

# LATE SUBMISSION WITH PERMISSION

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<b>Comments</b>	<b>Section</b>		
	<b>Title and Abstract (5%)</b>  Title to include: A concise indication of the research question/problem. Abstract to include: A concise summary of the empirical study undertaken.		
	<b>Introduction and literature review (25%)</b>  To include: outline of context (theoretical/conceptual/applied) for the question; analysis of findings of previous related research including gaps in the literature and relevant contributions; logical flow to, and clear presentation of the research problem/ question; an indication of any research expectations, (i.e., hypotheses if applicable).		
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**Prifysgol Fetropolitan Caerdydd**

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**Sources of stress and coping strategies experienced by novice amateur boxers previous to  
competition**

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

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## **Abstract**

The purpose of this study was to explore the sources of stress and coping strategies experienced by novice amateur boxers previous to competition, through qualitative investigation. Participants were six male amateur boxers all experiencing between 1-10 competitive fights and range between the ages of 18-31. Using a qualitative methodology, the participants were interviewed in a semi-structured format about their experiences during the arrival to the venue and the one hour period before competition. The hour before competition will be looked at every 15 minute stage including the entrance to the ring. The interview transcripts were both inductively and deductively analysed as a definition of the findings was formulated previous to the study, however, new information was gathered during the investigation. General stress dimensions reported across all stages included (a) performing poorly, (b) self-doubts, (c) Awareness of negative thoughts and feelings, (d) competitive anxiety, (e) Performance criticisms, and (f) Competitive environment demands. General coping dimensions across all stages were (a) Avoidance tactics (b) removing self from others (c) increase motivation levels (d) coach support and (e) blocking out significant others.

# **1.0 Introduction**

## **1.1 Dissertation Introduction**

Due to the nature of both Elite and non elite sports, such as amateur boxing constructing a more competitive approach over the past 10 years, an increasing significance of importance has been placed upon the athletes physical and mental preparation in the build up towards competition. The challenging nature of the competitive environment has lead to a substantial amount of research being conducted into the experience of stress in sport (Mellalieu, Hanton & Fletcher, 2006; Woodman & Hardy, 2001). According to Fullerton (2002) all athletes and trainers should be concerned with how stress and anxiety affect performance during competition in order to create positive outcomes. Therefore, a requirement into the research of what causes these stressors to happen during competition has been seen as somewhat an increasing trend.

The major cause of these stressors and demands faced by athletes is the nature of competition they are faced with. Martens (1975) defined competition as a process where individuals performance is compared with some standard of excellence in the presence of at least one other person who is aware of the criterion of comparism. For many elite sportsmen and women competition becomes a regular situation to combat therefore coping strategies are learnt in order to reach peak performance. However, for novice performers the pressure of competition can be a major factor in achieving optimal performance due to inexperience in the competitive environment and the coping techniques needed to be successful.

The requirement into the research of what causes these stressors to happen during competition has been seen as somewhat an increasing trend. Jones and Hardy (1990) state that this recent growth in research comes from an increasing popularity on sports psychology in Western Europe which concludes that psychological factors play an important role in determining performance, not just physiological components. Over the past decade or so, Researchers have begun to use qualitative techniques in an attempt to unveil sources of stress experienced by both elite and non-elite performers (e.g., Gould, Jackson and Finch 1993). These stressors include preparation and performance problems, social support and financial and time pressures. However, although there is an increasing popularity into the research of stress in competition, unfortunately there is limited evidence of data regarding the

coping strategies that deal with these sources of stress. As stated by Devonport et al (2013) coping is highly relevant to performance in any domain where individuals strive to attain personally important goals. Therefore it is essential to find the best suited coping scenarios that are linked with the particular sources of stress.

Boxing is a combat sport that places two individuals in intense one-on-one physical and mental competition where physical injury or even death (British medical association, 1993) is a distinct possibility (Simpson and Wrisberg, 2013). Although the physical abilities of boxers (e.g. coordination, balance, stamina, strength, power and speed) are important for success in the ring, mental strengths are also essential (Schinke, 2004). Despite its popular appeal and the interest it has attracted from sport sociologists, Simpson et al (2013) argue that boxing has received relatively little attention among scholars in sport psychology. Nevertheless there have been some notable exceptions (Lane, 2006, 2008, 2009; Schinke, 2004, 2007) which look at the stress and pressures that boxers must deal with previous to competition and during training. However, the majority of this research has specifically looked at professional boxing. There has been a very limited amount of work in the amateur boxing field, especially at a non-elite level. There are many features that distinguish the amateur sport to the professional such as the frequency of competition. The consistency of fights can be staggered over a long period of time compared to amateur fights, therefore the build-up to competition will differ in terms of physical and psychological recovery (Schinke, 2004). Also, the experience of an elite professional and a non-elite athlete will vary significantly as was found by Sotoodeh (2012) who found that elite athletes significantly used mental skills such as game planning, goal setting, activation, relaxation, self-confidence and commitment more than non-elite athletes.

The purpose of this study is to identify the sources of stress and coping strategies that are experienced by novice amateur boxers previous to competition. The author will examine different experienced fighters (e.g. 0-6 fights, 6-10 fights) to justify any links or differences between sources of stress experienced and different coping strategies used.

## **2.0 Lit Review**

## **2.1 Introduction**

The focus of this review is to highlight the past research related to both stressors and coping strategies within sport. The first section will identify the different explanations for the major terms that are being researched during this study. The review will then look at the methods used in these past articles on sources stress and coping strategies and identify the results obtained from the data collection. Finally, a consideration of the limited research in Amateur boxing will be considered and how the majority of research on boxing has been done in the professional field which has many differences to the amateur sport, culminating with the rationale and purpose of the study.

## **2.2 Definition of stress**

Due to the challenging nature of the competitive environment, a substantial amount of research has now been conducted into the experience of stress in sport (Mellalieu, Neil, Hanton and Fletcher, 2009). Scanlan, Stein and Ravizza (1991) asserted that with rare expectation all athletes will experience stress during their sporting careers. However, throughout research in this specific field, researchers have often failed to create and use a clear definition of the term stress. Stress has been defined by Reber (2001) as any force that when applied causes some significant modification of its form, usually with the connotation that the modification is a deformation or a distortion. It has also been defined by McGrath (1970) as substantial imbalance between a demand and response capability, under conditions where failure to meet the demands has important consequences. Both definitions state that the failure to handle the modifications or demands that the specific sport holds will result in the stress having a negative impact on performance. However, criticisms of these definitions have argued that stress does not always have a negative impact on the individual. A more contemporary definition will be followed during this research by Fletcher et al (2005) which takes a more specific approach towards the individual. They defined stress as an ongoing process that involves individuals transacting with their environments making appraisals of the situations they find themselves in, and endeavouring to cope with any issues that may arise. This specific definition suggests that stress can come in various forms, depending on the situation that the

individual may be in and therefore must look for different ways in which to cope with it.

### **2.3 Competition Stressors**

Stressors are defined by Hanton et al (2006) as the environmental demands (i.e. stimuli) associated primarily and directly with competitive performance. For example, a tennis player may feel pressure from the crowd, so the stressor for that specific tennis player would be the crowd. A negative appraisal of, and failure to cope with, this stressor may result in a negative emotional and behavioural response. This suggests a similarity to the work of Lazarus and Folkman (1984) in their transactional approach stating that the individual's appraisal of the situational relevance to well-being potentially leads to a stress appraisal rather than the situation itself. A sporting example of where the stressors of an individual have caused a negative effect would be the famous 2006 world cup football final between Italy and France. French International sporting icon Zinedine Zidane was forced to a red card for striking a player with his head. This was said to have been created by various stressors such as media, verbal abuse and pressure to win. However, not all the time do stressors impose a strain on an individual. Depending on if the individual perceives that they are able to cope with the demands is the source to whether it has a negative effect or whether they are able to deal with it. This instance, the football player experienced an unpredictable stressor where by the athletes playing conditions were affected (Butler, 1996). There has been a large body of literature that have used qualitative studies on elite athletes experiences or 'sources of stress' (Gould, Jackson and Finch, 1993; Noblet and Gifford, 2002; Holt and Hogg, 2002). A range of stressors have been identified including: The physical preparation of the athlete, the level of opposition, pressures and expectations to perform and team atmosphere.

### **2.4 Stress in Sport**

Over the past decade there has been an increased focus on the phenomenon of stress in sport psychology research (Giacobbi, Foore, & Weinberg, 2004). The research into Stressors in sport is, however, limited in the fact that the focus has

been at a macro level across the participant's entire careers, therefore the stressors identified were not clearly contextualised within a specific time period (Mellalieu, Neil, Hanton and Fletcher, 2009). It is important to research competitive stressors on a micro scale in order to compare stressors in both individual and team sports and evaluate whether they change over time.

## **2.5 Qualitative studies of competitive Stressors in sport**

Over the recent years, there has been a large increase into the research of the stressors that athletes are facing previous and during competition. The majority of this research has been undergone using a qualitative method (Scanlan, 1991; Cohn, 1990) in order to get a real insight into the demands performers are faced with on a regular basis. Studies such as these have contributed to the findings in sport psychology that stress experienced by athletes can impede their optimal performance (Burton, 1988; Gould, 1987).

A study done by Scanlan et al (1991) examined the causes of stress in former national champion figure skaters. Inductive content analysis provided, five higher order themes, 'negative aspects of the competition', 'worries about the competition', 'competition failure', 'preparation for the competition' and the 'importance of the competition'. Similar to the findings of Melalieu (2009), many of the athletes experienced some form of stressors during competition (81% of athletes). Also, comparing the skaters stressors and enjoyment reveals that a particular event (e.g. performing in front of an audience) can produce stress for some athletes and enjoyment for others (Scanlan, Stein & Ravizza, 1991).

Another study that showed similarities to the results of Scanlan et al (1991) was the work of Mellalieu et al (2009) which looked at the performance and organizational stressors encountered by elite and non-elite athletes within the competition environment. Participants were examined using open ended questionnaires in order to create "information-rich" data. After a combination of both inductive and conductive analysis results found that during the preparation phase (hour before competition), performers not only encounter demands directly related to the upcoming performance, but also experience stressors pertinent to the organization.

Findings also demonstrated the stressors that were commonly encountered by sport performers which included 'competing while injured', 'needing to perform well', 'large crowds', 'times of performance changing' and various weather conditions.

A comparable study undergone by Gould et al (1993) on former national U.S. figure skaters found similar stressors. Results obtained from this study found that 71% of the champions experienced an increase in the levels of stress after winning due to self and other-imposed expectations. These findings emphasize the importance of significant-other evaluation in the stress process. Other sources of stress experienced by the athletes included 'time demands', 'media exposure' and 'financial burdens'. The findings of this research were beneficial to the growing research in to stress in sport, however limitations were related to the use of phone interviews for data collection. Such an approach puts the interviewer at a disadvantage because he or she cannot react to the nonverbal behaviours of the subject or build a relationship with the participant. According to Novick (2008) the absence of non-verbal cues can result in loss of contextual and non-verbal data and to comprise rapport, probing and interpretation of data.

A late study undertaken by Cohn (1990) argues the fact that it is necessary to distinguish between sources of stress. This research investigates the sources of stress and athletic burnout in youth golf. A guided interview approach was the method taken in this research and consisted of both open-ended and specific questions related to golfing experiences on 10 high school competitive golfers. Results showed that the most frequently cited reasons for burnout in youth golf were, 'too much practice or play, 'a lack of enjoyment', and 'too much pressure from self and others to do well'. Other main sources of stress which were experienced by 90% of golfers stemmed from 'performing in front of a crowd', 'not practising enough', 'playing in bad weather' and 'living up to parent's expectations'. These findings showed similarities to the work of Mellalieu et al (1991) on elite figure skaters and their sources of stress. Cohn (1990) concluded that the perceived sources of stress need to be considered when investigating the causes of burnout and stress in youth sport in order to prevent levels of drop out increasing and to improve standard of competition for young athletes. The results of this study are of importance of exploring sources of stress in athletes when investigating causes of burnout, however the limitation of this specific study is the lack of research towards

both situational and personal demands and how the particular sports contribute to athlete burnout.

Another sport specific, exploratory study was undertaken by Campbell and Jones (2002) who investigated stressors experienced by elite male wheelchair basketball players. The study included 10 participants who were current members of the Great Britain men's wheelchair basketball squad. They were examined through unstructured interviews as well as given sheets with the six likert-type scales detailed to rate each of his personal sources of stress (e.g. 1, not at all to 7, extremely). The results supported previous research that sources of stress may be appraised as a mixture of challenging, threatening, and causing harm or loss, depending on how an individual interprets a situation (Bjork & Cohen, 1993; Lazarus, 1999). The work of Campbell and Jones (2002) differs from the previous research of Scanlan et al (1991) who distinguish between sources of stress based on the number of raw data themes they comprise. The findings of Campbell (2002) suggest that it is unnecessary to distinguish between stress sources and that acquiring information about stress source variables gives a deeper understanding of the nature of the stressors experienced.

A more recent study carried out by Nicholls et al (2009) investigated the stressors and affective states among professional rugby union players. The purpose of this study was to look at the sources of sport and non-sport stress and their associated symptoms on rest-days, training days, and match days. The study consisted of 16 athletes who completed the daily analysis of life demands (DALDA) and the activation deactivation adjective checklist (AD ACL) for 28 days. Findings showed that on match days players reported that few stressors were 'worse than normal', while most stressors were 'worse than normal' on training days followed by rest days. In addition, more stressors were 'worse than normal' on the day after a match than on match days. In summary, the results suggested that professional rugby union players experience more stress on training days in comparison with match days and the day before a match. Findings also found that prior to a match, shortly before competition, players were less bored and irritated in comparison with rest and training days. A strength of this study was that the data was collected longitudinally and analysed the athletes over a period of time. This differs from many previous cross-sectional studies which only look at a particular point in time (e.g. Cohn, 1990;

Gould et al, 1993; Mellalieu et al, 2009). However, the limitation of the research is the specific time the data collection took place. The study commenced in the final week of the players preseason which may explain the players displaying so many symptoms of training stress being 'worse than normal' due to fatigue and overload of training.

## **2.6 Stressors and associated Coping strategies**

Participating in competitive sport places athletes under intense physical and psychological demands, therefore, these rigorous challenges require athletes not only to use automated technical and tactical skills but also to develop and employ an arsenal of cognitive and behavioural coping skills to achieve performance success (Crocker, Alderman, & Smith, 1988). Coping is highly relevant to performance in any domain where individuals strive to attain personally important goals (Devonport et al, 2013). The definition of coping that will be followed during this research was defined by Lazarus and Folkman (1984) as 'constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taking or exceeding the resources of the person. A sporting example of an athlete coping with a stressful demand would be a goal kicker in rugby playing in front of a large crowd and successfully scoring points in a close, pressured game. Many kickers cope by blocking out the crowd around them and focusing on one specific point between the posts, however, some prefer to embrace the atmosphere and use it to their advantage and give them confidence.

A study conducted by Thelwell et al (2010) looks at coping from a coaching perspective. The aim of the study was to examine the coping strategies that elite-level coaches employ to overcome stressors. The associated coping strategies ranged from problem-, emotion, appraisal, and approach focused dimensions. Results also found that across the participants there were some similarities in the methods of coping adopted. However, the similarities in coping were not necessarily for the same type of stressor which suggests that coping is highly individualistic (cf. Dale, 2000). Limitations have been found for this particular method referring to the use of potentially leading definitions for stressors and coping strategies (Thelwell, Weston, & Greenless, 2010).

Focusing towards a more athlete based research, Anshel and Wells (2000) investigated the sources of acute stress experienced by competitive basketball players, and the coping styles they used to overcome it. The study was conducted on 20 basketball players. The data collected identified 25 sources of acute stress. During competition, the competitors reported using an avoidance coping style to cope with these sources of stress, such as not thinking about the stressors, detaching oneself from the stressor, passive acceptance that the stressor had occurred, and efforts to avoid confronting ones feelings or confronting the source of stress. The study also looked at the intensity of these stressful situations as perceived by the players. Using the conceptual framework of approach and avoidance coping styles, Anshel and Wells concluded that these coping styles were used as a function of the type of stressful event, supporting the transactional coping model.

A more recent sport specific study by Devonport et al (2013) explored the coping strategies used by national adolescent netball players across domains. The study examined thirty-three female national standard players who participated in one-to-one interviews. Results identified stressors that derived from attempts to achieve highly important personal goals in different areas of daily life, including academic, sport, and social settings. The coping strategies associated were identified as planning, prioritizing, time-management, goal setting, and problem solving. Evidence from the results stated these specific coping strategies were successful in managing multiple stressors and creating a sense of well-being.

As well as the athletes dealing with stress of competition, Officials in sport also experience stressors in the competitive environment. A recent study conducted by Voight (2009) investigated the sources of stress and coping strategies of U.S soccer officials. Through a national soccer official organization, questionnaire packets were administrated to over 200 officials. Results of the questionnaires indicated that the top sources of stress experienced by officials were 'making a controversial call' and 'conflict between officiating and work demands'. Results indicated a difference in coping strategies compared to various other researches (Devenport, 2013. Anshel and Wells, 2000) due to the different sources of stress they are faced with as athletes and officials. The study concluded that the top acute coping strategies utilized by the officials included 'thought hard about steps to manage', and 'asked

fellow officials what they did'. The study is important in highlighting essential stress management interventions, including time management, restructuring unproductive thoughts and mental skill training techniques.

## **2.7 Stress and coping Research in Boxing**

Throughout time the majority of research on sources of stress and coping strategies has tended to focus on mainstream sports such as Football, swimming and Rugby (Noblett, & Gifford, 2002; Burton, 1988; Nichols et al, 2009). These studies show a similar pattern in the time phases researched (e.g. preseason, one week prior to competition). There is also a trend towards research within sports that attract media attention such as professional boxing. However, the research in to sources of stress and coping strategies within novice amateur boxing is very limited and the majority of any studies within boxing focus on the professional sport (Gambrell, 2007. Lane, 2008). There is a large divide in both the physical and mental demands in the amateur and professional sport, therefore previous research in to professional boxing would be of no relation to this specific study which focuses on sources of stress and coping strategies for novice amateur boxers, previous to competition.

No matter how skilful or fit a boxer might be physically, this will count for nothing if the boxer is not prepared mentally (Wadman, 2013). As the sport becomes more competitive, and the effort to win becomes harder, it is important that boxers, especially novices with little experience of competition, are able cope with the demands they are faced with in boxing. Although boxing is extremely physical, the mental aspect of the sport is exhausting and takes time to cope with (unknown, 2013).

This research will focus on the sources of stress only experienced on entrance to the venue, and the hour before competition, therefore the coping strategies for this specific period will then also be examined. Once the sources of stress and coping strategies have been identified, an examination in to any relationships or differences between the boxers will be investigated. Minimal research has looked at the sources of stress and coping strategies this close to competition. It is important to examine

stressors experienced at these stages as this is when the boxers coping strategies will be most effective in dealing with their pre-competition anxiety and stress.

## **3.0 Methodology**

### **3.1 Introduction**

This chapter will give insight into the method adopted during the data collection to address the research question of the study. Specifically, Insight into the semi-structured interviews conducted with amateur boxers to contribute to the stressors and coping strategy literature.

### **3.2 Participants**

The examined group consisted of six male amateur boxers (0-10 fight experience) who range between the ages of 18-31. All boxers were medically examined and recorded within the WABA (Welsh Amateur Boxing Association) board and were approved to compete under the rules and regulations of WABA. All boxers within the study had at least once in their career experienced stressors prior to competition, and also initiated ways of coping as a result. After clarifying the criteria, each individual athlete was approached and asked if they were willing to participate in the study. The athletes were given time to decide on their decision to participate. All six individuals approached prior to the interviews agreed to participate in the study. Each participant was informed about the interview process, which would entail talking to them individually about their experience of the most recent fight they participated in.

### **3.3 Instrumentation**

An interview guide was created specifically for the purpose of this study. The guide was structured based on the stages towards the fight and how they felt during each of these time scales.

The guide included 9 sections that covered:

- 1) Introduction

The interviewer would give the participant opportunity to introduce himself and discuss their background in the sport. This way a rapport may be developed and the

participant may feel more comfortable. The introduction also informs the participant on the instructions about the interview.

## 2) Section one

The first section of the interview focused on the arrival to the fight venue and the physical and mental demands the participant was faced with at this point of time. The researcher also investigates what coping strategies were used at this specific time.

## 3) Section two

The second part of the interview looked at the hour previous to the fight and the sources of stress and coping strategies experienced at the different stages during the build-up. These stages were discussed in five separate sections:-

- One hour before competition
- 45 minutes before competition
- 30 minutes before competition
- 15 minutes before competition
- Entering the ring

## 4) Section Three

After probing the participant on the different stages during the build to competition, the researcher began to investigate the athlete's mental tactical preparation. This involved questioning the athletes on the specific importance placed on tactical preparation and when they process these thoughts.

## 5) Section four

A discussion will take place on the athlete's performance problems, such as, whether they think about performing poorly and if this acts as a source of stress during any of the time scales discussed in section two. Also examined in this section are any coping strategies used to remove these negative thoughts.

## 6) Section five

Section five will investigate the sources of stress related towards the opponent and whether it has an effect on your mental state. Again, the researcher will ask during what section of the time scale discussed in section two were these thoughts processed most significantly.

7) Section six

The sixth section will discuss the relationship that the boxer has with their coach and at what stages discussed in section two does the coach assist in terms of social support and physical preparation. Also examined in this section would be the significance in which the coach helps to cope with the demands around them previous to competition.

8) Section seven

This section will examine the competitive environment and how it has an effect on the boxers mental and physical state. The researcher will relate to areas such as the crowd and discuss where they consider these stressors in relation to the time scales discussed in section two.

9) Section Eight

This is the final section of the interview and the conclusion. In this section questions will be asked relating to how the participant felt the interview went. It is also a chance for the participant to ask any final questions about the study.

### 3.3.1 Pilot Study

A pilot study was conducted with an experienced boxer who competed in over 80 fights. The purpose of the pilot was to allow the interviewer to make any adjustments to the style of the interview and to develop appropriate interview skills. Amendments were made to the order of a few of the questions and were then changed in the final interview guide.

### **3.4 Semi-structured interview**

The interviews followed a semi-structured theme on a face-to-face basis. Each interview lasted approximately 30 minutes. Each participant was contacted by the interviewer a day before to decide a time and location for the interview to take place. Each individual was given the opportunity to read through the interview guide before it started to ensure their understanding of the process and what would be asked.

Once all interviews were recorded they were transcribed verbatim to ensure a valid and accurate reference of the data collection process. Each participant was given the same questions however the nature of the semi-structure guide may lead some questions to fall in a different order as what is shown on the interview guide. Each interview was conducted in an empty dance studio at the gym where all the boxers train.

### **3.5 Data Analysis**

Throughout the interview the identified stressors and coping strategies the boxers experienced were discussed. Once all the information had been collected the researcher examined the transcripts several times and then identified patterns of stressors and coping strategies that were experienced at the different time phases.

When categorising the raw data into meaningful themes it must be done through either an inductive or deductive procedure. According to Mayring (2000) the main procedure of an inductive approach is to formulate a criterion of definition, derived from theoretical background and research question therefore allowing the themes and categories emerge themselves from the quotes which have been gathered. Based on a definition by Scanlan et al. (1989) A Deductive approach however involves the adoption of a predetermined set of themes and categories to organise quotes found in transcripts. During the analysis of this specific study, the data was analysed both inductively and deductively. The main aim of the study was to find stressors and coping strategies therefore a definition of the findings was formulated previous to data collection. However, new information was also found during investigation, therefore this new categorisation of stressors also generates an inductive process. Through thorough reading of the transcript, quotes are identified

and then emerged into themes. The common trends are then emerged in to first order themes and further in to general dimensions.

The general dimension is created through the process of creating new high order themes until the researcher is unable to remove any more high order themes. These general dimensions will represent the most accurate sources of stress and coping strategies at that stage in the pre-competition phase.

### **3.6 Verification and Trustworthiness**

The findings from the research including interview transcripts, raw data themes, first and second order themes, and general dimensions, were presented to an independent researcher whereby they were able to raise any concerns regarding the analysis. The Verification during this process was undergone by a sport psychologist with experience in qualitative interview methods and also within stressors and coping literature. Queries regarding the analysis were drawn upon by the psychologist and edited accordingly.

## **4.0 results**

## **4.1 Introduction**

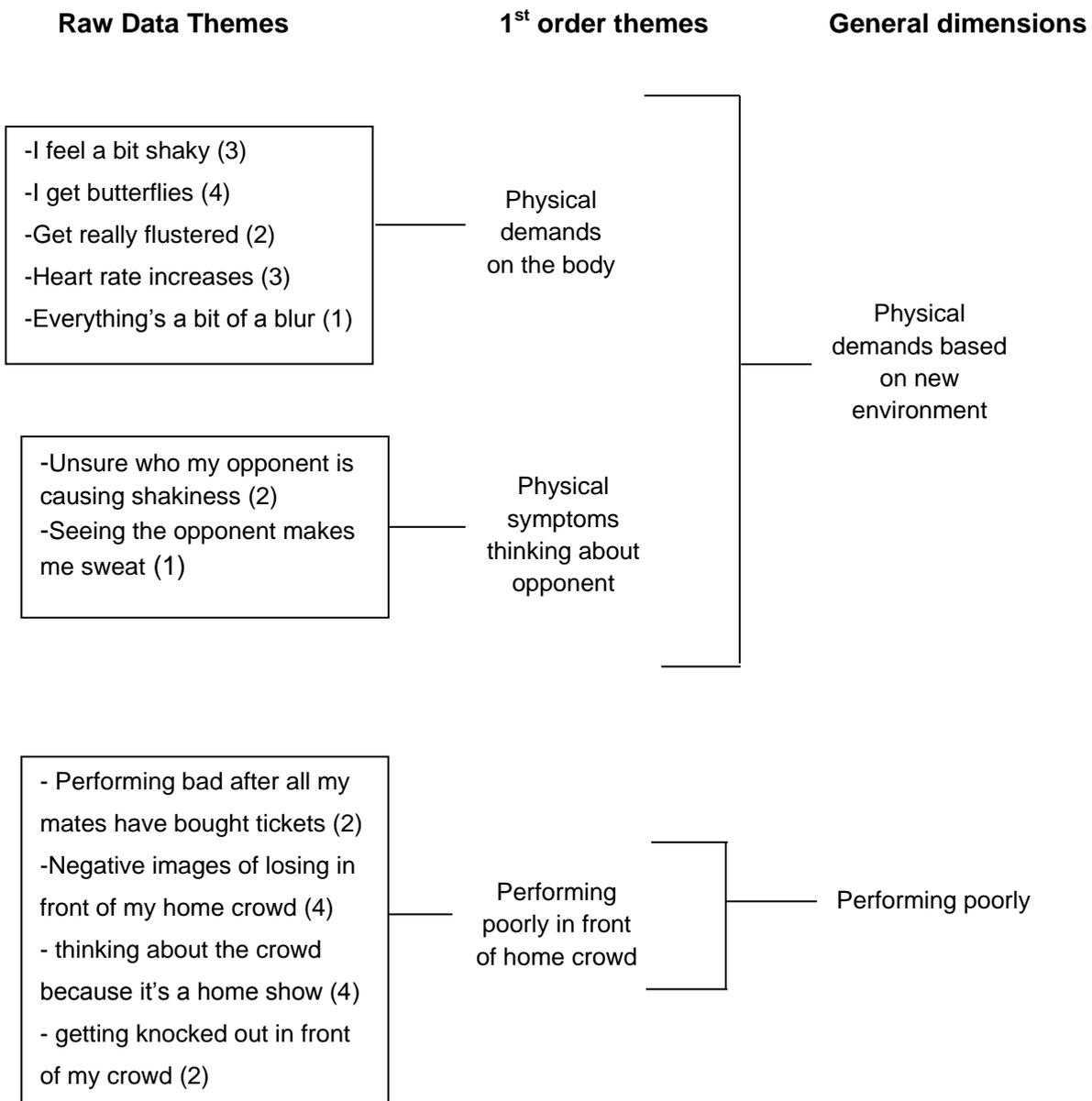
The purpose of the present study was to explore the stressors and coping strategies used by novice amateur boxers previous to competition. First, the demands faced in the competitive environment are provided looking at the arrival to the venue, one hour previous to competition and every 15 minutes then leading up until competition including the ring entrance. Second, insights in to the athletes coping techniques used in an attempt to overcome the demands experienced will be shown. Results are demonstrated through a hierarchical analysis table that provides general dimensions of the main stressors and coping techniques at each analysed stage.

## **4.2 Stressor themes**

The following section will focus on the stressors identified during each stage of the pre-competition phase. Six graphs will be presented showing the raw data themes, first order themes, and general dimensions which then follow a short description of the themes and general dimensions identified in these graphs.

## **4.3 Physical demands based on new environment and performing poorly**

Twenty eight raw data themes were found overall during the arrival to the venue stage (see figure 1). These themes were categorised into three separate first order themes and then narrowed down into two general dimensions. The general dimensions were physical demands based on new environment and performing poorly.



**Figure 1:** A hierarchical analysis of stressors encountered on arrival to venue

### **4.3.1 Physical demands based on new environment**

This theme was created through the first order themes 'physical demands on the body' and 'physical symptoms thinking about opponent'. Physical demands on arrival included an 'increase in heart rate', 'butterflies' and 'perspiring'. For example, one participant stated that 'seeing the ring for the first time made me really sweaty'. Also, physical symptoms were found when thinking about the opponent at this stage such as, an uncertainty about which one was your opponent caused the boxer to feel 'shaky'.

### **4.3.2 Performing poorly**

The athletes pressure was highlighted through quotes such as 'performing bad after all my mates have bought tickets', and 'performing bad in front of a home crowd'. The most commonly used theme during this phase was negative images of losing in front of a home crowd. The following quote from participant 1 emphasises the increase of stress from competing in front of a home crowd:

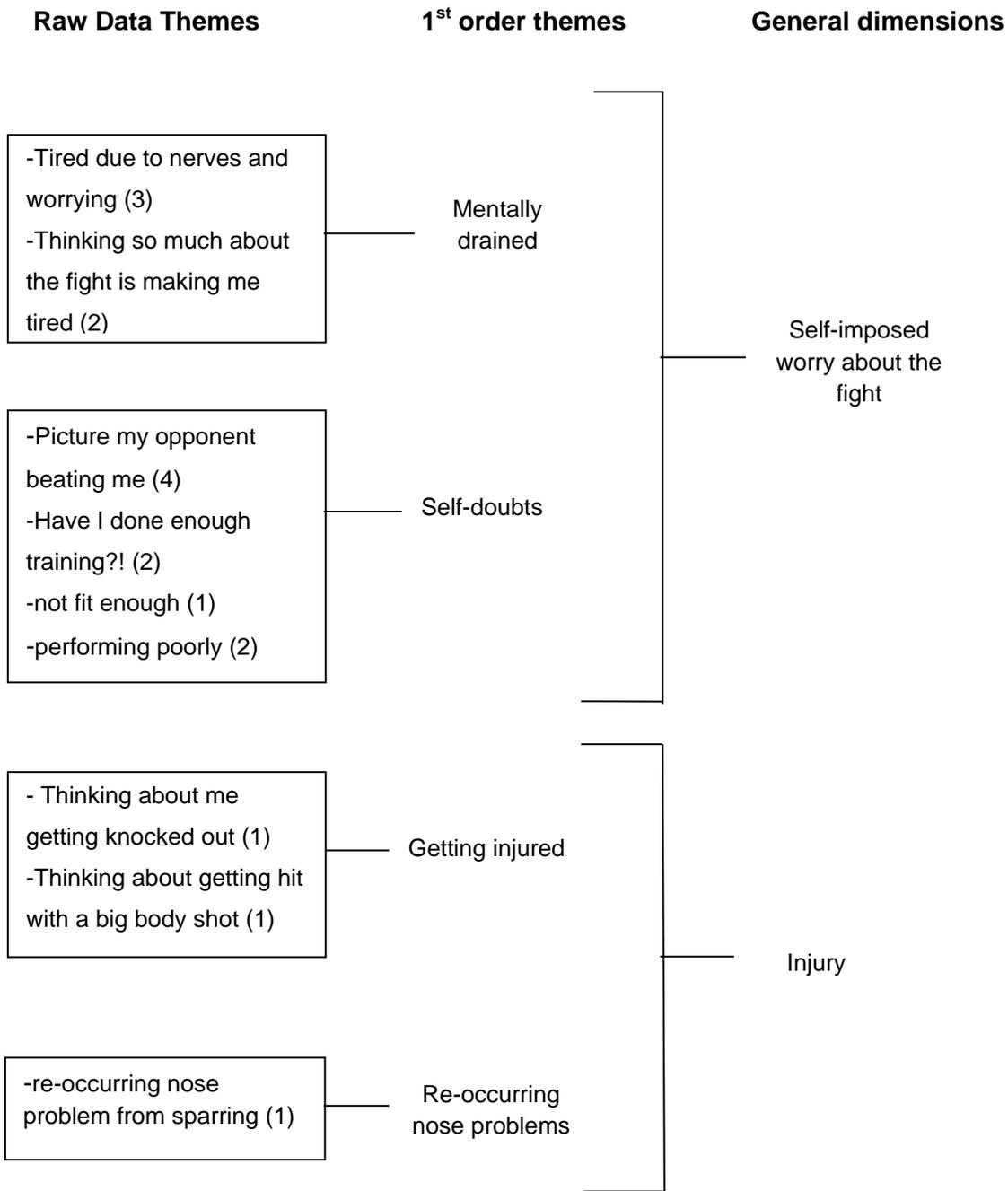
Yes it's definitely harder to cope on home shows because I'm in front of a lot of people who will judge me because they know me, rather than when I'm boxing away I don't know anybody so they won't judge me. I felt more nervous boxing on my home show because I feel worried about what the people I know think about my performance

## **4.4 Self-imposed worry about the fight and Injury**

Sixteen raw data themes were collected during this section (See figure 2). Four first order themes were then created from these quotes which then formed two general dimensions. These general dimensions were self-imposed worry about the fight and getting injured. Self-doubts were noticed across the majority of participants at this stage. Participant 6 demonstrates self-doubt in the following quote:

I have a few thoughts about the opponent in my head because I have seen him now, and I picture him being much bigger and stronger than me and not

being able to beat him. So that causes me stress during the hour before the fight



**Figure 2:** A hierarchical analysis of stressors encountered one hour previous to competition

#### **4.4.1 Self-imposed worry about the fight**

This general dimension evolved from being mentally drained and having self-doubts. Specific quotes from participants who were mentally drained included 'tired due to nerves and worrying' and 'thinking so much about the fight is making me tired'. Self-doubts were defined as lack of faith or confidence in oneself and one's abilities. Eight out of the sixteen raw data themes were found to be forms of self-doubt. Forms of self-doubt shown by participants included 'picturing my opponent beating me', 'have I done enough training?' and 'feeling I am not fit enough'. As participant 5 stated, 'ye I do think about if I have under trained and therefore under-perform, and as well thinking if I could have done anything differently in training'.

#### **4.4.2 Injury**

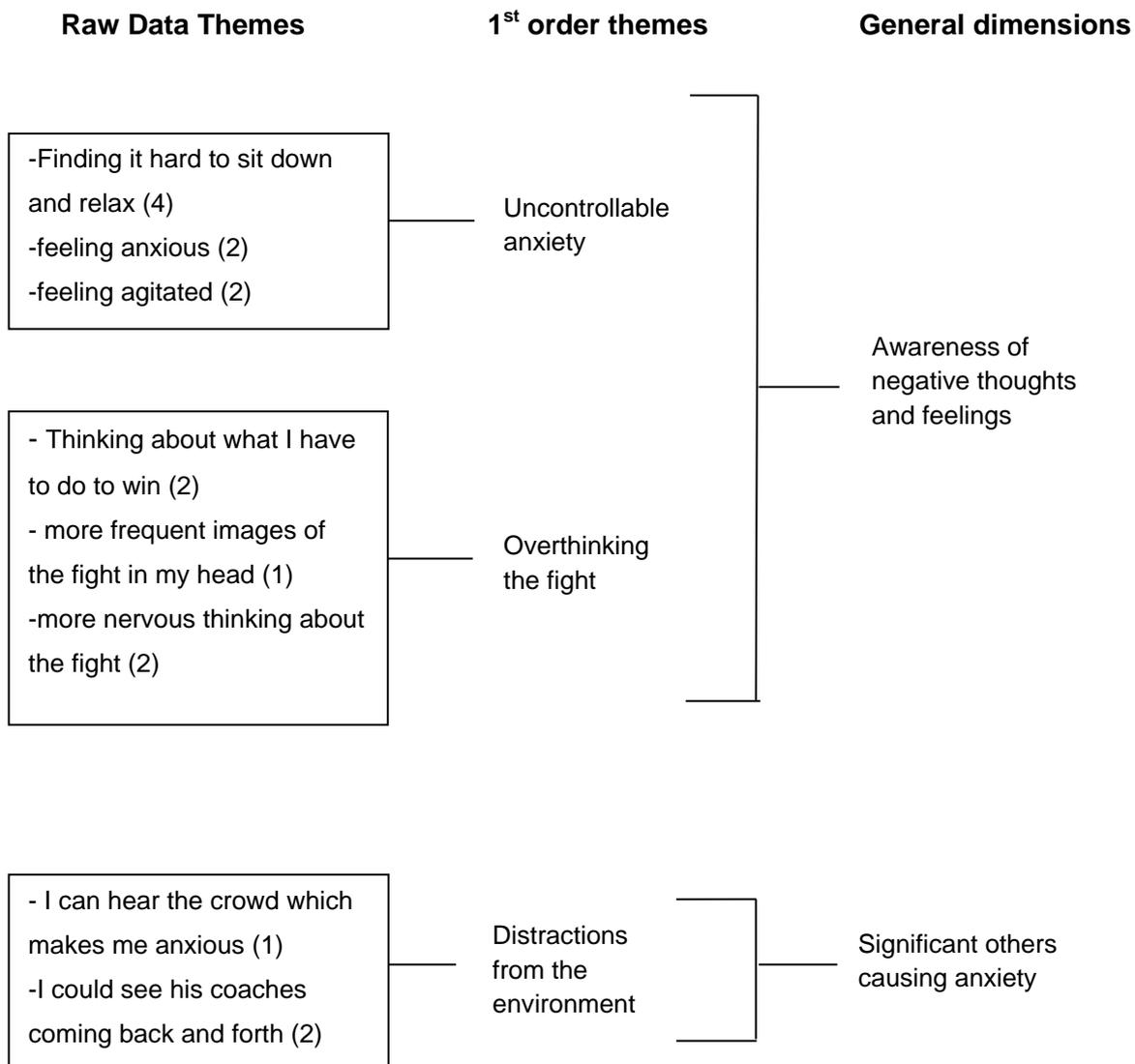
This involved worries about getting physically hurt during the fight such as 'thinking about getting knocked out' or 'getting hit with a big body shot'. It also includes worries relating to injury previous to competition that may be re-occurring which can cause psychological fear. However, these injury themes only contributed a minor form of stress at this stage of the pre-competition phase as results show only three out of the sixteen raw data themes were injury specific. One specific participant suffered a re-occurring nose problem which caused him worry that it may affect his performance. Participant 6 stated:

I've had a slight re-occurring problem with my nose....in sparring a few weeks ago it bust quite heavily and it's been a bit of a problem since so I was thinking about whether it will bleed in the fight and if the referee may stop the fight

#### **4.5 Negative anxiety related to an increase in thought towards the fight**

Sixteen raw data themes were comprised from this section of the pre-competition phase (see figure 3). Two second order themes emerged from these raw data themes: Psychological demands and significant others causing anxiety. Data

analysis of the stressors experienced 45 minutes previous to competition revealed that uncontrollable anxiety was most frequently cited.



**Figure 3:** A hierarchical analysis of stressors encountered 45 minutes previous to competition

#### **4.5.1 Awareness of negative thoughts and feelings**

The awareness of negative thoughts and feelings highlighted an increase in arousal and anxiety resulting in a higher amount of effort deposited. The two first order themes were uncontrollable anxiety and overthinking the fight. The most common theme across all stressors during this phase was finding it hard to relax. Participant 1 stated:

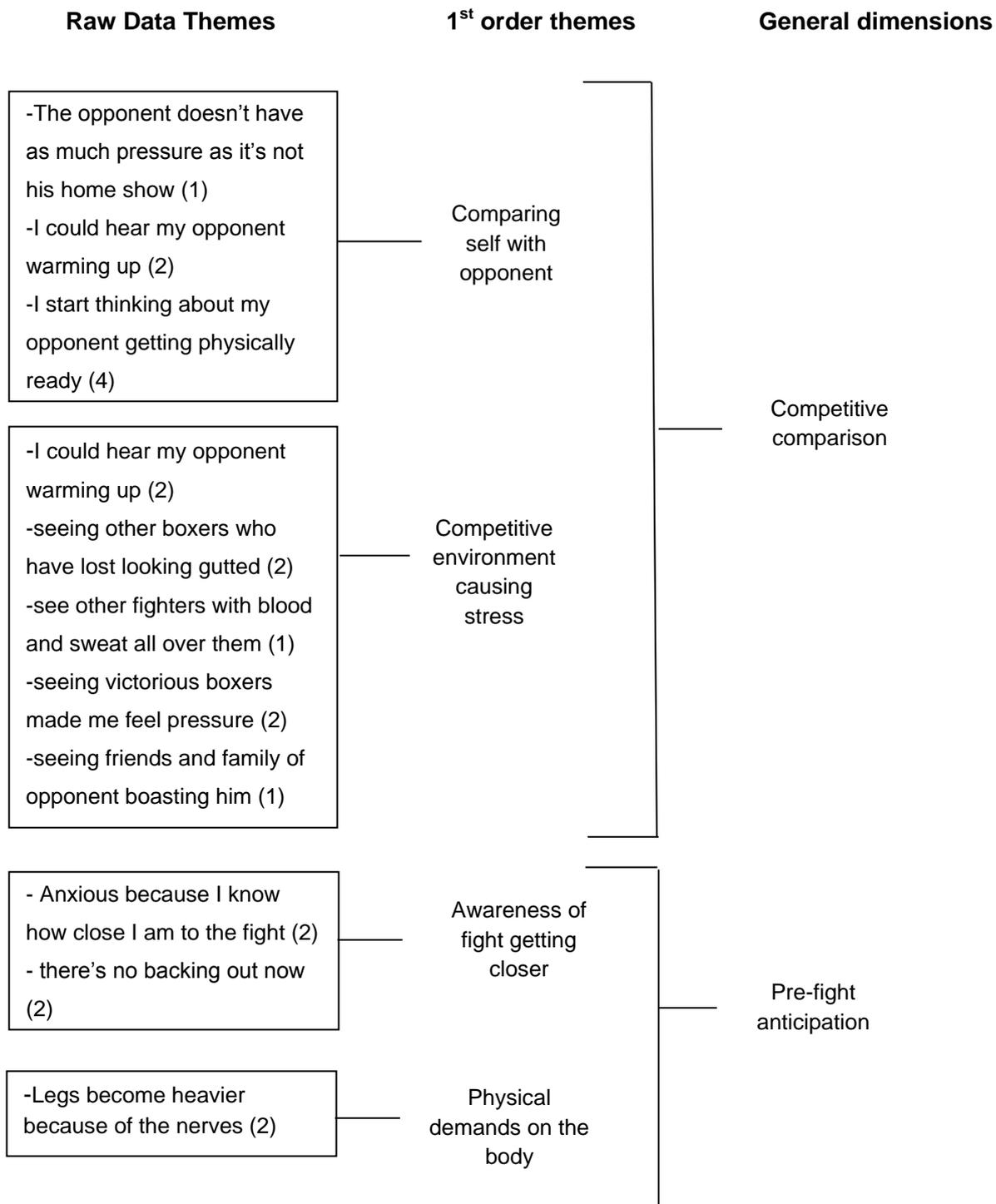
My nerves are getting a little worse now....im finding it hard to sit down, I want to be on my feet and doing something. I'm feeling anxious and the adrenaline has started kicking in

#### **4.5.2 Significant others causing anxiety**

Significant others in this instance include coaches, crowd, family, friends, opponent and opponent's crowd. This theme was derived from one first order theme: distractions from the environment. Distractions included 'hearing the crowd which caused anxiety'. Participant 3 quoted 'I remember hearing the crowd at this stage and it start hitting me how many people were going to be there watching!'

#### **4.6 Competitive anxiety and pre-fight anticipation**

Twenty-one raw data themes were found in this dimension during the 30 minutes before competition and were mentioned by all of the participants (See figure 4). The general dimensions for this phase were segregated into two sections: competitive anxiety and pre-fight anticipation. The reason for having two separate dimensions was that a second order theme was not possible to break down the themes any further.



**Figure 4:** A hierarchical analysis of stressors encountered 30 minutes previous to competition

#### **4.6.1 Competitive comparison**

This dimension was established from two first order themes comparing self with others and competitive environment causing stress. Comparing self with others was shown by thinking about the opponent getting ready and concluding the fact that the opponent does not have as much pressure because it's not there home show. The competitive environment was found to cause stress by hearing the opponent warming up and seeing other boxers losing looking upset. The following quote from Participant 3 indicates the competitive environment causing stress: 'I remember seeing other boxers who had lost coming back to the changing rooms after their fight looking absolutely gutted and I just remembered thinking I do not want to be in the position at all'

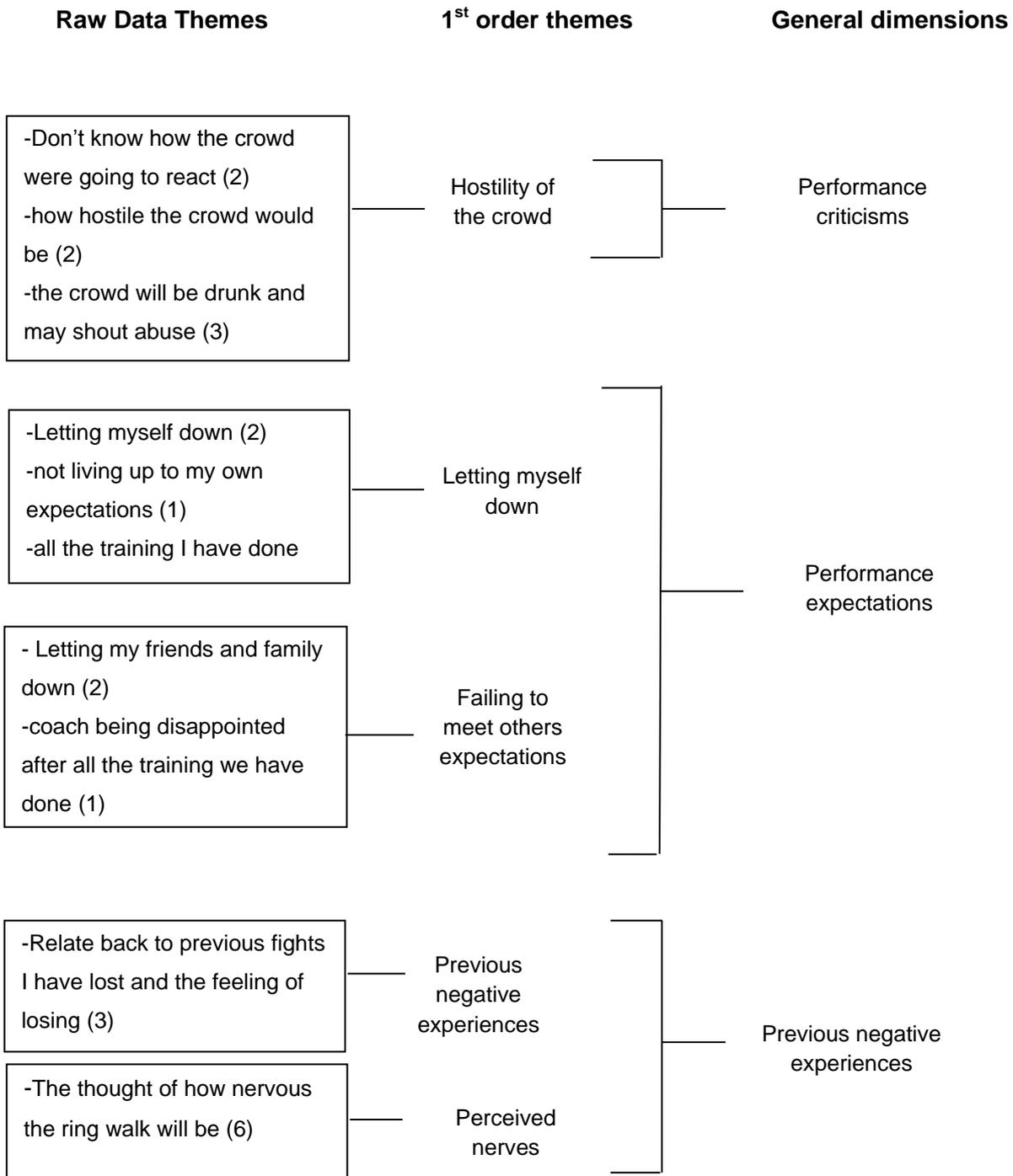
#### **4.6.2 Pre-fight anticipation**

This second general dimension was defined as over excitement and apprehension towards the forthcoming event. This dimension was established from two first order themes: awareness of fight getting closer and physical demands on the body. During the 30 minute period before the fight participant 6 stated:

This is probably the most pumped I have felt so far because I know theres no backing out, its full steam from here, I started thinking about my opponent getting physically ready.....so there's a lot of nerves now knowing your going out there soon

#### **4.7 Performance criticisms, performance expectations, and previous negative experiences**

Twenty-four raw data themes were identified during the 15 minutes before competition (see figure 5). The general dimension was created out of three themes, performance criticisms, performance expectations and previous negative experiences.



**Figure 5:** A hierarchical analysis of stressors encountered 15 minute previous competition

#### **4.7.1 Performance criticisms**

This theme was based on worry towards criticisms from spectators of the fight and negativity towards the performance. These related to the participants not knowing how the crowd would react, how hostile they would be and if they will be drunk and shout abuse. As participant 1 was boxing away and surrounded by an unfamiliar environment his experience showed differences to the other boxers who were surrounded by a home crowd:

'I felt a bit uncertain and almost at danger when I was involved in this environment as I was surrounded by my opponents fans and you don't know how they are going to react because they can be abusive as they have been drinking alcohol'

#### **4.7.2 Performance expectations**

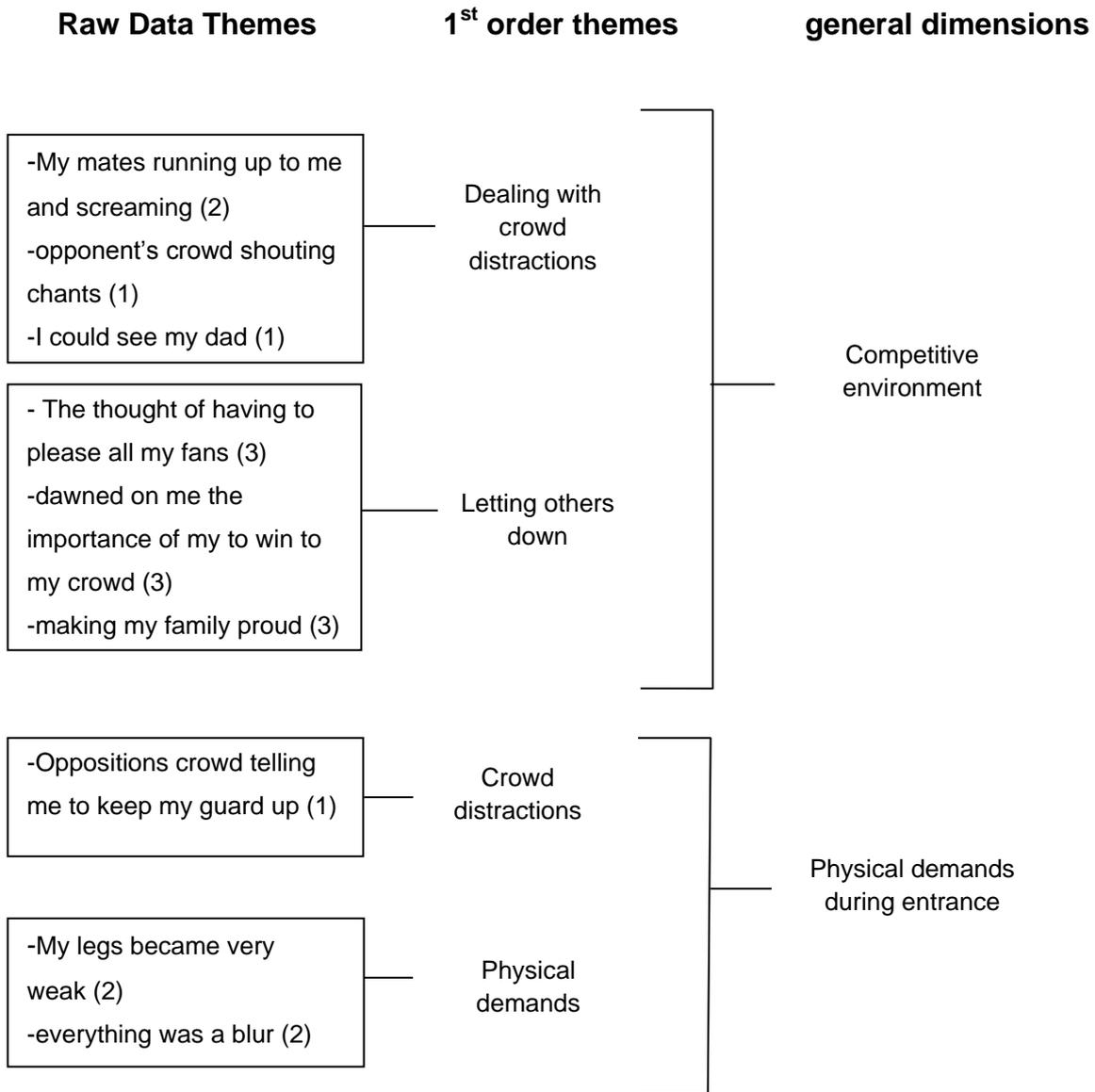
This theme represents striving to meet or failing to meet a certain level of performance set by the participant and significant others. Two first order themes created here were letting myself down and failing to meet others expectations. One specific participant placed a high level of expectancy on himself , 'because I trained so hard for the fight I would be devastated coming out of the ring thinking that all the training I have put myself through was pointless really'

#### **4.7.3 Previous negative experiences**

This theme would be defined by similar past experiences by which you have had a negative outcome/experience. It has been articulated through two first order themes, previous negative experiences and perceived nerves. Previous negative experiences relate back to previous fights I have lost and the feeling of losing. Perceived nerves then relate to thoughts of walking out in to the ring and how nervous the walk would be. Results showed that each participant experienced nervous thoughts of walking to the ring as a stressor at this stage.

#### **4.8 performance stressors due to new competitive environment**

This general dimension has been created from two second order themes, competitive environment demands and competitive stress (see figure 6). Eighteen raw data themes have emerged during the analysis of stressors during the entrance to the ring



**Figure 6:** A hierarchical analysis of stressors encountered during entrance to ring

#### **4.8.1 Competitive environment demands**

Two first order themes were made which created this dimension, dealing with crowd distractions and letting others down. 13 out of the 18 responses from the participants during this dimension were found to be due to competitive environment demands stating that the majority of participants found it to be a stressor at this stage. The most common lower order theme was letting others down which identified quotes such as 'the thought of having to please all my fans' and 'making my family proud'. The importance of significant others and the letting them down is highlighted by participant 6 who stated:

When I see everybody around the crowd and see my friends and family as I enter the ring, it hit me how important it was to my family to win tonight. I felt I had a point to prove to everybody watching and to make them proud

#### **4.8.2 Physical demands during entrance**

This dimension represents raw data themes that relate to specifically the crowd and performing for them. It has been created from two first order themes which would be the crowd distractions and physical demands. One specific participant experienced the opponent's crowd trying to cause him stress and worry by commenting on the strengths of his opponent; 'my opponents fans were telling me to keep my hands up because my opponent can hit hard, obviously trying to play mind games with me'

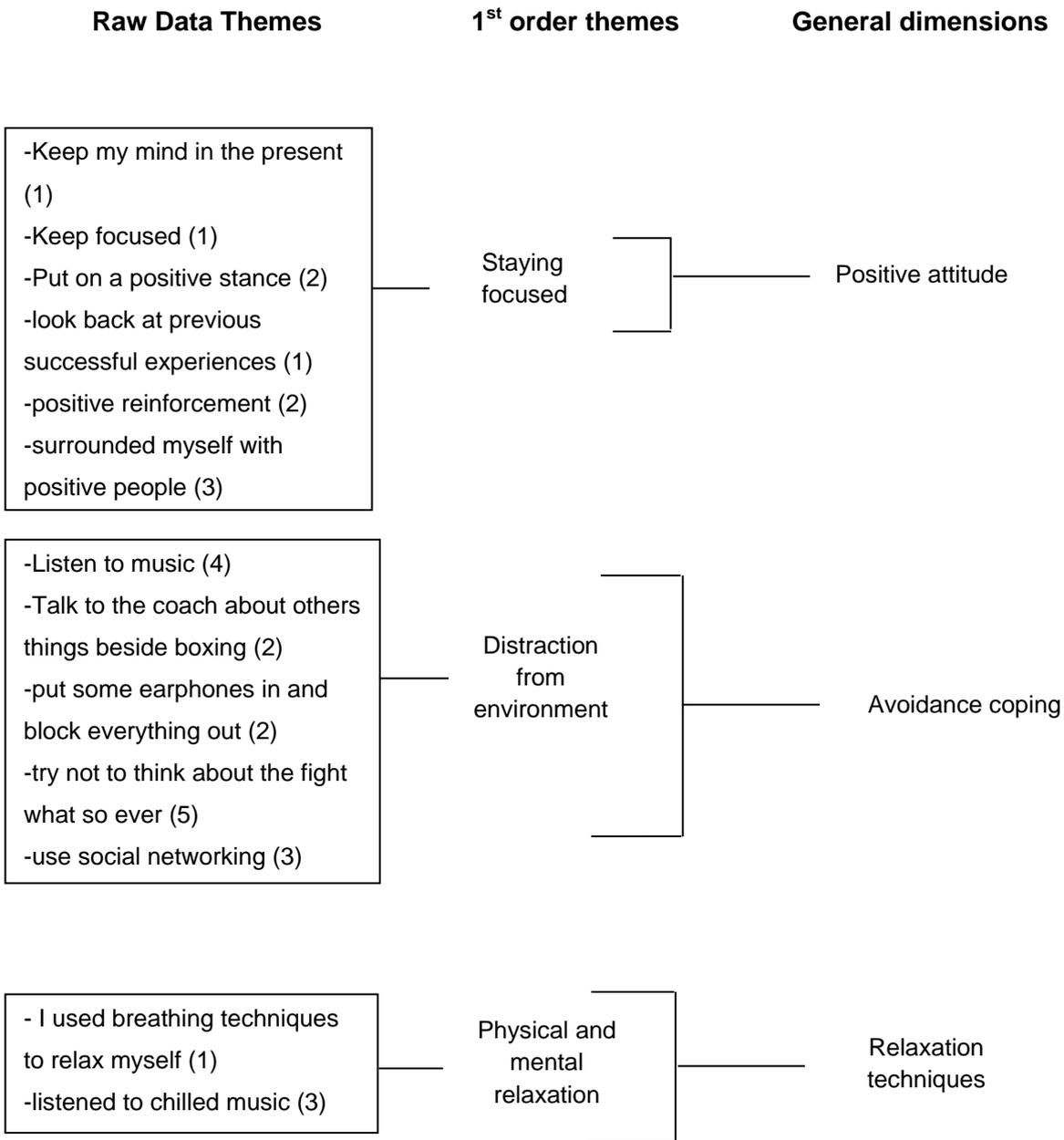
# **Coping Strategies**

#### **4.9 Introduction to coping strategies**

The following section will focus on the coping strategies identified during each stage of the pre-competition phase. Six graphs will be presented showing the raw data themes, first order themes, and general dimensions which then follow a short description of the themes and general dimensions identified in these graphs.

#### **4.10 Positive attitude, avoidance coping and relaxation techniques**

Three separate general dimensions emerged on coping techniques during the arrival to the venue (see figure 7). These emerged from three lower order themes: staying focused, distraction from environment, and physical and mental relaxation.



**Figure 7:** A hierarchical analysis of coping strategies on arrival to venue

#### **4.10.1 Positive attitude**

This theme identifies participants showing confidence in their own ability and belief in one's self to win and perform well. This general dimension was created through the lower order theme of staying focused. That is, 'keeping my mind on the present' and 'looking back at previous successful experiences'. The most common response theme was 'surrounding myself with positive people'. Participant 2 suggests how surrounding himself with positive people is an effective coping technique in the following statement:

I like to surround myself with positive people around my coach because he is a positive person and I value his advice...I don't want to be surrounded by any idiots at this stage who don't know anything about the sport

#### **4.10.2 Avoidance coping**

This was defined as avoiding all stressors that may have an effect on your performance. These coping strategies stem from 'listening to music', 'talking to the coach about other things besides boxing' and simply 'trying not to think about the fight what so ever'. Participant 2 stated using avoidance coping during arrival; 'I was just speaking to the boys about what they did on the weekend just to keep my mind distracted from any worries about the fight'

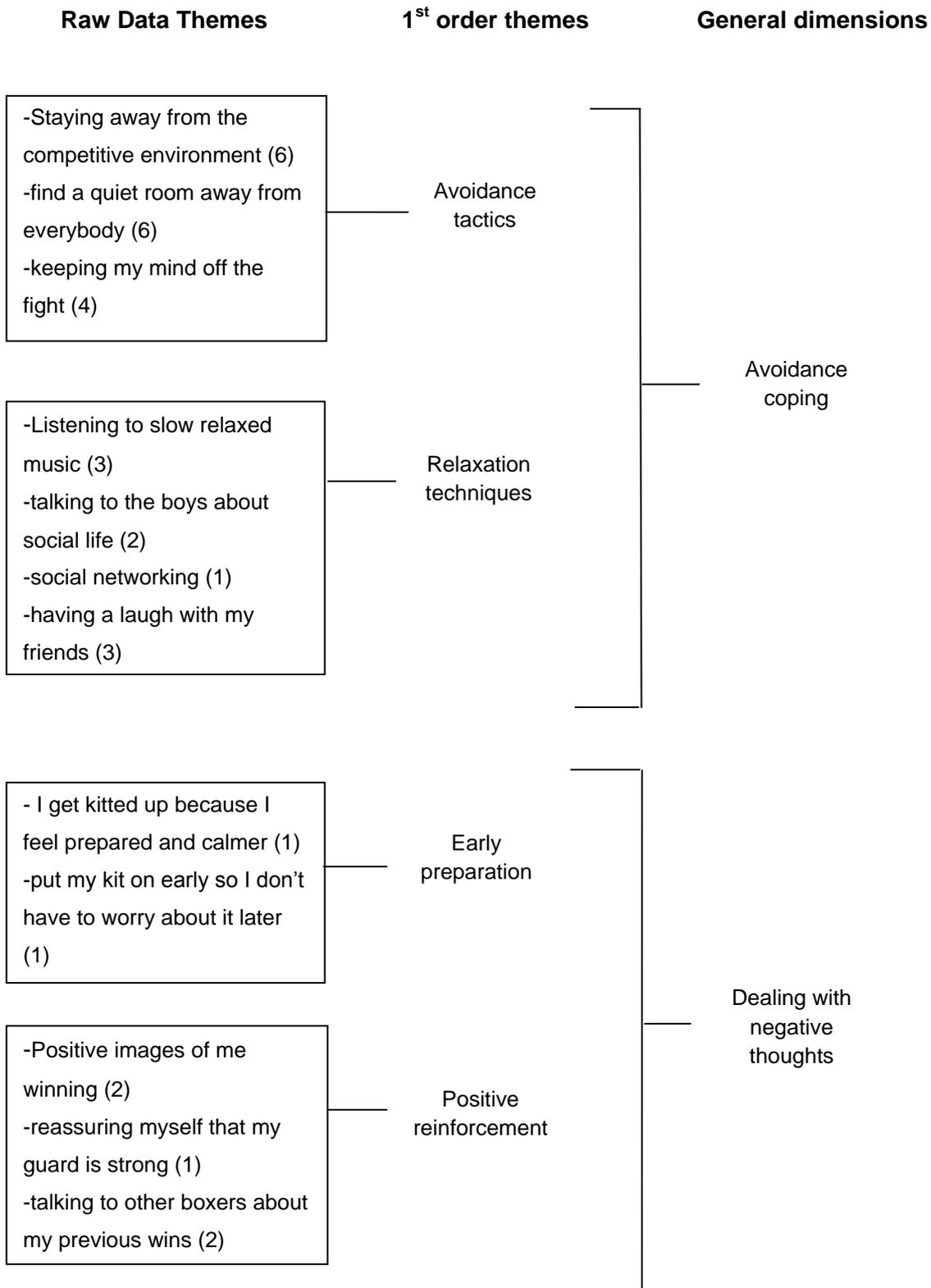
#### **4.10.3 Relaxation techniques**

This was described as ways of controlling forms of physical and mental nerves, anxiety and excitement towards competition. Although not a common coping strategy, listening to chilled music was used by certain participants to calm there state of mind during the arrival to the venue. When asked about coping techniques at this stage participant 2 responded with the following statement:

I just listen to music....chilled music that makes me feel relaxed.....I don't want to get aroused now because it's too early so I just need to be keeping cool at this point of time

#### **4.11 Avoidance coping and dealing with negative thoughts**

This general dimension was related towards avoiding frequent psychological stressors such as negative images of performing poorly (see figure 8). Two second order themes were derived from this dimension which were avoidance coping and coping with mental demands. Thirty-two raw data themes were identified and used to comprise the second order themes.



**Figure 8:** A hierarchical analysis of coping strategies one hour previous to competition

#### **4.11.1 Avoidance coping**

This dimension follows the same definition as seen as figure 7; however the raw data themes differ in terms of how the participants used this coping strategy at the different stages. All Participants identified 'staying away from the competitive environment' as a coping strategy. This would include 'finding a quiet room', 'away from the opposition' and 'back stage away from the competitive environment'. Results obtained and shown in figure 8 that 50% (16 out of 32) of the raw data themes were categorised as avoidance tactics. The other first raw data theme is relaxation techniques which comprised of 'listening to slow chilled music' and 'having a laugh with my friends'. One specific participant used social networking to deal with the stressors of the competitive environment. Participant 4 highlighted his importance to social networking to cope in the following quote:

I try not to think about the fight what so ever....I do this by keeping distracted by playing games on my phone, listening to music and going on facebook and twitter just to see what everyone is doing and communicating to other people on their

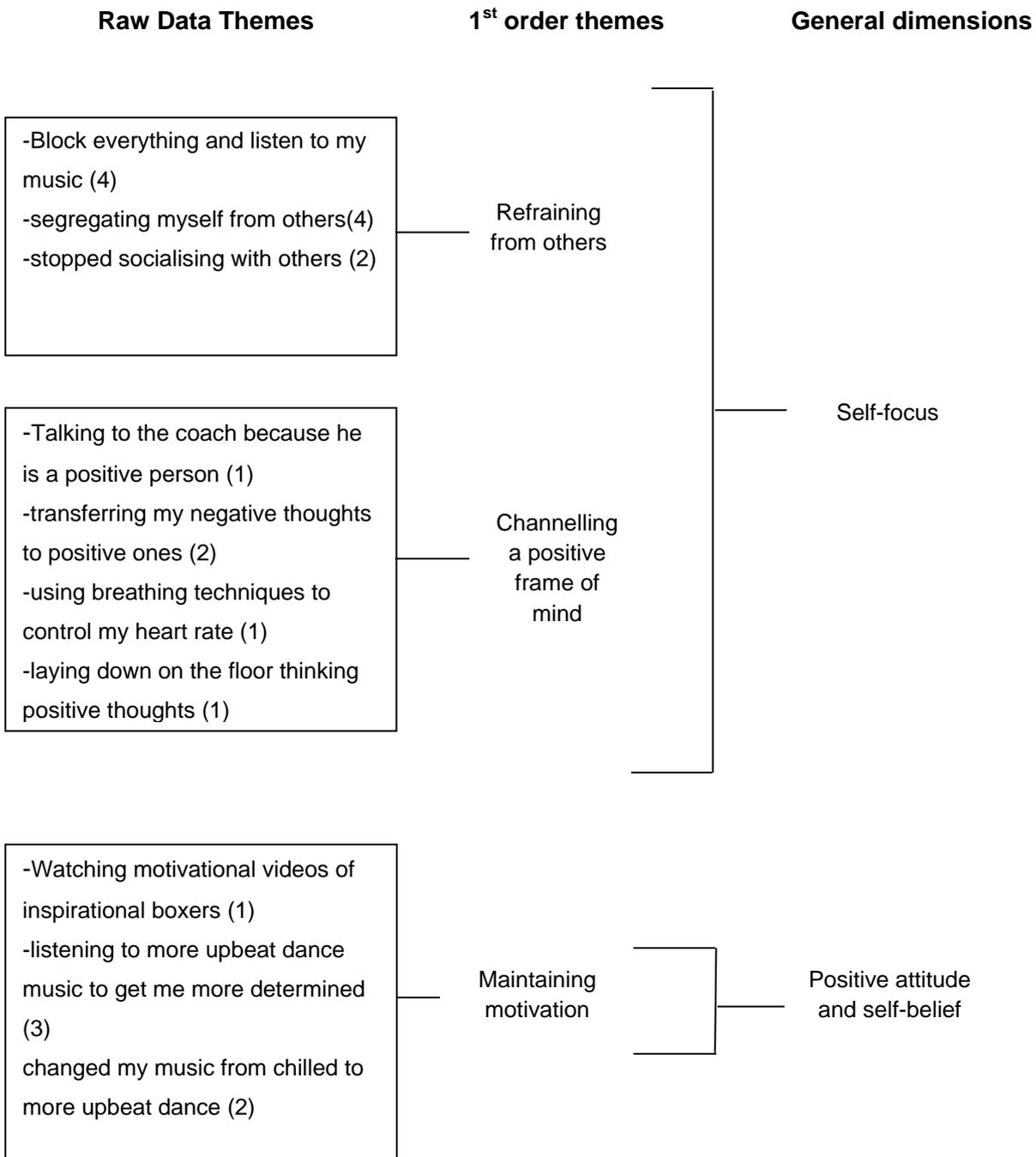
#### **4.11.2 Dealing with negative thoughts**

This second order theme involved controlling negative thoughts that participants may experience which may cause a negative impact on performance. This theme emerged from two first order themes, early preparation and dealing with sources of stress. Early preparation relates to participants feeling the need to change into their competition kit to feel prepared and stops any stress or worry later on about getting ready. This was evident with participant 5 when he stated:

'I like to get all of my kit on as early as possible really because if I don't then things start playing on my mind and I think about having to rush it all last minute and not get the correct preparation'

#### **4.12 Self-focus and Self-belief**

Twenty-one raw data themes were collected during the 45 minute previous to competition stage (see figure 9). The dimension emerged from three first order themes refraining from others, channelling a positive frame of mind, and maintaining motivation.



**Figure 9:** A hierarchical analysis of coping strategies 45 minutes previous to competition

### **4.12.3 Self-focus**

This second order theme relates to participants staying in a fixated frame of mind, having a positive mind set and staying away from any distractions which may interfere with their performance. Ways in which participants stayed focused were through reframing from others. Typical responses were 'block everything out and listen to music' and 'segregating myself from others'. Results found in figure 9 show that 10 out of the 21 raw data themes in this section were coping strategies that involved 'reframing from others'. Participant 4 stated he used all three of the responses at this stage in the following quote:

At this point I am still listening to my chilled music but now I've stopped socialising with the other boxers. I've just got my music in my ears, laying down on the floor with my eyes closed and completely shutting everything out

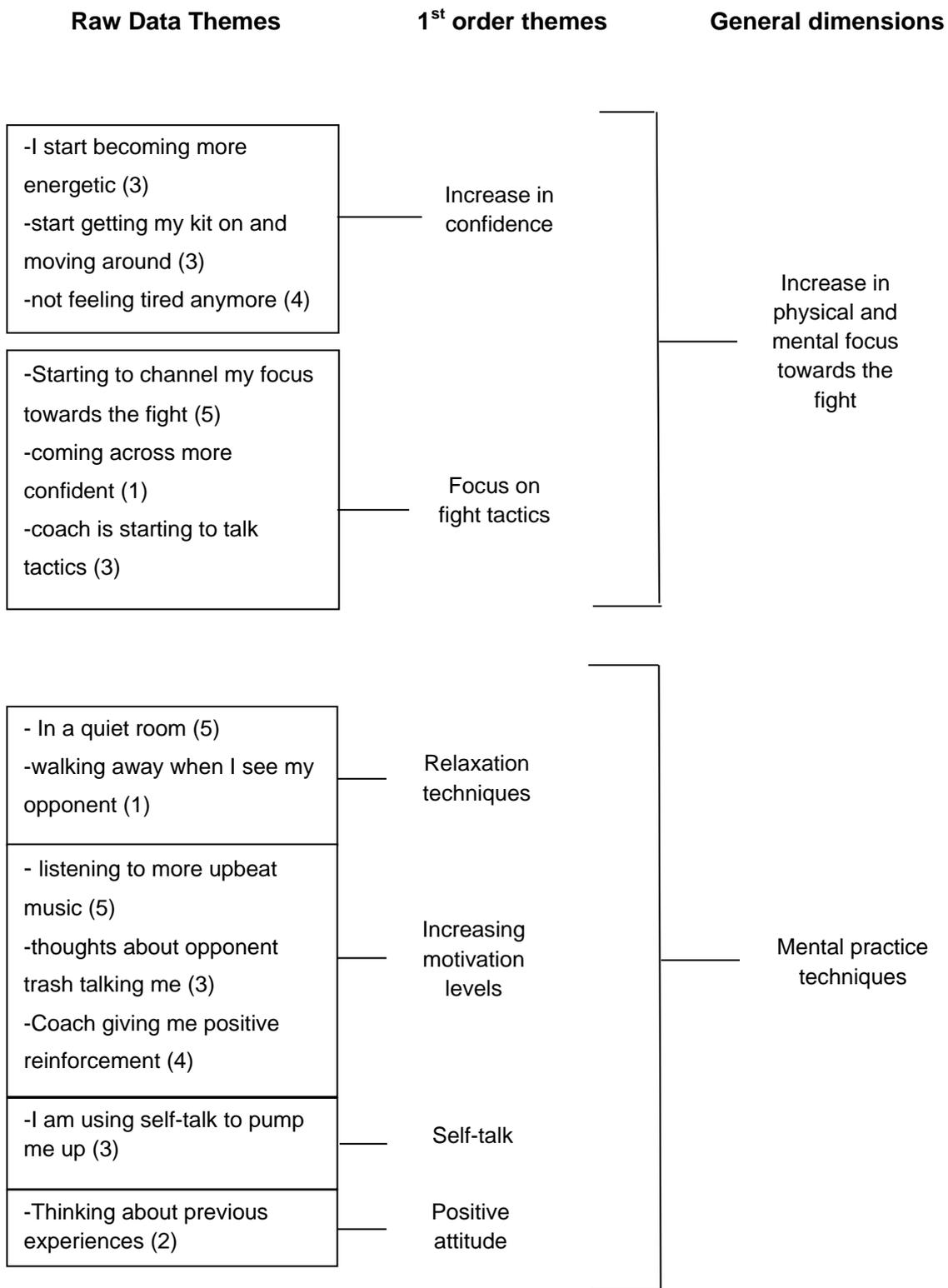
### **4.12.4 Positive attitude and self-belief**

This is identified by participants showing confidence in themselves, increase in morale and forms of increasing motivation. In the previous section (1 hour previous to competition) participants stated feeling physically and mentally drained as a stressor. However, responses at this stage aim at overcoming these stressors through 'watching motivational videos of inspirational boxers, 'listening to more upbeat music' and 'changing the music from chilled to more upbeat'. Participant 3 quoted:

I'm listening to more upbeat tunes rather than calmer house music...I also like to watch motivational videos on YouTube on my phone to remind me of the hard work I've put in during the build-up to this fight and it all just counts upon this fight

#### **4.13 Increase in physical and mental focus towards the fight and mental practice techniques**

Thirty-two raw data themes were collected at this stage (see figure 10). Six first order themes then emerged from these raw data responses: Increase in confidence, Focus on fight tactics, relaxation techniques, increasing motivation levels, self-talk and positive attitude. The following section will look at the mental practice techniques used by participants during this stage.



**Figure 10:** A hierarchical analysis of coping strategies 30 minutes previous to competition

#### **4.13.1 Relaxation techniques**

Forms of relaxation at this stage highlight differences to those shown during the arrival to the venue. During the arrival to the venue the main focus towards relaxing was through listening to chilled music, however during the 30 minute stage nearly all participants prefer to be in a quiet room, such as participant 3 who stated; 'the best thing for me at this stage is to keep away from the competitive environment and stay in a quiet place with my coach'.

#### **4.13.2 Increasing motivation levels**

This form of coping was defined through initiating or directing a positive frame of mind and getting the body physically and mentally prepared for competition. Typical responses here were 'listening to more upbeat music', 'thoughts about the opponent trash talking me' and 'coach giving me positive reinforcement'. Results found that increasing motivation levels showed the most popular response rate at this stage before competition.

#### **4.13.3 Self-talk**

Self-talk was defined as words or phrases participants would say to themselves to direct attention towards competition and improve focus. Only one raw data theme was found on self-talk however, this response was used by three participants which was 'using self-talk to pump me up'. Participant 5 identifies use of aggressive self-talk in the following quote:

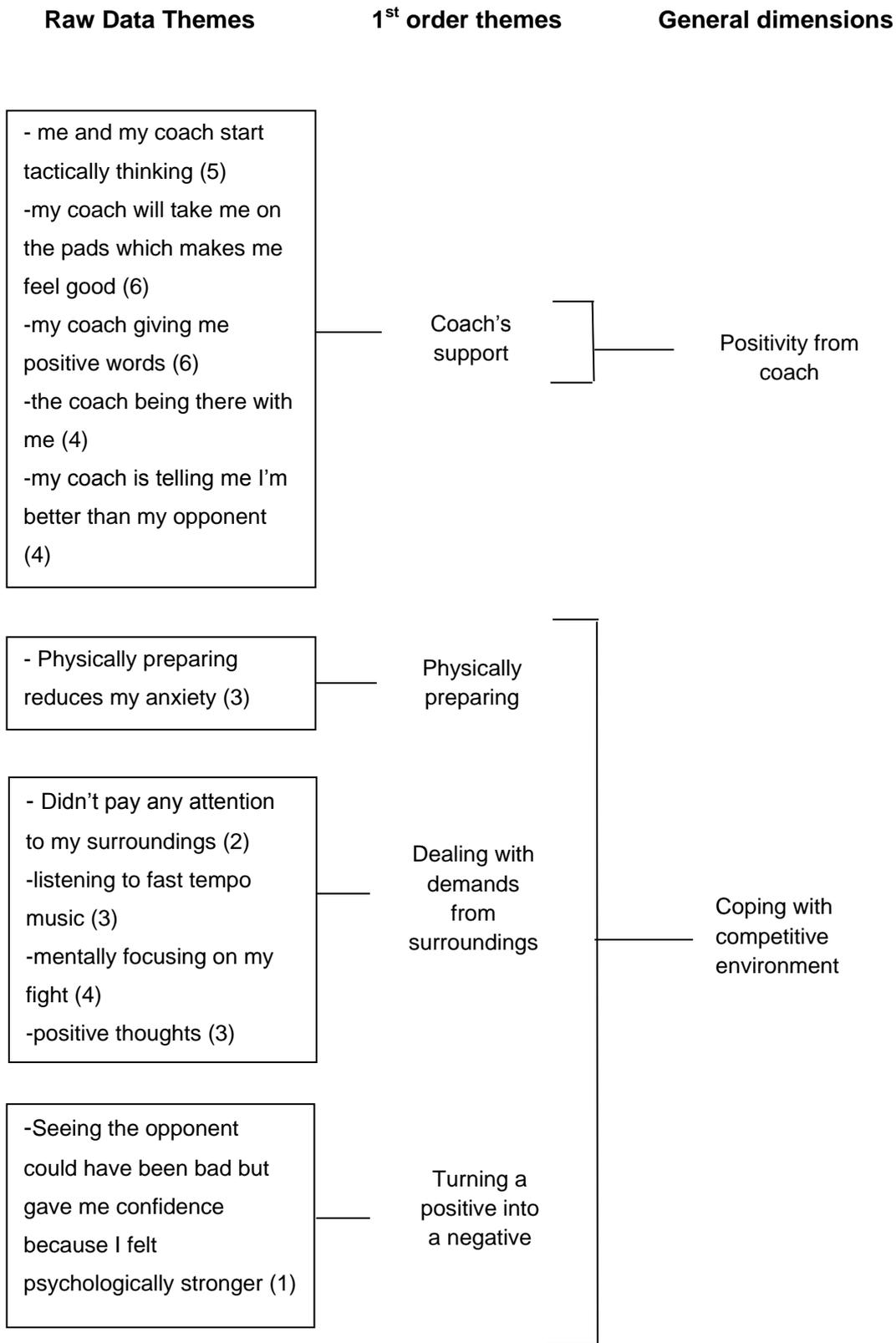
there's nothing worse than going in to the ring under aroused so I need to get psyched up...I'm doing this through upbeat music and aggressively shouting at myself saying "you can do this! I'm going to rip his \*\*\*\* head off!"...just really getting pumped up

#### **4.13.4 Positive attitude**

This first order theme identifies participants looking back at previous positive experiences and using these thoughts to create a positive attitude and help them become more motivated. However this mental practice technique was unpopular during this stage, identifying only two raw data themes.

#### **4.14 Positivity from coach and coping with competitive environment**

Two general dimensions were formed in this section that had emerged from four first order themes: Coach's role, coping with stressors, dealing with demands from surroundings and turning a positive into a negative. Overall, forty-one raw data themes/responses were collected at this stage which is the highest rate of all stages. (see figure 11)



**Figure 11:** A hierarchical analysis of coping strategies 15 minutes previous to competition

#### **4.14.1 Positivity from coach**

This theme draws upon the coach playing a role in helping athletes cope with the demands they are faced such as anxiety, nerves and physical preparation. The most frequently cited themes were, 'my coach giving me positive words' and 'my coach will take me on the pads which make me feel good'. Participant 2 identified how his coach used positive reinforcement to reduce anxiety:

During the last 15 minutes when my opponent is warming up and my coach can see me watching him, he reassures me even more because maybe he can see a little anxiety in me or he can see me doubting myself a bit, and when he can see that the opponents family are giving him positive talk he will also give me some reassurance'

Data collection and analysis has shown a trend towards the role of the coach playing a far greater involvement closer towards competition. This can be seen by through the number of raw data themes collected on the coach's role 15 minutes from competition and the minor amount further away. Participant 5 shows an indication to why this may be in the following quote:

it's the most important time to be speaking to me because you wouldn't want to be giving me this advice an hour before because its making you think about the fight and at that point you just want to relax. But 15 minutes is when the advice will sink in and you can take it into the fight

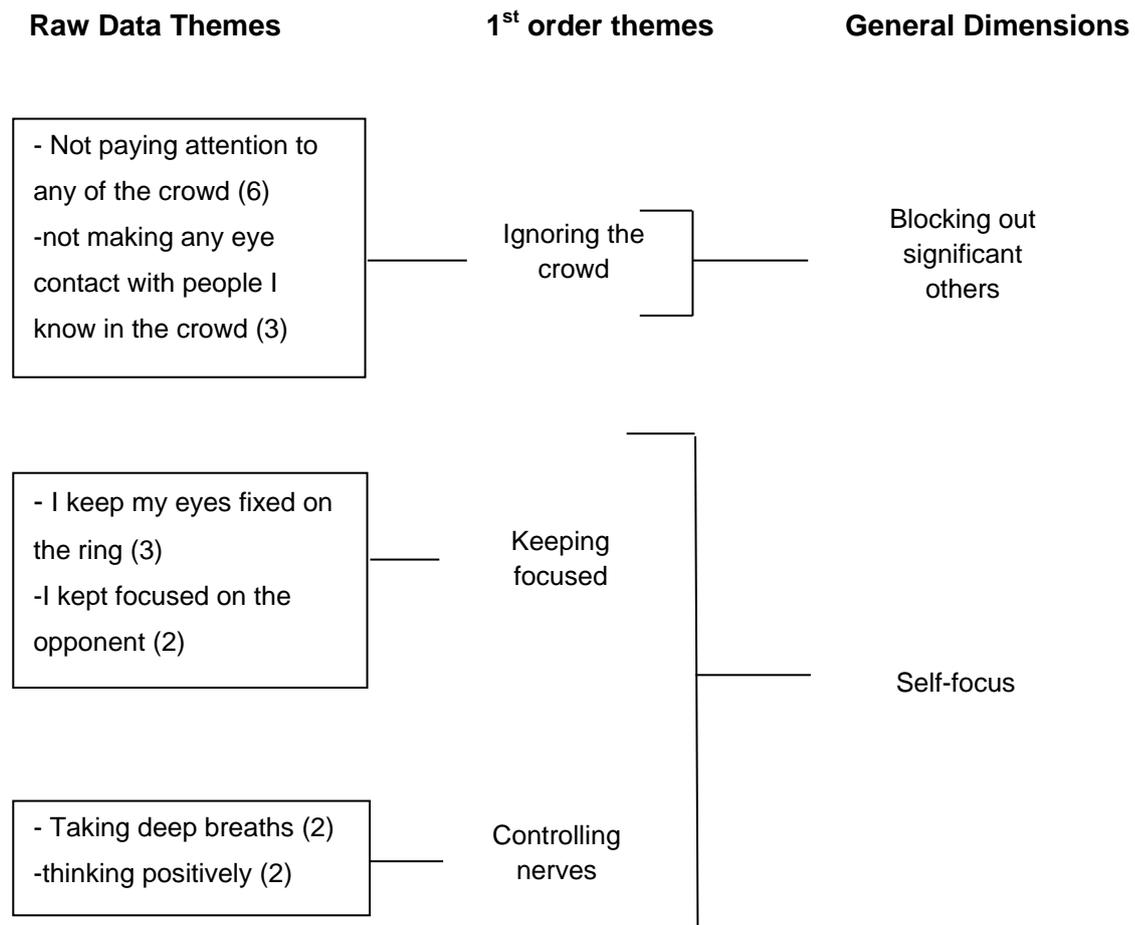
#### **4.14.2 Coping with Competitive environment**

This was described as the ability to handle the demands that the environment around them held and creating positive outcomes through it. Ways in which participants dealt with the demands were 'not paying any attention to their surroundings', 'listening to fast tempo music' and 'mentally focusing on my fight'. Ways in which participants mentally focus would be through 'pad work,' tactical preparation' and 'self-focus'. One specific low order theme was collected within 'turning a positive into a negative' category. This is evident in the following quote from participant 2:

I can now see my opponent and he's surrounded by his friends and family and there all talking about how good he is looking which could make me a bit anxious but at the same time I'm using it as a source of confidence because I know I have to prove them all wrong

#### **4.15 Blocking out significant others and self-focus**

These general dimensions of coping during the entrance to the ring were borne out of three first order themes, ignoring the crowd, keeping focused and controlling nerves. Eighteen raw data themes were collected overall and used to create these dimensions. (see figure 12)



**Figure 12:** A hieraschical analysis of coping strategies during entrance to ring

#### **4.15.1 Ignoring the crowd**

This refers to an avoidance style of coping by shutting out distractions around you and focusing on the objective of the competition. The raw data themes within this theme were 'not paying attention to any of the crowd', and 'not making eye contact with the crowd'. Participant 3 stated; 'I could see my dad in the corner of my eye, however I did look at him as it would distract me from my main focus and cause more nerves'.

#### **4.15.2 Keeping focused**

'Keeping my eyes fixed on the ring' and 'kept focused on my opponent' were frequently cited themes within this low order theme which is defined as directing a great deal of attention towards an aim, which in this case would be beating the opponent. An example of staying focused during the entrance to the ring is highlighted by participant 3 in the following quote:

All my friends are running up to me and screaming in my face telling me to smash his face in but I just block them out by keeping my eyes fixed on the ring and focus on the job at hand

#### **4.15.3 Controlling nerves**

This first order theme relates to coping strategies involving reducing pre-competition nerves. Few participants reported using physical strategies such as 'taking deep breaths'. Also the use of imagery was expressed as a form of controlling nerves at this stage. Participant 3 identifies using positive imagery of physically beating the opponent, he stated:

I do remember just thinking about my first connection with my opponent in the first round and making sure it was a big one to make sure I was on the front foot from the start. Then once I landed that big straight right all the crowd cheering and going wild

## 5.0 Discussion

## **5.1 Introduction**

The purpose of the study was to identify the stressors experienced by amateur boxers during the hour previous to competition and the coping strategies used to overcome these stressors. This section will discuss the findings in relation to existing research. Practical implications of the study will then be taken into consideration for novice amateur boxers, coaches and researchers towards amateur boxing. The final section will then focus on the strengths and weaknesses of the study, future research recommendations and a conclusion.

## **5.2 Identified stressors**

By employing a sample of novice amateur boxers, an extensive framework is provided that highlights the stressors that exist during the arrival to venue and the hour leading up to competition. In relation to these stressors, the primary finding was that the boxers do encounter a variety of demands that have the potential to influence performance.

The main themes and general dimensions that emerged during the analysis showed both differences and similarities between those identified by each boxer. In addition, it was found that the boxers not only come across stressors related to the upcoming fight, but also in relation to previous negative experiences (e.g. previous losses, poor performance, pressure to win). Unlike the work of Anshel et al (2013) and their study on sport officials which only focuses on stressors caused from competition and the competitive environment, this study presented findings associated with past events. Athletes seemed to mention looking back at previous losses as a cause of stress the hour before competition. This shows similarities to the work of Mellalieu et al (2009) during their research on competition stress with elite and non-elite athletes who also found evidence to support stressors related to previous experience such as 'pressure to win being the favourites and the team everyone wants to beat'. Evidence based on findings from this study suggests that research must be considered towards previous experiences of similar situations as a source of stress prior to competition. These findings also correspond with previous work related to self-efficacy theory (Bandura, 1997; Lane, 2004) which stated that efficacy

expectations mediate the influence of previous experiences on performance and that athletes are able to perform and cope more efficiently after relating back to performance accomplishments. Participants showed a lack in confidence when relating back to previous negative experiences and therefore seen as a stressor, however, reflections and thoughts of succeeding were also highlighted when athletes related back to previous successful experiences, increasing confidence therefore acting as a coping strategy.

During the different pre-competition stages considered in this research, a variety of stressors were experienced by the amateur boxers. The most frequently cited themes throughout the study were highlighted as: 1) performing poorly; 2) self-doubts; 3) awareness of negative thoughts and feelings which include uncontrollable anxiety and overthinking; 4) competitive anxiety; 5) performance criticisms including hostility from the crowd; and 6) competitive environment demands including letting others down.

'Performing poorly' was reported as a most frequently mentioned concern during the arrival to the venue. Results indicate that all participants experienced negative thoughts during this stage such as 'losing in front of home crowd', 'letting everyone down after they bought tickets' and 'getting knocked out'. These findings compliment previous research that suggested mental errors were highly associated with pre-competition stress (i.e., Nicholls, Holt, Polman, and James, 2005). Nevertheless, despite these similarities, the majority of this research was undergone during the weeks leading up to competition (Nicholls et al, 2005; Nicholls et al., 2007) not in the particular time frame adopted in this study. The importance of stressors and coping strategies during this time frame pre-competition must be shown of more importance in relation to previous research that look at the weeks before competition as the results may significantly change so close to competition. Any significant changes in stressors from long durations before competition to the hour previous can then be worked upon and different intervention strategies can be put in place by athletes and coaches.

Differences in stressors between boxers were found most frequent during the arrival to the venue and the 30 minute stage previous to competition. Both stages showed a response rate of 11 different stressors. This indicates a high frequency rate of

stressors during these pre-competition stages. It also indicates individual differences exist between novice amateur boxers specific stressors. These results support the work of Scanlan et al (1991) who found that less than half of the sample identified any one given stressor in common. Similarities of Scanlan's work were also evident in revealing that a particular event can produce stress for some and enjoyment for other. For example participant 2 reported the crowd as being a major stressor during the entrance to the ring, however participant 6 reported it has a source of excitement and embraces the atmosphere. This can again be applied to self-efficacy theory and whether participants are experienced a positive or negative ring entrance during previous fights and what appraisals have caused them to feel this way previously.

### **5.3 Identified coping strategies**

The most frequently cited coping themes throughout the stages analysed are as follows: 1) Avoidance tactics; 2) removing self from others; 3) Increase motivation levels; 4)coach support; and 5) blocking out significant others

The second aim of the study was to identify the coping strategies used by the athletes to deal with the demands faced with previous to competition. The findings of this study support those provided in previous research that found avoidance coping to be an effective strategy in reducing negative affect and encouraging a positive attitude (Krohne and Hindel, 1988; Anshel and Anderson, 2002). Forms of avoidance coping were used by all athletes during some stage of the arrival or one hour period previous to competition. Most common themes of avoidance coping included 'staying away from the competitive environment', 'listening to music', 'finding a quiet room away from everybody' and 'talking to mates'. These findings were beneficial to the athletes as they distracted any negative thoughts that may cause any form of stress. They also refrained the athletes from thinking about the fight at unnecessary stages such as the arrival and one hour before competition which was stated to be 'too early to be tactically thinking'.

During the 15 minutes previous to competition the use of the coach coping strategy was seen the most essential across all participants in reducing the onset of stressors. A total of twenty-five raw data themes were found relating to the coach at

this stage which was the highest response rate for any coping strategy at one given time during the pre-competition stages. This coping strategy supports the findings in previous studies (e.g. Bloom et al, 1998; Gould et al, 1999; Jowett et al, 2003), which also suggest that coach-athlete relationships can contribute to the athletes' development in terms of coping with psychological demands and subsequent performance success. Evidence from previous studies suggest that relationships are underlined by mutual respect, concern, support, open communication, shared knowledge and understanding (Jowett et al., 2003). These relationship descriptions show similarities to the raw data themes found during this study. Specifically the boxers identified the 'coach's role' as a coping strategy during the final 15 minutes such as physical reparation, positive talk and support.

#### **5.4 Practical implications**

The study has explored the stressors and coping strategies experienced by novice amateur boxers in the lead up to competition. The implications of these findings for amateur boxer researchers and educators are considerable. All Boxers were seen to experience stressors related to significant others such as the crowd during some stage within the study. Although these negative thoughts was shown as specific to the individual, the underlying explanations behind its presence was consistent across all athletes. Upon these demands it may be suggested that avoidance coping would be a recommended strategy to overcome the stressor. Considering the success rate of the boxers and the high use of avoidance coping (i.e. staying away from competitive environment) it would be a logical style of coping to consider in reducing the onset of stress previous to competition. This suggestion is consistent with the work of Krohne and Hindel (1988) which indicated that avoidance coping was associated with improved performance success among under competitive environment conditions. A more recent study by Anshel and Anderson (2002) also suggested that avoidance coping techniques were used to protect athletes against interfering thoughts and actions. These findings also correspond with the findings of Nicholls et al (2006) who highlighted the importance of avoidance coping during rehabilitation to block out negative thoughts. Although the paper by Nicholls and this specific study differ in experiences of stressors (injury and competitive stress),

similar styles of avoidance coping were found. For example, the injured athletes found in Nicholls study were found to use blocked thought stopping. This was evident during this specific study whereby boxers blocked out negative thoughts through positive images of winning and socialising with others which distracted thoughts related to competition. After the arrival to the venue, coaches should encourage athletes to remove themselves completely from the environment until 45 minutes previous to competition as results have found that being in the arena one hour before only creates stressors. The boxers seem to gain no advantages from being within the environment at that stage before the fight and seem to only suffer from 'nerves' and the feeling of being 'mentally drained'. A routine should be structured whereby the boxers arrive to the venue within 5 minutes before they start physical preparation and therefore avoid any hindrance from the environment . During the entrance to the ring boxers should however be advised by practitioners/coaches to formulate ways of embracing the crowd whilst avoiding negative appraisals such as opposition's crowd. This way, rather than completely blocking them out, the crowd can encourage motivation rather than hinder it.

The findings from this study have presented several guidelines for sports psychologists in dealing with demands within amateur boxing previous to competition. The study suggests that the stressors experienced by the boxers varied which highlights individual differences in what athletes perceive as a demand or stressor. This is consistent with the work of Hanton et al (2009) during their investigation into competition stress which highlighted the importance of practitioners effectively preparing performers for the variety of demands that they may face in the competition environment. The identification of the different demands experienced is crucial in the understanding of competition stress as it provides insight into the factors that instigate cognitive, emotional, and behavioural responses, which consequently, influence performance (Hanton et al, 2008). Therefore, it is important for researchers into amateur boxing to understand how the individual boxers are coping with the various demands prior to competition in order to reduce the onset of these stressors causing negative impacts on performance for future boxers. For example, several participants stated that self-talk had an impact on reducing the demands faced with, however these demands showed a variety of responses such

as 'anxiety knowing how close the fight was' and 'seeing opponents family boasting him'.

### **5.5 strengths, weaknesses and future research**

This study was the first to identify the various stressors amateur boxers' experience one hour prior to competition, the different stages at which they experience them, and the coping strategies used to deal with these demands. Previous studies have tended to only focus on long term patterning of stressors and coping previous to competition (i.e. over a 28 day period; Nicholls et al, 2006). However, few studies have generated their research based within the competitive environment prior to competition, or solely within boxing. In addition, the method adopted allowed for an in-depth exploration of the stressors and coping strategies employed. The semi structured interview guide provided the opportunity to explore the many demands and coping techniques the novice amateur boxers were faced with and question any changes during the time scale, which then gained a comprehensive understanding of their exposure to the dynamic competitive environment. The interviewers empathy due to being an amateur boxer helped to create rich, detailed responses as the researcher was able to compare and discuss any changes in demands or coping styles cited throughout the different stages.

Due to qualitative nature of the research however, the study was restricted to a small sample size and thus limited the generalizability of findings. When evaluating the findings within this research it must be taken with caution when comparing to other novice amateur boxers outside this specific sample group as the limited sample may only provide a small representation of the population. Consequently, future research should adopt a similar design as that used in the current study, but include a larger sample of participants. This way you are creating in-depth information across a larger population which will therefore give a better representation of amateur boxers demands and coping strategies.

Finally, the study has provided qualitative information upon the sources of stress and coping strategies within amateur boxing which adds to the rather sparse amount of literature within the sport. The strength of the study being qualitative helps create in-

depth valid information about the specific stressors and coping strategies used by the boxers. Although evidence has been shown of previous literature based around the demands and coping styles athletes' experience, there seems to be a bare minimum within amateur boxing. Progress of literature must be shown within the sport in order for coaches and psychologists within the sport to improve the way novice boxers cope with competitive demands. Whilst the use of qualitative analysis does hold its advantages of creating more detailed, specific results, problems have been raised due to unclear, precise results created. When using quantitative analysis, results are clear and are able to be accurately grouped or compared with other results (e.g. Kaiseler et al, 2009). This enables trends to be shown within the research. Trends and differences are shown within qualitative data however results may not be so straight forward and simple to follow due to the multiple answers given by participants.

Future empirical research should aim at using mixed research which is the mixing of quantitative and qualitative research. This can be done by creating a close-ended questionnaire for the boxers to fill out which looks at the demands and coping strategies previous to competition, followed by an interview discussing the answers given by participants during the questionnaire.

## 6.0 Conclusion

The major purpose of the present study was to explore the stressors and subsequent coping strategies used within novice amateur boxers previous to competition. The study found a variety of demands experienced across all participants, some common and some unique to each individual boxer. When the boxers experienced similar demands, there were occasions when they were experienced at different stages within the pre-competition stage. Although there were various coping strategies cited by the boxers, a trend towards avoidance coping was shown, especially when dealing with demands within the environment around them which they found unpleasant or uncomfortable, such as, hearing or seeing the crowd. The process of analysing the boxer's experiences across a time scale one hour before competition allowed for patterns or changes in demands/coping styles to be evaluated. The demands based on awareness of negative thoughts and feelings, such as, the crowd were experienced more as the fight approached, during the 30 minutes and entrance to the ring. However, physical demands such as nerves, feeling weak and mentally drained seemed to be experienced during the arrival to the venue and one hour previous to the fight. The study has provided preliminary guidelines for stressors and coping strategies within novice amateur boxing previous to competition whilst adding strength to non-elite athlete's research. Future research should aim to compare the demands and coping styles of non-elite novice boxers, and elite amateur boxers. Any significant differences in coping styles may then contribute to non-elite boxers and coaches encouraging a change towards the techniques used by the elite.

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# Appendices

## **Appendix A1- Participant consent form**

Calum Evans

Cardiff Metropolitan University, Cyncoed Road, Cardiff, CF23 6XD



### **Interview Guide**

#### **PARTICIPANTS DETAILS**

Participant number:

Name:

Age:

Sex:

Address:

Telephone number(s):

Sport:

Event(s)/position(s):

Years participating in sport:

Current performance level:

Highest performance level:

Date of highest performance level:

Major achievements:

Interview date:

Time begun:

## **Appendix B1- Participant information sheet**

Hello, my name is Calum Evans and I am a student at Cardiff Metropolitan University. I am studying Sport and Physical Education and currently in my final year undergoing my dissertation project. In this project I am studying the sources of stress and coping strategies of novice amateur boxers previous to competition. During this study I will be interviewing 6 amateur boxers who are currently at a novice level and examining their sources of stress and how they cope with these demands from 1 hour previous to competition and every 15 minutes up to the fight (1 hour, 45 mins, 30 mins , 15 mins previous to fight). The main purpose of examining at these different times is to identify if there are any changes in stressors and coping strategies during the build-up stage.

It is important for you as a participant to understand that your personal information will remain completely confidential. Some aspects of the interview may be used as quotations in the results section to get across important information. However, they will still remain completely anonymous as your identity must stay protected at all times. In order to transcribe all the information and collect accurate information from the interview I will be using a tape recorder which will record from the introductory questions, all the way to the conclusion.

As a participant of the study you have several rights. At any time during the interview you are within rights to decline any questions or withdraw from the discussion. You are the participant and I am looking to get accurate information off you specifically so it must be clarified that there are no right or wrong answers. Therefore, it is important that you answer the questions as honest and straightforward as possible. If there is any part of the interview you are unsure of how to answer then please ask for guidance.

The majority of the interview we will be discussing your fight which took place the previous fight. The reason I have chosen to do it the next day is so that you are able to remember the experience and the process is still clear in your head. I decided not to do it straight after the fight on the same night as you need time to rest and the adrenaline from competition may have an effect on your answers. At any point during

the interview you are finding it hard to recap your thoughts and feelings, then please take your time, take a pause to think. The information I am looking for is specifically on the arrival to the venue and one hour before competition so please try to focus on only them specific periods.

After every section of the interview I will ask you if there are any other relevant information you would like to discuss. That you feel are important. Have you any questions before we get started?

## **Appendix C1- Interview Guide**

### **Section 1- introduction**

I will be starting the interview with a few introductory questions in order to develop a rapport with the you and just find out a little bit about certain aspects of your sport

Tell me about when you first got involved in boxing

what were your reasons for getting involved?

What weight division do you box at?

What is your biggest achievement in your career so far?

What are your future goals that you are aiming for?

### **Section two: Arrival to the venue**

#### **Part one- Physical demands on arrival to the venue**

In this section I will be asking questions relating to the demands you face on arrival to your competition venue, Looking at physical symptoms you have during this time.

So when you arrive to your fighting venue and you see the ring for the first time, what physical symptoms do you feel? (e.g. sweaty hands, butterflies, increased heart rate)

When you see your opponent for the first time, how does that make you feel?

(specifically physically e.g. pumped up, adrenaline)

I want to talk to you about your post weigh-in routine. Once you have arrived and weighed in, what exactly do you do?

Is there anything else you would like to discuss about your physical preparation on arrival to venue?

#### **Part two- Mental demands and coping strategies on arrival to venue**

So we have looked at the way your body physically reacts when arriving, now I want to look at the thoughts and emotions you are faced with during this time.

What mental demands are you faced with at this stage? Tell me what specifically is going through your mind at this stage also (e.g. negative imagery, anxiety, nerves)

Do you have any social support here at this stage or do you prefer to be on your own? (coaches, family) explain?

So how do you cope with these demands?

What coping techniques do you use to make sure you are in a calm state at this stage? Discuss these coping strategies in detail

Do these demands occur on a regular fight basis or do they appear on certain fights such as in a home show or grudge fights?

Did the atmosphere at the venue when you arrived last night have an effect on your performance? How?

So would you say it had a positive or negative effect on your performance?

Is there anything else you would like to discuss regarding the mental demands?

### **Section Three: One Hour Before Competition**

#### **Part one- mental demands and coping techniques one hour before competition**

Ok, so we have looked at the demands you face when arriving to the venue and have also talked about what you do to control yourself and cope in these situations. As you get closer to competition however, your state of mind will change. We are now going to look at the build-up stage and the sources of stress and coping strategies one hour before competition and look at the different stages all the way up to entering the ring.

So now you are one hour before your fight, what physical preparation are you doing?

Why are you doing this?

What images are running through your head? (positive or negative thoughts)

what demands are you faced with both physically and mentally at this point?

What are you doing to cope with these demands if you actually are coping?

Why would you say this is helping you cope with your stress most effectively?

Is there anything else you would like to add in relation to the mental demands and coping techniques one hour before competition?

## **Section four: 45 minutes before competition**

### **Part one- 45 minutes before competition**

So What I would like to do now is look at the 45 minute period before competition and see if there are any changes to your stress during this stage and if so how you are coping.

So you are now 45 minutes away from competition, what are you thinking about now?

Are there any changes to your mental and physical state? What are they?

Is there a change of environment you're in at this stage? If so why the change?

At this point what are you doing to try and cope?

Is there anything else you would like add in relation to your mental tactical preparation?

### **Part Two- Mental tactical Prep**

So at what stage on the time scales we have looked at would you start thinking mostly about your tactics?

Would you say that tactics are a major factor you are thinking about before competition?

Does tactically preparing your strategy in your mind help you become more relaxed previous to competition? Or can it cause stress when you're unsure of how you are unsure of your fighting strategy? Explain.

## **Section five: 30 minutes before competition**

### **Part one- 30 minutes before competition**

Aspects that concern your 'upcoming' fight during the pre-fight one hour period.

Mainly focusing on negative thoughts that you may be thinking of during this period.

Now you are only 30 minutes away let's talk about how you're feeling now and what demands you are facing. Why are you feeling this way?

Are you still using the same coping strategies as you were previously (1 hour and 45 mins) If not what are you doing to cope now?

Can you remember any surroundings at this stage that made you feel at all relaxed or anxious? (e.g. opponent)

### **Part two- Performance problems**

Were you thinking about performing poorly or not living up to your own expectations?

Could you explain this? (e.g. letting yourself down, knowing you could do better)

At what stage on the time scales we talked about does this most fit?

If you feel you have not trained enough for the fight does that cause you stress during the one hour before competition?

Did the importance of your last fight have a role on your nerves and pressure to win (e.g. was it an important fight to win)

Is there anything else you would like to add in relation to your performance problems?

## **Section six: 15 minutes before competition**

### **Part one- 15 minutes before competition**

We are now going to look at the focus on your opponent and when you start thinking specifically about it. We are also looking at your sources of stress and coping strategies during the final 15 minutes

Ok so you have reached the final 15 minutes before your fight, what was your final preparation (e.g. warm up, relaxation techniques)

what is running through your mind at this final stage?

Any negative thoughts going through your mind at this stage?

Can you tell me about how you coped this close to fight?

Did your surroundings at this stage have any effect on how you felt? Why?

### **Part two- opponents**

Have you any knowledge of this boxer before your fight?

Did this knowledge have any effect on your mental preparation (e.g. Knowing hes good make you more nervous?)

Could you tell me at what stage in the hour before competition did you really to focus

on what you specifically had to do to beat this opponent?

Were you thinking about the tactics to beat the opponent the closer you got to the fight?

Is there anything else you would like to discuss about your mental preparation towards your opponent?

## **Section seven: entrance to the ring**

### **Part one- entrance**

We are going to discuss the period where you entered into the ring. This is an important time during the pre-competition time scale as it is when you see the crowd and the attention is all towards you and your opponent

As you are entering the ring and seeing the crowd for the first time, what is your reaction to it?

How do you cope with the new demands around you now and how are you keeping focused?

Were there any distractions from the crowd that stood out?

So could you tell me the one main demand that you are faced with during the entrance to the ring?

### **Part two- coaches role**

Could you talk about your relationship with your coach?

Explain how your coach helped you with your physical and mental preparation during the one before competition?

At what stage during the build-up did your coach help you the most in terms of dealing with the demands you faced? Explain how he helped

Would you say your coach plays a big role in your preparation one hour before competition or would you say that it is all down to you at this stage?

Anything you would like to add relating to your coaches role?

## **Section eight: Organisational issues**

### **Part one- Competitive environment**

We are now going to look how the competitive environment has an effect on your mental and physical state and how you cope in the environment one hour before competition

Do you prefer to stay away from the competitive environment previous to competition or be involved in the surroundings? Explain

Does the crowd play a big role in your physical and mental state previous to competition?

At what stage in the hour before your fight do you start thinking about the crowd?

Do you worry about performing for them and entertaining them?

Could you tell me about any superstitions you have?

Is there anything else you would like to add in relation to the competitive environment?

## **Section six: Conclusion**

Ok, we've covered a lot of areas related to your sources of stress and coping strategies on the arrival to the fight venue and hour previous to competition.

Is there anything else you would like to add with reference to the arrival and one hour previous to competition?

As an athlete, What advice would you give to aid other novice boxers to help them cope with demands they may face previous to competition?

How did you think the interview went?

Do you feel everything has been covered and you were able to tell your story full?

Have you any comments about the interview and how it was conducted?

Thank you very much for your time and for helping me with my study

## **D-1 Interview Transcript**

**Monday 2nd January 2014**

**2:37pm**

CE= Calum Evans (Interviewer)

P1= Participant one

CE: Ok, I will be starting the interview with a few introductory questions to find out a few certain aspects about your sport. So could you tell me about when you first got involved in boxing?

P1: Ok, I started boxing 5 years ago just to keep fit and had no intentions of competing but as it progressed I started doing a bit of sparring and that lead to competing because I enjoyed the sparring.

CE: When did you start competing?

P1: It was probably about 4 years ago

CE: Ok, what were your reasons for getting involved?

P1: Just because I love the sport, I love the individualness of it...Its down to yourself if you win and also if you lose...It's not like a team sport

CE: Right, so if you win its all down to you and vice versa if you lose?

P1: Definitely yes

CE: What weight division do you box at?

P1: 69kg, welterweight

CE: What is your biggest achievement in your career so far?

P1: Personally...Fighting in Cardiff in front of Joe Calzaghe and Nathan Cleverly in the audience....and I top the billed...that was an amazing experience

CE: Amazing! So what are your future goals that you are aiming for?

P1: Just to continue boxing for the gym and...it's not all about the winning and losing for me, its about being a part of the gym.....we are a close gym and it's important to me to be a part of that.

CE: Ok, good. Right, part one we will talk about the physical demands on arrival to the venue. In this section I will be asking questions relating to the demands you face on arrival to your competition venue, looking at the physical symptoms you feel, for example, sweating. So how do you physically feel at this point?

P1: ye I feel a bit shaky...I feel like...you don't know who your opponent is so your feel a little uncertain about it all.

CE: So any physical symptoms?

P1: Yes, I start sweating...My hands start sweating...I get butterflies...My mouth also starts going dry as well.

CE: When you see your opponent for the first time, how does that make you feel?

P1: Its sort of like...It kind of like ...I find it like calms me a bit...It's sort of an icebreaker because you now see that they are human and there not some sort of robot or machine that you think about.

CE: Ye right, so would you say that when you see them it pumps you up?

P1: Ye definitely, But it also calms when I see the opponent for the first time and can see that they are just human beings, there not massive which is what you picture them to be before your fight.

CE: Ok, good. Now I want to talk to you about your post weigh in routine. Once you've arrived and weighed in, what exactly do you do after that?

P1: Depending on what time the fight is, we normally go out somewhere, go get some food somewhere....we normally like to just get away from the venue.

CE: Why do you like to go out somewhere?

P1: I think its just something our gym does, we just like to get out of there and I think that helps with the emotional things going through your mind, and just takes your mind off things

CE: Right, so you're saying you don't really like to think about the fight until closer towards it

P1: Ye definitely

CE: Is there anything else you like to discuss on your physical demands on arrival to the venue?

P1: I try and keep my mind set in the present time... and just keep focused....it's a hard thing to discuss because it's such a surreal thing.... I just get very hot and flustered

CE: Ok, so we have looked at the way your body physically reacts on arrival to the venue, now I want to look at the thoughts and emotions you're faced with at this time. So what mental demands are you faced with on arrival to the venue? Any negative images?

P1: Ye there are lots of negative images going through my mind...I think about putting on a bad performance in front of the big home crowd

CE: What other images are going through your mind?

P1: Just like....because it's such a hostile crowd...and at this time there's only a team of about 3 or 4 of us....it's quite frightening thinking about what the crowd are thinking.

CE: At this stage on arrival, do you have any social support with you?

P1: I just like to stay with my coach and the other boys who are boxing from my club...I prefer to be with just this group because I know they are going through the same thing as I am so I get my support off them because there also feeling the nerves that I am.

CE: Ok good, so you've talked about earlier the crowd being one of the things you're thinking about at this stage, how do you cope with that?

P1: I think what plays a big part in it is when we get away from the venue, we have a bit of a laugh together and we have a good chat and stuff like that. I think that's one

of the best ways of coping just getting away from everything and having a laugh with all the boys and the coach...and were just talking about different stuff besides boxing

CE: What other coping techniques do you use to make sure you're in a calm state on arrival to venue?

P1: I just try and put on a positive stance...I try and come across as being more confident in front of the other boxers around me and just put on a positive image....I put my shoulders back and keep my head up...and by acting confident I feel more confident in myself.

CE: Ok so by acting confident you feel more confident in yourself?

P1: ye definitely

CE: Ok, do these demands occur on a regular fight basis or do they appear more on certain occasions such as home shows or grudge fights?

P1: ye definitely harder to cope on home shows because your in front of a lot of people who will judge you because they know you, rather than when your boxing away you don't know anybody so you know they want judge you. I still feel nervous boxing away, but more on home shows because I feel more worried about what the people I know think about my performance.

CE: Did the atmosphere of the venue you fought at last night have an effect on your performance?

P1: Ye definitely, I performed well and felt relaxed because it wasn't as busy as a home show and it was quite a big arena so you didn't feel the crowd as much. So when I walked to the ring it was quite a spaced out area and I didn't feel the crowd as much.

CE: Did the opponents crowd have a positive or negative effect on your performance?

P1: I don't think it had any effect on my performance...even though I could hear them shouting...I didn't really think about it I was just thinking about beating what was in front of me

CE: Ok, is there anything you would like to discuss regarding the mental demands on arrival to the venue?

P1: No

CE: So now we're going to talk about one hour before competition and look at mental and physical demands you face during this time and the coping techniques you use here. So we will look at the build-up stages during this one hour before competition, all the way up to your entrance to the ring.

P1: Ok

CE: So now we are one hour away from competition, what physical preparation are you doing at this point in time?

P1: At this point in time I'm not doing any physical preparation. The bouts have started and people are coming and going so the nerves are kicking in because you can see boys coming back from their fights all tired and sweaty and you know your time is soon.

CE: So you're not physically warming up yet, what are you doing?

P1: Just waiting round, just sitting down...I don't like to watch the boxing beforehand...I like to be away from it in some room back stage.

CE: Do you like to be where all the boxers are or on your own with just your coach and the boxers from your gym?

P1: YE, I just like to be with the boys from the gym away from my opponent.

CE: Why?

P1: Just because it's more comfortable for me being in that environment because there my friends are around more often and who I train with in the gym and spend social time with.

CE: What images are running through your head at this stage? Positive or negative?

P1: a bit of a mix...it swings from one to the other...sometimes I think of positive thoughts and then I will think about negative stuff like putting on a bad performance

or suffering a bad loss. But then sometimes I will think positive like how fit I feel and how ready I am for this. So it's a bit of both really.

CE: What are the positive thoughts specifically? Are they just winning or tactics?

P1: I don't really think about the winning yet, just thinking about how fit im feeling and how much I've been training for it

CE: What demands are you faced with both physically and mentally at this point?

P1: I start feeling a bit tired at this point, I don't know why I think it's just all the nerves getting to me making me feel a bit tired.

CE: What about mentally?

P1: Ye I also feel mentally drained...as the time progresses though I start peaking, but at this point im feeling mentally and physically tired.

CE:Is this a good or bad thing at this point?

P1: At this point I feel it's necessary to feel this way. It's a way of my body preparing me for the fight I will be having shortly.

CE: So what coping techniques are using at this point?

P1: Just relaxing, staying away from the ring, staying away from the boxing...just chilling and having a laugh with my friends and the boys from the gym...Just keeping my mind off things

CE: Why would you say this is helping you cope with your stress most effectively?

P1: Just because it's taking my mind off things that I shouldn't be worrying about....Keeps my mind on the present and stops me thinking about things like getting knocked out or something like that ye.

CE: Anything else you would like to discuss about the hour before competition?

P1: No that's it

CE: Right, now were going to discuss the 45 minute period before competition and see if there's any changes to your stress and coping strategies during this stage. So what are you thinking about now?

P1: my nerves are getting a little worse now...sort of like...im finding it hard to sit down I wanna be on my feet doing something. Im feeling anxious and the adrenaline has started kicking in

CE: So what are the main changes to your mental and physical state from 15 minutes before?

P1: more anxious, more fidgety.....Just getting up moving around

CE: would you say the tiredness you had 15 minutes before is starting to go now?

P1: I still feel tired...Well I feel mentally tired still but physically I feel a lot more hyped up.

CE: Any changes to the environment at this stage?

P1: Were still away from the boxing environment...In a quiet place away from everyone with the boxers from the gym and my coach.

CE: At this point what are you trying to do to cope with your physical hype?

P1: Just having a laugh with the boys...Talking to the coach because he's a positive person...he's good at keeping us relaxed and just keeping morale high....making us feel good.

CE: So lets talk about 30 minutes before competition. Youre now only 30 minutes away, lets talk about how your feeling now and what demands your faced with.

P1: Physically now im starting to get more prepared....Im also preparing my mind more now...like knowing now its definitely going to happen because maybe previously on the way up in the car I was doubting if the fight was going to happen because maybe the guy wasn't going to turn up or something...so now im really starting to channel my focus because I know the fight is going to happen.

CE: Ok, so now you know the fight is definitely going to happen, are you physically warming up yet?

P1: Maybe a light bit of warming up, like a light jog or something...But theres still about 3 fights in front of mine. I would get my kit on now, my vest, shorts and boots and just start doing some light shadow boxing aswell.

CE: So, are you still using the same coping strategies as you were an hour and 45 minutes before or have they changed?

P1: I start coming across now more confident more energetic. Shoulders up...feeling bigger and stronger....This is making me feel more confident.

CE: You were saying previously an hour before, you were trying to stay relaxed, has this changed now?

P1: YE definitely, im trying to be more active now and channel all my focus on the fight now...I want to transfer my relaxed mood to an active mood and be more prepared.

CE: Can you remember any surroundings at this stage that made you feel at all relaxed or even anxious?

P1: Ye at this point we are still in a quiet room, a quiet place...just away from anybody and its just the boxers from the gym and my coach...we couldn't see anybody and its made me feel more relaxed...and because im with my friends and coach it makes me feel like im not alone in this because it can be quite a lonely time.

CE: Could you see the opponent?

P1: No

CE: Is that a good thing or bad thing?

P1: good thing because I don't want to see him until I meet him in the ring

CE: Ok, good. Now were in to the final minutes before competition. Could you tell me about your final bit of preparation?

P1: We start going in to more specific game plan things. Talking about the tactics to do throughout the fight...the coach will take me on the pads and run through things he wants me to do during the fight...and he will be holding the pads and getting me working at the tempo he wants me to work at and giving me a few slaps on the pads

to make sure my guard is ready...ye and giving me positive talk like giving me positive feedback about my fitness and telling me im looking sharp on the pads...Just reminding me how good im looking.

CE: So at this point your coach is giving you positive feedback and also physically warming you up by giving you a few slaps with the pads. And this is helping you cope?

P1: ye definitely, it gives me more confidence when he gives me a few slaps on the pads knowing that I can take them on the guard...I know my defence is ready then....He will also talk down the opponent which will give me more confidence

CE: So by talking the opponent down it makes you feel better and gives you more confidence?

P1: YE! I then feel im better than him and boosts my confidence...and I know I can definitely win.

CE: Ok, So what is running through your mind in this final stage?

P1: To be honest I don't feel as anxious as I did in the previous stages...I feel like, I feel calmer...I feel more ready now as well after physically preparing and my coach giving me advice.

CE: Are there any negative thoughts going through your mind at this stage?

P1: Ye the only concern for me at that time is the crowd...because as I get closer to the contest the crowd becomes more of a part in my mind.

CE: What negative thoughts about the crowd were you thinking about?

P1: Just because it was away....how hostile they were going to be and sometimes they swear and shout because there drunk and they've all been drinking and stuff like that...you just don't know how they were going to react

CE: Could you tell me how you coped this close to the fight?

P1: Just tried to keep focused on the opponent...Keep my mind towards the fight...just listen to everything the coach is saying to me and take all of his advice on

board. But the most important I feel is the physical preparation and going through the tactics to do during the fight.

CE: Did the surroundings you were in have any effect on mental and physical state?

P1: It did, because we were in a nice hotel in Cardiff...and the place didn't really have an intimidating feeling about it like some of the places I have boxed in previously...so mentally it helped me feel more relaxed.

CE: Ok, so we are now going to discuss the final section which is entering the ring. This is an important section of the pre-competition time scale because you are seeing the crowd for the first time and all the attention and focus is on you and your opponent. As you are entering the ring, what is your reaction to it?

P1: I feel a sense of excitement, ye a lot of excitement from all the attention of the crowd....there was music playing so I felt a bit of buzz from the music.

CE: Specifically, all the attention and hype from the crowd, what was your reaction to it?

P1: It didn't bother me at this stage....I was more anxious about it when I was thinking about it previously when I was waiting because I was overthinking and thinking it would be a lot worse then it actually was.

CE: So the reality of it wasn't as stressful as you thought?

P1: YE. Definitely.

CE: So seeing the crowd for the first time, how do you cope with these new surroundings and demands as you have come from a quiet room with just you and your coach to an arena full of people watching you?

P1: I just like try and stay focused on my opponent because I can see him now...not like trying to pay attention to the crowd and my opponents crowd who are cheering for him...Ye basically just blocking out the crowd.

CE: Were there any distractions that specifically stood out from the crowd?

P1: just some of the opponents crowd...One of them shouted to me 'make sure you keep your hands up' I don't know whether that was a psychological thing to try and

put me off, trying to say he can bang a bit...but my coach straight away just said ignore it...but ye that stood out a bit.

CE: So, what was the one main demand that you were faced with during your entrance to the ring? The demand that stood out the most

P1: It was definitely seeing my opponent for the first time in his vest and shorts...there was a sense of like...there's a danger presence and that you will shortly be having a fight with this guy...and that it's all real now and going to happen.

CE: Ok, now I want to talk about your opponent. Have you any knowledge of this opponent previous to your fight?

P1: My coach has said to me he isn't very good....he's had 1 fight and lost 1 fight. Ye and basically just playing him down to me.

CE: did this help your mental preparation?

P1: ye definitely, it helped my confidence because it was all positive.

CE: Ok, so knowing that he's weaker than you that gave you more confidence?

P1: Ye that's my belief anyway

CE: Is there any pressure on you that you should win it then?

P1: Ye I suppose it can work both ways, it makes me feel ye I can beat this guy because he's not as good as me, but also it makes me feel pressure because if I don't beat him and hes not that good then that means obviously I'm not that good.

CE: ok, Could you tell me at what stage during the pre-competition phase that we have looked at throughout, did you start really thinking about what you specifically need to do to beat this opponent?

P1: I started thinking about using my jab a lot throughout the fight because I knew his guard wasn't very tight so I felt I could beat him with the jab

CE: Ok, so at what phase did you really start thinking about these tactics?

P1: during the pad work 15 minutes before the fight

CE: Ok so 15 minutes before you really started focusing on the tactics to specifically beat this opponent?

P1: Yes

CE: Ok good, lets talk about performance problems then. Were you thinking about performing poorly or not living up to your own expectations?

P1: Ye definitely I did tend to worry about that. I was also quite worried about letting my friends down and my coach down. I know it's an individual sport but at the end of the day we go to these fights as a team and going up there to win for the club so I carry a bit of pressure from that. And I also didn't want to come out of the ring thinking 'I could have performed better or done more to win'.

CE: So at what stage on the time scale do you mostly think about these demands in the pre competition phase we have discussed?

P1: Probably about 45 minutes prior to the fight would be the most nervous time and when I think about letting myself down. Other than that were keeping occupied like, getting ready, doing pad work and warming up, so I'm keeping my mind channelled and focused on something else. But 45 minutes I have to deal with my emotions and...its still like...the worries are still going on in my mind.

CE: And would you say this continues all the way until you get to the ring?

P1: No I think it changes...like when I start doing pads and warming up I'm thinking about that instead of thinking about the worry's

CE: So you're saying you're concerned about letting yourself down about 45 minutes before competition but then it starts to go when you warm up about 15 minutes before?

P1: Ye it changes to adrenaline then and those worries start to go

CE: Ok good, if you feel you have not trained enough for the fight, does that cause you stress before competition?

P1: Definitely, I started doubting myself, I know I'm not ready for the fight so I start thinking I'm not gunna win...I just feel really negative about myself...and I start thinking that the opponent is better than they actually are.

CE: Ok so when do you feel these emotions in the time scale?

P1: Probably about 45 to 30 minutes before competition and then I start channelling my focus through my warm up and pad work so it starts to go.

CE: Did the importance on your fight last night have a role on your stress and your pressure to win?

P1: Yes, I did not expect the fight to have been so important to me than it actually was. I was just going up there to have a bout, I did not expect to have all the other influences there such as the importance of the people in the crowd and how nice the venue was.

CE: So when during the pre-competition phase did these factors hit you and you felt there importance the most?

P1: Urm, I probably found out about these famous people watching an hour before and I also seen the fight order and noticed then I was topping the bill so ye an hour before competition these factors really hit me.

CE: Do these factors leave your mind at all?

P1: They were still in the back of my mind but not as apparent as they were an hour before.

CE: Ok good, now were going to talk about the coach's role, Could you tell me about your relationship with your coach?

P1: Ye I have quite a friendly relationship with my coach...Its different to just a coach role...he takes on a friend role as well.....like we go for a coffee and sometimes go for a pint after my fights.

CE: Explain how your coach helped you with your mental preparation in the pre competition phase?

P1: Just by supporting me by giving me positive talk telling me how good I'm looking and I'm going to win....Putting positive across to me and he put his own self-belief across to me

CE: At what stage during the build-up did your coach help you the most in terms of dealing with the demands you were faced?

P1: Probably in the final 15 minute stage, when I was one on one with him and he's taking me on the pads and talking through the game plan and talking me up basically....That when he really showed his confidence in me and that gave me confidence.

CE: Would you say your coach plays a big role in your preparation during the hour before competition?

P1: Yes, because the strategy we use were we stay away from the fighting and everyone around us is something that he use to do as a boxer so he's passing on his experience

CE: So was he a boxer himself?

P1: Yes he was a very successful boxer himself so that's why it's so good to have him there because he's been there and done it himself.

CE: Ok, now were going to look at the competitive environment. So why do you like to stay away from the competitive environment before competition?

P1: Just to keep my mind off it...if I start to think about it too soon, my mind starts to worry about other things and being in the competitive environment forces me to think about the fight.

CE: In the competitive environment there is obviously a big crowd there. Does it play a big role on your physical and mental state?

P1: Ye, the fight last night there was a hostile crowd, there were lots of drunk people in the crowd swearing and shouting stuff so that was playing on my mind on occasions before the fight.

CE: At what stage during the hour before the fight do you start thinking about the crowd?

P1: Is that during the fight?

CE: No, during the hour before.

P1: I start thinking about the crowd as soon as I see it when I arrive for the weigh in

CE: At what stage are you thinking about it the most?

P1: From an hour before up till half hour before

CE: And whys that?

P1: I dunno, I just get to terms with it by then and realise what I'm up against now...and also my warm up and pad work takes my mind off it.

CE: Do you think about entertaining the crowd or performing for them?

P1: Not really at the away show like last night because I don't know them so I don't really care what they think really. I'm just mostly focused on winning.

CE: could you tell me about any superstitions before your fight?

P1: No, I don't really have any superstitions I just make sure I have a good night's sleep the night before my fight

CE: Ok good. So we have covered a lot of areas related to your sources of stress and coping strategies previous to competition. Is there anything you would like to add?

P1: No I think we have covered everything.

CE: As a boxer, what advice would you give to aid other novice boxers and help them cope with these demands previous to competition?

P1: Ye just keep your mind on the present, try not to think about the fight too much prior to competition....try to take on a positive stance. Walk confidently with your shoulders back and head held high and that will make you feel more confident.

CE: Good, How do you think the interview went?

P1: Ye really well

CE: Do you feel everything has been covered and you were able to tell a full story of your fight last night?

P1: ye definitely and there was a good choice of questions

CE: Have you any comments of the interview or any good questions?

P1: No nothing

CE: OK, thank you very much for your time and helping with me with my study

P1: Cheers



# CARDIFF METROPOLITAN UNIVERSITY PARTICIPANT CONSENT FORM

**Title of Project: THE SOURCES OF STRESS IDENTIFIED BY RUGBY HOOKERS  
AND THE COPING STRATEGIES USED TO MAINTAIN OR ENHANCE PERFORMANCE**

Name of Researcher: Simon O'Leary

Participant to complete this section:  
Please initial each box.

I confirm that I have read and understand the information sheet dated ..... for the above project. I have had the opportunity to think about the information, ask questions and have had these answered adequately.

I understand that my participation in this study is voluntary and that it is possible to withdraw at any time, without giving a reason and without my relationship with Cardiff Metropolitan University being affected.

I understand that all personal information about me will be kept confidential.

I understand that the data collected from the study may be used in the final research; however I understand that these will be used anonymously.

I agree to take part in the above project.

Name of Participant

Date

\_\_\_\_\_

\_\_\_\_\_

Signature of Participant

\_\_\_\_\_

Name of Researcher

Date

\_\_\_\_\_

\_\_\_\_\_

Signature of Researcher

\_\_\_\_\_

## Appendix E1- Ethics status

When undertaking a research or enterprise project, Cardiff Met staff and students are obliged to complete this form in order that the ethics implications of that project may be considered.

**If the project requires ethics approval from an external agency such as the NHS or MoD,** you will not need to seek additional ethics approval from Cardiff Met. You should however complete Part One of this form and attach a copy of your NHS application in order that your School is aware of the project.

The document ***Guidelines for obtaining ethics approval*** will help you complete this form. It is available from the [Cardiff Met website](#).

Once you have completed the form, sign the declaration and forward to your School Research Ethics Committee.

### PLEASE NOTE:

**Participant recruitment or data collection must not commence until ethics approval has been obtained.**

### PART ONE

Name of applicant:	Calum Evans
Supervisor (if student project):	Richard Neil
School:	School of Sport
Student number (if applicable):	St20001036
Programme enrolled on (if applicable):	SPE
Project Title:	sources of stress and coping strategies experienced by novice amateur boxers previous to competition
Expected Start Date:	23/09/2013
Approximate Duration:	7 months
Funding Body (if applicable):	
Other researcher(s) working on the project:	None.
Will the study involve NHS patients or staff?	No
Will the study involve taking samples of human origin from participants?	No

In no more than 150 words, give a non-technical summary of the project

This study will look at the sources of stress and coping strategies used by novice amateur boxers during the arrival to the venue and one the one hour stage previous to competition. There is limited previous research concentrating on novice amateur boxing and the little research that has been found within the sport tends to focus on the professional game. By doing this study I hope to further the knowledge and understanding of amatuer boxers and coaches and what are the most common sources of stress and the coping strategies used to counteract these demands.

Does your project fall entirely within one of the following categories:

Paper based, involving only documents in the public domain	No
Laboratory based, not involving human participants or human tissue samples	No
Practice based not involving human participants (eg curatorial, practice audit)	No
Compulsory projects in professional practice (eg Initial Teacher Education)	No

If you have answered YES to any of these questions, no further information regarding your project is required.

If you have answered NO to all of these questions, you must complete Part 2 of this form

**DECLARATION:**

**I confirm that this project conforms with the Cardiff Met Research Governance Framework**

Signature of the applicant:  
C. L. EVANS

Date: 11/4/13

**FOR STUDENT PROJECTS ONLY**

Name of supervisor:

Date:

Signature of supervisor:

**Research Ethics Committee use only**

Decision reached:

- Project approved
- Project approved in principle
- Decision deferred
- Project not approved
- Project rejected

Project reference number: [Click here to enter text.](#)

Name: [Click here to enter text.](#)

Date: [Click here to enter a date.](#)

Signature:

Details of any conditions upon which approval is dependant:  
[Click here to enter text.](#)

## PART TWO

A RESEARCH DESIGN	
A1 Will you be using an approved protocol in your project?	Yes
A2 If yes, please state the name and code of the approved protocol to be used <sup>3</sup>	
Interviewing Participants 6.1.1.	
A3 Describe the research design to be used in your project	
Data will be collected by interviewing 6 participants that have a fighting experience of between 1-10 fights. The interview will be a semi- structured following the interview procedure may differ between participants. The questions asked will be open ended questions breaking the interview up into two sections. The first section looking at the stressors they faced within the arrival to venue and one hour previous to competition and the second section looking at the coping strategies utilised by the participants to maintain or enhance performance. The participants will be sent the interview questions 2 days prior to the actual interview to give them time to get familiar to the questions that will be directed to them. An information sheet and consent form will be provided to each participant and will be needed to be completed before taking part. Interviews will be analysed using verbatim transcription.	
A4 Will the project involve deceptive or covert research?	No
A5 If yes, give a rationale for the use of deceptive or covert research	
Click here to enter text.	

B PREVIOUS EXPERIENCE
B1 What previous experience of research involving human participants relevant to this project do you have?
None.
<b>B2 Student project only</b> What previous experience of research involving human participants relevant to this project does your supervisor have?
Written many journals himself.
C POTENTIAL RISKS
C1 What potential risks do you foresee?
Common risks involved in taking part in boxing
C2 How will you deal with the potential risks?
Choose participants between the ages of 16-28

When submitting your application you **MUST** attach a copy of the following:

- All information sheets
- Consent/assent form(s)

Refer to the document ***Guidelines for obtaining ethics approval*** for further details on what format these documents should take.

<sup>3</sup> An Approved Protocol is one which has been approved by Cardiff Met to be used under supervision of designated members of staff; a list of approved protocols can be found on the Cardiff Met website here

