: Social pressures?

R: umm social sources of stress, society stress you out?

NATHAN: umm I don't know actually umm I don't think so I mean I suppose living live in a wheelchair is more stressful in a lot of ways than not but everybody has their own [stresses]. I don't think people generally tend to be more stressed than others it just different things that are important to different people and umm and you just have to understand that I think probably the most stressful thing I have is if I'm going somewhere and I've never been there before I suppose in the back of my mind I'm thinking I wonder if there will be steps that will probably be the most difficult.

R: To what extent does your impairment impact upon the sources of stress you experience in the different environments, contexts?

NATHAN: well reiterate what I have just said really.

R: For society yeah but what about work? How does your disability impact?

NATHAN: umm from a work point of view?

R: Yeah

NATHAN: Well recently I was offered some tickets to go to a conference I turned them down. The reason why I turned them down was I didn't think I was going to learn anything from the conference umm the main reason the main place where you learn is socialising after after the conference or the coffee breaks which is great and I did find that difficult because

they are all stood up and the conversation all happening about 3 feet above my head and I don't integrate so well in those sorts of environments. I think that's the only example.

R: Using some of the stressful situations you have identified how does the stress experience affect you behaviourally, any physical reactions, emotional reactions or any cognitive reactions to sources of stress?

NATHAN: Can you repeat the question please.

R: Think of some of the stressful situations for example work or in sport umm how does the stress affect you behaviourally, physically, emotionally or cognitively?

NATHAN: Umm as I said I think some stress is good you need stress otherwise you just shrink into a smaller and smaller person umm but there obviously must be a limit to that umm I suppose the skill is working out where that limit is I don't know.

R: yeah but let's say you go over that limit how do you react? Do you have physical reactions like you get headaches, get sick or any behavioural reactions where...

NATHAN: I guess I must get more short tempered I must get more frustrated umm I suppose umm I guess I must take it out on the people in the close vicinity at the time [laugh] I umm what else same as most people I guess.

R: okay what happens to like in sport what happens to your performance if you are like under stress so beyond the good stress like if it goes further than that.

NATHAN: Yeah well if the stress develops into anger then there is a massive drop in performance

R: Ok

NATHAN: ...because umm your body just doesn't umm think logically any more umm it is you are just you have your anger and you must vent it out on something and that's not necessarily the right way in a basketball match or achieve anything in life. But then again I suppose umm anger in some ways is positive because umm as I've mentioned I guess it's the anger with myself after the match if I don't that I've umm performed as well as I should have done that actually makes me get better and it's the anger of losing a match that wants to motivate you to umm to improve and ultimately umm you become the feeling of losing is umm much worse than the feeling of the sort of nice feeling of winning makes you not wanting feel the feeling of losing that motivates you rather than it feels like to win.

R: okay alright next question. A coping strategy is any method you use to deal with a stressor to lessen its negative impact. There are many different ways to cope with stress for example ignoring it, using positive self talk, or relaxation. What are some of the methods that you use to deal with stress?

NATHAN: I definitely use positive self-talk umm I suppose umm I suppose relaxation as well probably a pint of beer whatever relaxes a bit umm.

R: Any other methods like eating, going to the gym, going on holiday, or?

NATHAN: Umm I don't think I feel like going on holiday I see that as a major stressful situation and you are not even calming down over night or anything like that I don't think I have even been in that sort of situation to be honest umm no I would never go to the gym that's more stressful. I would give myself a serious talk or two and umm or go down the pub with me mates probably.

R: okay in your experience are there any personal or situational factors that influence how you cope successfully with stress?

[PAUSE]

NATHAN: In my, sorry say that again.

R: in your experience are there any personal or situational factors that influence how you cope successfully with stress for example how much know about what is happening and when the personal support you have available.

NATHAN: Oh yes umm yes the fact you know if you if I was living on my own, I don't know if it answers the questions, when I was living on my own I came home and I was stressful I probably wouldn't umm you know it would all get on top of me but you go home to people who make big demands on you which is totally unrelated to what you've been stressed about like I don't know the kids want something fixing or whatever and they pressure you to do that umm and that sort of thing distracts your attention from what you thought was a major issue. I suppose umm I had an experience on the weekend which umm caused me a bit of stress one of the races I was at one of the drivers was just killed and I did feel that really umm I found that hard I suppose I felt quite stressed after that I don't know I umm... it took a day I suppose to calm down.

R: It must have been difficult. What did you do to calm down? How did you deal with the stress?

R: Umm right umm. Yeah I would like to explore the emotions that you experience that result from stress in sport or every day activities. Starting with sport what are some the emotions that you are aware of that help you perform better?

NATHAN: the emotions?

R: Yeah

NATHAN: it's going to be you've got to think positively is that what you mean?

R: Yeah

NATHAN: umm if you go into anything planning to fail you will fail so you've got to be positive and umm try and extract the good things and umm ignore or make the bad things as small as possible umm I'm very conscious of that.

R: umm yep alright any emotions that affect your performance in a negative so umm anger you said is there anything else that makes you play worse?

NATHAN: I suppose, [pause] Yeah, I suppose sometimes if I'm playing against umm people... athletes which aren't as able and I don't try so hard consciously because I don't want to, upset them if you like. I'm very conscious that I want as many people to benefit from wheelchair basketball as possible so I won't want to put anybody off by beating them to hard or be too aggressive with them sometimes.

R: Ok, umm,

NATHAN: Especially if it's like a young child,

R: yeah

NATHAN: I don't know if that's the sort of fatherly thing, I don't know.

R: OK, umm what about in your work or personal life are there any emotions, especially in your work that make you perform better at work?

NATHAN: Umm, yeah, well I'm conscious that I have, well, it might be a stress line, if I am above this stress line I'm working really well and umm, I get a lot done but if I'm below the stress line then I basically do less and less and less and less and I have a serious chat with myself to get myself back up to that line. I'm old enough like the other blokes and never have enough time. And I suppose that's a stress... is that...

R: Yeah... to that, how do you cope with negative emotions that you perceive to be harmful? So if you go above that stress line what do you do to go back down?

NATHAN: umm, Normally if I think I've got too much on, so what I'd do is write all the tasks down on a list and then do them and start ticking them off, or umm delegate some tasks which is a much better idea. Umm if its... if I've got a negative or stress caused by an individual I will probably just tackle that head on, I don't like things festering or whatever, just tackle them head on.

R: Do you consider the methods you use to be successful coping strategies?

[Both laugh]

NATHAN: I'm not sure I'm not person to ask. Umm I guess so, I'm obviously constantly aware that everything can constantly be improved.

R: OK, umm, how do you cope with positive emotions or do you think you need to cope with positive emotions?

NATHAN: Yes because you can get carried away and I'm a bloke who'll go up and say things are never as good or bad as they seem. And that I find myself saying that a few times.

R: ok, so how would you cope with positive emotions then?

NATHAN: Well, I'll just say hang on let's just get this into perspective and you'll only get it done, why are you getting excited about this about lets concentrate on this and do it properly or something like that really.

R: Again, do you think that your coping strategy is effective?

NATHAN: umm, yeah I think so. But other than that...

R: yeah

NATHAN: That'll be interesting to see what you've written about.

R: Yeah, well we'll be seeing that when I start working with you. Yeah, that's pretty much it. Do you have anything else that you think I need to know for sources of stress that you experience personally in sport, so anything that could help, benefit me in when I work with you guys? Or with you in particular?

NATHAN: I can't think of anything off the top of my head but I'll obviously bear that in mind

R: Ok, great

NATHAN: yeah

R: Thanks a lot

NATHAN: are you coming tonight?

R: Yeah I'm definitely coming tonight

NATHAN: ok see you then Caren

R: Ok see you then bye

Interview Gerry

R: Tell me a bit about yourself work, family, hobbies, sport?

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R: Work?

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R: hobbies, Sport?

GERRY: hobbies and sport right generally sport is around sort of playing wheelchair basketball, go down the gym you know sort of work out and all um hobbies not really not that many you know it kind of revolves around sport, watching sport, just doing the usual sort of that everyone else does you know, the social thing going out, going to the pub, watching sport, playing sport just things like that really in between studying [laugh]

R: You have time for that [laugh]?

GERRY: Yeah so nothing too exciting.

R: Tell me a bit about wheelchair basketball.

GERRY: What as in me or just generally?

R: Both

GERRY: Well from both I mean from my kind of angle I got into it about 20 oh no I think its 20 years ago now. Yeah probably about yeah sort of 15 years ago and I have always been brought up in an able bodied environment as a disabled person and one of the things that I have never really thought about when it was put to me was playing um you know basketball in a wheelchair because I had always been able to walk. So the whole concept of getting into a wheelchair I couldn't get me head round so it took me a year or two to sort of think, if you

can't run you push type thing so then I came **down to check** it out **and got** into it. **I** did it for a couple of years enjoyed it and everything it keeps you fit and everything but one of the things **I really couldn't** get my head round was coming from an able-bodied environment to being in a disabled environment it was almost like hang on I'm doing this because I am disabled and you know that sort of label and everything I couldn't get my head round that. Whereas a lot of the others like NAME probably NAME and few of the others they had been brought up going to a disabled school so they didn't really know any different so I couldn't get my head round that and then after about 3 years I left um for a couple of years and then I came back and now through studying through getting to know people I now view it as just a sport that you're doing with your mates rather than with your mates in wheelchairs you know what I mean? So I kind of been through all that so you know the whole thing is good I enjoy it you know you do it for the crack, you do it to keep fit, its good there is a high level to it as I'm sure you've seen when you've seen some of them to it so you know that's why we do it so I've now been doing it for 15 years.

R: Can you please go into a bit more detail of the transition period of when you saw it as a label of being "disabled" to returning back to the game and seeing it as playing the game with your mates

I think for me it was really just a case of the fact that I hadn't spent much time with other disabled people and as such when I was in their company I felt as though a label was being attached to me. Because I was brought up in an able bodied environment I have never really seen myself as disabled and as such I couldn't see why I should have to spend time with other people who also have a disability. To me in the early days it almost felt as though I was mixing with these people because I was disabled and this is something I hadn't done before. However, since taking the three or so years out I decided to start playing wheelchair basketball again as I realised that I enjoyed it, it was a source of good exercise and it was a good social thing as well. I guess it took me sometime to see the other people as more than just disabled and that at the end of the day it doesn't really matter whether someone is disabled or able bodied because we are all people and if we get on then it doesn't matter! Also I guess what I'm trying to say is that I have always just seen people as people and I have never really seen the point of disabled people having different groups or clubs etc so when I found myself in one I guess I just found it a little uncomfortable to begin with.

Hope that makes sense!

R: What are some of the personal commitments necessary to be...?

GERRY: To play wheelchair basketball?

R: Yeah

GERRY: I mean I think the general

R: At the level you play at

GERRY: At the level I play at is um from a personal point of view is the commitment to train you know once a week um I have done other sports like I was doing sledge hockey for a bit that kinda involved **going to training late** cause you could only get the ice late on for free so it involved playing at like at 11 at night till 2 in the morning and things and again with the sledge hockey and equally with the basketball and you will find with NAME it I guess it depends with what level of commitment you want. I am quite happy with this and I am quite happy to commit you **know to once** a week training and if there is a game on a Saturday or a game Sunday I am quite happy to commit time to do that. **To me it's not the be all** and end all you know to me if I win I win **and if I** lose I lose but I don't go home and kick the cat about it I mean if you try your best that's all you **can. Equally** there are others that if you want to get to the higher level the Great Britain level you're talking every other weekend you know Saturday and Sunday going to training camps this that and the other for some people it takes

over their life **NAME** done that it's not really my cup of tea so you know I'm quite happy with once a week training, playing games when ever, more of a social thing you know.

R: Can you describe some of the pressures that you have experienced as an athlete.

GERRY: Athlete eh?

R: Yeah

GERRY: Um I don't know really um the pressures I've never really sort of felt any real pressure you know to play the game because I kinda play it on more of a social sort **of basis** you know there is the pressure probably to um you know you want to do your best at the end of the day and I am one for sort of cheering everybody else up and everything else like that to get everybody to try their best but you know I don't feel as though there is any real pressure on **me. I** mean sometimes you will get certain team-mates aren't pulling their weight a little bit you get a little bit of that going on that type of thing you know I don't feel under any great pressure to play the game purely because I do it socially rather...

R: So you don't put any pressure on yourself?

GERRY: No personally I just try and go out try me **best, admittedly** though there are some days when you know when you're warming up **and there** is a group of **10 of** you, you are always going to get 2 or 3 that are going to muck about, 2 or 3 that take it a little bit more seriously some days it happens some days it doesn't that's just the way it is.

R: What are the main sources of stress that you experience resulting from personal life, sport, and social life?

GERRY: In what...oh stress wise...

R: Yeah stress wise

GERRY: Um at the moment personally it's probably studying that's just 1 big stress...

R: Really [sarcastic]

GERRY: Yeah and it's just like misery you know so from a personal point of view you know that kinda gets a bit at times um but sporting wise I don't really...feel again going back to the thing because I play on a social level I don't really feel any pressure to play basketball I feel the commitment I feel the, you know I think everybody a commitment to it because whilst you're not getting **paid** for it I think you need to be turning up every **week on time to play every time** you know some people are more committed to others on that score but other than that I don't really feel any sort of stress towards the basketball.

R: To what extent do you think your impairment impacts the sort of stress you are experiencing?

GERRY: Blimey

R: You're studies, sport or anything else

GERRY: I don't know really I mean...I don't know never really thought about that I mean probably not so much um I couldn't answer that question. I don't know can you elaborate in what way my impairment and stress.

R: I don't know like some people for example in sport it could be accessibility if you can't get there with your wheelchair that might stress you out.

GERRY: Oh right yeah that stressed me out a little bit. Um no I don't know I mean stress wise personally it doesn't really sort of play a part again with the basketball side of things for my side of things I mean I can get out of the chair you know so it's less of sort of an issue then whatever... you might get a little bit stressed when you are standing in the rain trying to get your wheelchair together or helping others and all that sort of thing so I don't **feel as though my disability** causes me any kind of stress it's be of an inconvenience at times in life but that's life innit I mean you've got 2 choices haven't you, you either worry about it or you get on with it I don't worry about it I just get on with it yeah.

R: Using some of the stressful situations that you have identified, how do you react to stress behaviourally?

GERRY: Behaviourally?

R: Yeah

GERRY: If I'm stressed?

R: Yeah if you're stressed

GERRY: I think behaviourally if I do get stressed I think it's just probably like a lot of people you can get a bit short with people you know you can get a bit agitated and I mean having said that thinking about it now when you talk about the stress in the basketball game I guess I can link that to it can probably get a bit heated and a bit stressed when you're charging around like a you know like a mad man and you know other people are not pulling their weight a little bit so yeah I am beginning to see the stress on that side now so maybe there is stress to basketball it's all linking in now. So you know from the basketball yeah I think the old blood does boil a little bit you know because when you're really charging around the adrenaline is fired up you know you really and I think you can get a bit short and a bit sharp with people and words to get exchanged at times but equally some people are more you know are less likely to be like that with someone than some people are again personally when you are kinda doing the studying thing again it can, as you know yourself, you get to the point where you want to pick the computer up and throw it out...

R: Yep

GERRY... you know you do get a little bit stressed with it all but and again I think everybody you know reacts to things differently with the studying thing I probably personally go around the houses to get to where I want to rather than some people who can do something in two days you know me I have a tendency to make things a little bit more complicated than what they need to be you know but that's just me.

R: Any physical reactions and that doesn't have to mean violence as someone understood yesterday

GERRY: no no

R: Any other physical reactions?

GERRY: No I think physically stress wise I think again um you know I think you can react in a way when you get stressed you can be a bit sharp and a bit angry and whatever from a personal point of view on the studying I think um you know stress has caused a bit of you know sort of a bit of digestion and all that sort of thing you know it's thrown my whole body out of kilter a little bit which is why I'm going to the doctors tomorrow so you know I think the stress levels from the studying I'm more affected by than the stress levels of the basketball and it's it can make you ill it's not made me ill yet well kinda made me ill but not ill enough to you know like as in just more physically ill but not depressed or anything like that.

R: Any emotional effects?

GERRY: Again emotionally again the basketball side of things, me personally you know you try your best at the end of the day you shake your hands and whatever I don't get angry about it I don't start throwing things around

R: Like the Argentines did with the German's

GERRY: Yeah so yeah if you win you win if you lose you lose you know some people frown upon that and interpret that as if you're not bothered other people get a bit NAME gets a bit wound up and a bit angry and that sort of thing so you know emotionally the basketball thing you know sometimes I think it also depends on how close the game is I mean if you're really pushing it and you worked your socks off for 40 minutes and you go and lose by 1 point then you're absolutely gutted and I have been gutted where I've you know sort of been a bit fed up and a bit pissed off and what have you but again if you're going to get and equally I think going back to that as well is I think one of the things with the wheelchair basketball thing is there is a fine line ability wise in as much as you know I am all for giving everyone a crack at

the whip you know because there are different disabilities at some people you can chuck the ball hard at some people you can't some people can score some people can't and I've been in situations where I think that's right but equally I have been all the way down to Birmingham for a game put the rest of the bench on and you're charging around and through no fault of anybody else through lesser ability you can't do it and that can wind **you up and** it's sad to say it but it's true sometimes you know because you know you can pass the ball to them and they can drop it and that's not because of any other thing they just have a different ability to everyone else and that can wind you up sometimes. Anyway go on.

R: To that do you think because there is a classification system whereas in other sports it is more extreme than in basketball do you agree with the classification or should that be changed?

GERRY: I mean yeah I mean that's kind of that's a bit of a funny area really almost innit because if you then go and sort of I don't know you kind of run the risk of saying people are more able and some are less able you know you can have 1 team for 1 and but equally if you put in people together you are going to get someone like me for instance and then your got someone like NAME I'm not knocking NAME but you **know NAME is a 1 pointer** and I'm a **3.5 pointer** you know the unfortunate thing for NAME is he can travel all the way down to wherever and only get 2 minutes whereas if he is coming down every night training for 2 hours travels all the way down south he should get as much time as everyone else but unfortunately he doesn't so than you could argue there is a reason than to have a team that is of more equal standard for NAME so he gets to play more I don't know.

R: Okay. What happens to your performance when you are under stress and how do you know you're under stress?

GERRY: I don't know I think 2 things can happen 1 is if you get really sort of I mean depending on what **you mean when** you say stress and everything but if you get really the adrenaline starts pumping and it kicks in and I think that **really I guess** it can have a positive and negative effect at the end of the day 1 is that you know it can really fire you up and you're really flying in and you're really giving it 110% equally you could argue that you get so fired up that it begins to have a negative effect on your game and then you start clattering into people and getting to aggressive and getting **sent off** and getting fouled and all that sort of thing so in many ways I can imagine in probably has it can have a positive and a negative effect you know so.

R: What effect does it stress/adrenaline have with your performance?

GERRY: I think in many ways if you channel your stress/adrenaline/aggression into the right areas then in many ways this can have a positive effect on your performance, but equally if you let things get to you too much then this could also have a negative impact on your performance as you will start to try too hard and make silly mistakes.

R: A coping strategy is any method you use to deal with a stressor to lessen its negative impact. There are many different ways to cope with stress, for example, ignore the stressor, use positive self-talk, or use relaxation exercises, drinking alcohol eating, going on holiday like I'm going to do or other methods. What methods do you use to cope with stress?

GERRY: What basketball or both?

R: Any

GERRY: I don't know really um stress I don't know really I have never really thought about it because I guess when you... to me I guess probably the best way to deal with stress if you're talking the studying kinda side of things is to probably to put it down and walk away and if you find yourself kinda because I tend to get stressed when I'm studying when I don't really know where I'm going and I'm kinda going around in circles a bit so than maybe walk away from it and you probably speak to somebody else...Here is NAME now **do** you want to take over or carry on

R: Carry on because we are in the middle of it

GERRY: um so um you know from a sort of studying side of things it's the...are you alright with the tape am I not taking up much of your time

R: No no it's...

GERRY: In case you have to turn it over?

R: Exactly

GERRY: So from a kind of a studying side of thing you know kinda walk away from it you might be getting stressed because you're going round in circles, you don't understand something or whatever so then you kind of ring **someone** you know you speak to someone else, try and get a bit of guidance get you know cause sometimes you can't see the wood for the trees and that sort of thing um on the basketball side of things I don't know I guess again it's probably a case of pushing away from something and just calming down a little bit or you're kinda relying on your teammates to pull you away from something at the end of the day but like I said I kinda feel more the stress from the studying rather than the basketball I think with the basketball it's all the adrenaline innit I don't know the weird thing with the stress and the adrenaline is that a game can go by and you can try and think back to it and you just haven't got a clue you know either what happened, how many points you scored, you know because the adrenaline is just mad innit? You know so there you go.

R: In your experience are there any personal or situational factors that influence how you cope successfully with stress. For example, how much you know about what is happening and when, the personal support you have available, your personal dispositions.

GERRY: I don't know I guess in many ways 1 of the things to stress is **probably that you know when** you're getting stressed having said that I think from a personal side of things I've probably you know I think there are times when I'm not stressed but equally there are times when I think I'm not stressed and you know I am thinking like well hang on why am I know well or why am I this or why am I that and then you might speak to your mum or whatever and she will say well you're probably stressed I don't feel stressed I don't think there is anything to stress me but psychologically I probably am stressed and I don't know I'm stressed you know so sometimes I do know and sometimes I don't you know so I don't know.

R: I would like to explore in more detail the emotions you have experienced resulting from stress in sport. Starting with sport, are there any emotions that you are aware when you perform well like positive, negative you know that influence you to perform well?

GERRY: Um I don't know really I think the thing when one of the things that kind of makes you perform well is when you're kind of coming in and you're warming up and everything is kind of focusing on what it is you're trying to do and where you're trying to go and I do get stressed at the beginning when I get you know when like you're doing your lay ups and you're warming up and not everybody takes it as seriously as you know as I might be or whatever and that can wind me up that can get me stressed but you know I try to sort of you know kind of focus on what it is I'm trying to do and things

R: Are there any emotions that you know that enhance your performance or make you play worse before hand like for example when you're angry do you perform better worse?

GERRY: I don't know really I think one of the things is **that you know when you're** getting there whether you're in a good mood or not I think your mood has an impact on whether you're going to perform well or not you know whether you're up for it or you know whether you've had a **night out** you know whether you slept well the night before or whether you know whether you got caught up in traffic on the way there whether you rush, whether you've got 2 minutes to get in and get changed all that has an effect I mean if you can get there in time, time to prepare, time to get ready, time to warm up or whatever I think you're going to perform 10 times better than when you're stuck in traffic, you're rushing in your chucking your wheelchair together you got to get in dump your bag, stick your t-shirt on and

get on than you haven't got a chance you know that does affect the way you play ...it's all in the preparation.

R: Ah right. How do you cope with negative emotions or emotions that you perceive to be harmful?

GERRY: Um negative emotions, um does that come back to the stress thing?

R: No not really

GERRY: What is negative emotion?

R: Well it depends it various anger for me I go through a negative emotion but for some it might be positive cause for some anger kind of enhances them to play better or so

GERRY: So go on, ask me the question again

R: Oh yeah what was that! How do you cope with negative emotions?

GERRY: Oh anger, anger and things like that?

R: Yeah

GERRY: Again, anger erm I think in many ways that the way to deal with things like that are ... if you probably know you're going to get a **bit wound up or someone is trying to wind you up** a little bit is sometimes to pull away and you know to calm down from the situation, but equally I've been in situations when I've been playing basketball where someone has rubbed me up the wrong way and all sort of **logical and rational thinking** goes out of the window, don't it? And you know when you're in there you'll give as much as you get sometimes which I think is in many ways the natural way to react in an angry situation on the basketball court. Goes back to your adrenaline if someone rubs you up the wrong way you jump in, you'd like to think you'd pull away but you don't always!

R: Right so yes pulling away is not a very successful coping strategy as it doesn't always work

GERRY: No it doesn't, when the adrenals going it doesn't, what you should do and what you do do, tends to be different

R: Right, How do you cope with positive emotions or emotions that you receive are helpful

GERRY: I don't think you need to cope with positive emotions, do you? The joy and ecstasy of winning and all the rest of it is what it's all about, aint it? You know when you've kind of especially when it's close towards the end of the game and you win it then you just release all that you know positive emotion and I dunno... you'd be less wanting to cope with that more than the negative maybe I don't know

R: Well I mean for you maybe but I mean I'm sure there are some people that perform worse when they are happy for example, then are some people like that around. Right, erm

GERRY: But equally having said that thinking about that with the positive emotion though I think when you go back to, if you think about the thing of focusing on what your trying to do I think if you're in a bad mood or equally if you're a bit giddy and a bit mucking about, pissing about then you're probably not going to, like you say both of those emotions of being negative and being in a bad mood but equally being a bit giddy and a bit silly I do think a lot of it comes back to the fact of when you coming in and you're doing your, you know your warming up or what have you, you do need to get into that zone, to focus on what you're doing because if your too low down here or your too high up here that is going to have an effect aint it? You need to focus

R: Yeah, so how do you get into that zone?

GERRY: How do I focus? Because at the end of the day for me you know I kinda come in and you know get your kit on and do the warming up and then you know you're just sort of thinking right, if someone tells you to go do something you just do it, if someone tells you to do this you do that, you don't sit mucking about with your mate behind you or you don't spend twenty minutes getting ready and you know what I mean? It's all about the whole

basketball team thing you've got to sort yourself out and then you've got to group together as well, so there's individual and teamwork involved in it. You're responsible for yourself

R: Yes, right, to the questionnaire that you filled out

GERRY: Alright

R: Right, Erm

GERRY: This just proves that you've done some work since I last saw you

R: Yeah it does, doesn't it?

GERRY: Right, this is where I find out that none of what I've just said ties in

R: Well, not quite

GERRY: Alright, cool

R: Well for worse performance erm you said that, you ticked that vigour highest sixteen lowest obviously zero. You ticked, had the score of 12 so that's quite active, alert and for best performance 14 so there's only two points difference so not much, happiness you had 9 for both, so you're always happy whether you play bad or good

GERRY: Yeah, I don't let it get to me

R: Calmness there was a bit of a difference,

GERRY: Right

R: So calmness impacts you a lot? Do you need to be calm? As according to this the more calm you are the worse you play

GERRY: No, I would say it's probably the other way round than that, I've probably sort of not answered that properly. So yeah I would argue the more calm and focused you are the better you would play.

R: Sounds right,

GERRY: Sorry

R: It's alright, that's why we go through them to see

GERRY: Yeah that's right

R: Anger and depression both zero so that's good, tension was a score of one difference but Calmness was the only one that was interested as the answer was none, alright. What coping strategies did you utilise? Did you use a coping strategy to change any of the emotions starting to reduce in intensity? Do you use any coping strategies? Like for example when you play badly and you realise you're playing badly cause it's there, do you do anything to get back into the game?

GERRY: Well I Don't know really, I think maybe, I think two things happen, one is if you're really playing badly and if you've got something about you you'd probably speak to the coach and tell him to take you off but equally the chances are the coach will get you off before you say that, you know what I mean? But again I think from my own point of view if I know I'm playing well I'd try and put it to the back of my mind and carry on. But equally from other peoples point of view if I know that other people have had a bit of a shocker or are having a shocker I'm one for geeing them up and saying don't worry about it, as if you just have a go at some who's having a bit of a stinker then it's just going to get their head down even more isn't it? Encouragement is the source of ... whatever aint it? Just forget about what you've done and move onto something else

R: Alright, is there anything else that you think I need to know that concerns sources of stress that you've experienced?

GERRY: No,

R: Great then were done!

GERRY: Are we?

R: Yes that was it

GERRY: Happy days

Study 1 interview Marco

R: Hi tell me a bit about yourself work, hobbies, family, sport, anything.

MARCO: DEMOGRAPHIC INFO HAS BEEN REMOVED

R: Alright

MARCO: INFO REMOVED

R: Right tell me a bit about wheelchair basketball I mean I know that you know that I have tried it out and played a bit but tell me as much as possible just in case there is something that I might miss even though I have some sort of knowledge about the game, just basically anything about wheelchair basketball.

MARCO: It is competitive, it's challenging, erm skilful it's hard erm you've got to be able to control your wheelchair as well as controlling the ball. You've got to learn all the skills of throwing, shooting, defending, erm but generally its fun.

R: When did you get involved in wheelchair basketball?

MARCO: I player wheelchair basketball as a child I was about... 10/11. I played within the school but for a local team nothing really competitive but erm we played and then I stopped playing for various reasons went on to higher education and work and then about 2 years ago I met up with **NAME** and have been playing since then.

R: Could you please expand on the reasons why you stopped playing wheelchair basketball?

MARCO: I moved away from home to study. Had no transport to travel independently and as a student the last thing I thought about doing was playing basketball. I also think that had there been a person around e.g. (sports development officer) to guide me into sports then I may have continued.

R: What are some of the personal commitments necessary for wheelchair basketball at the level you play at?

MARCO: Personal commitments...training, you've got to train regularly erm fitness...he says [patting his stomach and laughing]...and I think generally listening to more experienced players, picking up tips and skills from them.

R: Does it affect your work life? I mean I know you guys train in the evenings so...

R: How often do you train and compete?

MARCO: I train once a week with the team, but as I work in a school which has a court, I try to get in there as often as I can, even if it is for 10minutes. We normally play about once a week between September and April. Sometimes once every two weeks.

MARCO: No I don't think it does affect my work life at all I tell you in fact I've introduced it into the sport. We've just recently purchased 11 wheelchairs which we should be getting just before the summer or just after the summer so I am going to introduce wheelchair basketball into the schools which I am going to be doing so erm it's become part of my work.

R: Are there any further commitments you can think of?

MARCO: I'm not sure what you mean by this.

R: Cool. Can you describe some of the pressures that you experience as an athlete?

MARCO: Pressures... apart from the normal pressures of any other athlete competing, trying to be the best you can, trying to beat the opposition erm I don't think there have been any real pressures up until now.

R: Are you saying that there are pressures now? If yes what are they?

MARCO: No.

R: So there is nothing you do to cope with those pressures, as there are none.

MARCO: As I said earlier I think it's just a matter listening to the more experienced players seeing how they've coped with it and erm trying to overcome it.

R: So what have you learned from experienced players about coping?

MARCO: I've learnt that it is important to take time and think about the game (play). To watch what others are doing and then react. I've also learnt ball skills by watching how they move and throw.

R: What are the main sources of stress that you experience resulting from your personal life?

MARCO: Sources of stress that I experience...teenagers at work (laugh) yeah work can be very stressful, not being able to do what you want to do...mm not being able to treat the students the way you want to.

R: In what way?

MARCO: Disciplining them.

R: Oh yeah okay

MARCO: not being able to...also maybe not being able to do things at work because of lack of funds lack of equipment but that's general with everybody not just me...erm privately stressful...erm...yeah trying to pay all the bills (laugh) can be quite stressful towards the end of the month when you see your bank balance it getting to very...its becoming from pink to red. Erm environment wise can be stressful when you're in a wheelchair when you get to when you can't get into places you want to because of steps, pavements mm some people's attitudes towards disability which you wouldn't expect being in two thousand and six but they still have some unusual attitudes and ideas and that can be quite stressful.

R: Can you please expand on the unusual ideas and attitudes like give an example

MARCO: Some people's attitude is that disabled people are aliens. We are not "normal". We should not be let out into the community. They are scared to talk to us just in case they catch our disability! They think that we are unable to do things for ourselves.

R: What about sports related coaches, administration is there any...like...

MARCO: coach wise no mm the coach is a coach you do what the coach says erm otherwise you don't do the sport that's my opinion. Sport wise erm yeah within Northamptonshire I don't think that they are doing enough for disabled people within sports from past experience and I don't care if this does get out but from past experience if there has been money involved they will get disabled people involved in some way if there is no money there well than you don't see disabled people.

R: Can you please explain that a bit more?

R: That is so true. What about administration? For example this whole classification issue? Is that a source of stress? I mean some people think depending on what classification they fall into...

MARCO: No I think it is a good idea actually otherwise you are going to get people that are erm less able than myself playing against me and that wouldn't be fair to them and vice versa I would be playing against more able than myself and that wouldn't be fair. So no I agree with it.

R: In what way does your disability/impairment impact on the sources of stress that you experiences in the different contexts?

MARCO: In other words?

R: For example in your work environment does your impairment I mean you are working with disabled but does your impairment have any influence on that?

MARCO: I think one of the reasons why they employed me at the time is because I am disabled and they thought it would be a good idea a good role model for the students there and it has worked yeah they are also employed me because of my abilities but I think that came second (laugh) because the wheelchair they looked at first and yes it has worked out and kids do come up to me and say and I am not talking about the kids that have disabilities but even kids that haven't will come up to me and say sir erm can you do this in your chair or can you do that in your chair or how do you do this, or how do you drive they ask questions and they're learning so yes it's been very positive.

R: Do you think that some of the stressful situations that you have identified for example work how does the stressful experience affect you behaviourally like do you get angry?

MARCO: I get frustrated and yes when I am in a meeting or something I can I do lose it. I've been banned in the past from going to meetings where social services are involved because I will actually tell them what I think and the school doesn't like that so yeah that does happen. It is just a frustration basically of not being able to do it mm and then unfortunately because I get frustrated I take it out on the kids which is wrong but it happens and I will be the first to admit that.

R: In what way do you take it out on the kids?

MARCO: I'm not as patient with them as I should be. Tell them off more often.

R: Physical reactions?

MARCO: No no

R: How do you react to stress physically? E.g. getting sick

MARCO: Stress tends to give me headaches. I'm unable to think clearly and find it difficult to sleep.

R: Emotional?

MARCO: Emotional? Erm apart from the frustration the anger I don't know I suppose deep down it's yeah if you start to get a headache somewhat yeah...I don't know not too sure about the emotional.

R: Are there any cognitive effects? Thinking about differently hoping that, I don't know, any cognitive effects on your stress?

MARCO: What are you saying?

R: Like for example when you get stressed you might think about things a lot more how they affect you how you could do what you would like to change how to change?

MARCO: Oh yeah that happens every day all day even without the stress but yeah more so when you are stressful yeah I believe you do think about it I would do it this way or I would do it that way. These ...shouldn't be in this place you know someone else should be doing their job you know.

R: What happens to your performance when you are under stress? How do you know you are feeling stressed?

MARCO: I start making mistakes erm not as energetic, kind of the main two ones yeah.

R: A coping strategy is any method you use to deal with a stressor to lessen its negative impact. There are many different ways to cope with stress, for example, ignore it, or using positive self-talk

MARCO: The way I deal with my stress is I move away from everybody for a few minutes on the end quietly just thinking about things through thinking about looking at the other persons point of view because yeah sometimes it is stressful not being able to do something or even in sports ah I made that mistake but if I had done this or so you think of other peoples points of view and realise maybe they weren't so wrong and that sort of calms me down so that's the way I deal with it.

R: Any other methods like?

MARCO: Going to the gym [laugh] going to the gym

R: Or going on holiday [laugh]

MARCO: Oh yeah going on holiday that can be stressful as well though

R: Could you please expand on that give an example of a stressful holiday.

MARCO: Booking a holiday. Great fun! Having to inform them that I use a wheelchair to ensure that the hotels are wheelchair friendly. Ensuring that I have got assistance at the airports (both ends) to get on/off the plane. On several occasions I have had to re-arrange this again at the air port itself because the correct paper work was not sent through by the travel agent. However, I do love going away.

R: How do you cope with the attitudes of others towards you and your impairment?

MARCO: I try to let a lot of things go by me. However, it has been known for me to tell people what I think of their attitude. On rare occasions I have been rather rude. I once told a woman, some time ago now, who I thought was patronising me, by the way she was speaking, that I had seen a better attitude come out of a cow's backside.

R: True

MARCO: accessible with the wheelchair

R: Oh yeah true. In your experience are there any personal or situational factors that influence how you cope successfully with stress?

MARCO: Not sure what you mean?

R: For example how much you know about what is happening and when? The personal support you have available or no support?

MARCO: I don't know I just think you get stressful and that's it at the time yeah you don't think yeah I don't think about those things at the time. I think that comes after.

R: To what extent do you think personal factors such as personality, experience or situational factors such as duration of stress or characteristics of the situation influence your choice of coping strategies?

R: Yeah. Starting in sport are there any emotions that you are aware of that help you perform better

MARCO: I think feeling at ease feeling [pause] not having anything on my mind at the time yeah I think that helps.

R: Could you please describe what you mean by feeling at ease? What emotions do you experience when feeling at ease?

MARCO: Feeling at ease means that your mind and body are united. You feel good and your mind is clear of any thoughts e.g. Work or issues concerning the family. My emotions at that time are contentment, relaxed and calm.

R: Anything that, any emotions that hinder your performance?

MARCO: Stress (laugh) I don't know if you've got yeah if you've got something on your mind it may not be an emotion I don't know. Define emotions

R: Remember we had that topic before [laugh]

MARCO: Yeah

R: something that last not very long but is intense

MARCO: I suppose if you had a disagreement with somebody before a match or an event that could hinder your performances not sure that hasn't happened

R: It hasn't happened?

MARCO: No

R: Alright anything helpful emotions in your work life, social life that make you perform better?

MARCO: Just being content with life basically, generally and yeah that's it.

R: Any negative emotions that hinder you from being successful at work or social life?

MARCO: not emotions no not emotions

R: You mentioned anger and frustration previously those are emotions do they hinder you from being successful or any other emotions?

MARCO: I have had to think about this question quite a bit. I guess my answer has to be yes. If I get frustrated or angry I tend to tell people what I think and this gets their back up. They then close doors on my face.

R: Could you give an example of what would hinder you of being successful at work/social life

MARCO: The environment (Steps into lots of "public" places. Do you remember all the pubs in Wolverhampton centre?), Public transport and the attitudes that I mentioned earlier.

R: How do you cope with negative emotions that you have experienced in sport or social or work life?

MARCO: I think it is yet again by taking myself away from the situation, thinking about it looking at all the reasons for that particular event, why it's happened and then going back into the situation and trying to sort it out.

R: Do you think that is an effective coping strategy for you?

MARCO: It works for me yeah and that's also in sports a few months in training I felt that, we were playing a friendly game between ourselves, and I felt that the people on my team were not including me within the game so I moved away from the game came out for a few minutes and on me own and then discussed it with the others yeah it does help but it helps me.

R: What did you discuss? What did they say?

MARCO: From what I remember, I told them that I felt as if they were not including me within the game. I was calling for the ball but never got it. They said that this was not intentional.

R: How do you cope with positive emotions?

MARCO: Is there any need to cope with them?

R: Well sometimes positive emotions like happiness could get in the way, like if you are too happy or too calm.

MARCO: Yeah I would disagree with that though I don't think they would get in the way

R: For some it may. Right we are now going to go through the questionnaire

MARCO: I can't remember what I put

R: That's why I have it with me.

MARCO: oh no

R: We are only going to go through the best and worst competition and look at the moods you wrote down. I didn't ask what competition so for one of the competitions where you played badly

MARCO: well it would have been a game and not a competition

R: Okay a game you put, you had a vigour score of 9 which is quite high, happiness was a score of 8, calmness you had 6, no anger, no depression, tension you were at 7. 16 is the highest you can get. Confusion you had 2 and you weren't fatigue. So I am interested in the confusion part.

MARCO: The confusion I think the way I looked at it if I remember rightly is what's happening within the game, what I need to do, um being a fairly new player um I'm still learning and sometimes quite often I make mistakes and you know it's the confusion of thinking well what should I be doing, how should I be doing it, where should I be, where shouldn't I be that's what I meant by confusion when I marked it down.

R: Yeah. What about tension you had a score of 7?

MARCO: Tension yet again, it's the tension um it's the buildup tension of the game you know how are we going to win this, this is an important game you know that's what I think I meant at the time.

R: For your best performance you had a vigour score of 12, happiness you were at 13, calmness 8, anger 0, depression 0, tension 2, confusion 0, fatigue 0. So much better, from that I get that when you are feeling happy you play better.

MARCO: Yeah definitely, yeah if I am more at ease with myself I perform better within sport and work.

R: Um what are some of the coping strategies that you utilise, you know that happiness is ...you play better when you are happy so what do you do to become... before the game or competition to increase those moods and emotions that make you play better.

MARCO: The evening before I just try to forget and problems or any disagreements I've had with whoever I am not talking within the team I am talking outside the actual team itself I try to forget all that, try to get a good night's sleep but it doesn't always work depending on where you were the pub hinders you from sleeping

R: Oh yeah [laughing]

MARCO [laughing] yeah which is not good before a match um yeah basically that's it just going into the game with a clear mind apart from the game itself.

R: So during a game, you're having a bad game feeling the tension what do you do to calm yourself down...

MARCO: I say to myself you can do better than this you'll be alright, just calm down, think about it, all those thoughts are going through my mind at the time yeah you know um I try to listen to the coach shouting out one of the problems um and I am saying this because we have discussed this is that people on the sideline tend to shout out so you are hearing several voices saying different things that can be confusing as well so you just try to focus on one voice, the coaches voice and I try to overcome it that way, doesn't always work unfortunately I think 9 out of 10 times when the game starts to go wrong it continues to go wrong for you, for me.

R: Could you please go into a bit more detail. About when things go wrong for you they continue going wrong for you.

MARCO: Yes, if for example I start a game by defending badly, no matter what I do I end up defending badly. The harder I try the worse it gets. The coach/ others tell me where I am going wrong, but it just doesn't sink in on that day.

R: I don't know if we spoke about it before or if it was NAME and I cause in wheelchair basketball, well in any disabled sports, especially in team sports, I mean there are lots of injuries, does that affect you in a way, if one of your team mates, I mean disabled sports is such a small community, each team is such smaller if a team mate is missing its quite key does that affect you in any way.

MARCO: I think it affects everyone yeah I think it does affect us mentally if a player is away because of injury you think well there is a big part of the team missing even though its one player, however many players, it does effect you mentally, if it's an important player, um if it is someone like me, well you think oh well you know he will be back and that's it sort of thing [laughing] but no yeah it can affect you.

R: So when that happens, how do you prepare yourself, like okay you know key player is not there, we need to win the match...

MARCO: You have to listen to the coach, coach is sort of saying yeah you can do this guys, whatever try to take it on board and do it and do your best and adapt it, different players play differently and you have to we all have to adapt to play with each other.

R: Alright last question is there anything else that you think I need to know that concerns the sources of stress you experience, some of your coping behaviours and factors influencing coping?

MARCO: I think I have told you everything yeah I think so.

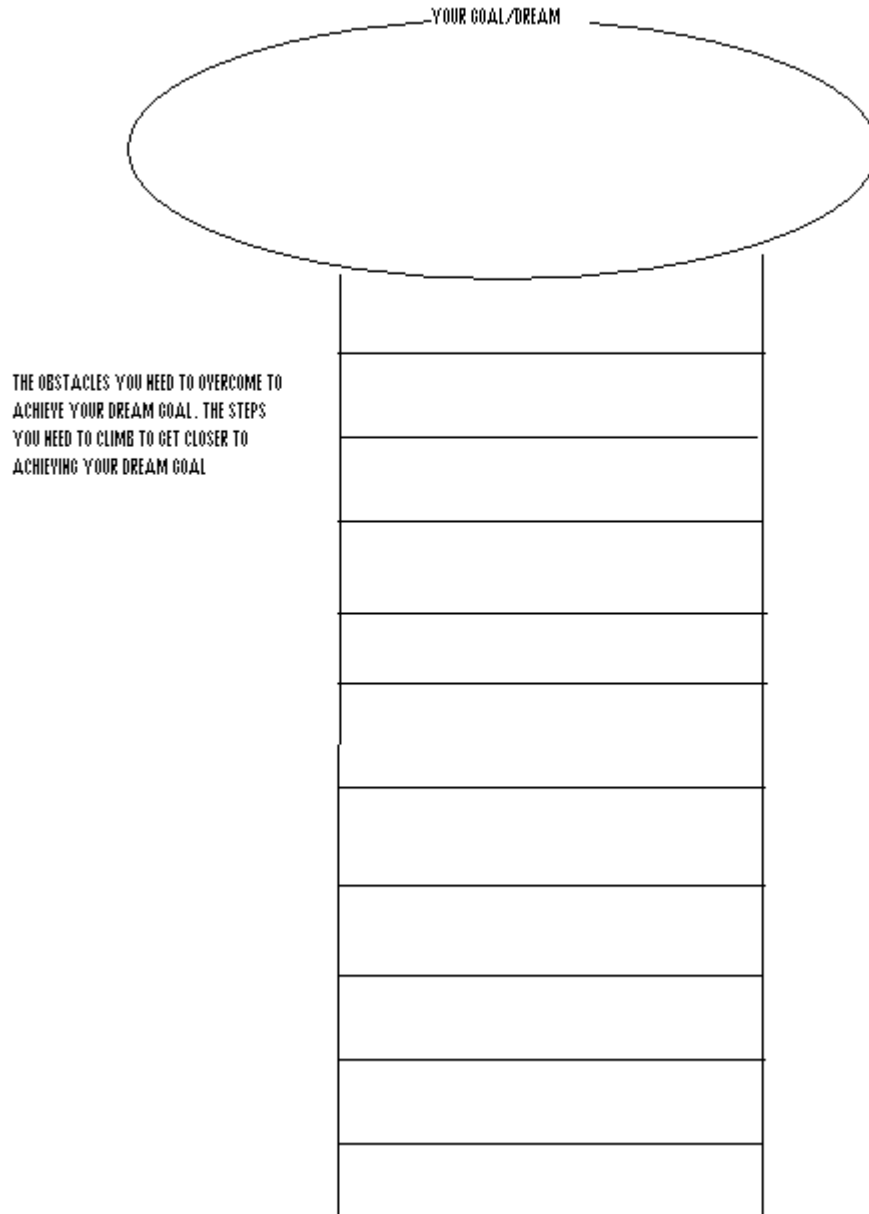
R: That's it

MARCO that the end of the interview?

R: Yeah that's it.

Appendix D

Goal-Setting



Appendix E

The Deep Breathing Script used in Phase 3

Imagine your lungs are divided into 3 levels. I want you to first fill the lower level of your lungs with air. Do this by pushing your diaphragm down and forcing the abdomen (stomach) out. Now carry on and fill the middle level of your lungs. Do this by expanding your chest and raising your rib cage. Now to the top level of your lungs, fill this level by raising your chest and shoulders slightly. Now hold your breath for 4 seconds. Okay and now exhale first pull in your stomach and lowering your shoulders and chest to empty your lungs. Try and get out that last bit of air by pulling in your stomach a bit more. Let go of all muscular action so that your stomach and chest are completely relaxed.

Now let's do that again but this time when you breathe out I want you to let go of everything that stressed you out today. Just clear your mind every time you exhale. Okay so let's fill those lungs again starting with the lower level (read the above section again). Okay and now that you have all the worries of your chest, I want you to take another deep breath and just enjoy having to worry about nothing and just feeling nice and relaxed.

Appendix F

PMR Script used in Phase 3 for the wheelchair basketball population

I will read a script to you, but first get yourself comfortable if you want to get out of your chairs and lie on the ground then you can do that too, anything that will help you feel relaxed. Now I would like you to close your eyes and take a long deep breath through your nose, inhaling as much air as you can. Then exhale slowly and completely, feeling the tension leaving your body as you exhale. Take another deep breath and let the day's tension and problems drain out of you with the exhalation. [PAUSE] Relax as much as possible and listen to what I say. Remember not to strain to relax. Just let it happen. During the session, try not to move any more than necessary to stay comfortable. Particularly, try not to move muscles that have already been relaxed.

As we progress through each of the muscles groups, you will first tense the muscle group for 5 to 7 seconds and then relax for 30-40 seconds. Do not start tensing until I say NOW. Continue to tense until I say OK. The word OK cues you to immediately let go of all the tension.

Begin with tensing the muscles in the dominant hand and lower arm by making a tight fist NOW. Feel the tension in the hand, over the knuckles, and up into the lower arm...OK, relax by simply letting go of the tension. Notice the difference between tension and relaxation [pause for 20 to 30 seconds]...Make another fist NOW [pause 5 to 7 seconds]. OK relax. Just let the relaxation happen; don't put out any effort [pause 25 to 30 seconds].

Next tense the muscles of the dominate biceps by pushing your elbow down against the back of your chair (or floor if lying down). Tense NOW. Feel the tension in the biceps without involving the muscles in the lower arm and hand...OK, release the tension all at once, not gradually. Just let it happen...Tense the biceps NOW...OK, release it. Notice the difference between tension and letting go into relaxation.

With your nondominant hand, make a tight fist NOW. Feel the tension in your hand and lower arm, but keep the upper arm relaxed...OK, relax by simply draining all of the tension out...NOW tense again...OK, relax and feel the difference between the tension and relaxation...Also notice the different feeling for each new muscle group...Next push the elbow down to tighten the nondominant biceps NOW...OK relax...NOW tense the biceps again...OK, notice the decrease in tension, drain it all out, and enjoy the feelings of relaxation...Notice the sensations you have in the muscles of both arms and hands...Perhaps there is a sort of flow of relaxation- perhaps a feeling of warmth and even heaviness in these muscles.

Turn your attention to the muscles in your face. We will tense and relax the face by progressing through three muscle groups. Tense the muscles in your forehead by raising your eye brows NOW. Feel the tension in your forehead and scalp [pause for only 3 to 5 seconds]. OK, relax. Enjoy the spreading sensation of relaxation...NOW frown again...OK, relax. Release all the tension...Your forehead should feel smooth as glass...

Next squint your eyes very tightly and at the same time wrinkle your nose. Tense NOW. Can you feel the tension in the upper part of the cheeks and through the eyes? OK, relax...NOW tense again...OK, release all the tension...

Next pull the corners of your mouth back and clench your teeth, but not so hard that your teeth hurt. Tense NOW. You should feel tension all through the lower part of your face and jaw. OK relax...NOW tense...OK relax.

Next tense the muscles of the neck by trying to pull your chin downward and upward at the same time, thus contracting the muscles in the front and back part of the neck simultaneously. NOW tense. OK, relax. Drain all the tension from the muscles in the

neck...See if you can get your neck and face to feel completely relaxed. NOW tense the neck again. Feel the discomfort...OK, relax. Drain all the tension out...Remember relaxation is simply the absence of tension...

Take a deep breath and hold it while raising your shoulders upward and pulling your shoulder blades back. Tense NOW. Feel the significant tension in the chest, the shoulders, and the upper back...OK, relax. Drain all the tension out. Let your shoulders drop completely. Enjoy the spreading sensation....NOW tense....OK relax.

For those of you who can do this please do other just sit and relax. Next tighten your abdomen as though you expect a punch while at the same time squeezing the buttocks together. Tense NOW. You should feel a good deal of tightness and tension in the stomach and buttocks...OK, release the tension gradually letting it all drain out. Just let it happen...NOW tense again...OK, relax. Feel the sensation of relaxation spreading into those muscles.

Relax all the muscles of your body-let them all go limp. You should be breathing slowly and deeply. Let all last traces of tension drain out of your body. Scan your body for any places that might still feel tense. Wherever you feel tension, do an addition tense and relax. You may notice a sensation of warmth and heaviness throughout your body as though you are sinking deeper and deeper into the chair or floor. Or you may feel as though you are as light as air, as though you are floating on a cloud. Whatever feelings you have go with them...Enjoy the sensation of relaxation.

Before opening your eyes, take several deep breaths and feel the energy and alertness flowing back into your body. Stretch your arms and body if you wish. Open your eyes when you are ready.