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Dissertation title:	<input type="text" value="The influences of pressure and difficulty upon anxiety and its perceived effect on a place kick
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CARDIFF METROPOLITAN UNIVERSITY

Prifysgol Fetropolitan Caerdydd

CARDIFF SCHOOL OF SPORT

DEGREE OF BACHELOR OF SCIENCE (HONOURS)

SPORT AND EXERCISE SCIENCE

**The influences of pressure and difficulty upon anxiety and
its perceived effect on a place kick in Rugby Union**

SPORTS PSYCHOLOGY

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THE INFLUENCES OF PRESSURE AND DIFFICULTY UPON ANXIETY AND ITS
PERCEIVED EFFECT ON A PLACE KICK IN RUGBY UNION.

Cardiff Metropolitan University
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ACKNOWLEDGEMENTS

I would like to pay thanks to Declan Connaughton for the help and support throughout the period that the dissertation took place in. I would also like to thanks the six participants in the study for the time and testimonies they gave to allow for such an interesting study.

ABSTRACT

The aim of the study is to explore the effects of both pressure and difficulty on the directional anxiety experienced by a rugby union player performing a place kick. Using interviews, this qualitative study required 6 rugby union place kickers to recall and describe their perceived performance in relation to pressure and anxiety in scenarios that involved place kicking during differing levels of pressure and difficulty. Difficulty levels were identified into two categories, easy and difficult). Interview transcripts were analysed and causal relationships were mapped for each scenario demonstrating relationships of difficulty and pressure and the direction of anxiety and perceived performance. Each scenario gave out differing results with the most conclusive evidence being for the difficult kick with pressure scenario being interpreted as wholly facilitative by participants. Pressure and difficulty have profound effects upon the interpretation of anxiety in differing manners; the findings are discussed in the paper.

CHAPTER ONE

INTRODUCTION

1. Introduction

When placed under a pressure to perform a certain skill in a scenario, a person's "consciousness does not contain the knowledge of these skills, so that it ironically reduces the reliability and success of the performance". (Baumeister, 1984. p. 610-611). In Rugby Union, the goal kicker has the responsibility of being the person the team relies upon to keep the score board ticking in these situations of pressure.

"The responsibility as England's kicker does scare me. I worry all the time about it, but the important thing is that I know I can worry about it. It's not a bad thing, or a detrimental thing, to worry." (Jonny Wilkinson, OBE)

This is a quote from one of the world's most prolific goal kickers, World Cup Winner, Jonny Wilkinson. Wilkinson has a knack for performing well in these highly demanding scenarios where the pressure is on, and he insists he can cope as long as his routine is intact. Playing with such a volatile state of mind where doubts outweigh the positives in a position when the thought of 'choking' under the pressure must be a daunting feat, yet Wilkinson consistently performs where others would crumble and fail. This raises the question, what is it that makes it possible for him to cope with his worries under pressure scenarios?

The ways in which the anxieties can be interpreted have been explored from many different researchers' viewpoints. Anxiety has developed from a uni-dimensional construct where only one type of trait anxiety was accounted for to a multi-dimensional model in which somatic and cognitive anxieties are measured in terms of the intensity they are experienced and the frequency of which they occur in a performance. The purpose of this qualitative study is to see if a goal kicker's direction of anxiety is affected by the scenario of kick, with the variables of pressure and difficulty determining the scenario. The hypothesis of this study predicts that pressure scenarios will have a debilitating outcome on the performance of the kickers..

In chapter 2 the literature related to this study area will be reviewed, the body of evidence linked to athletes anxiety in different fields of sport psychology and how athletes view their anxiety in terms of direction towards their performance will feature in this review.

Chapter 3 presents the qualitative methods used to gather the study data by means of face to face interviews with a purposive sample of 6 semi-professional rugby union goal kickers.

Following on, chapter 4 presents the results of the interviews. This information has been organised and presented in narrative sections that are supported by illustrations of the resulting causal networks generated from the interview data and represent both the facilitative and debilitating networks that were identified.

Analysis and discussion about the findings of this study related to anxiety/pressure relationships and the effects of these on kicking performance can be found in chapter 5, the contribution of this study to the developing body of work on cognitive anxiety and performance and how this might be put to use in sporting practise is discussed. Acknowledging that this is a small qualitative piece of undergraduate work is however important and caution in making claims about the generalizability of the findings are emphasised.

CHAPTER 2

LITERATURE REVIEW

2. Literature Review

In this review of the literature, the author will look at the definition of pressure, the types of pressure a performer may experience, the antecedents of pressure in different scenarios, and the influence difficulty has on performance (for example, a goal kick in rugby). Anxiety will then be examined from a uni-dimensional approach to a multi-dimensional approach. The review of previous literature will aim to expand the understanding about how anxieties influence performance, (debilitative or facilitative) and how pressure affects the anxieties interpreted. The review will firstly examine previous research related to pressure and its influence on sporting performance.

2.1. Understanding Pressure.

Pressure was a relatively vague area of research until Baumeister (1984) defined pressure as “any factor or combination of factors that increases the importance of performing well on a particular occasion” (p.610). Baumeister (1984) believed that competition was one of the types of pressure that could be experienced. Factors of this competition pressure are rivalry, audience presence, and the presence of cofactors (p.610). These three factors were all shown to have heightened the arousal of a participant and increased self-consciousness. Baumeister’s research suggested that when placed under pressure, that a person realizes self-consciously that it is important to execute a skill correctly, however this skill execution could be affected by the level of pressure and as a result be seen to increase the self-consciousness of the participant. This research examined how performance can decrease under pressure; this decrease of performance was subsequently called ‘choking’. Baumesiter (1984) referred to ‘choking’ as when an athlete suffers ‘performance decrements under pressure circumstances’ (p.610). Baumesiter proposed a model depicting the effect of ‘choking’ as a chain of consequences; he suggested that the pressure increases the self-conscious attention to the participant’s own performance level, and that this increase leads to disruptions of a mastery skills execution. The experiments in his work proved consistent with the model suggesting that increase in self-conscious thought process to a skill can lead to decrements in performance. His study also showed that other manipulations of

situation pressure can lead to performance decrements, for example implicit competition, a cash incentive, or audience-induced pressure.

Baumeister and Showers (1986) found that distraction is one of the influencing explanations of the underlying 'choking' in performances as it interferes with the self-focused thoughts on automated skill responses. Their study described four variables that lead to the 'choking' effect in performance. These four variables of pressure are: *audience presence; competition; performance-contingent rewards and punishments; and ego relevance of the task.*

Pressure for each of these four incentives was differently described by Baumeister and Showers (1986). Audience presence was seen as an evaluative influence on participants who experienced this pressure was wary of their evaluator's scrutiny of their performance. Competition pressure was generated when the performer was aware that their performance outcome would be compared to other participant's performances, thus causing them to self-consciously place pressure on their skill execution. Performance-contingent rewards and punishment was manifested when the individual was aware that their performance may lead to punishment or a loss of reward, this placed pressure on the performance. Ego relevance relates to how task-performance creates an image of how skilled they may be as a performer.

These four variables when uncontrolled can lead to the choking and performance level decrease as Baumeister and Showers (1986) had discovered in their review of the pressure research. However the findings of Baumesiter (1984) and Baumeister and Showers (1986) work had not been applied in a sporting context or into team based sports such as rugby union. With this in mind the current study being undertaken will develop understanding about the influence of pressure and will examine whether the principles are transferable across different domains (e.g. from education to sport).

Masters (1992) was the first person to examine pressure in a sporting environment when he investigated the effect stress can have upon a well learned skill of putting in Golf. The study aimed to examine the causes that led to the failure of motor skills, and why this is relatively common when the athlete performing a skill has a high desire of being successful. Examining why this skill failure occurred with athletes with a high desire to succeed Masters (1992) asked participants to generate an

implicit knowledge of a golf putt, and to then perform the skill. Masters (1992) explained that implicit knowledge is made up of “which we ‘know’ yet are not aware of and thus cannot articulate” (p.343). When knowledge is implicit, the skill is well learned and effortless. The opposite approach used was asking the participants to obtain an explicit knowledge of the skill of putting in golf. Explicit knowledge is “made up of facts and rules of which we are specifically aware of and therefore able to articulate” (p.343). Under explicit knowledge a skill is widely recognised as being in the cognitive phase, which is normally slow paced and requires verbal guidance. Both criteria of knowledge were performed in Masters study under conditions of stress. These stress conditions came via evaluation and financial inducement. These were two of the four pressure variables as described by Baumeister and Showers (1986). One cause of skill failure occurred when the performer attempted to execute the skill by consciously processing explicit knowledge of how the putting skill should be performed. The interruption of the skill as a result of the explicit knowledge acquired, caused skill failure. The findings suggested that the level of knowledge the performers have is crucial as under these conditions, athletes with a smaller pool of knowledge will be able to withstand pressure better and execute the skill in a superior fashion with less conscious control than those who have a larger pool of explicit knowledge. This explained that the pressure of a situation can affect the overall outcome of a skill when an athlete has a certain level of knowledge towards their skill. The following theories all looked to investigate how the variables can affect a performance.

Hardy, Mullen and Jones (1996) re-examined the work of Masters (1992). The rationale for their re-investigation of Masters (1992) study was that the implicit learning group which Masters (1992) had allocated tasks to was only required to perform articulatory suppression, which is a method of distraction whilst trying to recall a skill execution during a performance. This meant that during the learning task the implicit learning group was put under this pressure, but this did not happen in the stress trials. Hardy et al. (1996) described that these subjects were therefore denied the opportunity of self-learning to generate knowledge for the task with the lack of articulatory suppression. Hardy et al. (1996) believed that this may have been the reason for the reduced level of task difficulty.

To address the query they had made of Masters (1992) method, Hardy et al. (1996) replicated the method of Masters (1992) work and extended it further. They added an additional implicit learning group which had added articulatory suppression during both sets of trials. They hypothesised that the 'new' implicit learning group would experience the same performance spread as the explicit knowledge group. However, the 'new' implicit learning group performed the same as Masters (1992) original study. The results of the study found that there was still the continued improvement of the implicit groups in the study, whilst the explicit learning groups suffered the same declines as Masters (1992) found. This study reinforced Masters (1992) explicit knowledge hypothesis that a small amount of explicit knowledge is more likely to improve the management of pressures effects.

Beilock and Carr (2001) examined the reasons to why theories of distraction and explicit monitoring have been used to describe the choking of performance under pressure scenarios. Beilock and Carr (2001) explained that a pressure created a distractive environment for the athlete to perform in, thus shifting the athlete's attention focus away from task to irrelevant cues such as worries about the situation. They described this shift as a change from a single-task to a dual-task performance situation. This makes the execution of the task in hand harder as it creates internal emotional competition between the feelings of worry about the situation versus attention on the task.

Beilock and Carr (2001) describe another reason for these performance decrements under pressure. They use *Self Focus Theories (Explicit Monitoring)* to explain these decrements as it relies on more attention being paid to skill execution. They suggest that pressure raises self-conscious thoughts and anxiety experienced, thus increasing attention to performance. The purpose of the Beilock and Carr's study was to examine the cognitive mechanisms responsible for the disruption in the execution of a well-learned skill under pressure. Beilock and Carr's study had two sections to their research; in test 1 and 2 the research aimed to identify a particular sensorimotor skill that had the right properties to be susceptible to 'choking' (Baumaster, 1984). Results of these two experiments showed in clear detail that from the theories explained that automaticity and proceduralisation of task performance are a function of practice.

In Experiments 3 and 4, the Beilock and Carr (2001) looked at the aspect of choking under pressure in two very different tasks: One of which was a sensorimotor skill of golf putting, and the second was an alphabet arithmetic task. The results of this section showed that the golf putting was susceptible to choking under pressure and not the arithmetic tasks. They found that when under single or dual tasks that the choking in a task such as golf putting can be cancelled out by self-consciousness training. The performers who experienced this type of training actually improved under conditions of pressure. They believed from their results in their study that choking may be confined to sensorimotor skills, however their work does not actually explain the specific areas of the skills which break down.

DeCaro, Thomas, Albert and Beilock (2011) reinforced the work of previous researchers, by showing that distraction is increased by pressure. They concluded that skill failure or success occurs as a result of the environment performance situation (e.g. multifaceted high-pressure situations); this in turn affects attention and the amount of explicit attention.

Murayama, Sekiya and Tanaka (2010) conducted research of athletes who reported to have experienced the phenomena of choking under pressure. The study examined their psychological, physiological and behavioural factors when they choked during a performance. Murayama et al. (2010) found that the choking occurred with changes in the motor control of a situation and this lead to increased physiological arousal, negative thoughts and somatic sensations. These changes occurred when an athlete's performance was placed under pressure. This shows that interaction of the seven factors that were suspected by Murayama et al. (2010) thought to create choking (negative thoughts/feelings, motor control changes, increased physiological arousal, communication failure, nervous personality, pre-competition condition, and abnormal somatic sensation), that performance can consequently decrease.

Pressure can be seen to induce choking and be viewed as a negative influence on performance (Beilock and Carr, 2001; Masters, 1992; Hardy et. al. 1996; Beilock and Gray 2007; DeCaro et. al. 2011). However the research of (Otten 2009) explains that it can be deemed positive towards an athlete's skill performance.

Otten (2009) studied the difference between ‘clutch performance’ (performing better in a pressure scenario) and choking in a pressure scenario. The author defined a clutch performance “as any performance increment or superior performance that occurs under pressure circumstances” (p.584).

Otten (2009) created a model (FIG.1.) to try and explain predictions of performance under pressure with all the varying factors that affect the model. The model was used as a summary of his hypothesis that self-focus and implicit knowledge are affected on mediating levels of self-confidence, cognitive anxiety and somatic anxiety.

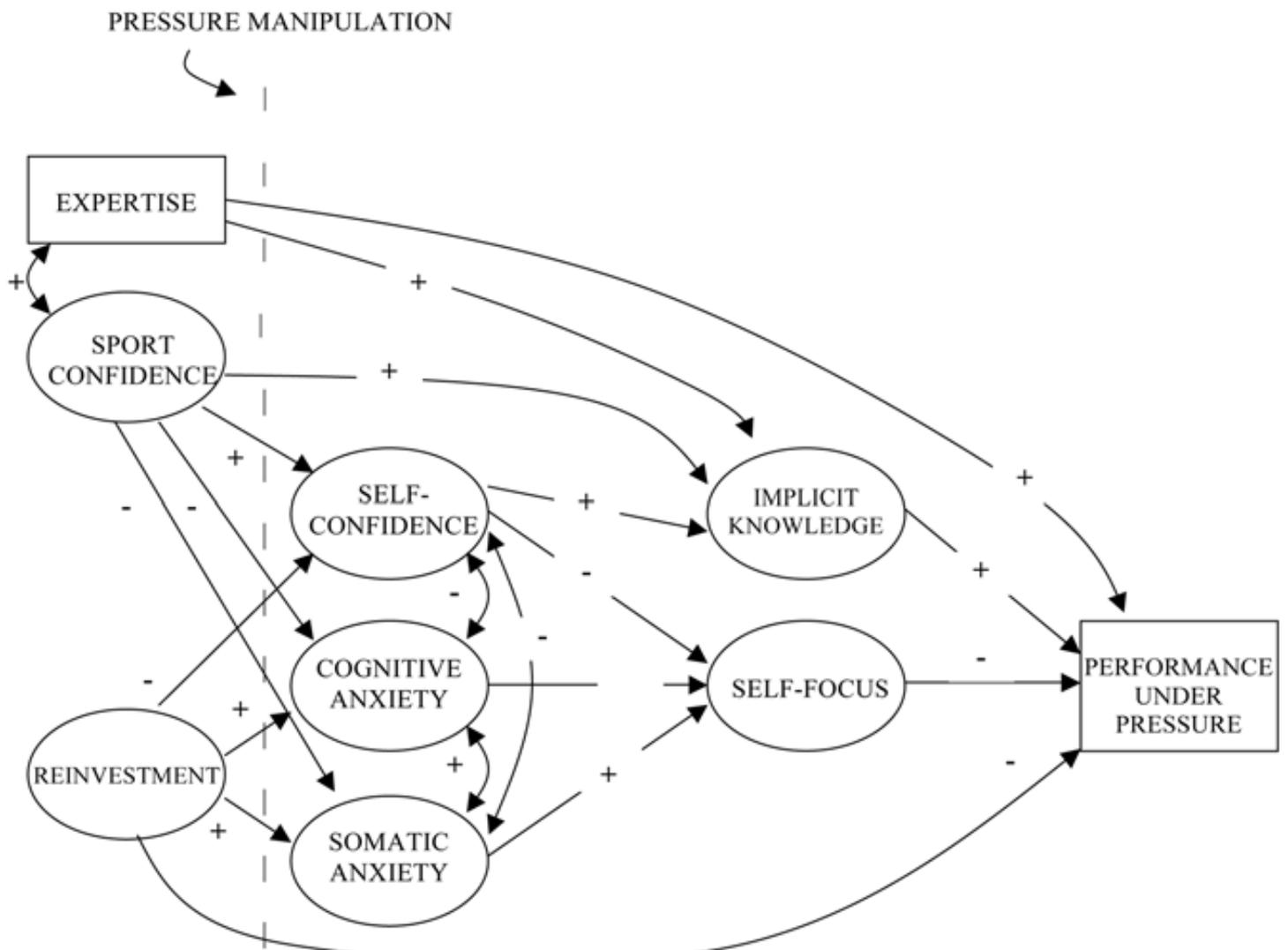


FIG.1. Otten (2009) Model to predict sports performance under pressure

Otten's (2009) study found that after testing the model that when you re-invest attention towards anxieties and self-confidence, this leads to athletes suffering higher levels of anxiety and this in turn led to predictions of higher levels of self-focus in the participants, however, this did not lead to any increments in performance levels. When the athletes alternatively reported higher levels 'perceived control' it did help to increase their performance. Self-focus, in fact did not mediate the relationship between anxiety and performance because self-focus did not have a significant influence on performance. Self-focus did although have a positive relationship with cognitive anxiety, but it did not have the same affect with somatic anxiety and self-confidence. The study went on to alert coaches in steering athletes away from reinvesting attention in the competitive task, to reduce performance anxiety.

The overall view of pressure as a whole is that it has differing theories (self-focus, distraction theories) which can induce the effects of choking under pressure. Throughout the literature Baumeister and Shower's (1986) four variables of pressure (*audience presence, competition, performance-contingent rewards and punishments, and ego relevance of the task*) seem to affect the self-focus and explicit knowledge in many of the choking cases. Otten (2009) examined how these pressure variables in terms of self-focus and distraction (implicit knowledge) can affect the anxiety an athlete suffers in performance. It is important to understand how anxiety may be affected by the pressure of scenario and the strains that the pressure may place on cognitive and somatic feelings during competition. The review will now go on to look at how anxiety has been interpreted in literature, and what other researchers have examined and found about its effect on an athlete's performance level in a positive or negative way.

2.2. Understanding anxiety

Anxiety has been defined as the negative response to a stimulus with stressors as the stimulus (Jones and Hanton, 2001). Over recent years there has been many different ways in which researchers have tried to describe the complex nature of anxiety. The amount of research driven work into examining anxiety has grown, allowing for anxiety to take several different changes in its dimensions as a psychological process. Anxiety was initially viewed in the early research years as a uni-dimensional construct. Spielberger (1966) described how it was vital to distinguish between state conditions or personality traits in anxiety contexts. He explained that anxiety is derived from either state or trait anxiety. O'Neill, Spielberger & Hansen (1969) described state anxiety as “feelings of apprehension and heightened autonomic nervous system activity that vary in intensity and fluctuate over time” (p.343). Trait anxiety was then also defined to being the “individual differences in anxiety proneness, that is, to differential tendencies among individuals to respond with different levels of A-State in situations that are perceived as threatening” (p.343). Spielberger (1966) developed a state-trait theory of anxiety in which he explained that state anxiety can vary from different situations at certain times and conversely, trait anxiety was the individual’s ability to appraise a situation as threatening or not.

Martens (1977) then developed the Sports Competition Anxiety Test (SCAT) from the work of Spielberger (1966) as Martens tried to create a model to enter into the sporting domain. Martens explained that the SCAT is a “Psychological tool developed especially for sport” (p.IV). The SCAT was developed to assess the competitive trait anxieties of a performer. However, this only examined the trait anxieties, Martens, Burton and Vealey (1990) explained that it was this uni-dimensional aspect which needed to be addressed, and a scale was also needed to assess state anxieties.

Martens et al. (1990) re-conceptualised the Competitive State Anxiety Inventory (CSAI) which was created to fill the void of the needed state scale. In their work, Martens et al (1990) drew on other research that had started to reconceptualise anxiety as a multidimensional construct which interacted from a relationship between

state cognitive and somatic anxieties experienced by athletes. Martens et al. created a sporting definition of cognitive anxiety as being “most commonly manifested in negative expectation about performance and negative self-evaluation” (p.120). This explains that the thoughts of self-worry of performance are the cognitive anxieties an athlete experiences. The authors referred to somatic anxiety as the “physiological and affective elements of the anxiety experience that develop directly from autonomic arousal” (p.121). This anxiety form gets its experiences from actual bodily feelings such as clammy hands, butterflies and tense muscles.

The CSAI-2 (Competitive state anxiety inventory-2) was developed to measure an athlete’s intensity of the cognitive and somatic anxieties they experience along with self-confidence. The Multidimensional Anxiety Theory (MAT) was created by Martens et al (1990) following the adoption of the CSAI-2. Swain and Jones(1993) explain that the theory predicted that “cognitive anxiety and self-confidence should remain stable in the period leading up to competition, whereas somatic anxiety is predicted to elevate” (p.534).

However, as researchers (Swain and Jones. 1993; Jones et al. 1994; Jones and Hanton, 1996, 2001) explain the CSAI-2 only accounts for the level of which you experience the anxiety (intensity of anxiety). It was Jones and Hanton (1996) who explained that this measure of intensity had existed and survived for so long in sports psychology backgrounds due to the concept of anxiety being deemed as a negative emotion experienced in a situation, carrying on to be debilitating to performance. Swain and Jones (1993) query the temporal patterning of the MAT as it expects cognitive anxieties to be the same 30mins prior to competition and a week prior.

Swain and Jones (1993) also questioned the measurement of the cognitive anxieties with some of the statements in the CSAI-2 (e.g. ‘I am concerned about this competition’ and I am concerned about losing’). Swain and Jones identified a dissonance between these statements and the notion that cognitive anxiety will remain constant. Swain and Jones (1993) modified the CSAI-2 in a way to which the athletes could respond to the intensity and frequency of which they can experience the cognitive and somatic anxieties in different periods leading up to competition.

The results found that the intensity of the anxiety response was greater in the final stage of testing than it was 2 days prior. In their conclusions of the research, the authors explain that there may be a new dimension of anxiety which needs to be examined as some of the anxieties were not viewed as negative towards the participant's performances.

A new dimension that was explored was the direction of this anxiety by Jones, Hanton and Swain (1994). The authors explained that previous research into the direction of anxieties has generally adopted uni-dimensional theories to try and interpret the notion of direction. They explain that this direction notion is the "interpretation of those symptoms in terms of whether they are positive or negative towards performance" (p.657). The aim of their study was to employ a multidimensional theory of anxiety to examine the intensity and direction in a performance. The skill level difference was the moderating variable throughout the work.

The results of the study found reason to support distinction between intensity and direction of anxieties in a sports performance. They found that the dependant variable of skill level as an important factor as to which interpretation is experienced. Intensity levels between the elite and non-elite athletes did not vary, however the interpretation of the anxieties experienced that were seen as positive, has a greater relationship with the elite, than the non-elite who viewed their interpretation of these anxieties as debilitating. The findings also showed that elite athletes who did interpret their anxiety as debilitating had sufficient cognitive coping strategies for maintaining confidence.

Jones (1995) created a model of competitive anxiety (FIG.2). This model shows how an athlete's cognitive appraisal of the control the athletes have over both the external environment and their own performance. If they can cope and are able to achieve their goals, they deem anxiety as facilitative. If they perceive themselves not in control and have negative expectancies, they will deem the anxiety as debilitating. Jones and Hanton (1996) explain how the behavioural control of attaining goals and their own personal expectancies of goal attainment in sports generate an athlete's interpretation of the manner in which anxiety affects them. Hanton and Connaughton

(2002) also found that athlete's interpretations of anxiety were more facilitative when there was more perceived control over the anxiety.

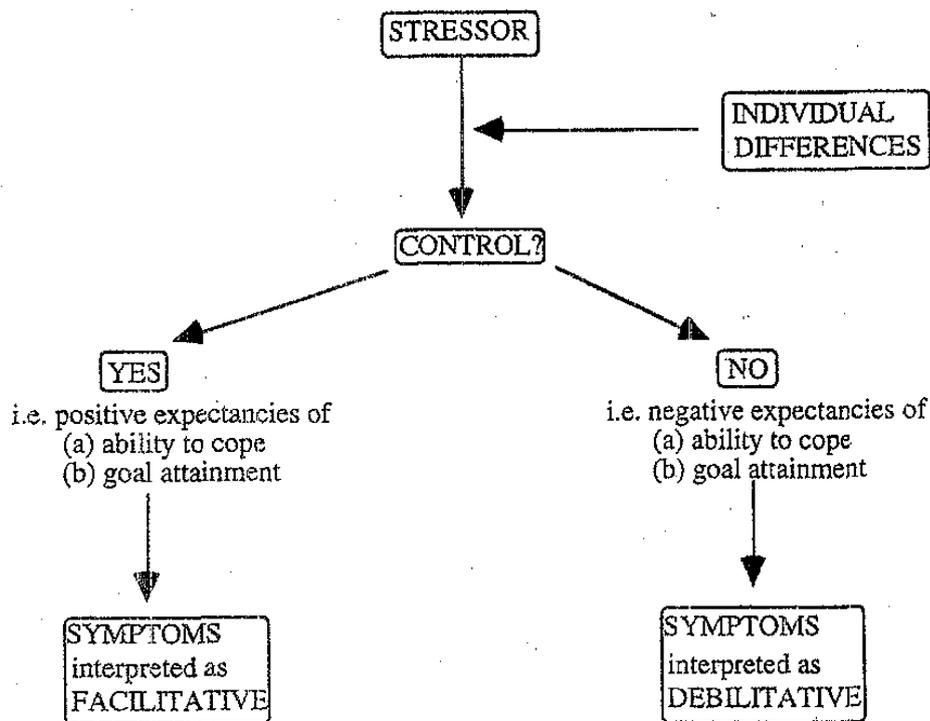


FIG.2. Jones (1995) control model of competitive anxiety.

Jones and Hanton's (1996) study revolved around the model Jones (1995) created. Jones and Hanton's (1996) research examined swimmers' interpretations of their anxieties and their goal attainments. They hypothesised that intensity would be similar in all the 92 swimmers, but ones with positive goal expectancies would see anxiety as more facilitative. Their findings add to the assumption that competition anxiety is not wholly debilitating towards performance. Control of anxiety in these studies (Jones, 1995; Jones and Hanton, 1996; Hanton & Connaughton, 2002) was examined as it tried to explain for why previous studies (e.g. Jones et al. 1994) had found no difference between intensity and duration yet direction was perceived as facilitative by the elite. Other studies such as Mellalieu, Hanton and Fletcher (2006a), Hanton, Neil, Mellalieu and Fletcher (2008) found results to show that facilitative directions are also found in elite performers with high self-confidence levels. Other studies such as Hanton and Jones (1999) suggest variables such as competitive experience may be a variable that should be examined when looking at anxiety direction. This has been supported by Hanton, Wadey and Connaughton (2005) who

found that elite performers who had debilitating interpretations had not had the key experiences necessary to help cope.

Competitive anxiety has developed over the years and as Neil, Wilson, Mellalieu, Hanton and Taylor (2012) stated, the facilitative outlook on anxiety can be positively connected with sporting performance, even though anxiety is deemed as a negative emotion. The handling of this emotion of anxiety seems to be important on the coping mechanisms used needs to be examined, as there has been no research into the coping mechanisms for rugby goal kicking. By adding the variables of difficulty of a rugby union place kick, which has been described by Jackson and Baker (2001) in figure 3 below, and the pressure of a competitive scenario on a kicker, it would be possible as certain the perceived affect these two external variables may have on anxiety.

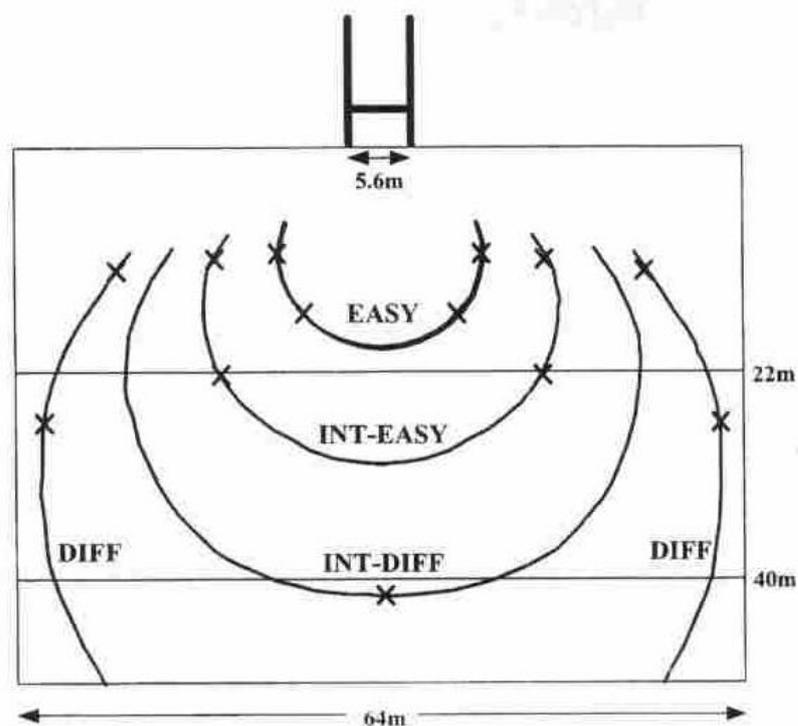


FIG.3. Jackson and Baker (2001) difficulty rating for kicks.

The purpose of this study has been decided following the review of the literature to examine the influences that the pressure and difficulty of a Rugby Union goal kick, can have on the perception of that players anxieties and how they perceive both pressure and difficulty to affect their performance.

CHAPTER THREE

RESULTS

3.1. PARTICIPANTS

Participants used in the study were 6 Male Rugby Union players who are all recognised goal kickers for the teams they play for. Players have all played at Semi Professional level at club, with one currently playing professionally. Each participant has represented county/region and/or country at age grade level. The age of the participants ranged from 19-21 (20 ± 0.89). Each of the players has kicked at goal from between 9-13 years ($11. \pm 1.55$).

3.2. INSTRUMENT

Prior to taking part in the interview, they were asked to **read and sign** and informed consent form. This form was designed to relay the rights they have as a participant in this study and to also underline the purpose of the study and the goals it aims to achieve (A copy of which can be found in Appendix A). The form also elaborated to the participant on why they had been asked to part take in this study. The signed copies of the consent forms showed that they had willingly accepted to take part and were entirely voluntary in doing this study, and could at any time decline from taking further part. Along with the consent form, prior to the interview the participants were sent copies of the Interview Guide (A copy of which can be found in Appendix B)

Each participant agreed to be involved in a semi structured interview, the aim of these interviews was to try and identify the influence of the pressures and difficulties upon their anxieties they have faced when taking a place kick, and to also explain their perceived affect this had on that kick.

The difficulty of kicks was defined by Jackson and Baker (2001) (The difficulties can be seen in Fig.3. (Chapter 2.2). Prior to the interviews taking place, a copy of Jackson and Baker's criteria was sent to each participant to check that they agreed with the scenarios. Each participant was also asked to mark out on the same scale of their own perception on the difficulties of kicks. From this study and adaptation of Jackson and Baker's criteria was created (Fig.4.) and was once again passed on to the participants to allow for familiarity of the criteria's and to make sure they agreed with the criteria used in the interview process.

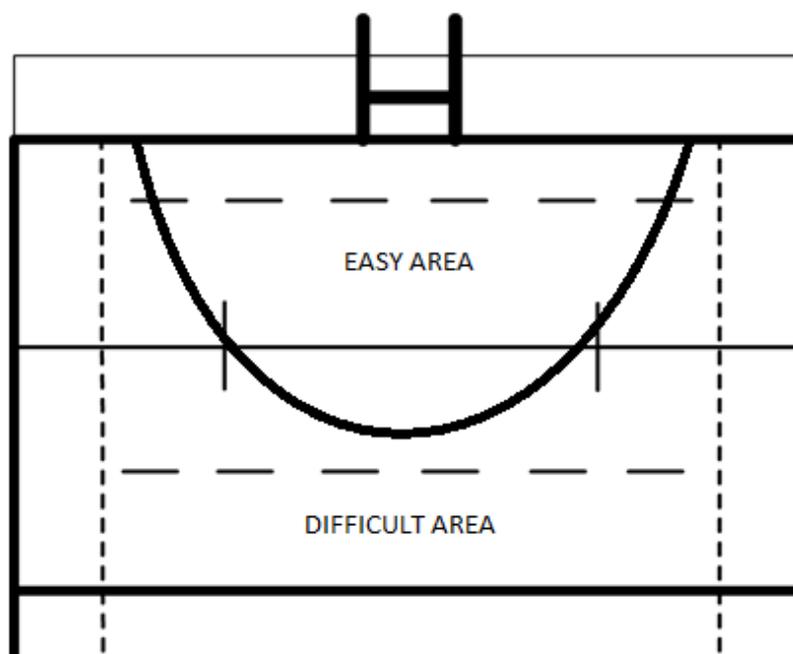


Fig.4. Adaptation of Jackson and Bakers Criteria following analysis from participants in the study.

3.3. PROCDECURES

The research project that was undertaken used semi-structured interviews. A semi-structured interview guide was created so that the researcher could try to examine how the participants would interpret the pressure and difficulty level of a place kick in a match scenario and their perceived influences on the anxiety and performance

Prior to the interviews taking place, each participant was given an informed consent form. This form is designed to relay the rights the participant has taking part in this study, whilst also describing the nature and purpose of the study. Once they signed this form they have therefore given consent to participate. However, at any time during the interview process they had the right to withdraw themselves from the interviewing without reason.

Interview times and venues were arranged and each venue was chosen by the participant to make them feel as comfortable as possible during the interview process. Each of the 6 interviews that took place lasted from 20-30minutes. During

the whole interview process, section 1 of the interview guide (A Copy of which is in the Appendix) was not recorded by Dictaphone. This section relayed the rights the participant had in this interview. This section also explained what the interview looked to investigate and what details that would be taken from this. The participants were briefed on how comments may be used in the write up of the research project, but their identities would remain completely anonymous. Section 1 allowed for the participants to read the definitions of anxieties, pressure and difficulty of kicks. The difficulty of kicks was defined Jackson and Baker (2001) (The difficulties can be seen in Fig.4. below). Prior to the interviews taking place, a copy of Jackson and Baker's criteria was sent to each participant to check that they agreed with the scenarios. Each participant was also asked to mark out on the same scale of their own perception on the difficulties of kicks. From this study and adaptation of Jackson and Baker's criteria was created and was once again passed on to the participants to allow for familiarity of the criteria's and to make sure they agreed with the criteria used in the interview process. Section 2 of the Interview guide was recorded; this is where the introductory questions were used to get the participants into the swing of the interview.

After these questions were asked about all the differing criteria's of kick, the interview asked questions to get the participants opinions on what previous research had found on anxieties affects. Finally the participants were asked on what advice they could give to coaches or other kickers on how they should deal with the anxieties they face with relation to difficulty and pressure. The interviewees were then asked if they had any questions to ask the interviewer, the interview then closed appropriately.

3.4. Data Analysis

The data was then transcribed verbatim. Once the interviews were transcribed, analysis of the interviews began. The analysis method would look to adopt the work of Miles & Huberman's (1994) causal networks analysis. A casual network is a display of the most important independent and dependent variables in a field study and of the relationships among them (shown by arrows) (Miles and Huberman, 1994). Hanton and Connaughton's (2002) also adopted the use of causal networks in their work. Their method of analysis uses boxes and arrows to create an illustration of the text from the transcribed data from the interviews. It brings the variables together with a description to create a coherent picture of the relationships being formed (Hanton & Connaughton, 2002). These illustrations contain streams that show they can be drawn up via different directions. The method of analysis in this study looks to adapt the method used by Hanton and Connaughton (2002) to try and draw out casual networks between pressure, anxiety and performance.

1. First of all the transcripts were studied to ensure that the content within each script is familiar in terms of data that is needed.
2. Raw data quotations were then used to draw up casual streams throughout the transcripts.
3. Inductive analysis occurs by developing themes from the raw data quotations in the interviews and creating causal streams to demonstrate the anxiety experienced influence the nature of the performance outcome.
4. Following the inductive phase of the analysis, links are established between what has been found in the present research compared with findings in relevant literature to determine whether these findings support previous theory.
5. Each causal stream was then discussed with the research supervisor to verify the findings.

This method is used so that the transcribed the interview guides are used to try and create an illustration of the relationships between the anxieties they experienced and how these anxieties had been affected by the pressure and difficulty of the scenario and the overall effect on the performance outcome. The results will then be discussed in the next section of the research project.

CHAPTER 4

RESULTS

4. Results

4.1. Easy kick, with no pressure- facilitative causal network

Following the data was gathered in accordance with the data analysis protocol, Causal Networks (Miles and Huberman, 1994) were created for each data set. These networks are used to give a visual representation of the results that have been inductively taken from the interview transcripts. The aim of each network is to illustrate how anxieties were interpreted during different kicking scenarios. The first causal network that was created was for the scenario of an 'easy kick, with no pressure'. The causal network in FIG.5. below shows the facilitative causal network for the cognitive symptoms experienced during this scenario.

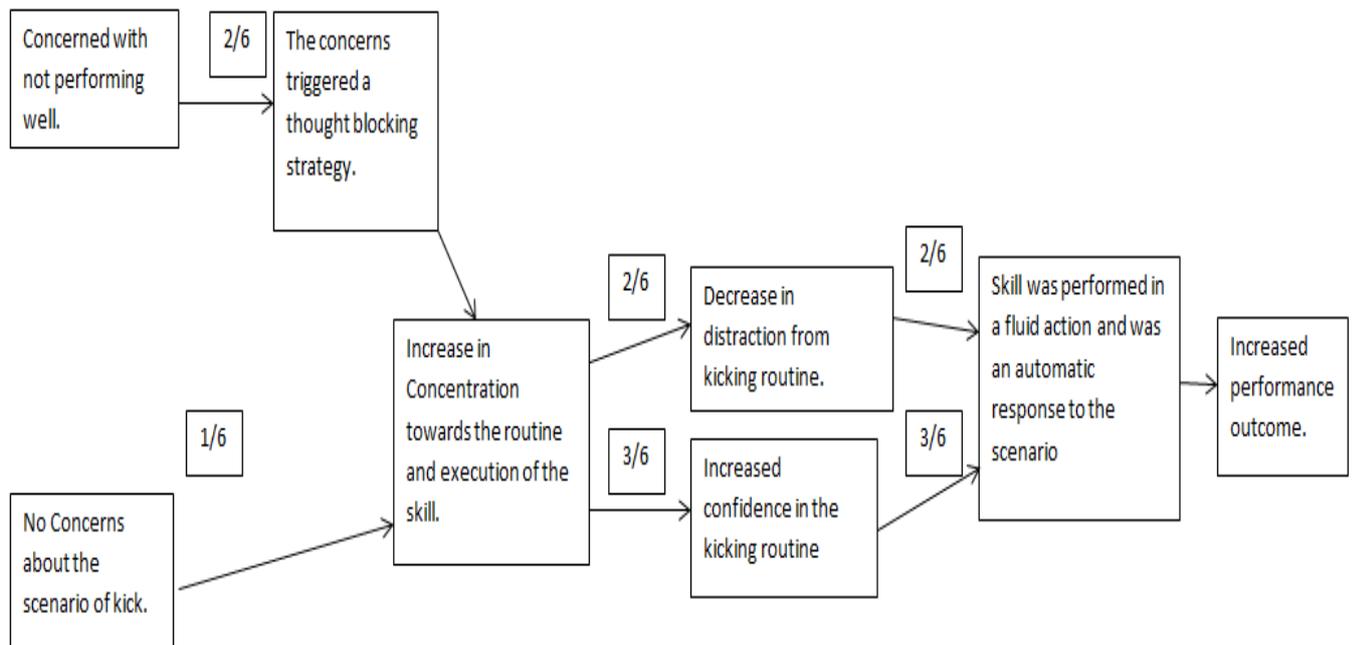


FIG.5. 'Easy kick with no pressure' - the causal network created for the facilitative cognitive symptoms that were described.

Within the causal network for the easy kick no pressure scenario, two causal streams were identified. Two of the six participants were concerned with not performing well in this scenario; this led to a thought blocking strategy they both used that blocked the negative concerns. When these negative thoughts had been successfully blocked, the participants explained how their concentration towards their routine and the execution of the skill was increased. Following this increased

concentration towards their routine, the participants described how this resulted in two effects on their kicking routine. Firstly the increased concentration helped increase the participants own confidence in their successful kicking routines. Secondly the increased concentration helped aid the performance of the participants by decreasing the perceived amount of distraction from the routine. The skill was then performed in an automatic nature with little conscious thought placed on the skill and executed successfully. This stream can be demonstrated through the following quote from participant 3:

“I was concerned that I wasn’t going to get the kick, So I took a second to block the negative thoughts so I could completely concentrate on my routine. This stopped me getting distracted and thinking about anything else other than my routine. Like when I have confidence in my routine I know that I will do well because it’s been very successful for me for a long time now. I performed well because I couldn’t get distracted because my concentration was directly on the kick and nothing else; this helped me have confidence in my routine” (Participant 3).

The second causal stream within the network was experienced by one of six participants. There was no concern shown during the easy kick no pressure scenario. The participants explained how due to there being no concern experienced, it allowed for an increase in concentration towards the routine of his kick. This then lead to an increase in the confidence that he had in his routine. Participant 5 described this in the following quote:

“I don’t really get concerned with anything in this scenario, so I can concentrate directly on the kick... When I concentrate on my routine I am confident I’ll do well because if I get everything right in my routine I’ll get the kick.” (Participant 5).

4.2. Easy kick, with no pressure - debilitating causal network

A second causal network has been created to illustrate how the other participants have viewed their anxieties as having a debilitating nature towards their kicking performances in the scenario of an easy kick with no pressure. The causal network for the debilitating symptoms can be seen below in FIG.6.

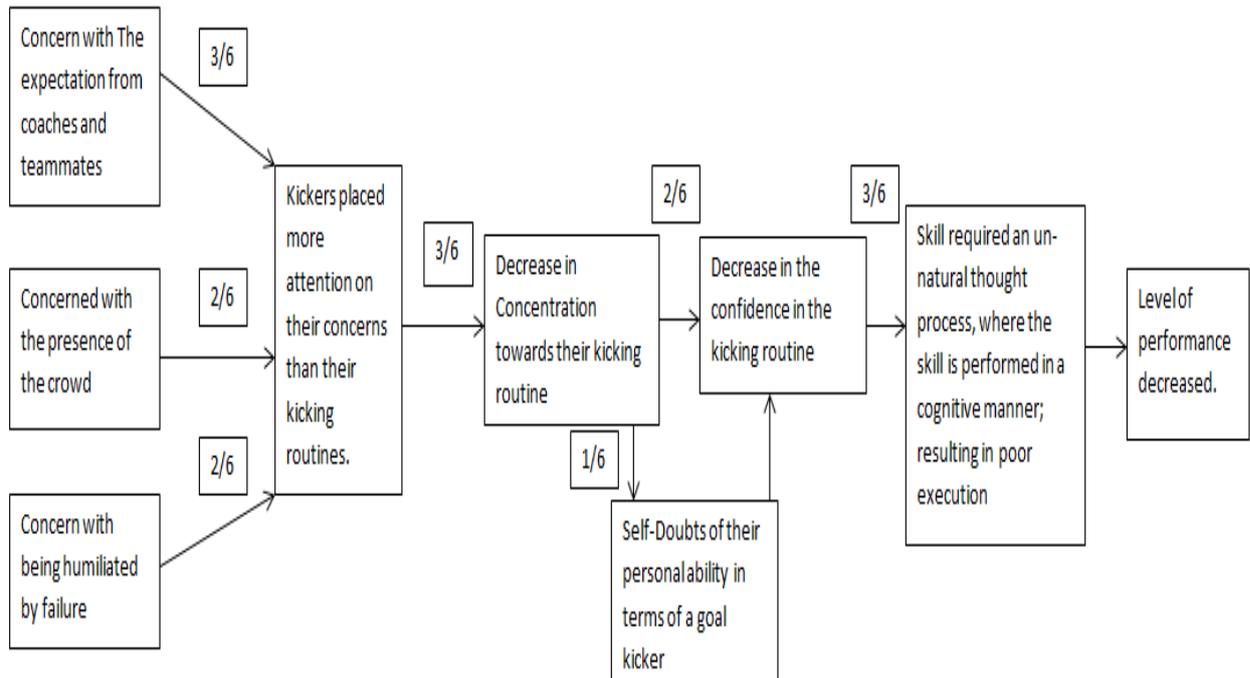


FIG.6. 'Easy kick with no pressure'- the causal network created for the debilitating cognitive symptoms that were described.

Three casual streams were identified from this debilitating causal network for the easy kick no pressure scenario. Three of the six participants identified that they were concerned with expectation that was placed on them by players and coaches. These concerns were then identified to have diverted their attention away from their regular kicking routines and placed more focus on this concern. As a result of this concern the participants described how their concentration on the routine was affected. Following this decrease in routine concentration, two of the six participants explained that due to a lack of concentration on their routine, they lost confidence in the routine. One of the six went in another direction and explained that following the concentration decrease, and placing more focus on the concern, the participant started to self-doubt the ability he had to perform well in this scenario which then in turn negatively affected the confidence in the routine. Following the decrease in routine confidence the three participants described that this had negatively affected their performance and the skill was not a natural movement that they would have expected and as a result they performed poorly. This is shown in the following quote:

"I was worried about the expectation that was placed on me from the coach and other team mates on the team, it was so easy they expected me to get

the kick, but due to the scenario, it was a lot harder than they thought it was for me so I began to place more of my attention on the concern that on my kick. This made me concentrate less on my kick and I began to doubt that I could actually get the kick and I lost almost all confidence in my routine I rushed the skill and I missed terribly” (Participant 4).

The second casual stream which resulted in debilitating cognitive functions was identified when two of the participants described that they became ‘concerned with the crowd’s presence’. Similarly to the previous stream the participants explained that they had placed more attention on this concern than on the kicking routine. Concentration on the routine was negatively affected; from this concentration decrease the kickers lost confidence in the routine because they had not placed all their attention on the routine. The skill was poorly performed in an unnatural manner unlike the usual manner they expect and the performance outcome was unsuccessful. Participant 1 described this:

“I also get worried about the crowd, it can distract me from my routine which really affects the way I kick. I lose concentration and it really affects the confidence I have in my routine, if I don’t place the utmost concentration in the routine I have I don’t actually know what I’m meant to do in my kicking prep and it leads to a poor outcome like the one that happened.” (Participant 1)

The final stream that led to debilitating cognitive function was identified with the participants being concerned with being humiliated by a poor performance. Participants again explained that they placed more attention on the concern of being humiliated than on their kicking routine, thus decreasing the amount of concentration on the routine. Following the decrement of concentration, the participants described a loss of confidence in their routine. This led to the skill being performed unnaturally by the kickers, with conscious thought towards the performance and execution of the skill was poor, thus resulting in a negative outcome. Participant 4 explained the following:

“I always think of how if I miss a kick when in this area how upset and humiliated I’d get. I got concerned in this way with this kick as well. All I do is worry and think about this humiliation, so I place more concentration on this

than on the kick.... It makes me unconfident with my routine if I don't concentrate on it" (Participant 4).

4.3. Easy kick, with pressure- facilitative causal network

The casual network for the easy kick with pressure can be seen in FIG.7. The network shows three casual streams for the cognitive anxieties experienced by the participants.

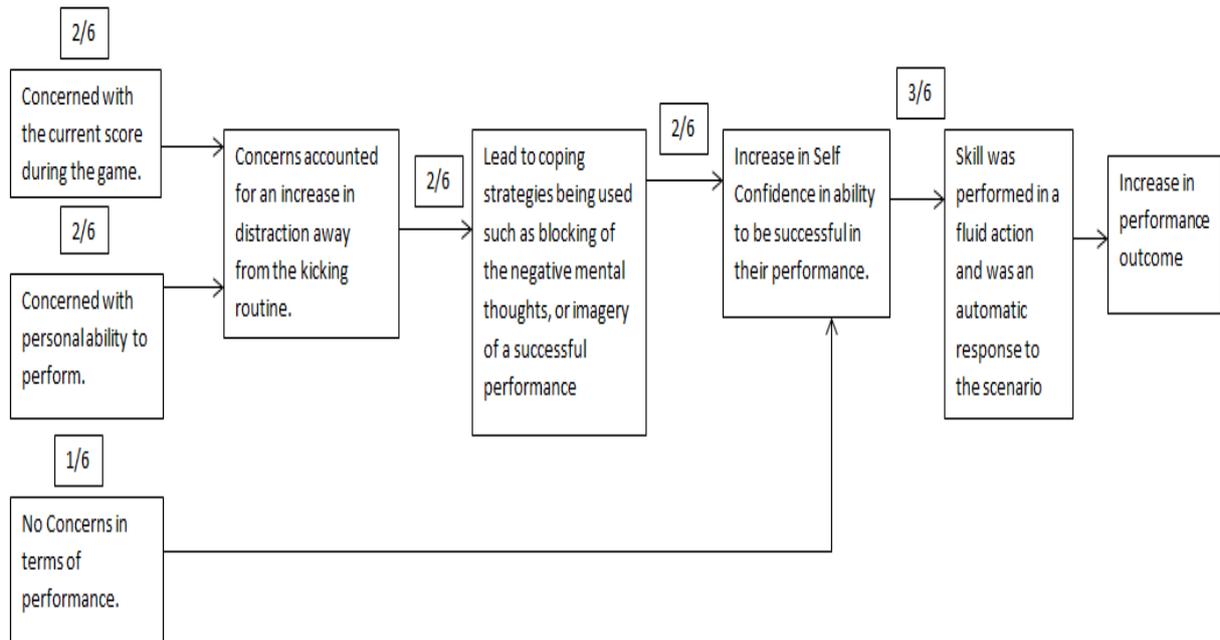


FIG.7. 'Easy kck with pressure'- the causal network created for the facilitative cognitive symptoms that were described.

The first stream to be identified starts with two of the six participants identifying a concern about the current score in the game. This concern accounted for an increased amount of distraction away from the kicking routine. Participants described how they then used coping strategies blocking these negative thoughts, and positive mental imagery of a successful previous experience. When successfully applied to an image of a previous successful experience, self-confidence in the ability to perform well increased. The skill was in turn performed in a fluid automatic response to the imagined scenario. This is evident in participant 2's quote:

"It was such a close game, I was worried about the score so much and it really distracted me, but I have kicked like this before so I knew how to cope

like I remembered a previous performance from a similar situation that I did well in, and it helped me to also block out the negative thoughts about the scores and I become very confident I'll do well." (Participant 2).

The second casual stream elaborates on the participants expressing concerns with personal ability to perform well in the scenario. This concern increased the amount of distraction the participants had from their kicking routine, from this the athletes coped using strategies of successful mental imagery from a previous performance where they performed well and they blocked these negative thoughts. When the strategy was performed successfully like in the previous causal stream, the skill was performed in a fluid and automatic manner. Participant 3 expressed this in his interview:

"When the pressure is on, I can sometimes feel myself doubting the ability I have to perform well, and it puts me off my kick so I try and find a way to cope with it by imagery of when I kicked good in a similar situation, this in turn helps me block out the negative thoughts about me being incapable of getting the kick and it makes me confident I'll do well" (Participant 3).

The final stream to be explained is experienced by only one of the six participants. They expressed to have had no concerns when under this pressure scenario for an easy kick, because there was no pressure they had the upmost self confidence that they would perform well and their outcome would be successful. This can be seen in the quotation by Participant 6:

"I don't get concerned in this scenario because I know it's a kick I should get no matter the pressure, so I just let it build my confidence that I'm not bothered by it at all" (Participant 6).

4.4. Easy kick, with pressure - debilitating causal network

The second causal network for the scenario of the easy kick with pressure was created to show the debilitating nature of the anxieties that had been interpreted by the participants. It can be seen in FIG.8 below. From within this causal network, three causal streams were developed.

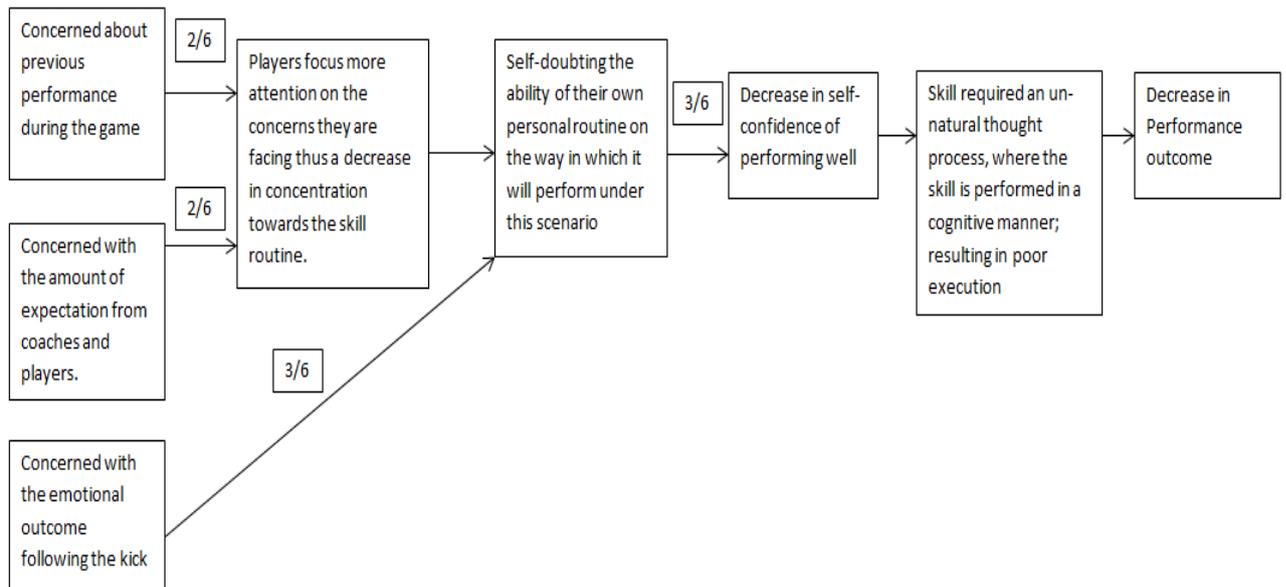


FIG.8. 'Easy kick with pressure' - the causal network created for the debilitating cognitive symptoms that were described.

The first stream starts with two of the participants describing a concern with their previous poor kicking performance in the game. The players then focus their attention directly on the concern, diverting concentration away from the kicking routine. The players then began to doubt their personal ability of their kicking routine and doubt their own capability to perform under the pressure with an overall loss of self-confidence. The skill was then performed with an overtly conscious control in the nature of movement; unlike the automatic motion they normally expect resulting in a performance decrease. Participant 4 described this:

“I had kicked really rubbish earlier in the game, and I was thinking about that the whole time I was setting the ball up, didn’t think about the setup well at all, and it made me think I couldn’t get this kick, and it completely knocked my confidence and I missed such an easy kick” (Participant 4)

The second casual stream (FIG.8) is initiated as a result of concerns with the amount of expectation to perform well by coaches and team mates. After this initial impetus it follows the same stream with attention diverted away from the routine onto the concern, and self-doubt about the ability to perform in this scenario, with a similar drop in self-confidence. The skill was then performed as an unnatural process and the outcome was poor. This was elaborated upon by participant 5:

“The coach always tells me before the game that he doesn’t care about the hard kicks as long as I get the easy ones, this is what I thought about a lot in my kick prep, that he expected me to get it, especially in this scenario when the pressure is on. It makes me worried and I can’t concentrate and I ain’t as confident as normal and I don’t perform well”

The final causal stream (FIG.8) was initiated by the participants being concerned with the emotions they had experienced following the kick. This concern directly led to the participants self-doubting their ability to perform the skill to a successful level, thus leading to a decrease in self-confidence. The skill was then performed in an unnatural manner and performance decreased.

The network for somatic anxiety can be seen in (FIG.9) below, this scenario was the first to demonstrate somatic anxiety experienced by any of the participants.

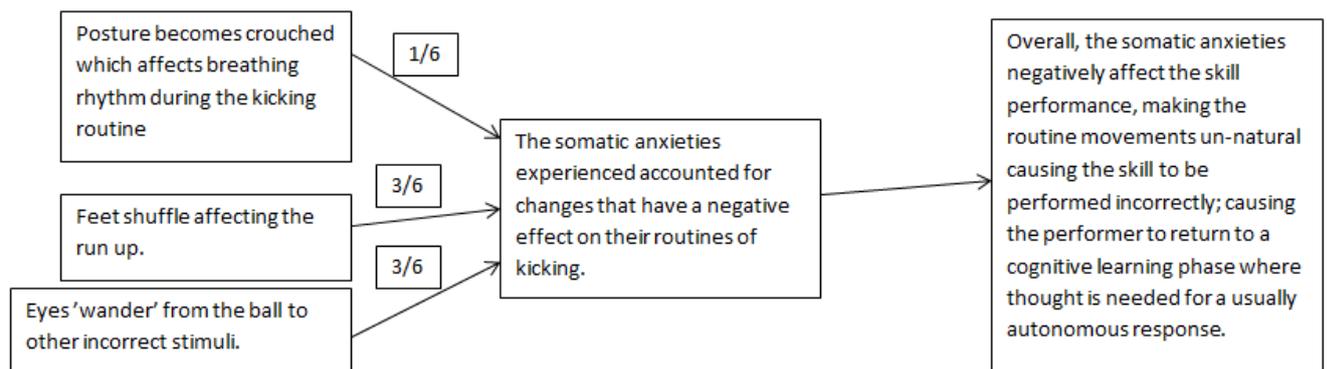


FIG.9. 'Easy kick with pressure'- the Causal network created for the debilitating somatic symptoms that were described.

The somatic concerns that were experienced were that one participant described their posture became crouched which affected their breathing rhythm. The second somatic anxiety experienced by three participants related to their feet shuffling and affecting their run up to the ball. The same three participants described that their eyes drifted away from the ball distracting them. All of these anxieties led to the participants changing their routines in a negative manner. The overall effect of these changes on the skill being performed resulted in unnatural movements, to overcome these participants had to use conscious thought in executing their skill causing a decrease in their perceived performance.

4.5. Difficult kick, no pressure – Facilitative symptoms

In this network there was no direct cognitive anxiety experienced by the participants as illustrated in FIG.10 below.

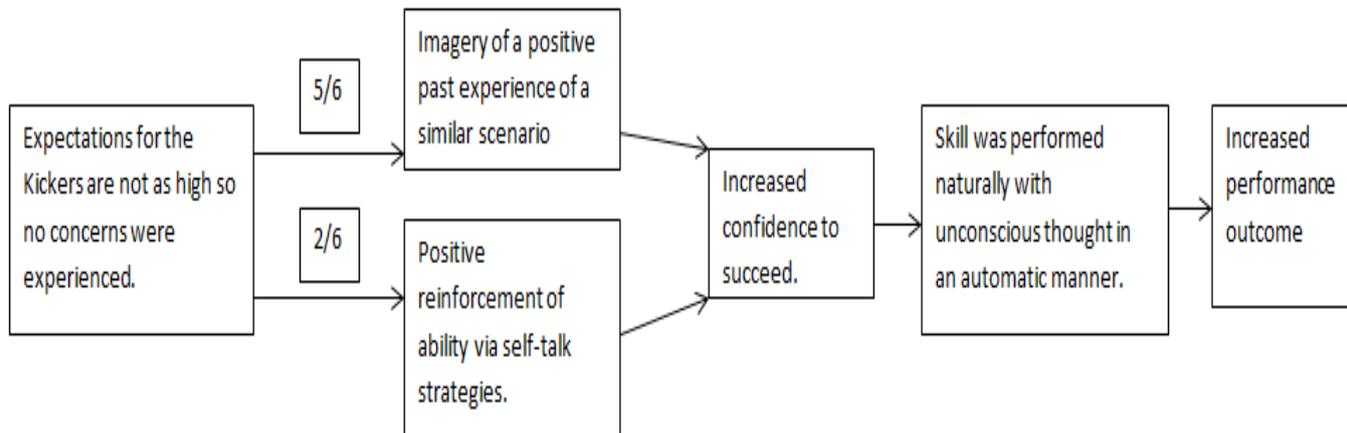


FIG.10. 'Difficult kick with no pressure'- the causal network created for the facilitative cognitive symptoms that were described.

The participants explained that they experienced a lower expectation for them to achieve a well performed kick, as a result they were not as concerned with the kick, however it led to them applying methods of imagery from a positive past experience (5/6). Two of the kickers also used a form of positive reinforcement via self-talk to reinforce confidence in their kicking ability. These strategies increased the kicker's self-confidence to succeed in difficult kick circumstances and the skill was performed with unconscious thought allowing for an automatic skill response which was natural to the kickers, this in turn resulted in an increased in performance level. This was explained by participant 1:

"...because there was no pressure from expectation to get it, so I remembered what I did in the game before in a similar situation, and it made me confident I'd get the kick and I did." (Participant 1).

4.6. Difficult kick, no pressure – debilitating symptoms

One participant described the concern they experienced in this scenario to have been debilitating towards their performance, this stream can be seen below (FIG.11).

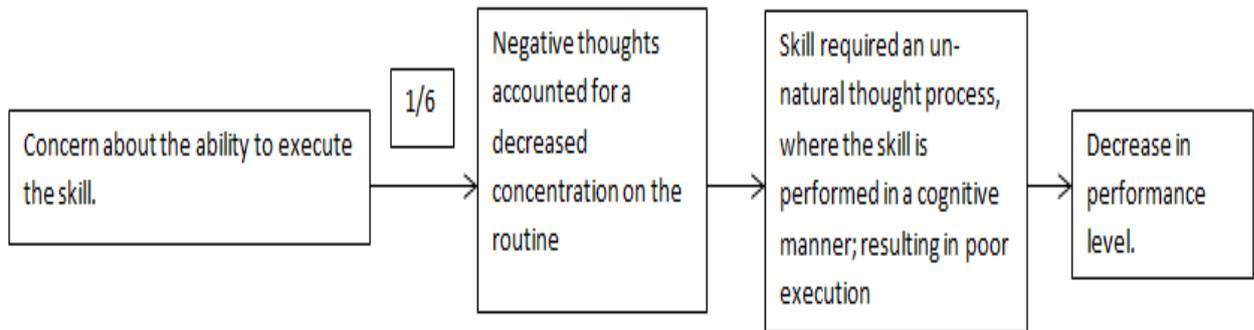


FIG.11. 'Difficult kick with no pressure'- the Causal network created for the debilitating cognitive symptoms that were described.

The participant described how that he was concerned that he didn't have the ability to get the kick, the negative thoughts decreased the amount of concentration his routine and placed it on certain aspects of the kick, therefore leading to conscious thoughts about the skill and the skill becomes performed in a cognitive manner. The skill was as a result executed poorly and the performance was poor.

4.7. Difficult kick with pressure – facilitative symptoms

This scenario was the final one in which any anxiety was experienced by the participants in the study. This was the first network to show all participants deeming the anxiety they interpret as facilitative to their performances. This network can be seen below (FIG.12)

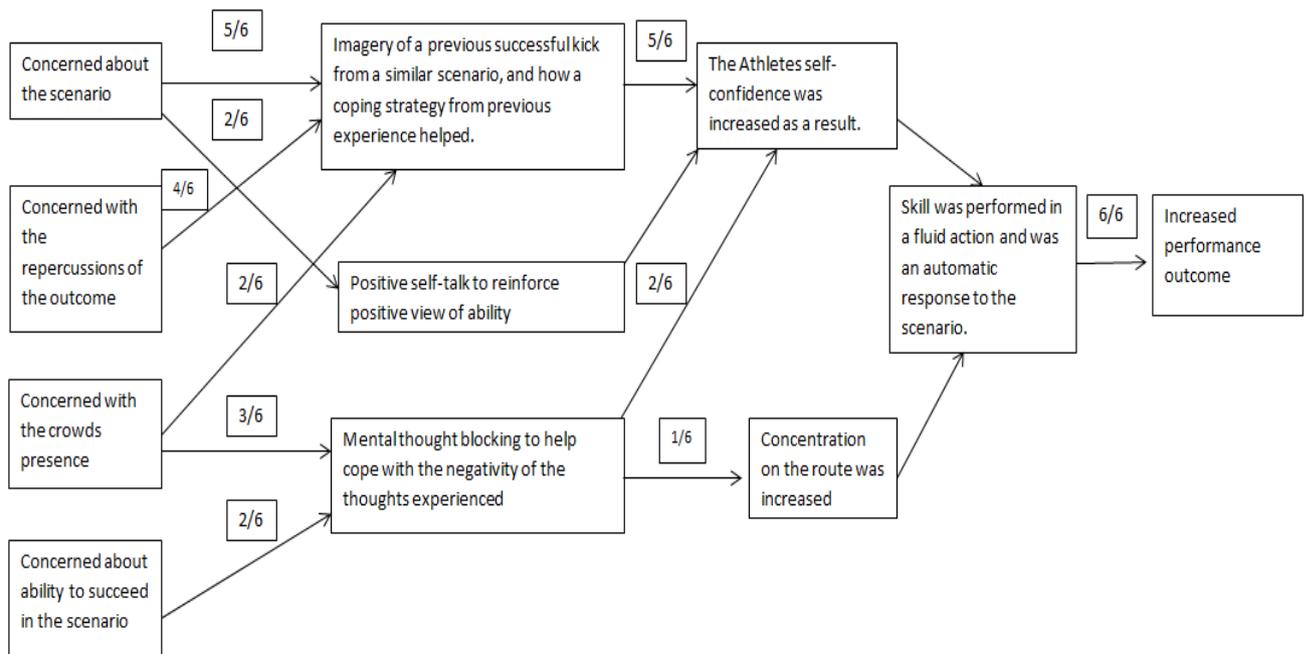


FIG. 12. 'Difficult kick with pressure' - the Causal network created for the facilitative cognitive symptoms that were described.

In this network, the participants described four different cognitive anxieties, which accounted for five different streams. These three concerns were coped with by imagery of successful previous performance. The concerns were that the participants were concerned about the scenario they were in (5/6), concerned with the repercussions (4/6), and that they were concerned by the presence of the crowd (2/6). Following these concerns this imagery influenced an increase in the confidence level in the participants, as a result the performance level of the participants increased and the action was a fluid response to the scenario.

The second coping method used to deal with the concerns was the use of positive self-talk. Two of the six participants described to cope with the concern of the scenario they used positive self-talk to reinforce their positive view of their ability. This increased the self-confidence of the participants, which aided their performance

and allowed for the skill to be performed automatically with little thought process with a successful outcome.

The final coping strategy used by the participants was the use of thought blocking. The concerns with the crowd presence (3/6) and concerns in their own ability to succeed (2/6) were considered negative; the participants described how they can mentally block out these thoughts, from this two of the six described that it accounted for direct increases in self-confidence, where as one participant described that the mental blocking accounted for a concentration increase towards the routine which aided performance. This can be seen from participant 1's quotation below:

“Because the worries of the crowd presence and my own ability to do well I kind of blocked it all out because I have done that before and it helped me to concentrate on my routine and allow for all my negative thoughts to be blocked out and I concentrated really well. And I got it, we won”
(Participant 1).

CHAPTER FIVE

DISCUSSION

5.1. Introduction

In this section the primary findings from the study will be discussed and an attempt will be made to apply previous research literature and to examine whether the study has addressed the research question.

The main premise of this section is to discuss any identified relationships between the ways in which a kicker interprets their anxiety and the effects of difficulty and pressure placed upon a player during a rugby union goal kick effects this interpretation. This section will also examine the practical implications of the findings for the coaches and players, and the possible avenues to build on this study with further research.

5.2. Contributions to knowledge

The main aim of this study was to investigate whether the interpretation of anxiety is effected by the influence of difficulty and pressure on a kicker. The study did provide variations in the interpretation of the anxiety the participants experienced dependant on the difficulty and pressure level placed on that kick. Facilitative interpretations of anxiety were experienced with differing amounts of consistency throughout all the scenarios, with the most conclusive results showing facilitative interpretations for difficult kicks.

Facilitative interpretations of anxiety were experienced in each scenario with no less than half the participants experiencing these facilitative directions for anxiety at each scenario. This finding of facilitative directions experienced by the kickers is similar to the findings of Jones et al. (1994) who initially found that facilitative interpretations were more likely with the elite performers.

During the easy kick no pressure scenario, facilitative interpretations were seen to have been generated by the kickers who experienced greater control of cognitive anxiety. Kickers with more perceived control over the appraisal of anxiety had a more facilitative interpretation which backs the literature of Jones (1995) and Hanton and Connaughton (2002). The ability of the kickers to cope helped the athletes by increasing self-confidence. This is also similar to Jones et al. (1994) finding that the kickers who coped better maintained their self-confidence. Facilitative interpretations were also linked with increases in

concentration via the coping of anxiety which also provides backing for Otten's (2009) view that cognitive anxiety has a positive relationship with cognitive anxiety, however some cognitive anxieties at this level were interpreted as negative. Debilitative views were also found with this interpretation when the athletes focus was affected and they were distracted. This can question the incentives of pressure in the work and Beilock and Carr (2001) as they explained that distraction was increased in pressure scenarios. This study showed that distraction can be heightened in scenarios of low pressure as well.

The second facilitative interpretation as present in the second scenario when pressure was placed on an easy kick, similar to the first scenario with no pressure when the kickers experienced a greater perceived control over their anxiety they had a more facilitative interpretation. Again this is consistent with the findings of Jones (1995) and Hanton and Connaughton (2002) who found similar results for the control of anxiety. This scenario also supported Jones et al. (1994) notion of self-confidence maintained occurs when coping is of a better standard. Debilitative causes were also found for this scenario; the causes were consistent with findings by Beilock and Carr (2001) that anxiety heightens the explicit knowledge placed on a previously automatic skill, thus causing conscious thought on the skill. It was also consistent with Jones et al. (1993) as these participants could not cope with their anxieties and thus could not maintain their self-confidence. This debilitative interpretation also accounted for the only record by the participants of somatic anxiety in the study. Within the debilitative view of somatic, the negative relationship between somatic anxiety and concentration on the skill in performances has strengthened the findings of Otten (2009) who also found somatic anxiety to have a negative relationship with self-focus.

The third scenario when the athletes were faced with non-pressure scenarios provided distinct facilitative interpretations. For this scenario however, none of the 5 participants who experienced facilitative outcomes did describe for any cognitive anxieties. Instead these participants described that due to the fact that expectations were not as high under a difficult kick, then they experience less/no concerns about the scenario. Expectations in terms of goal attainment were examined by Jones and Hanton (1996) who explained how positive goal attainment expectations lead to facilitative interpretations. In this study

expectation from external sources (i.e. coaches and other players) were lower which allowed for control over the skill in terms of coping mechanisms which accounted for increased self-confidence in these kickers, again providing consistent evidence to support Jones et al. (1994) notion that self-confidence maintenance is enhanced via successful control and coping of anxiety. The debilitating interpretation of anxiety came from one athlete being unable to again gain a control over their cognitive anxiety of self-ability doubts thus causing a debilitating outcome. Again this debilitating notion is consistent with the findings of Beilock and Carr (2001) as explicit attention was applied to certain parts of the thought process of the skill which is un-natural in this skill.

The final scenario of pressure when faced with a difficult kick is the most conclusive finding in the study. All participant experienced facilitative interpretations of anxiety at this scenario. Concerns were experienced due to the added stipulation of pressure compared with the difficult kick with no pressure. All athletes claimed of different control methods in this scenario as allowing for facilitative outcomes as the expectancy for goal attainment was lower, this in turn backs the findings again of Jones (1995) and Hanton and Connaughton (2002). Jones et al (1994) self-confidence maintenance on appropriate coping was also backed by the findings.

Under pressure scenarios in the study, factors such as crowd pressure, concerns with relation to ego relevance, extrinsic incentives (e.g. cup progression) were present at all pressure scenarios. These are all relative and support the four incentives of pressure described by Baumeister and Shower (1986), however these were also present in situations of no pressure on the athletes.

5.3. Practical Implications

The study has found many ways to which coaches and players can be aided in dealing with their anxiety and different scenarios. The clearest finding from the study looks at the expectancy placed upon the goal kicker. All participants described the lower expectancy of getting a difficult kick allowed for a more positive interpretation and better control of anxiety. This could be approached in ways by coaches and team players in situations of pre match pep talks, team meetings and one on one chats with the kicker, coaches and team mates

(captains talking in meetings) may want to try and explain to kickers there is no expectancy upon any kick. Expectancy seems to be an increased performance variable when teams are in close games, addressing the matter close to these games may help. The importance of a sound routine is necessary from the testimonies from the participants in the study, working on a certain and being used to certain scenarios may be helpful in creating a consistent routine.

Development of sufficient coping strategies by coaches and kickers is another way in which the study provides impetus for practical implications. The work with coaches on imagery for previous positive could be enhanced via watching previous successful kicks in an analysis session. Employing thought blocking or self-talk methods into practice sessions so you can repeat the method and it becomes a fluent part of the routine throughout a kick.

5.4. Limitations of the study

This study has uncovered some rich descriptions about how anxiety affects a rugby union player's kicking performance from both a facilitative and debilitating perspective however there are limitations to the status that can be applied to the interview data and the conclusions reached.

The descriptions of kicking experiences elicited from the participants have been analysed and causal relationships have been constructed by the investigator. If true to the methodological essence of qualitative research the causal relationships drawn up by the investigator required scrutiny and analysis by each of the participants in order to confirm the conclusions that were reached (Silverman 1993). However this more complex way of addressing the data may have produced a similar conclusion. The course taken in this study has resulted in identification of legitimate debilitating and facilitative effects on a kicker's performance and contributes in a small way to the body of knowledge that is concerned with the psychological performance of rugby union players kicking.

The conclusions reached in this study cannot be generalised as the sample size used was small and purposive and does not represent the rugby union population in general. Samples of players at a variety of levels of the sport and age range would be required along with the use of additional methods such as observation

of kicking performance to enhance and further explore the phenomena (Denzin & Lincoln, 2000). Future research building on this small qualitative study will be in the interest of the rugby union world, at all levels of the game, where the performance and reliability of goal kickers can make the difference between winning and losing games.

5.5. Future Research areas

The study has opened a few avenues for future research to be concluded. Following the cognitive anxiety and self-focus relationship of Otten (2009) being supported by this study, an area that could be examined directly is can the cognitive anxieties which affect self-focus be categorised as facilitative or debilitating in any quantitative manner

Another area for future discuss could be anxiety and pressures relationship. In this study, anxiety was reported to have created pressure when there was no pressure on the situation. Further research into this anxiety/pressure relationship may want to take a quantitative to provide empirical relationship evidence.

5.6. Conclusion of Discussion

This study has confirmed the work of Jones (1995) and Hanton and Connaughton (2002) in terms of that when there was more perceived control over anxiety, facilitative interpretations of anxiety occurred. Also this study provides evidence confirming the findings of Jones et al. (1994) that confidence is maintained following successful coping. Additionally parallels were drawn with the work of Beilock and Carr (2001) related to the use of distraction and explicit knowledge in pressure scenarios and non-pressure scenarios.

CHAPTER SIX

CONCLUSION

6. Conclusion

The study addressed the question of what influence pressure and difficulty may have upon a kick in terms of the directional view of anxiety that would be experienced by the kickers. The results were amassed following a successful interview period where participants gave their accounts of anxiety based on the scenario. Results found there to be conclusive evidence to show that pressure and difficulty did have differing effects on interpretations of anxiety direction.

The hypothesis was weakly supported as only one debilitating account was alluded to for the pressure scenarios when the difficulty was easy and pressure was on the kicker. Due to the fact this research was qualitative it allowed for in depth insight into the participants reasoning and experiences during the scenarios and some understanding about other variables such as expectancy that were found to be influencing factors. Unlike previous literature, this study found that the participants thrived in a harder skill setting with more pressure on them in terms of their anxiety directions. The study has opened new areas for research which were discussed in chapter 5, and overall the study has addressed the research question with sound findings.

CHAPTER SEVEN

REFERENCES

7. REFERENCES

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APPENDIX A

COPY OF CONSENT FORM

UWIC PARTICIPANT CONSENT FORM

UWIC Ethics Reference Number:

Participant name or Study ID Number:

Title of Project: *The influences of pressure and difficulty upon anxiety and its perceived affect on a place kick in Rugby Union*

Name of Researcher: Callum Bennett

Participant to complete this section. Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I agree to take part in the above study.

4. I agree to the interview being audio recorded

5. I agree to the use of anonymised quotes in publications

Name of Participant

Date

Signature of Participant.....

Name of person taking consent..... Date.....

Signature of person taking consent.....

APPENDIX B

COPY OF PARTICIPANT INFORMATION SHEET

Title of Project: The influences of pressure and difficulty upon anxiety and its perceived affect on a place kick in Rugby Union

After years of being a goal kicker myself, I have always been intrigued into what affects the psychological stresses (Anxieties) have on the performance of rugby union goal kickers. By examining this area of the goal kick, it could lead to help being created for coaches and players on how they should work with their anxieties.

- You are being invited to partake in this study conducted by Callum Bennett; the study is being supervised by Declan Connaughton; A very experienced lecturer at Cardiff Met.
- The only intention of the study is to be the under-graduate dissertation project for Callum Bennett.
- If you require further information on the project please contact myself directly.

Your Participation in the Research Project

Why you have been asked

You have been asked to participate in this study because; you are an experienced rugby union goal kicker; who fits the criteria for participants that need to be examined in the project.

If you believe you do not fulfil this criteria then we apologise for contacting you.

You are one of 7 other goal kickers who have been contacted to participate in this study.

What happens if you want to change your mind?

If you decide to join the study you can change your mind and stop at any time. We will completely understand and accept your withdrawal from the research. There is nothing binding you to the research project, you can withdraw hassle free at any time with no queries.

What would happen if you join the study?

If you agree to undertake the study, then you will be required to undergo a 30minute interview process whereby we will try to assess the anxieties you face when you kick in a game.

All the interviews will be transcribed, analysed and presented in results in the dissertation. During the process you will remain completely anonymous. Raw quotations may be used from your interview, only if you sign this in the consent.

Are there any risks?

There will be no risks to you during the interview process, the interview will just ask you to recall different game scenarios. If at any time you feel that the interview is too

intrusive or you feel uncomfortable at all. Ask to stop and the interview will cease to continue.

Your rights.

Your taking part in this study is not legally binding, you do not give up any rights. If at any point you wish to withdraw from the study you are free to do so .

Any special precautions needed?

In order to gain clear and relevant information please can you not to take any alcohol during the period immediately before interview. This is to ensure the account you give is accurate .I am happy to arrange the interview for your convenience to avoid this issue.

What happens to the questionnaire and interview results?

I will be recording, transcribing and analysing all the information taken from you during the interview. I will be using this information to determine the effect of anxiety on kicking performance. I will report my findings in my undergraduate dissertation. With my academic supervisor I may publish my findings in an academic sports science journal.

Are there any benefits from taking part?

There are no direct benefits to you for taking part; however this study may help develop knowledge and understanding about the anxiety experienced by rugby union players when performing goal kicks.

How we protect your privacy:

In order to maintain your confidentiality interviews will be recorded verbatim, transcribed and the transcripts anonymised. Tape recordings and interview transcripts will be held securely on encrypted data storage devices.

I will not store any identifiable details about you that will directly relate to my results. I will use a coding system known to myself to identify participants in my study .

When my study is complete your name and address and your consent form will be stored securely by the University to comply with research governance rules. This information will be stored in a secure location. When the study is complete the interview recordings will be destroyed.

You will be given a copy of this information sheet along with a copy of your signed consent .

PLEASE NOTE: *YOU WILL BE GIVEN A COPY OF THIS SHEET TO KEEP, TOGETHER WITH A COPY OF YOUR CONSENT FORM*

Contact

Details:

Callum Bennett Telephone 07825548906 email
st10001341@outlook.uwic.ac.uk

Declan Connaughton email dconnaughton@cardiffmet.ac.uk

APPENDIX C

COPY OF INTERVIEW GUIDE

**The influences of pressure and difficulty upon anxiety and
its perceived effect on a place kick in Rugby Union**

INTERVIEW GUIDE 1

Name : _____

Subject # : _____

Age: _____

Best Standard: _____

Address: _____

Tel No : _____

Interview Date : _____

Start Time : _____ Finish Time : _____

SECTION 1

INTRODUCTION (NOT RECORDED)

Hello, I am Callum Bennett, an undergraduate student from the School of Sport at Cardiff Metropolitan University, Cardiff, Cyncoed, UK. Thank you for accepting to participate in this interview for my study. The project you are partaking in involves examining the influence that pressure and difficulty have upon anxiety and the perceived affect on a place kick in a game of Rugby Union.

The purpose of this study is to investigate the impact of different forms of pressure and difficulty has on the perceived anxiety and its subsequent effect on performance. As I am an undergraduate student my work will be supervised by an experienced lecturer employed by UWIC.

All information collected from the interview will be confidential and used in my undergraduate dissertation. Your name will never be revealed during the dissertation project.

Throughout the interview all information that you will disclose to me the interviewer will be **strictly confidential**. I may use your words directly as quotations within my work to elaborate on discussion topic in my dissertation. These quotes will remain **completely anonymous**. I will ensure that your identity stays protected throughout. During the interview, it will be recorded via Dictaphone so that I can ensure the most precise information is captured. It will be transcribed, for the accurate inspection and reference of quotes verbatim.

Participant's Rights

As a participant in this study you have several very definite rights. First, you are doing this interview completely voluntarily, and at any time you can decline to answer and questions and stop the interview. There are **no right or wrong answers** to the questions that I will be asking. I am looking to learn and discover relevant research but to learn your view on different scenarios. Hopefully, you will answer the questions in a clear and straight forward manor. If there is a question that you do not wish to answer, I would rather you decline than try to give me an answer that you think I would like to hear. So if you would prefer not to answer a question state “no comment”, and no further questions related to that topic will be asked. If you have any questions as we go along please feel free to stop me and ask as in the case for clarification, at any time you do not understand what I am asking.

DEFINITIONS:

Cognitive Anxiety: Refers to the mental component of anxiety and is characterised by the symptoms, for example, concerns and worries about your upcoming competition, for example, losing and performing poorly.

Somatic Anxiety: Refers to your perception of your physical symptoms you experience and is characterised by symptoms such as physical nervousness, butterflies in the stomach, tense muscles, and increases in heart rate.

Direction: Refers to the extent with which an anxiety symptom can be perceived by the performer as either facilitative (positive) or debilitating (negative) towards their performance e.g. For a kick you may feel that the anxieties you are experiencing are having a negative on your performance

Intensity: This refers to the level of anxiety you may experience in your performance, be that cognitive or somatic E.g. you may feel a high level of somatic anxiety for the situation, so you would register this as a high number on a 1-10 scale.

Pressure: The definition of what pressure is taken from *Baumeister (1984)*.

Pressure results from what desire the individual has to perform well in a highly demanding skill situation. These pressures can come in different factors that affect the importance of performing at a high level.

For example, you may feel a lot of pressure from a kick due to the scenario and your own cognitions of how you should perform may affect these.

Pressure can come from one or four areas - audience presence, competition, performance-contingent rewards and punishments, and ego relevance of the task.

- **Audience presence** was seen as an evaluative tool where participants who experienced this pressure were wary of their evaluations of their performance.
- **Competition pressure** came from when the performer was aware that their performance outcome would be compared to other participant's performances, thus causing them to place pressure on their skill execution self-consciously.
- **Performance-contingent rewards and punishment** found that when their performance can lead to punishment or a loss of reward, this placed pressure on the performance.
- **Ego relevance** relates to how task-performance creates an image of how skilled they may be as a performer.

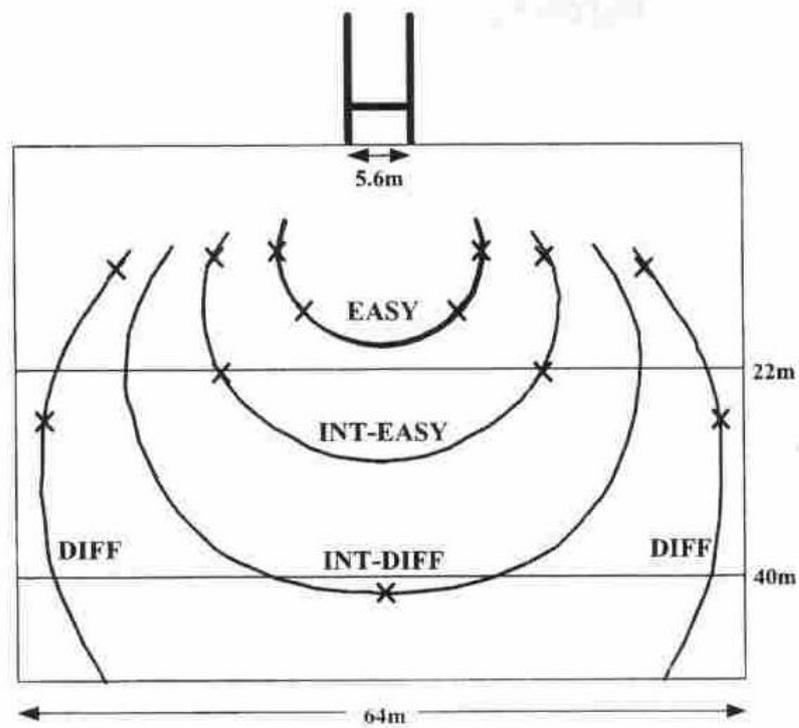
Difficulty: The difficulty of the scenario will be gauged upon the work on the diagram (Fig.1.) of Jackson and Baker's (2001) work. The difficulty range will be from easy, inter-easy, inter-difficult and then difficult.

e.g. You may be facing a kick from 50m out from the post directly centre of the posts also. This would fall under a difficult kick.

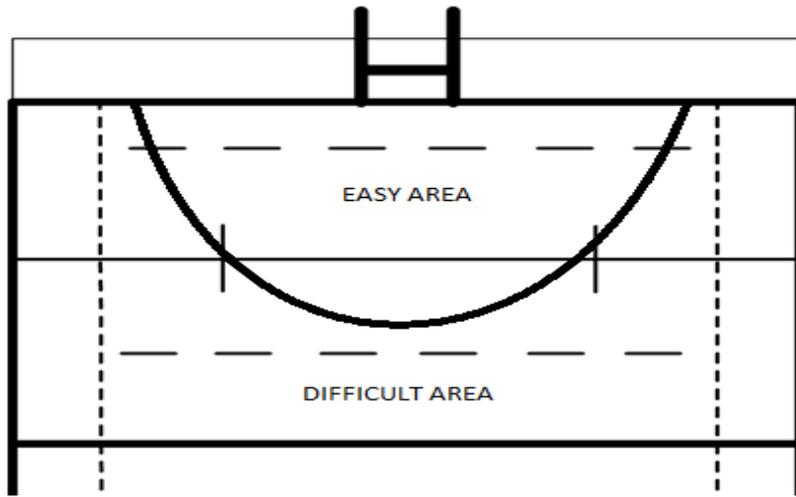
KICKING CRITERIA:

The criteria for kicks will look at difficulty and pressure.

DIFFICULTY:



Above is the criteria is set into two areas. This was established by adopting Jackson and Baker (2001). The four areas are Easy, Inter-easy, Inter-difficult and difficult. **Below is the adapted criteria.**



SECTION 2:

Introduction: (Recorded)

In this section I will ask the you questions to get you into the flow of the interview and to build a rapport between us.

1. What position do you play in rugby?
2. How old were you when you started playing?
3. How often do you practice goal kicking?
4. Do you enjoy the role/responsibility of kicking for your team?
5. Do you see yourself as a successful goal kicker?
6. So, can you now please explain a general week before a game please?

SECTION 3

With relation to the difficulties in which kicks have been assigned, I am now going to ask you questions about your personal experiences of a kick within each of the four criterias but with the feeling of pressure and no pressure affecting you. These four criterias are: *Easy, Inter-easy, Inter-difficult and difficult.*

Cognitive

1. **Can you recall any mental thoughts of concerns towards your performance experienced during this kick? And could you please elaborate on the intensity of these thoughts, concerns.**

(If the participant gives short answers, probe them with why) This is looking at the cognitive symptoms the athlete experience and the intensity.

2. How did the mental thoughts have an effect on your performance?

Somatic

1. Also during the minute leading up to the kick, can you remember any physical feelings and the intensity of these feelings?

This is looking at the somatic symptoms the athlete may feel.

2. How did these physical feelings have an affect on your performance?

*****SOMATIC ANXIETY**

Nerves:

Jittery legs:

Body feeling tense:

Heart racing:

Stomach sinking:

Clammy hands:

Body feeling tight:

Tense in the stomach:

Relaxed body:

Pins & Needles:

Butterflies in stomach:

Other:

*****COGNITIVE ANXIETY**

Concerns about the competition:

Self doubts:

Concerns about not doing as well as you could:

Concerns about choking under pressure:

Worries about performing poorly:

Concerns about losing:

Worries about reaching your goal:

Concerns that others will be disappointed with your performance:

Concerns that you will not be able to concentrate:

Other:

***NOT IN SUBJECTS COPY

Questions on Previous Research

1. Studies have found that the elite view anxiety as more facilitative than the non-elite
 - a. Do you feel this is the case?
 - i. Explain your opinion.
 - b. Do you feel that it is just the elite that experience this?
 - i. Explain your opinion.

Advice Section

1. Could you please explain any advice you'd give to coaches or athletes when working with kickers, on how they should work with their anxieties?

