# CARDIFF SCHOOL OF SPORT

**DISSERTATION ASSESSMENT PROFORMA:**

**Empirical**

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### Comments

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<td><strong>Title and Abstract</strong></td>
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CARDIFF METROPOLITAN UNIVERSITY
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CARDIFF SCHOOL OF SPORT

DEGREE OF BACHELOR OF SCIENCE
(HONOURS)

SPORTS COACHING

EXPERIENCE IN RUGBY UNION AND ITS
RELATIONSHIP WITH COMPETITION STRESS
AND COPING RESPONSES

(PSYCHOLOGY)

LEIGHTON BELLAMORE

ST10001296
EXPERIENCE IN RUGBY UNION AND ITS RELATIONSHIP WITH COMPETITION STRESS AND COPING RESPONSES
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgements</td>
<td>i</td>
</tr>
<tr>
<td>Abstract</td>
<td>ii</td>
</tr>
<tr>
<td><strong>CHAPTER ONE: INTRODUCTION 1.0</strong></td>
<td></td>
</tr>
<tr>
<td>1.0 - Introduction to the Study</td>
<td>1</td>
</tr>
<tr>
<td><strong>CHAPTER TWO: LITERATURE REVIEW 2.0</strong></td>
<td></td>
</tr>
<tr>
<td>2.1 - Defining Stress</td>
<td>4</td>
</tr>
<tr>
<td>2.2 - Stressors</td>
<td>6</td>
</tr>
<tr>
<td>2.3 - Appraisals</td>
<td>9</td>
</tr>
<tr>
<td>2.4 - Appraisals and Emotions</td>
<td>11</td>
</tr>
<tr>
<td>2.5 - Stress and Coping</td>
<td>13</td>
</tr>
<tr>
<td>2.6 - Stress and Experience</td>
<td>14</td>
</tr>
<tr>
<td>2.7 - Rationale and Purpose of Study</td>
<td>15</td>
</tr>
<tr>
<td><strong>CHAPTER THREE: METHODS 3.0</strong></td>
<td></td>
</tr>
<tr>
<td>3.1 - Participants</td>
<td>17</td>
</tr>
<tr>
<td>3.2 - Data Collection</td>
<td>17</td>
</tr>
<tr>
<td>3.3 - Data Analysis</td>
<td>19</td>
</tr>
<tr>
<td>3.4 - Trustworthiness</td>
<td>20</td>
</tr>
<tr>
<td><strong>CHAPTER FOUR: RESULTS 4.0</strong></td>
<td></td>
</tr>
<tr>
<td>4.0 - Introduction to Chapter</td>
<td>23</td>
</tr>
<tr>
<td>4.1 - Stressors</td>
<td>23</td>
</tr>
<tr>
<td>4.2 - Appraisals</td>
<td>32</td>
</tr>
<tr>
<td>4.3 - Emotions</td>
<td>37</td>
</tr>
<tr>
<td>4.4 - Coping</td>
<td>38</td>
</tr>
<tr>
<td>4.5 - Experience</td>
<td>42</td>
</tr>
<tr>
<td><strong>CHAPTER FIVE: DISCUSSION AND CONCLUSION 5.0</strong></td>
<td></td>
</tr>
<tr>
<td>5.1 - Aims of Study</td>
<td>45</td>
</tr>
<tr>
<td>5.2 - Stressors</td>
<td>46</td>
</tr>
<tr>
<td>5.3 - Appraisals</td>
<td>48</td>
</tr>
<tr>
<td>5.4 - Emotions</td>
<td>49</td>
</tr>
<tr>
<td>5.5 - Coping</td>
<td>50</td>
</tr>
<tr>
<td>5.6 - Experience</td>
<td>52</td>
</tr>
<tr>
<td>5.7 - Practical Implications</td>
<td>52</td>
</tr>
</tbody>
</table>
5.8 - Strengths, Limitations and Future Directions for Research 53
5.9 - Conclusion 55

REFERENCES 56

LIST OF FIGURES

STRESSORS
1: Performance Stressors – Internal and External Expectations 27
2: Performance Stressors – Injury and Preparation 28
3: Performance Stressors – Opposition 28
4: Performance Stressors – Self-presentation 29
5: Organizational Stressors – Factors intrinsic to Rugby Union 30
6: Organizational Stressors – Athletic Career and Performance Development issues 31

APPRAISALS
7: Primary Appraisals 33
8: Secondary Appraisals 34
9: Reappraisals 35

COPING
10: Problem-focused Coping 39
11: Emotions-focused Coping 40
12: Avoidance Coping 41
ACKNOWLEDGEMENTS

I would firstly like to thank Dr. Rich Neil for his guidance and support through this whole process, it is greatly appreciated. Thank you to Dragon Crossfit for their support in terms of finding experienced participants and the use of their facilities to record the interviews. Thank you also to the Professional Rugby Union players who offered their time to take part in this study.
ABSTRACT

The present study aimed to explore the relationship with competition stress and coping responses in its entirety between experienced and inexperienced rugby union players (2 experienced, 3 inexperienced). Participants were interviewed about their previous experiences pre, during and post competitive games. The results indicated that experience doesn't influence each stage of the stress process a great deal revealing the theme of injury as the only different stressor encountered by the experienced athletes. It provides support for previous literature that certain positions within rugby union have specific performance indicators, as a result experience unique stressors. It also indicated that experienced athletes are more familiar with the stressors they encounter; therefore appraise the stressors as less harmful. Although the findings do highlight that experience does influence the coping process. Avoidance coping was employed more by the inexperienced athletes suggesting experienced athletes are more functional and more efficient when coping. Additionally results revealed that experienced athletes used simulation training in order to cope with stressors but both groups identified that they need time in their training schedules to do so, therefore coaches should give a specific amount of training time to the individual within training session so they can focus on individual stressors that they encounter, in training. Future research should continue to adopt a holistic approach and adopt a specific timescale like the one used within this study when exploring the stress and emotion process. This will gain a more in depth understanding of athlete’s stressful experiences at certain times of competition.
CHAPTER ONE
INTRODUCTION
1.0 Introduction to the Study

Rugby union became a professional sport in 1996/97 season in the United Kingdom and Ireland. Since the game turned professional the demands on rugby union players have increased (Nicholls et al., 2006). In modern day sports there is lot of expectation placed on the performers by themselves and the environment in which they operate within, from both performance and organizational aspects (Scanlan, 1991; Mellalieu et al., 2009; Woodman and Hardy, 2001). Therefore it is inevitable that rugby union players will experience several demands (stressors), thoughts (appraisals) and feelings (Emotions). This process that the players experience is called the stress process, all stages within it could have facilitative or debilitative impacts on their performance (Nicholls and Pollman, 2005; Nicholls and Holt, 2006; Lazarus, 2000). Due to the debilitative effects the stress process can have on an athlete’s performance previous research has aimed to further knowledge of the stress process. However the majority of these studies have only focussed on one stage of the stress process, according to Neil et al. (2007) studies that consider the stress and emotion process as a whole will provide a more detailed insight into the stress experiences of athletes.

For players to stay on top of their game, it is essential that they are able to cope effectively with the stress and emotions they experience within the competitive environment (Lazarus 1999, 2000 and Folkman, 1992), otherwise failure to cope with the stressors experienced can carry serious consequences (Jarvis, 2006), one of these consequences could be a decrease in performance. Consequently, an understanding of the coping strategies performers’ use whom are within the elite population, competing at the professional level for longer might be essential to investigate for other athletes, practitioners and coaches to compare the difference to performers who have not been competing at professional level for as long.
CHAPTER TWO
LITERATURE REVIEW
2.0 Literature Review

2.1 Defining Stress

Various definitions of stress have been designed due to more researchers investigating the area. These include the notion of stress as an environmental variable and a person’s response to that variable, as a cognitive-emotional reaction as a result of a person’s interaction with the environment and an ongoing transaction between environmental demands and a person’s resources (Neil, Fletcher, Hanton and Mellalieu, 2007).

Traditionally the Stimulus and Response perspective was formed to explain the process of stress as an environmental variable (the stimulus) acting upon the individual, and the body’s response to that environmental variable or stimulus. (Lazarus, 1999). However, this perspective does not consider any individual differences. For example - certain individuals could react differently to others if they encounter the same stimulus. In addition it views stress as a stimulus or a response, therefore focuses on separate variables as opposed to a relational process (Neil et al., 2007).

Due to the limitation of the stimulus and response outlook, a diverse viewpoint was formed called the Interactional perspective. Through this perspective stress was viewed as an end product of the interaction between the individual and the environment, with the interaction described in terms of some imbalance between the person and the environment, which gives rise to cognitive-emotional reactions (Fletcher, Hanton, and Mellalieu 2006; Neil et al., 2007; Cooper, Dewe and O’Driscoll., 2001). Although it provides an improved understanding of the relationship between these components, it fails to provide an explanation for the underlying mechanisms that underpin an individual’s response to a stressor (Neil et al., 2007).
These two definitions of stress have framed the research, therefore different research approaches have been adopted and different research questions have been asked. The knowledge that has accumulated from the research using these two definitions as the framework has provided researchers to form a new debate about the future directions about how stress should be defined (Cooper et al., 2001; Cooper and Dewe., 2004). Kaplan (1996) Suggested to achieve a better understanding of the mechanisms underpinning stressful encounters, which is a limitation with the interaction perspective, researchers should pay greater attention into the processes accompanying stress and the sequence of events which culminate in stressful experiences, rather than exploring single variables of the process which the stimulus and response perspectives adopts. This suggestion is reinforced by the transactional perspective formed by Lazarus (1998, 1999, 2000).

Lazarus (1991; Lazarus and Folkman, 1984) introduced the transactional perspective viewing stress as a result of an imbalance between the demands from the environment and a person’s resources he or she has to cope with the demand (Aldwin, 2007). This definition was derived from contemporary theory that views stress not as a variable that resides in either an individual or the environment, but rather as a relationship between the two also referred to as relational meaning (Cooper, Dave and O’Driscoll., 2001). The notion of relational meaning formed by Lazarus (1998, 1990) explains how the combination of environmental demands and personal characteristics influence how the individual perceives, copes and their behaviour towards a stressful encounter which results in the individual ascribing a meaning to the encounter (Neil et al., 2007). This theory has had a significant influence over the direction of the stress research as it gives a better understanding of performers’ experiences of competition stress.

Given the transactional perspective of stress, a new improved definition of stress can now be formed from reflecting upon the conceptual progressions of the stress research. Neil, Fletcher, Hanton and Mellalieu (2007) who
reconceptualised competition stress in sport performers and drew attention to conceptual issues within the competition stress area defined competition stress as, “an on-going transaction between an individual and the environmental demands associated primarily and directly with the competition within which he/she is operating” (Pp. 27).

2.2 Stressors

The stress process begins with the experience of a demand (also known as a stressor). Competition stressors have been defined by Neil et al. (2007) as the environmental demands (stimuli) associated primarily and directly with the competition which an individual is operating. Studies have focussed on finding the range of stressors athletes face during the competition environment (e.g. Gould, Jackson, and flinch, 1993; Holt & Hogg, 2002 and Noblet and Gifford, 2002). However Fletcher et al. (2006) identified that the research on stressors labelled performers’ cognitive and emotional responses to a stressful encounter as sources of stress rather than consequences of stress. Hanton, Neil and Mellalieu (2008) highlighted examples of where this has happened within the research: treated unfairly by the coach (Anshel and Sutarso, 2007), negative thoughts (Dugdale et al., 2002), and anxious about defending because we are anxious to protect the goal (Holt & Hogg, 2002).

In addition to this conceptual issue, research highlighted that the early stressor investigations did not consider where stressors originate (Scanlan, 1991; Mellalieu et al., 2009; Woodman and Hardy, 2001) that is whether they come from performance or organizational sources.

In the results of Mellalieu et al. (2009) study they formed a framework to categorize where performance stressors come from, they were; preparation, injury, expectation, self-presentation, and rivalry. Whereas Organizational stressors in sport derive from the organization within which the individual is operating (Woodman and Hardy, 2001). The main sources of organizational stress within a competitive sporting context were identified in Hardy and Woodman (2001) study which were; selection, training
environment, finances, nutrition, injury, goals and expectations, coaches and coaching styles, team atmosphere, roles, support network, and communication. These sources of organizational stress differ from the performance stress sources as they are not directly related to the upcoming performance, but are related to the organization within which the individual operates. The results of the study highlighted a new route in which psychologists need to research in, as the participants from Woodman and Hardy’s (2001) made reference to organizational stressors that accounted for a significant percentage of performance variance. However a limitation of the study was that the participants used were from one sport, therefore the results could not be representative to other sports.

Due to the limitation within Woodman and Hardy’s (2001) study, Fletcher and Hanton (2003) extended this research on organizational stress in elite sport and used participants from a variety of different sports. The findings enhanced validity for both studies as the main sources of organizational stress were identical. However Fletcher and Hanton’s (2003) study identified three additional sources of stress, Accommodation, Travel and the Competition Environment which can cause unwanted distraction which could be detrimental to performance. Another finding from the study was that elite performers experience and recall more demands associated primarily and directly with the sport organization than with the competitive performance (Fletcher and Hanton, 2003). Although both studies point out that even though the performer might experience negative emotions, it is not inevitable to have a detrimental effect on performance because some organizational stress can be tolerated or even be beneficial to performance (Eysenck and Calvo, 1992; Jones and Hanton, 2001 and Mahoney and Avener, 1977). As well as this, both studies suggest psychologist consultants need to develop and acquire new competencies to deal with the causes of organizational stress, because the psychological skills training which is heavily on the agenda of most psychology courses is unlikely to be particularly helpful in the resolution of many issues that these studies have highlighted (Woodman and Hardy, 2001; Fletcher and Hanton, 2003). Although this study has given more validity into the research on organizational stress it fails to compare the stressors
therefore organizational stressors might affect the athlete’s performance more than competitive stressors.

Hanton, Fletcher and Coughlan (2005) therefore did a comparative study of competitive and organizational stressors. Their findings support Fletcher and Hanton (2003) premise that elite athletes experience (and recall) more demands associated with the sport organization that with the competitive performance. As well as this, the stressors identified compare with those highlighted in previous literature, therefore enhances the validity of the stressor research. They furthered the research from their results identifying safety as a new theme that emerged from the study, due to the world’s political and sociocultural climate, this shows that psychologists must continue to expand their work to meet the demands of the ever changing environment. A limitation of the (2005) study was that it looked at the general stressors that athlete’s face, not the stressors they face within the competitive environment it also only considered the elite population.

Mellalieu, Neil, Hanton and Fletcher (2009) consequently looked at stressors experienced within the competitive environment by elite and non-elite performers. Their results show that both organizational and performance demands were experienced in the lead up to competition, although more performance stressors were experienced prior to performance by both groups of performers. They found that some demands were unique or common to each group; these unique differences demonstrate that practitioners need to be aware that athletes from different competitive skill levels may experience different stressors. It complements previous literature that organizational and performance demands are prominent features of performers lives leading up to competition.

Due to the findings of the (2009) study, Fletcher, Hanton, Mellalieu and Neil (2012) study aimed to further the research on organizational stressors within the competitive environment between the elite and non-elite population. Their findings complement the previous research that both the elite and non-elite population reveal a number of noteworthy differences again suggesting that practitioners should be cognizant of and sensitive to the organizational stressors encountered by performers of varying abilities. Although their findings differ from the (2009) study as the elite population encountered
proportionately more organizational stressors than their non-elite counterparts. A limitation of both the (2009) and (2012) study is that they fail to investigate performers emotional and behavioural responses to the stressors encountered.

In spite of the limitations within the stressor research, it has unquestionably advanced our understanding of the varying demands athletes face within the competition environment. However the stressor research has not considered that athletes may appraise and respond differently to the same type of stressor, and the impact the stressor could have on athletic performance (Thatcher and Day, 2008).

2.3 Appraisals

The coping process following a stressful event has been portrayed as an individual’s cognitive appraisal of the stressor, followed by using a coping strategy in an attempt to reduce the stressors perceived intensity, or by using an individual’s resources or abilities to deal with it (Lazarus and Folkman, 1984). Cognitive Appraisal is a concept which is central to the transactional perspective of stress formed by Lazarus (1998, 1999, 2000). The concept refers to how an individual evaluates their transactions with the environment. People are constantly trying to balance out the demands with the resources they have to cope with that demand, however if they fail to do so stress and stress-related consequences will result and have a potential effect on ones well-being due to the transactional alternatives which are harm/loss, threat and challenge. (Lazarus, 1999)

Lazarus (1991; Lazarus and Folkman, 1984) posited that there are two kinds of appraisal that work interdependently, Primary and Secondary appraisal. Primary appraisal has to do with whether any given transaction is relevant to the individual’s values, beliefs, goal commitments and situational intentions (Lazarus, 1999). Secondary appraisal refers to an individual evaluating what coping options he/she has to be able to deal with a stressful person-environment relationship (Lazarus, 1966, 1999; Dewe, 1993). The environmental variables that can have influence over a person’s appraisal are
situational dimensions, such as novelty-familiarity; predictability-unpredictability; clarity of meaning-ambiguity; and temporal factors, such as imminence, timing and duration.

It is evident, therefore, that appraisals of stressors have a significant role within the stress process, because whether or not athletes experience stress or stress-related consequences solely depends on their cognitive appraisal of the situation and their available coping responses (Dugdale, Eklund and Gordon, 2002). If an individual appraises the transaction with no stake in ones well-being in any given transaction, stress and emotion will not occur (Lazarus, 1999). Therefore coping is not required as the transaction has not been appraised to have potential in harm/loss, threat or challenge (Anshel and Delany, 2001).

Due to the significant role appraisals play within the stress process, more researchers have aimed to advance the understanding of appraisals within the sports performers (e.g Dugdale et al., 2002; Giacobbi et al., 2004; Nicholls et al., 2005, 2006; Thelwell et al., 2007; Thatcher, and Day, 2008). This research has demonstrated that the stress process is vastly individual in the sense that performers appraise things differently to others. For example, Dugdale et al. (2002) identified that athletes appraised unexpected stressors as more threatening as opposed to expected stressors. Thus, from a practitioners perspective by developing coping strategies for dealing with unexpected stressors will help athletes who are prone to making threat appraisals. However Dugdale et al. (2002) study is on athletes competing at a major international as opposed to this study being on professional athletes from other sporting disciplines, which could affect how individual's appraise stressors. Similarly, Thatcher and Day (2008), examined the appraisal of the underlying properties proposed by Lazarus and Folkman (1984) and assessed their relevance to the sporting context. The properties of novelty, predictability, event uncertainty, imminence, duration, temporal uncertainty, ambiguity, timing in relation to life cycle, self and other comparison, and inadequate preparation were found to have relevance because at least one
underlying property must be present in order for an individual to appraise a transaction as stressful.

Although these studies have advanced our knowledge and understanding of appraisals within a sporting context, Fletcher and associates (i.e., Fletcher et al., 2006; Hanton et al., 2008; Mellalieu et al., 2006 and Neil et al., 2007) highlighted a key limitation within these studies that although they adopt the transactional outlook on the stress process, they have only examined part of the process and have not considered the emotional and behavioural responses of athletes.

2.4 Appraisals and Emotions

It is important to understand emotion within the stress process as researchers agree that emotions can influence aspects of performance because of changes in an individual’s physical and cognitive functioning (e.g., appraisals), along with motivation levels (Botterill and Brown, 2002; Jones, 2003; Lazarus, 2000 and Uphill et al., 2009). Lazarus’ (1991) cognitive-motivational-relational theory of emotion (CMRT) which is a progression of the transactional theory of stress that concludes in the expression of emotion that resides in the individual via thoughts, physical sensations and behaviours. Therefore emotion is considered as an essential part of the transactional stress process as an individual has experiences emotion from appraising the stressor. CMR theory provides a framework for research into emotions. According to the CMR theory, emotions occur when an individual appraises (cognitive) a transaction with his/her environment as either positive or negative and its relevance to their goals, values and beliefs (motivation). Therefore an individual’s emotional responses are shaped by the process of appraisal (Lazarus 1991, 1999)

Lazarus (1999) directed researchers away from the assumption that the occurrence of stress is associated with only negative emotions, but was
also associated with positive emotions such as happiness and pride. Consequently, an individual’s thoughts dictates the way they feel. There are three components that are central to this theory, motivation, appraisal and coping. These components are used to generalize the eight emotions applicable to competitive sport. These include, anger, anxiety, guilt and shame, relief, happiness and pride.

Lazarus (2000) outlined as being particularly relevant to sport into core relational themes. The core relational themes act as precursors to discrete emotions, for example, Lazarus (2000) describes anxiety as “facing uncertain, existential threat” in comparison Happiness is described as “making reasonable progress toward the realization of a goal”, they essentially describe an assessment of the significance of what is happening to a person in a given situation (see Thatcher, Jones and Lavalle, 2004). The CMR theory portrays how athletes can make multiple appraisals of their environment and how an athlete has a commitment to multiple goals, because of this athletes are more likely to generate more than one emotion in relation to the same stimulus (Thatcher et al., 2004).

Uphill and Jones (2007) study provided support for Lazarus’ CMRT; they explored the association between athlete emotion emotional responses such as anxiety and excitement with primary and secondary appraisals that include goal relevance, blame, coping potential and future expectations. However the findings on core relational themes were mixed, there was no evidence to support the core relational themes of anger and pride. Although Uphill and Jones (2007) acknowledged that emotions are central to the success or failure of an athlete, their study focused just on the antecedents of emotion and therefore made no attempt to explain what impact emotions have on performance. Consequently, Neil et al., (2009) criticised research in this area that only focused on part of a process, suggesting future research to consider emotional responses of performers through the more holistic transactional process (Lazarus, 1981) involving stressors, appraisals and consequent behaviours.
2.5 Stress and Coping

The illustrated stressors experienced by athletes could have a debilitating effect to performance unless they respond using an effective coping strategy. As advocated by Lazarus (1999, 2000) and Folkman (1992), it is important for researchers to study the coping responses of athletes in order to understand how some athletes adapt to stress from facing the demands from the competitive environment while others do not. (Giacobbi and Foore., 2004) as failure to cope with the stressors experienced can carry serious consequences (Jarvis, 2006) such as drop out intentions, performance dissatisfactions and impacts on physical and mental health (Goldsmith and Williams 1992; Taylor et al., 1990). For example Gould et al. (1993) conducted a study on stress sources encountered by national champion figure skaters. They found that demands in some cases affected the skaters’ performance. Therefore from a sports psychologist perspective knowing the types of interventions that athletes use to manage stress, could help other athletes with similar interventions to prevent the serious consequences to mental and physical health and also eliminate factors that affect performance.

Within the research, stress has been a factor that can influence performance; this suggests that, for athletes to perform optimally they need to successfully cope with the stressors and emotions they experience within the competitive environment (Dugdale et al., 2002). In order to successfully cope to optimize performance, athletes use a variety of strategies to prevent, avoid or manage their stressors and emotional experiences. Some of these strategies have been revealed in the study by Gould et al. (1993) using content analysis on US national champion figure skaters it revealed 40% of the skaters used rational thinking, self-talk, positive focus, orientation, social support, time management, prioritization, pre-competitive mental preparation, anxiety management, training hard and smart, isolation and deflection and ignoring the stressor, as a strategy. To reinforce this, the same coping strategies were used by athletes in Giaccobi et al. (2004) study.
There have been limitations within the research on stress and coping interventions. Firstly, Mellalieu et al. (2009) study and their investigation into the stressors experienced within the competitive environment, they have highlighted key factors that contribute to stressors in sport (i.e. Hanton et al., 2005; Mckay et al., 2008; Thelwell et al., 2008). Their focus of the studies was on a large scale with participants across their whole careers with no specific time period on the pre competitive or post competitive experience. Adapting the study to a specific time scale could give a true reflection of a participants key stressors and when they occurred. Doing this could show that athletes use different coping interventions for stressors that occur at different times and offer more important information and opportunities for future theoretical and practical research in this area (cf. Fletcher et al., 2006; Neil et al., 2007).

2.6 Stress and Experience

Lazarus and Folkman’s (1984) stress model proposed that athletes with more experience will initially appraise the stressor encountered as less harmful, perceive they have the strategies available to be able to cope with the situation and manage the stressor more effectively. To reinforce this, Mellalieu (2004) suggested that experienced athletes may possess a wider repertoire of coping strategies. The concept of sport experience is associated with the familiarity an individual has with the competitive environment (Cerin, Szabo, Hunt and Williams, 2000), a more highly skilled individual is assumed to possess greater competitive experience. However it is possible for a highly skilled athlete to be low experienced due to a sudden rise in performance.

Hanton et al. (2007) depicted that previous studies on the relationship between experience and competitive anxiety employed a limited definition of experience. Previous studies have attempted to investigate experience by using age of the participants, by doing this age will not take into account the variety of training and competition experiences an athlete has acquired over time. Therefore an improved way of measuring experience was done by Hanton et al. (2008) study, using the number of years athletes have competed at their respective sports at elite level; they used a median of 10 years to
allocate the participants into groups of high and low experienced athletes, any participant with over 10 years competing experience was deemed as highly experienced, anything below was deemed as low experienced.

The findings of Hanton et al. (2008) study portrayed that high-experience group of athletes reported lower somatic anxiety levels than their low-experience counterparts as well as this current-elite performers reported lower worry intensity and more facilitative interpretations of somatic anxiety than the past-elite performers. Therefore competitive experience and performance status are important variables in the study of multidimensional anxiety and coping as they do influence it. However playing experience might not have the same influence over the stressors athletes encounter, although the literature is all on anxiety those who cope better with anxiety are more experienced as they are more functional, therefore may also be more functional when faced with stressors and may have influence on initial appraisals and coping responses.

2.7 Rationale and purpose

Previous research has looked at experience and its relationship with anxiety but little research has been done on its relationship with the stress process. Consequently the purpose of this study is to find out whether years of experience athletes have in rugby union affect the types of stressors they encounter before competition and the type of coping intervention they use. The benefits of finding this out will allow better insight into what kind of stressors athletes face and the types of coping strategies to use to help cope with these stressors. With competitive experience being a factor, if the more experienced athletes use different coping strategies to their counterparts then a practitioner could help less experienced athletes to use the coping strategies used by the more experienced athletes.
CHAPTER THREE

METHOD
3.0 Method

3.1 Participants

The participants used in the study are a total of five athletes who have played rugby union at a professional level. Based on the selection criteria used within Hanton et al., (2008) study, five of which deemed worthy of the selection criteria whom were all contacted and asked to participate in this study, all of whom agreed. The participants ranged from 21 to 36 years (M= 25.8, SD= 5.7). Two of the participants met the criteria for high experienced counterparts (P4 and P5) as they had all competed in rugby union at professional level or above for over 10 years. Both participants had retired for under 2 years. The remaining three met the criteria for the low experienced counterparts (P1, P2 and P3) as they have competed less than 10 years.

3.2 Data Collection

All participants were contacted by phone or face-to-face contact and informed of the rationale of the study and asked to participate. Those who agreed were sent an information sheet which provided the aim of the study, the role of the researcher, the role of them as the participant, benefits of taking part, how the data will be collected and how the data will be used. They were also sent a consent form, it was stressed that participation is voluntary and their responses would be kept completely confidential, only group data would be discussed and no individuals would be identified during the study (Gould et al., 1993; Giabocci et al., 2004). Semi-structured interviews were carried out on 5 athletes (2 athletes with over 10 years’ experience in professional rugby union / 3 athletes with fewer than 10 years’ experience in professional rugby union) Although the interviews were semi structured, they were designed with less structure to give more freedom in the athletes response as suggested in Neil et al., study (2009). The athletes were questioned about their previous experiences pre, during and post competitive games. They were asked about the performance and organizational stressors that they experienced, their primary appraisals of each stressor generated, secondary appraisals of each
stressor and whether they re-appraised the stressor, their feelings and emotions they experienced after the appraisal of each stressor was generated, the coping strategies they used to cope with the demands effectively and their feelings or emotions after coping with the stressor. Previous to the interview all participants were given a probes sheet which included information on the dimensions that were derived from the previous literature on all areas listed within the stress process, the stressors, appraisals, emotion and coping (Woodman and Hardy, 2001; Fletcher and Hanton, 2003; Hanton et al., 2005; Mellalieu et al., 2009; Fletcher et al., 2012). This helped athletes put a name on the stressor, appraisal, emotion that they experienced and the coping strategy they used.

Each interview was conducted face-to-face, lasting duration of 30-60 minutes. Each interview was tape recorded all participants were aware of this. All participants involved in the study were again given detailed information about the nature and purposes of the interview (e.g., study rationale, the use of interview data, issues of confidentiality, the topics to be discussed, and procedures for tape recording and transcribing each interview) and there were no right or wrong answers (Giabocci et al., 2004). This data will be collected in this way in order to pursue content analysis to retrieve the findings from the study. All interviews were then transcribed. All individuals’ names, their organizations and any locations were made anonymous during the transcription.

Qualitative methodology was used in the study, using an interview guide. The interview guide was developed to investigate performance and organizational stressors that they experienced, their primary appraisals of each stressor generated, secondary appraisals of each stressor and whether they re-appraised the stressor, their feelings and emotions they experienced after the appraisal of each stressor was generated and the coping strategies they used to cope with the demands effectively and how they felt after coping with the stressor, pre, post and during competition.
The interview guide contained two main dimensions of stressors, performance stressors and organizational stressors. These dimensions are based on the findings and similar procedures of previous stress literature (e.g. Scanlan et al., 1991; Gould et al., 1993; Giacobbi et al., 2004, Fletcher and Hanton, 2003; Hanton et al., 2005; Mellalieu et al., 2009). These dimensions underpin a number of other stress sources, within performance stressors dimension focused on topics surrounding physical, mental, tactical and technical preparation, injury, self-presentation, opponents, performance issues, and pressure. Within organizational stressors dimension, subsection topics relating to the relationship with the coach and teammates, time demands, competitive environment, weather, and media. Each participant was asked the same questions in a similar manner to enhance reliability of the study.

3.3 Data Analysis

After conducting the interviews the tapes were then transcribed. Data from the interviews will be then analysed through a combination of inductive, deductive and frequency content analysis. Deductive analysis involved going over the interviews and ensuring that the participant’s answers related to the question asked. Inductive analysis involved going over previous literature on competitive stress and picking out original themes in relation to sources of stress, appraisals, emotions and athletes coping responses. Inductive analysis also took place going over the responses from the participants in the study and making sure the themes identified in the study linked with those highlighted in the previous literature (Mellalieu et al. 2009., Hanton et al., 2012). Frequency analysis involved going over the amount of stressor, appraisals, emotions experienced and the number of coping responses used. By doing this it will accurately represent the stress and emotion process discussed by the participants (Giacobbi et al. 2004) and their coping strategies used. After the key themes are identified further inductive analysis took place in order to generalise the key themes highlighted into the dimensions of the stress process (Mellalieu et al. 2009., Hanton et al., 2012)
and higher-order coping themes which will be represented in the figures in the study.

3.4 Trustworthiness

Trustworthiness is the qualitative equivalent of validity and reliability (Padgett, 1998). Trustworthiness was achieved throughout this study using Guba & Lincoln’s (1981) model. There are four parts to their criteria which assess trustworthiness within qualitative research being credibility, transferability, dependability and confirmability.

With regards to creditability, this study has met the criteria as prolonged engagement was sustained throughout the interview process; firstly each interview was conducted in an environment where the athlete feels comfortable, a good rapport was built with each athlete before conducting the interview and all participants were made aware that all information collected from the interview was confidential and will be anonymous. Therefore athletes were more comfortable and this would have encouraged them to give a more truthful response.

This study has met the criteria of transferability as the study is solely done on rugby union players therefore can be made generalizable to rugby union. As well as this all participants were given an information sheet prior to conducting the interviews which gave them a further insight into the study and what was going to be asked of them therefore increases the external validity of the study.

According to Lincoln and Guba (1981) Dependability is “parallel to the conventional criterion of reliability in that it is concerned with the stability of data over time”. The measurement conditions have remained consistent throughout the study; therefore the data collected will be stable.
The study has met the criteria of confirmability as the results of the data were directly rooted directly from the transcripts, therefore no bias can enter the research methods from the researchers imagination.
CHAPTER FOUR
RESULTS
4.0 Introduction to Chapter

The purpose of the present study was to explore the stress and emotion process between experienced and inexperienced professional rugby union players. First the demands faced from their competition environment before, during and after performance and insights into the transactions between the athletes and their environments and their attempts to cope are provided. Finally, specifics are provided that best represent the stress process to help the reader understand the athlete’s experiences before, during and after performance.

4.1 Stressors

A total of 54 performance (#PS = 47) and organizational (#OS = 7) stressors were identified by the athletes. These were put into higher order categories using the framework of Mellalieu et al. (2009) and organised into figures (Figure 1-6) including a frequency analysis to illustrate the number of times each stressors was mentioned. In terms of the number of stressors identified across years of experience data analysis revealed that experienced athletes encountered a similar number of performance (#PS = 17) and organizational (#OS = 2) as their inexperienced counterparts (#PS = 30; #OS = 5). Inexperienced athletes encountered an average of (#PS = 10) and (#OS = 1.6) per athlete as opposed to their experienced counterparts (#PS = 8.5; #OS = 1).

The inexperienced athletes encountered 12 performance (#PS = 10) and organizational (#OS = 2) stressors (Average #PS = 3.3; #OS = 0.6) before competition, 10 performance (#PS = 9) and organizational (#OS = 1) stressors (Average #PS = 3; #OS = 0.3) during competition and 12 performance (#PS = 10) and organizational (#OS = 2) stressors (Average #PS = 3.3; #OS = 0.6) after competition. As opposed to their experienced counterparts who encountered 8 performance (#PS = 8) and organizational (#OS = 0) stressors (Average #PS = 4; #OS = 0) before competition, 5 performance (#PS = 5) and organizational (#OS = 0) stressors (Average #PS = 2.5; #OS = 0) during competition and 8 performance (#PS = 6) and
organizational (#OS = 2) stressors (Average #PS = 3; #OS = 1) after competition. All 5 athletes stated that certain individual skills (before competition), coaches’ evaluation of them regarding selection (before and after competition), opposition (before and during competition) and criticism within video analysis sessions (after competition) were frequent stressors for them. The data analysis also revealed that injury, risk of re-injury was a demand encountered only by the experienced athletes who both have had previous injury history. As well as this, some demands were unique to the individual.

Focussing on specific stressors, individual skills before competition were seen as a frequent demand, because there was a higher chance for physical error when executing that certain skill for the individual. This is demonstrated by participants 4, “what if’s used to go through my head so it would be “what If I missed a tackle””. A similar comment was provided by Participant 3 (inexperienced), "I probably get a little bit worried about skill execution of certain things in my part of the game, I’ve got that thought in the back of my mind what if I mess up”.

All participants suggested that opposition was an external stressor. This is demonstrated by Participant 3, "Say for example there is a move and you’re running into some guy and he’s having a hell of a game and he’s a really big guy that would be a stressor for me”.

Participant 5 also provided an example of this experience before competition:

I seemed to go through a period of time where long-ranging No.8s were coming on the scene and there were a couple of times where rather than just running straight into you there’d be bloody footwork which would do you! Defensive, probably yes, very much the footwork certainly, there were times where that used to grate on me a lot.

Another external stressor that was encountered by all of the athletes was coaches evaluation of them regarding selection, both before and after competition. For example, Participant 1 (inexperienced) stated, “Just to
perform to show the coaches" and participant 2 (inexperienced) provided an example after competition, "I worry about what the coaches think, I worry about selection whether that mistake will affect selection". Participant 5 also commented about the coaches’ evaluation before “there would be times where you’d want to prove the coaches” and after competition “the selection is something I definitely worried about. Once the game’s stopped it’s... you’re there... opinions are in other people’s hands and you know you can’t control it”

The final demand that was common with all athletes was Criticism in the video analysis sessions after competition. All athletes referred to performance analysis sessions as a stressor after a poor performance.

This is demonstrated by Participant 1 (inexperienced) after competition:

I get quite worried about performance analysis, it’s a very honest environment and if you have done something wrong then it is going to be highlighted, and it’s not nice when it comes up on the screen in front of all your team mates.

Participant 5 (Experienced) also provided an example of this experience, “That’s not something that is particularly enjoyable, that’s certainly something you dread post-game, that coming up onto the analysis, your error, no-one likes to be wrong.”

The demands that were only encountered by the experienced athletes were risk of re-injury. This is demonstrated from Participant 4 before competition, "I was always worried about the fact that this could be my last game." during competition, "My only issue was when I went down on my knee, towards the end of my career it was causing me a lot of pain and that was probably when I had the most self-doubt", and after competition "It would be stressful if I came off the field and my knee would be sore".

Participant 5 (Experienced) also commented on his injuries when describing his experience before competition:

There would be times obviously when you’re carrying injuries, I was certainly affected with that a lot during my career, and that would probably
play on my mind a lot in terms that you’re just praying that your body’s going to hold out for that game.

Participant 5 also provided an example of his experience of injuries after competition "worries about injuries you picked up in the game, whether they’ll stop you from being fit to train in the week."

Finally some demands were only unique to certain individuals. Participant 5 (Experienced) mentioned that penalties in rugby was a frequent stressor for him, "I would see stressors as penalties, that was a big thing." as opposed to participant 2 mentioned kicking in certain areas of the field was a stressor for him, "I’m just worried about not scanning enough and too focussed about what is happening in the ruck and I’m not getting any outside voices talking to me saying where the back field space is".
Figure 1. Performance Stressors in Experienced and Inexperienced Rugby Union players: Internal and External Expectations.
Figure 2. Performance Stressors in Experienced and Inexperienced Rugby Union players: Injury and Preparation.

![Diagram of Performance Stressors]

Figure 3. Performance Stressors in Experienced and Inexperienced Rugby Union players: Opposition.

![Diagram of Performance Stressors]
Figure 4. Performance Stressors in Experienced and Inexperienced Rugby Union players: Self-Presentation.
Figure 5. Organizational Stressors in Experienced and Inexperienced Rugby Union players: Factors intrinsic to Rugby Union.
Figure 6. Organizational Stressors in Experienced and Inexperienced Rugby Union players: Athletic Career and performance development issues.
4.2 **Appraisals**

Data analysis identified 74 Primary appraisals, 51 Secondary appraisals and 10 re-appraisals. This will be presented in figures 7-9 using the framework of Hanton et al. (2012) along with a frequency analysis to illustrate the number of times participants mentioned each appraisal. The athlete’s made multiple appraisals when encountering certain stressors, as mentioned in the CMR theory (Lazarus 1999) athletes have multiple goals, values and beliefs. This is demonstrated by the quote from participant 1, "I find it very harmful, as when you’re highlighted on the screen you take it very personally, it’s also threatening because you’re not sure whether that mistake could have affected selection purposes."
Figure 7. Primary Appraisals of Experienced and Inexperienced Rugby Union players. Frequency analysis of each appraisal.
Figure 8. Secondary Appraisals of Experienced and Inexperienced Rugby Union players. Frequency analysis of each appraisal.
Reappraisals of Experienced and Inexperienced Rugby Union players. Frequency analysis of each appraisal.

Appraisals averaged out to be similar between the two groups. A number of athletes both experienced and inexperienced appraised certain stressors as a threat (28/74) or a challenge (28/74). The following quotes demonstrates an experienced player (Participant 4) encountering a performance stressor of skill execution and appraising it as a threat, "The worst bit is when your 3-5 points ahead with 10-15 minutes to go, that's when you can't make mistakes and that's when it becomes harmful and threatening", and a challenge "It [situation] was not threatening, or harmful. It was more of a challenge; I suppose it was a challenge that you have to rise too". Participant 2 (inexperienced) also provided his primary appraisal after encountering a performance stressor of skill execution as being a threat, "but if I don't execute it correctly then it becomes threatening to selection", and a challenge, "It's a challenge for me, to see if I can execute the correct decision".

With regards to the secondary appraisals, 34/51 of the secondary appraisals both groups knew how to act referring to the evaluation of what coping options the athlete has to be able to deal with a stressor (Lazarus, 1966, 1999; Dewe, 1993). Participant 1 (inexperienced) provides an example
of an experience where he knew how to act after encountering thoughts about the opposition after competition and appraising it as threatening as it could have influential factors with selection depending on how he played, "It is threatening as it could have influential factors with selection for other teams you play against. You just got to channel that emotion through your training and then take it out on the next opposition player you play against". Participant 5 (experienced) also commented on how he would act in order to deal with an opposition with footwork before competition which he saw as a stressor and appraised it as a challenge. "Yes, definitely challenging, but not threatening. Preparation, that would be the big thing, then the preparation, which you hope will cut down the chance of you coming out second best."

Although a majority of the secondary appraisals of the athletes knew how to deal with the stressor, the other 17/51 secondary appraisals athletes made were that they either had restricted resources in terms of dealing with the stressor which is demonstrated from a quote by participant 5 (experienced) who encountered the possibility of re-injury as a stressor, “You just have to get on with it! At the end of the day you’d just have to get on with it”. Or the athletes identified areas for action; participant 2 provided an example where he identified areas for action to help him deal with the stressor of making a mistake during performance, "Well like I said before, try to make something into a positive and to bounce back".

There were a limited number of reappraisals within the data analysis. There were only 10 occasions where the athletes reappraised the stressors they encountered, the majority of the stressors the athletes reappraised were before competition. It was after they coped effectively with the stressor they would feel a change in intensity of emotions. This happened with both experienced and inexperienced athletes, which can be demonstrated from a quote by Participant 3 (inexperienced):

Because I know I have repeated that skill so many times I just go over that process in my mind and just visualise the movement and then yes, just do that once or twice and then I get my confidence then and feel a lot better about it after that.
Participant 4 (experienced) also provided an example of where he reappraised a stressor, "You feel a little bit more confident, you think right “I have put that to bed now” I’ve talked myself up for it, I think about something else”.

4.3 Emotions

The emotions identified by the participants were Anger, Anxiety, Disappointment, Excited, Guilt, Nervousness, Pride, Relief and Sadness (Total = 80). As all the athletes made multiple appraisals of their environment and all have commitments to multiple goals, the athletes generated more than one emotion in relation to the same stimulus (Thatcher et al., 2004). The most frequently cited emotional responses from both groups were of Nervousness (16/80 E = 5. In = 11) and Anxiety (21/80 E = 5. In = 16) particularly before competition as there were 12 cases in which the athletes commented on being anxious. This is demonstrated from a quote by participant 1:

Again there’s a lot of nerves because each situation is different and if in particular if one lineout has gone bad the next one there is going to be a lot of pressure to get it right, so you do feel nerves and anxiety during the game

The other two frequently cited emotional responses from the athletes were Anger (14/80 E = 5. In = 9) and Guilt (9/80 E= 5. In = 4). The data analysis also revealed that all participants felt angry and/or guilty with themselves after making a mistake or performing badly, both during and after performance. Participant 2 provides an example of where he has felt both of these emotions after a poor performance, "Angry, guilty that I have let people down, I feel horrible!" Again both groups experience a similar amount of emotional responses.
4.4 Coping

In the present study a total of 90 Problem-focussed (#PFC = 39), Emotional-focused (#EFC = 35) and Avoidance (#AC = 16) coping strategies were used which are listed in figures 10, 11 and 12. The figures include a frequency analysis to illustrate the number of times each coping strategy was used by the certain groups of athletes. Both groups of athletes used multiple coping strategies in order to cope with some of the stressors and emotions they encountered, this is demonstrated by participant 1 (inexperienced) who uses visualisation, blocking and distraction techniques in order to cope with the stressor of starting well before performance.

Just mentally rehearse what I want out of the game once and then just leave it there then. I just like to just switch off I just think about random things, just try and speak to people, just I listen to music and just switch off completely from it all.

The data analysis revealed that both groups use a similar amount of Problem-focused (Average INEXP. = 8.9, EXP. = 6.5) and Emotion-focused (Average INEXP. = 6.3, EXP. = 7.5) coping strategies, however the inexperienced group of athletes used avoidance coping strategies a lot more frequently than their experienced counterparts (Average INEXP. = 5, EXP. = 0.5).

Athletes also reported that they experienced a positive change in the intensity of emotions after using a coping strategy; the reappraisals of the athletes suggest this. Participant 3 provides an example of where the intensity of his emotions changed after using visualization as a coping strategy, "I feel a little bit of anxiety but after I have gone through the process and just reassured myself of the processes I need to go through, yes confidence is probably the biggest emotion I feel."
Figure 10. Problem-focused coping of Experienced and Inexperienced Rugby Union players. Frequency analysis of each coping strategy.
Figure 11. Emotion-focused coping of Experienced and Inexperienced Rugby Union players. Frequency analysis of each coping strategy.
Avoidance coping of Experienced and Inexperienced Rugby Union players. Frequency analysis of each coping strategy.

Figure 12. 16 Avoidance coping of Experienced and Inexperienced Rugby Union players. Frequency analysis of each coping strategy.
4.5 Experience

The experienced group of athletes were asked questions on how experience has helped them cope with the stressful situations that rugby players face. Both experienced athletes stated that with experience you become used to certain situations, you are faced with similar stressors and you know what to expect the next time you perform, making it easier to cope. This is demonstrated from a quote by participant 4 (experienced):

I did used to get nervous before games when I was younger, but the more games you play the more you feel comfortable in your surroundings and playing in that situation. At international level on your first few caps you’re playing in front of thousands of people and you have never done that before but then as soon as you play more you feel more confident you don’t tend to notice things as much, you know what to expect, it’s like anything you know, the more you are doing something the more comfortable you feel in that situation.

Participant 5 (experienced) also provides an example of where experience has helped him cope:

With experience you’d have been in that situation before. It’s understanding that – one of my favourite sayings is “Control controllables” in terms of performance the controllables are the work you put into training prior to performance, it’s that preparation, which I think is a huge part of performance. Preparation would be the key. Preparation and confidence: confidence in your ability, why you’re in that situation to begin with; preparation prior to performance. Certainly experience helps mental toughness in terms of that ability to just get on with it. You’ve been in that situation before, whether it’s injury or whether it’s a mistake. However much pressure you put on yourself, it’s not the end of the world and that’s something you have to deal with. There are plenty of times you’ll beat yourself up, but I deal with the stress, it’s that preparation, I used to thrive off that and visualisation.
Both athletes also make reference to a coping strategy called Simulation training, when asked about how experience helps them cope. They refer to it as “emulating the game in training”. Participant 4 demonstrates how simulation training could help inexperienced athletes cope:

They have to try and emulate a game in training; they have to put themselves through the stressors in training, if you put more pressure on yourself in your training environment you can perform better at the top level, if you’re training against unopposed catch and pass drills and you start messing up in games that is because you’re not used to doing it under stress or fatigue, you have to try and mirror what you’re doing on the field in training

Participant 5 also provides us with an example of where he has used simulation training in preparation to cope more effectively.

There’s no better preparation than just doing the skill. So in sessions, you’d have the tackle suit on and you’d get the player to run at you four, five or six times, and it’s more of, the comfort that you’ve done it; that you’ve got yourself into that situation and prepared.
CHAPTER FIVE
DISCUSSION
5.0 Discussion

5.1 Aims of Study

This study extends the research on the stress and emotion process of experienced and inexperienced rugby union players by examining each stage of the process with a holistic approach. Previous research adopted designs that did not examine the transaction of stress in enough depth and have only looked at demands faced prior to competition (see Hanton et al., 2008). Consequently this study has investigated the whole experience, which includes athletes’ appraisals, emotions and coping responses. In addition, this study has been the only one to adopt a specific time scale before during and after competition to give a true reflection of participant’s key stressors, appraisals, emotions and coping responses and when they occurred. In addition, the previous research on experience (Hanton et al., 2007; Hanton et al., 2008) has only considered its relationship with anxiety and coping responses, they found clear differences between the experienced and inexperienced athletes. Therefore the present study aimed to investigate experience and its relationship with competition stress and coping responses to see if any differences occurred between the same groups of athletes. The findings show that each stage of the stress process is very similar, yet minor differences among experienced and inexperienced athletes within the elite population. Although this study looked at the process holistically, for the benefit of the reader each stage is broken down to help understand each stage of the process more clearly.
5.2 Stressors

The results revealed that experienced and inexperienced athletes encountered both performance and organizational stressors which supports previous research that athletes encounter stressors from other factors outside performance (Woodman and Hardy, 2001; Hanton et al., 2005; Mellalieu et al., 2009). A similar amount of performance and organizational stressors were encountered by both groups of athletes before, during and after competition, which was predicted as Mellalieu et al.’s, (2009) findings showed that the total numbers of performance and organizational stressors were similar between the elite and non-elite groups. Therefore experience did not have any influence over the amount of stressors each athlete encountered.

The results also indicated that both groups of athletes recalled more demands related to performance stressors than organizational stressors when asked about their competitive experiences before, during and after competition. This supports previous findings of Mellalieu et al. (2009), although contradictory to those observed by Hanton et al., (2005). However because of the retrospective nature of the study organizational stressors may have been harder to recall for the athletes, as Hanton et al., (2005) states that competitive stressors are often inherent and similar for each competitive experience whereas organisational ones are more extraneous and widely distributed, therefore may be easily forgotten by the athletes. This results in less organizational stressors recalled by the athletes. The fewer numbers of organizational stressors encountered by the athletes in this study could be because of the methods used, both this study and Mellalieu et al., (2009) focused solely on the competition environment where as Hanton et al., (2005) considered the stressors encountered by performer across the entirety of their careers.

The most frequently reported stressors of both groups were certain individual skills (before competition), coaches’ evaluation of them regarding selection (before and after competition), opposition (before and during competition) and criticism within video analysis sessions (after competition).
The individual skills (before competition) were closely related to physical error of that certain skill which was highlighted in the results. This provides support for in Nicholls et al., (2006) study on rugby union players; as physical error, coaches’ evaluation and opponents were stressors that were all frequently reported. However coaches’ evaluation under video analysis sessions was not reported once within Nicholls et al., (2006) study this is something that practitioners need to take into account to prepare performers for after performance demands like video analysis, as video analysis is a big part of professional sports at present.

There was one difference that the results highlighted; this was that only the experienced athletes reported injury and risk of re-injury as a stressor they encountered. It was surprising that the inexperienced athletes did not perceive injury as a stressor due to rugby union being a contact sport. This could suggest that injury might only be a stressor that rugby players encounter if they have an on-going injury that affects how they perform. However these results differ from Nicholls et al., (2006) who found injury was one of the most cited stressors within their study. This could be because of the retrospective nature of the present study as Nicholls et al., (2006) used diaries as their form of data collection and asked participants to complete the appropriately dated diary sheet on the evening of each day they played rugby (either competitively or in practice). This therefore made it easier for the athletes to recall stressors decreasing the likelihood of participant recall error.

There were also unique stressors that each individual encountered which was again predicted from the findings of previous research (Mellalieu et al., 2009), for example participant 5 encountered a stressor of receiving penalties during competition as opposed to Participant 2 who encountered a stressor of kicking in certain areas of the field. These unique stressors could be explained by the certain playing position the athletes did within rugby union this supports James, Mellalieu and Jones (2005) study of position specific performance indicators in professional rugby union as they also identified there were specific performance indicators for each position. Participant 5 is an Openside flanker (number 7); therefore the stressor of receiving a penalty
might be common amongst other Flankers within rugby union as a role of a Flanker is to try and turn over possession which increases the chance of rule infringements. Penalties were found in James et al. (2005) as a key performance indicator for an Openside flanker which increases the chance of rule infringements. Participant 2 is an outside half, and identified a stressors was unsuccessful kicks in certain areas of the field. Again a key performance indicator for the Outside half within James et al. (2005) study was unsuccessful kicking, therefore provides support for this study the stressor of kicking in certain areas of the field might be common amongst other outside half’s within the game as a role of an outside half is to kick the ball to win territory for their team. These unique differences demonstrate that a psychologist needs to be aware of the unique stressors each individual may encounter as highlighted in Mellalieu (2009).

5.3 Appraisals

The results support Lazarus (1998, 1999, 2000) that the concept of cognitive appraisal is central to the transactional perspective of stress, as it is a fundamental in understanding the variety of ways an athlete may respond to a stressor they encounter (Holt and Dunn, 2004; Thatcher and Day, 2008). In addition, the findings support the CMR theory (Lazarus, 1999) in the sense that the individual’s appraisal of a stressor is closely linked to their goals, values and beliefs (motivation). Specifically both groups of athletes appraised certain stressors as either a threat to career development or a threat to the individual’s performance, or a challenge to rise to and determined to overcome. Again no differences between the groups regarding the primary appraisals of the stressors the athletes encountered.

The results also highlight that there are no differences between the groups regarding secondary appraisals. Although a majority of the secondary appraisals both groups knew how to act referring to the evaluation of what coping options were available to the athlete to deal with the stressor (Lazarus, 1966, 1999; Dewe, 1993), because all 5 athlete are within the elite population
this supports previous literature that Elite athletes know how to cope (see 5.5 for coping) more effectively (Hanton et al., 2008).

The reappraisals of the athletes suggest that when coping effectively with the stressors encountered they experienced a positive change in the intensity of emotions, by reducing the intensity of negative emotions and increasing the intensity of positive emotions. Participant 3 provided an example of where visualization has changed the intensity of his emotions, "I feel a little bit of anxiety but after I have gone through the process and just reassured myself of the processes I need to go through, yes confidence is probably the biggest emotion I feel". The limited number of reappraisals from the study shows that athlete’s might not be as aware of the importance to reappraise the stressor.

5.4 Emotions

There were a variety of emotions that both groups experience in competition, which were presented within the results. The findings indicate that emotions do not occur in isolation, they support Thatcher et al., (2004) study that athletes generate more than one emotion in relation to the same stimulus. Consequently, draws attention to the limitations of the anxiety literature’s focus on only one emotion. In addition to this, the results support Uphill and Jones (2007) study on the CMR theory. The results show that the athletes appraisals of the stressors shapes their emotional response, appraisals that were labelled as a threat or harm to the individual were more likely to generate a negative emotional response.

There were certain emotional responses within the study that were cited more than others; Nervousness and Anxiety were cited the most, particularly before competition. This provided support for the previous research done (e.g., Anshel, 2001; Mellalieu et al., 2008 and Nicholls et al., 2009) on emotions, as athletes were more than likely to experience a negative
emotion due to the study asking athletes on their stressful transactions (e.g., Hardy, 1997).

The other two frequently cited emotional responses from the athletes were Anger and Guilt, these findings support that of previous literature as anxiety and anger were common from athletes who participated in team contact sports, due to the combative nature (Campo, Mellalieu, Ferrand, Martinent and Rosnet, 2012). The data analysis also revealed that all participants felt angry and/or guilty with themselves after making a mistake or performing badly, both during and after performance as they would appraise the situation as harmful or threatening to their goals which further reinforces the CMR theory that appraisals of stressors shape our emotional responses. Again both groups experience a similar amount of emotional responses. Experience didn’t seem to influence the emotions the athletes felt, this could account for the similar environments that elite rugby players are associated with. Lazarus’ (1999) perspective is that the environment shapes both stress and emotions that athlete’s experience.

5.5 Coping

In terms of coping strategies used by the athletes, there were again a lot of similarities between both groups. Firstly both groups used multiple coping strategies in order to cope with the stressors and emotions they experienced, this supports previous research on coping (Giaccobi et al., 2004; Gould et al. 1993; Nicholls et al., 2005). Specifically, multiple coping strategies are proposed to increase the individual’s chance of controlling the stressor or emotions experienced.

Another similarity between the groups was that they used a similar amount of problem-focused and Emotion-focused coping strategies. This provides support for Hanton et al. (2008) as problem-focused and positive emotion-focused coping strategies were employed by the current elite. This could account for the elite population being more functional in terms of coping.
Findings of previous research suggest problem-focused coping strategies were cited more frequently compared to emotion and avoidance coping (Crocker & Isaak, 1997; Gaudreau et al., 2001, 2002; Nicholls, Holt, Polman, & James, 2005), this wasn't the case in the present study, as a similar amount emotion-focused and problem focused coping strategies were used by the participants. This could account for the higher number of negative emotions experienced; therefore athletes felt the most effective way to cope or manage their emotions would be to use more emotion-focused coping. (Nicholls et al., 2005)

Athletes also reported that they experienced a positive change in the intensity of emotions after using a coping strategy; the reappraisals of the athletes suggest this. These findings support Lazarus and Folkman’s (1984) stress model which proposes that when a stressful situation occurs, which is more indicative of the elite environment; effective coping will reduce the intensity of the symptoms experienced.

One difference that did come apparent within the study was that the inexperienced group of athletes used avoidance coping strategies more frequently than their experienced counterparts. This could account for experienced athletes being more functional and have a wider range strategies to employ to cope with the situation more effectively rather than just avoiding the stressor (Mellalieu, 2004), Lazarus and Folkman’s (1984) and supports this as their stress model proposes that experienced athletes perceive they have strategies available to cope with the situation effectively.
5.6 Experience

Lazarus and Folkman’s (1984) stress model, which proposes that experienced individuals appraise stressors as less harmful and perceive they have strategies available to cope with the situation effectively (Hanton et al., 2008). Both experienced athletes in this study specified that with experience you get familiar with the stressors you encounter; therefore you know what to expect the next time you perform. This could suggest that they appraise the stressors as less harmful as they are more familiar with what they are going to encounter, thus making it easier to cope as they know what strategy is available to cope with that certain situation effectively.

5.7 Practical Implications

Based on the findings from this study, in terms of coping with the stress process, both experienced athletes made reference to how simulation training helps them cope with the stressors they face, they both referred to it as “emulating the game in training”. Participant 2 explains he can’t use simulation training as a means of coping with his stressors because of the tiredness from training, making reference to his long team runs, however he agrees that simulation will be a good way to cope with his stressors, specifically kicking out of hand in certain areas of the field (under pressure). Participant 5 provided a relevant quote:

I think certainly with the coaching, some of the coaches I've had, they don't take that into consideration necessarily of how that player needs to prepare himself mentally. Even if they don't agree with it, it might be the way which gets the best out of that player for that match day, and whether its guys playing rugby or doing lacrosse, everyone prepares in different ways and everyone needs different volumes of training there.
This suggests that coaches need to structure training sessions and allow time within the sessions for players to simulate their personal stressors they encounter in training.

Additionally inexperienced athletes used avoidance coping more frequently than their experienced counterparts, therefore practitioners could persuade the athletes to use more problem or emotion-focused coping strategies to take control of the stressors they encounter which will be more effective when coping rather than avoiding them. Practitioners could promote this by prescribing certain problem focussed or positive emotion-focussed coping strategies to deal with the individuals stressors.

5.8 Strengths, Limitations and Future Directions for Research

It is important to highlight the strengths and limitations of this study to contribute to future research done on the stress process. This study adopted a qualitative approach, according to Neil et al., (2009) in comparison to previous quantitative investigations such methods allow for a fuller exploration of performer’s experiences of stress, the results of the present study support this as participants were able to express their experiences, thoughts and feelings to the interviewer in a lot more depth than what quantitative data would have collected. However, due to the retrospective nature of the study, the participant’s responses from the interview present further limitations to the studies design. Both participants 4 and 5 (experienced) are retired players from rugby union they both made reference to their stressors, appraisals, emotions and coping responses before injury which was over eight years ago, increasing the likelihood of participant recall error (Patton, 2002). Future research should therefore adopt a mixed method approach to collect data (Neil et al., 2009). Through longitudinal approaches similar to that adopted by Nicholls et al., (2006) who used diaries as their form of data collection. Such an approach would then reduce the likelihood of recall error when collecting data and a quantitative complementary approach could measure levels of
anxiety, controllability and self-confidence to see if there is any difference between the two groups in the way they interpret the stressors encountered.

An additional strength from the present study was how it adopted a specific timescale to measure the players’ experiences before, during and after performance. It has shown a key difference in the types of emotions experienced due to different stressors occurring at different times within performance. However experience was measured using years within professional rugby union and not quality of experience (Hanton et al., 2008), previous research (Hanton and Jones 1999; Gould, Dieffenbach and Moffett, 2002) observed critical experiences such as major competitions, the stage of the athlete’s career in which such events are experienced and the management of the athlete at these times. They also recognised that the behaviour of significant others was important during the development of psychological skills. These factors appear to be essential in terms of acquiring appropriate coping strategies that help elite athletes maintain their status with a confident, more facilitative viewpoint towards performance. Therefore if the quality of experience was measured the findings could have differed more between the two groups because an inexperienced athlete in this study could have potentially had a better quality of experiences than the experienced athletes within the study. Future research should therefore use less structure when designing interview guides and measure experience using quality the individuals have had and not the years within the individual’s specific sports.
5.9 Conclusion

In conclusion, the present study suggests experience doesn’t influence each stage of the stress process a great deal. The study did find certain differences between the two groups such as injury as a stressor only encountered by experienced athletes.

In addition this study has provided support for James et al. (2005) study, that certain playing positions have unique performance indicators. As a result of this, certain positions may encounter unique stressors, this is important for a practitioner when working with rugby players or any other athlete, that they encounter unique stressors.

Although they study indicated that experience doesn’t influence the stress and emotion process, it does influence the coping process. It found inexperienced athletes used avoidance coping more frequently. It also identified experienced athletes are more familiar with the stressors they encounter, therefore appraise the stressors as less harmful, both suggesting experienced athletes are more functional and more efficient when coping.

As well as this experienced athletes used simulation training in order to cope with stressors and participant 2 (inexperienced) agreed that simulation training would help him cope with his stressors although can’t find the time to employ the strategy as he is too tired from training. The study suggests coaches should give a specific amount of training time to the individual within training session so they can focus on individual stressors that they encounter in training.

The study has also provided additional support to researchers, firstly that they should adopt a mix method approach when investigating the stress process so it can measure areas that this study failed to do so such as levels of anxiety, self-confidence and controllability. In addition, it has provided support that researchers should adopt a specific timescale when measuring the stress process as differences in emotion can occur. It has also provided
support on why they should measure the quality of experience as opposed to the number of years participated in a certain sport.

REFERENCES


