

**IDENTIFICATION AND ENHANCEMENT OF
PREPERFORMANCE MENTAL STATES IN MALE RUGBY
UNION PLAYERS**

STEPHEN DAVID MELLALIEU

OXSTALLS LEARNING CENTRE
UNIVERSITY OF GLOUCESTERSHIRE
Oxstalls Lane
Gloucester GL2 9HW
Tel: 01242 715100

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ABSTRACT

The purpose of this thesis was concerned with the identification of the nature and content of the preperformance affective experience of the rugby union performer, and the subsequent measurement of the efficacy of a psychological intervention strategy to enhance the precompetitive mental state. Study 1 of the thesis conducted a preliminary investigation into the overall experience of sports performers' precompetitive affect (i.e., negative/positive) and the relationship with symptoms associated with competitive anxiety through the employment of trait self-report measures. The findings highlighted the importance of maintaining favourable perceptions of anxiety in the experience of positive affect. In order to describe the nature of this positive affective state, a sport-specific self-report scale was designed and validated in Study 2 within a population of competitive athletes. Study 3 used the scale to examine the content of the preperformance affective experience and the relationship with interpretations of symptoms associated with competitive anxiety. The findings identified the existence of an overall positive affective state in the presence of favourable perceptions of competitive anxiety symptoms. In order to derive a comprehensive understanding of the precompetitive experience a qualitative perspective was employed in Study 4. In-depth interviews were conducted with 12 international, male, rugby union players. Appropriate preperformance mental states were identified with symptoms associated with mental, physical, and technical readiness. Inappropriate preperformance mental states were symptomatic of a lack of mental, physical and technical readiness and negative experiences associated with competitive anxiety symptoms. The study also established the influence of significant others upon an individual's mental preparation for competition within the context of the team sport. A final purpose of Study 4 was to

describe the psychological strategies employed by performers to achieve appropriate preperformance mental states. The study identified the employment of task-specific imagery in order to facilitate appropriate preperformance mental states. Utilising these findings, the final study of the thesis adopted a single-case design to investigate the efficacy of a task-specific imagery strategy in enhancing appropriate mental readiness for performance in 4 sub-elite rugby union players. The findings demonstrated enhancement in preperformance mental readiness across all participants. Specifically, increases in the level of mental preparation and self-confidence were identified, whilst a lower level of competitive anxiety symptoms were reported. The overall findings of the thesis have facilitated a greater understanding of the affective experiences and psychological strategies of competitive athletes prior to performing. Practical recommendations are proposed in order to facilitate the enhancement and achievement of ideal precompetitive mental states in sports performers. These outline the importance of employing structured task-specific imagery to facilitate appropriate activation states and the need to establish structured mental 'warm up' periods in the preparation for competition.

Author's Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of Cheltenham & Gloucester College of Higher Education and is original except where indicated by specific reference in the text. No part of this thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in the United Kingdom or overseas.

Any views expressed in the thesis are those of the author and in no way represent those of the College.

Author: _____

Date: _____

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PART ONE: THESIS OVERVIEW

CHAPTER ONE

INTRODUCTION

The origins of study in the discipline concerned with the mental preparation of sports performers, commonly referred to as sport psychology, lie some seventy years ago with the pioneering work of Coleman Griffith and his publications surrounding the psychology of coaching (Griffith, 1926; 1928). Despite these early beginnings, only in the last two decades has the discipline experienced any major advancement in the understanding of the psychology of sports performance. Largely responsible for these conceptual advancements has been the work of researchers such as Rainer Martens (1979; 1987). Amongst others, he advocated a move away from the conduction of research in experimental laboratory based settings, to a more ecologically valid field-based perspective. Researchers were encouraged to swap ‘Smocks for Jocks’ (Martens, 1979) and embrace alternative methodologies, outside existing quantitative approaches to science, in an attempt to better understand athletes’ performance in their natural environment of the sporting arena. Subsequently, researchers have responded to these requests and have assisted in the advancement of the understanding of the psychology of sport.

In its present form, sport psychology has grown into a subject discipline with its own identity. The field now embodies several established professional practice and research journals supported by a wide range of books covering research, application and education in the psychology of sport and performance. In addition to academic developments, both national and international professional bodies exist to regulate and monitor the administration and provision of psychological support services to athletes and teams. The use of sport psychology support is now widely acknowledged and accepted amongst most professional sports and governing bodies across the globe.

With the establishment and growth of professional practice, the state of sport psychology now places a growing emphasis upon accountability (cf. Smith, 1989). Specifically, this emphasises the need to provide supportive evidence for the efficacy of psychological interventions in enhancing performance. Consequently, a growing body of research has now begun to address the contribution of the various intervention programmes and psychological methods in achieving development of psychological skills by employing suitable methodologies (i.e., Shambrook & Bull, 1996; Ming & Martin, 1996; Hanton & Jones, 1999).

Amongst the plethora of research areas pursued by sport psychologists over the history of the discipline, probably one of the most frequently investigated has been that of the concept of competitive anxiety. Indeed, the reasons as to why emotional and motivational factors, associated with anxiety, will cause one athlete to 'peak during competition', whilst a fellow competitor will 'choke', experiencing performance impairments, has been a fundamental question posed by any observer or participant of sport at one time or another (Smith, Smoll, & Wiechman, 1998).

**"Competitive anxiety has long held a paradoxical fascination for sport psychologists, and coaches and athletes with whom they work.... Because no other single psychological attribute can have such a debilitating effect on performance, research on the causes and consequences of competitive anxiety as well as on how practitioners can reduce anxiety or more effectively cope with its effects has been one of the most heavily researched topics in sport psychology."
(Burton, 1998; p.129).**

The study of competitive anxiety has enjoyed a large prominence in sport psychology over the last twenty years (Bar-Eli & Tenenbaum, 1995; Jones, 1995; Biddle, 1997), from its origins in the social psychology of test anxiety to the recent development of a sport-specific multidimensional approach to the construct. Recent conceptual advancements (i.e., Jones, 1991) have seen researchers examine various

dimensions of the competitive anxiety construct, including the cognitive directional perceptions of the response experienced directly prior to competing (i.e., facilitative versus debilitating). Despite such advancements, researchers have criticised the notion of facilitating and debilitating anxiety, and the misrepresentation of the direction of competitive anxiety symptoms experienced by performers (Burton & Naylor, 1997; Kerr, 1997). Underpinning this criticism is dissatisfaction that anxiety is too narrow to explain the preperformance affective experience. Sport psychologists have long acknowledged the role of mental preparation in elite level sporting competition, with particular reference to the importance of achieving an appropriate frame of mind or mental state prior to performing. In the early 1970's, Vanek and Cratty (1970), and fellow Eastern European psychologists (Sirotin, 1973; Genov, 1970) acknowledged the importance of athletes achieving such states, directing attention to psychological preparation and mental readying procedures and employing the concept of 'mobilisation readiness'.

Periodically, authors have requested a wider investigation of affect in sport and the various mental states performers undergo prior to performance (Vallerand, 1983; Biddle, 1988; Jones, 1995; Kerr, 1997). However, in spite of these calls, empirical investigation into emotions in sport has tended to prove less helpful in addressing the problem, with a lack of investigation into positive emotional states *per se* (Hahn, 1991). Given the lack of conceptual clarity and understanding surrounding the psychology of performers' experiences prior to competition, the primary objective of this thesis is to examine the psychology of the preperformance mental state experienced by the elite athlete, and attempt to understand the role of specific emotions, such as competitive anxiety, and general emotional states, in mediating this response.

Previous research into preperformance affect has investigated unitary concepts of emotion such as anxiety, or employed global measures of affect with relatively negative bias responses (Morgan & Pollock, 1977). The first aim of the thesis, therefore, is to establish the content of preperformance affective states experienced by sports performers. Competitive anxiety has been suggested as a key protagonist in mediating the precompetitive experience (Jones, 1995). Consequently, a further aim is to examine the relationship between directional perceptions of competitive anxiety symptoms and the affective states experienced prior to performing. Existing measures of affect in sport have been heavily influenced by parental disciplines such as social psychology, with a relative lack of sport-specificity. Therefore, a final initial aim of the thesis is to construct a comprehensive instrument that can accurately measure and reflect performers' preperformance affective experiences, and establish the role of perceptions of competitive anxiety symptoms in the production this response.

Whilst theoretical explanations for the anxiety-performance relationship (cf. Martens, Vealey, & Burton, 1990a; Hardy, 1991) have a long and established history in sport psychology, comparatively little research has been conducted to comprehend the role of the broader emotional states upon performance. Specifically, scant research has investigated the characteristic precompetitive affective states associated with consistent performance. Consequently, in addition to the identification of preperformance affective experiences in sports performers, a further aim is to identify what preperformance affective states elite sports performers perceive as ideal and non-ideal to forthcoming performance.

Despite a large body of literature establishing the employment of mental skills during competition, little work has examined the psychological skills performers utilise to establish appropriate performance states prior to competing. In determining ideal

preperformance states, a further aim of the thesis is to identify the specific strategies elite performers employ to facilitate such mental states. Having identified performers' psychological strategies, a final aim is to measure the efficacy of such a strategy in an intervention to achieve an ideal preperformance state.

The structure of the thesis will employ the following procedure. First, a review of the relevant literature will examine research pertaining to the psychology of preperformance affect and the methodological issues associated with measurement, understanding, and facilitation of these states. Second, there will be three research phases that will investigate the psychology of preperformance affect. These studies will identify common preperformance states, the psychological skills employed, and the subsequent efficacy of psychological interventions to facilitate an ideal preperformance state. The preliminary phase will adopt a qualitative perspective within a sample of competitive athletes, comprising three studies, to examine the potential role of positive affective states in the preperformance period and the relationship with directional perceptions of symptoms associated with competitive anxiety. Study 1 will comprise an examination of the relationship between performers' directional perceptions of competitive anxiety responses prior to competition and the relationship with traditional measures of preperformance affect. Study 2 will construct and validate a sport-specific scale in order to accurately measure preperformance affective states. Study 3 will then examine how performers' directional perceptions of their competitive anxiety responses compare with the newly constructed measure.

Having attempted to identify and measure the psychology of preperformance affect in a general population of competitive performers, phase two will comprise a detailed qualitative investigation into these experiences prior to performance in a sport-specific sample of elite performers. This investigation will attempt to gain a deeper

understanding of the relationship between experiences of competitive anxiety and the role of preperformance affect in the sport of international rugby union. Furthermore, the performers' perceived ideal preperformance mental states will also be established. In order to develop practical advice for the applied consultant, the study will also aim to identify psychological strategies elite male rugby union players utilise to facilitate ideal preperformance mental states. The final study will then employ one of the psychological strategies identified as an intervention in attempting to enhance sub-elite male rugby union performers' preperformance mental states. A single-case design will be adopted to accurately assess the impact of the intervention. Within each of the studies presented there will be a consideration of the contribution to knowledge as a consequence of the findings.

In conclusion, the final part of the thesis will discuss the findings of the research and present a consideration of the practical and theoretical contributions of the three phases of research to the area of enquiry. Practical recommendations will be proposed in order to facilitate the enhancement and achievement of ideal preperformance mental states in sports performers. Finally, an assessment of the relative strengths and limitations of the designs employed will be provided with recommendations for future research discussed. Collectively, therefore, this thesis is concerned with the identification and enhancement of preperformance mental states in male rugby union players.

CHAPTER TWO**LITERATURE REVIEW****Competitive Anxiety**

General trends of research identified in sport and exercise psychology through computer database literature searches have established competitive anxiety as one of the most frequently published themes over the last decade (Biddle, 1992; Tenenbaum & Bar-Eli, 1995). Anxiety research has benefited from several major conceptual advances in the parent psychology discipline, from which many theories and concepts have been borrowed and adapted. Advances have included distinguishing between general and situation-specific anxiety responses, establishing anxiety to be a learned response to a particular situation (Mandler & Sarason, 1957). Further conceptualisations have observed a distinction between state and trait anxiety (Spielberger et al., 1966). Competitive anxiety has also been observed to constitute a multidimensional nature (Borkovec, 1976; Davidson & Schwartz, 1976; Liebert & Morris, 1967). The subsequent instrument designed to measure the construct in sport, the Competitive State Anxiety Inventory-2 (CSAI-2; Martens et al., 1990), has examined the relationship of its sub-scales with both person and situation variables, together with the notion of sporting performance. In addition to research into intensity of the construct, direction and frequency dimensions of the competitive anxiety response have been proposed. The review, therefore, begins with a consideration of the major conceptual advances in anxiety theory, with the main section reporting research employing the modified version of the CSAI-2 (Jones & Swain, 1992).

More recently, however, the concept of directional interpretations of anxiety symptoms has drawn criticism (Burton & Naylor, 1997; Burton, 1998). This criticism has been underpinned by existing calls for a broader investigation of the precompetition

response by examining emotions or affective responses, other than anxiety, potentially, more significant in influencing performance (Biddle, 1992; Jones, 1995; Males & Kerr, 1996). Consequently, the final section describes the argument surrounding the notion of 'positive' anxiety, and concludes with a description of recent developments, including a reconceptualisation of competitive trait anxiety, and the various abbreviated forms employed to assess the state construct.

Definitions

The ability to cope with intense pressure and anxiety is viewed as an integral part of all competitive sport, most significantly at the highest levels of performance (cf. Hardy, Jones, & Gould, 1996). Measurement and understanding of this construct has driven psychology research in sport for several decades. Traditionally, anxiety is an emotion that has typically been employed by researchers to refer to the product of the competitive stress response (Jones & Hardy, 1990).

“Anxiety is one variety of stress response, and it is a multi-faceted construct. On the one hand, it is a subjectively aversive emotional response and an avoidance motive characterised by worry and apprehension concerning the possibility of physical or psychological harm, together with increased physiological arousal resulting from the appraisal of threat. As a motivational state, anxiety is an avoidance motive that helps strengthen coping and/or avoidance responses through negative reinforcement (i.e., response-contingent anxiety reduction).”

(Smith, Smoll, & Wiechman, 1998; p.106).

Subsequently, this competitive stress response has been explained to arise as a consequence of the large situational stresses of competition, which are believed to place a cognitive load or mental demand upon the sports performer. Such demands are proposed to be required in order to produce effective performance (Fisher, 1984). The typical response to stress can be described as part of a larger process. In a conceptual

model of athletic stress (figure 2.1), Smith (1988) describes this response as a consequence of the performer's cognitive appraisal of the balance between the situational demands and the appropriate resources to deal with these demands. The subsequent outcome results in appropriate coping and task behaviour responses (i.e., anxiety). More specifically, Martens (1977) describes the production of anxiety as a result of the 'competitive process'. In his competitive process model, Martens, employing McGrath's (1970) model of stress, which defines the construct as "a substantial imbalance between (environmental) demand and response capability" (p.20), views anxiety as the objective environmental demand interpreted as threatening (a perceived imbalance between demand and individual response capabilities) by an individual.

Martens et al., (1990a) further expanded the competitive process model as it occurs in sport by combining the model of competitive processes (Martens, 1975) with the original competitive anxiety model (Martens, 1977). The expanded model (figure 2.2) consists of four links, described by Martens:

"The process begins in Link 1 as situational factors in the objective competitive situation (OCS) and interpersonal factors (A-trait) interact to create a perception of threat that is part of the subjective competitive situation (SCS). This perception of threat then interacts with other interpersonal factors to influence the individual's state response (A-state) as well as performance (Link 2). These cognitive, somatic, behavioural responses then interact with interpersonal factors to create different performance outcomes, or consequences (Link 3). Link 4 completes the cycle of the model as it represents the reciprocal influence of performance outcomes on intra-personal factors."

(Martens et al., 1990; p.70-71).

Other authors have chosen to describe anxiety in the context of its consequences. Gould and Krane (1992) define anxiety as the "feelings of nervousness and tension associated with activation or arousal of the organism." (p.21). One common theme with such

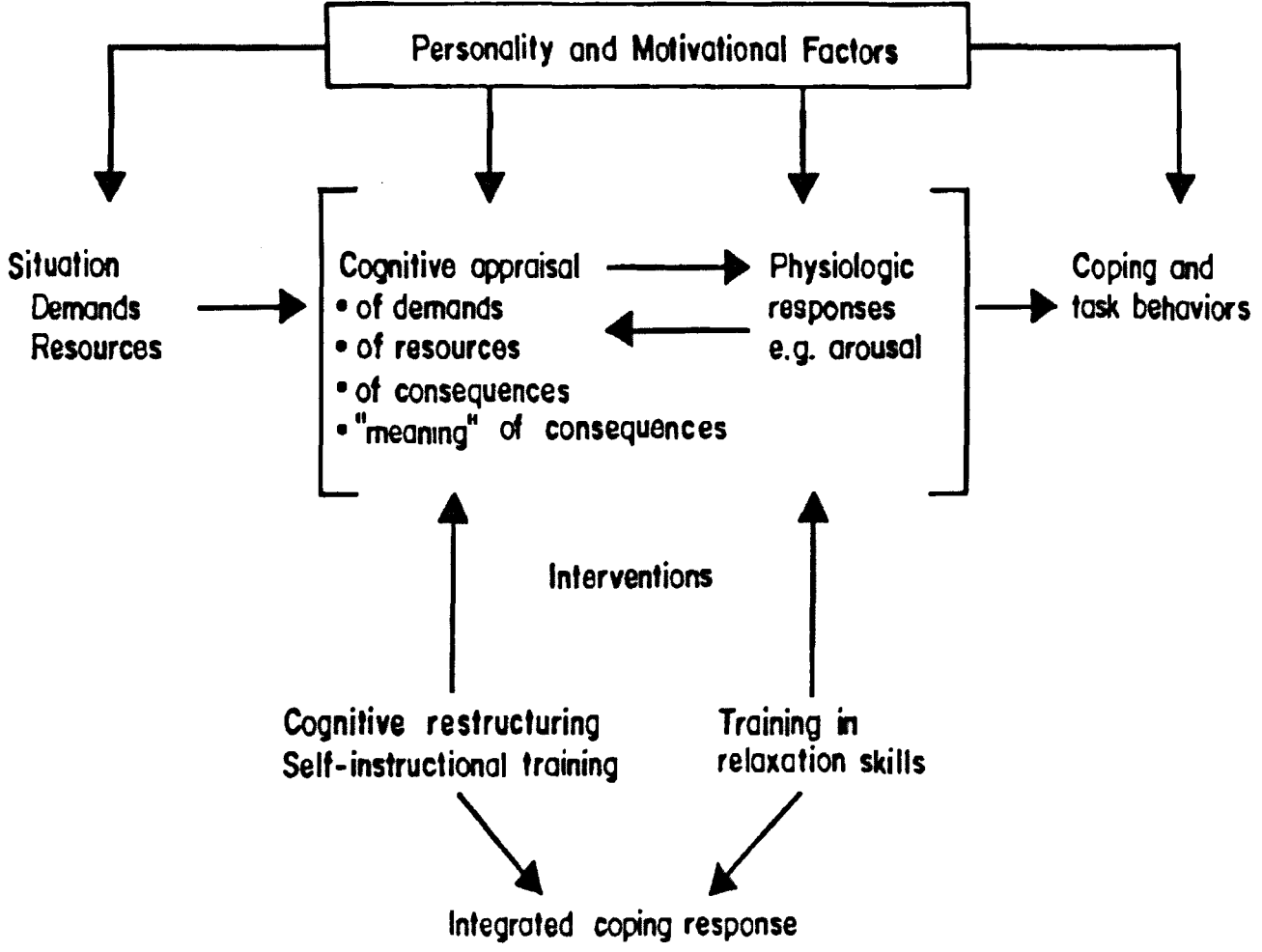


Figure 2.1: A conceptual model of stress (Smith, 1988).

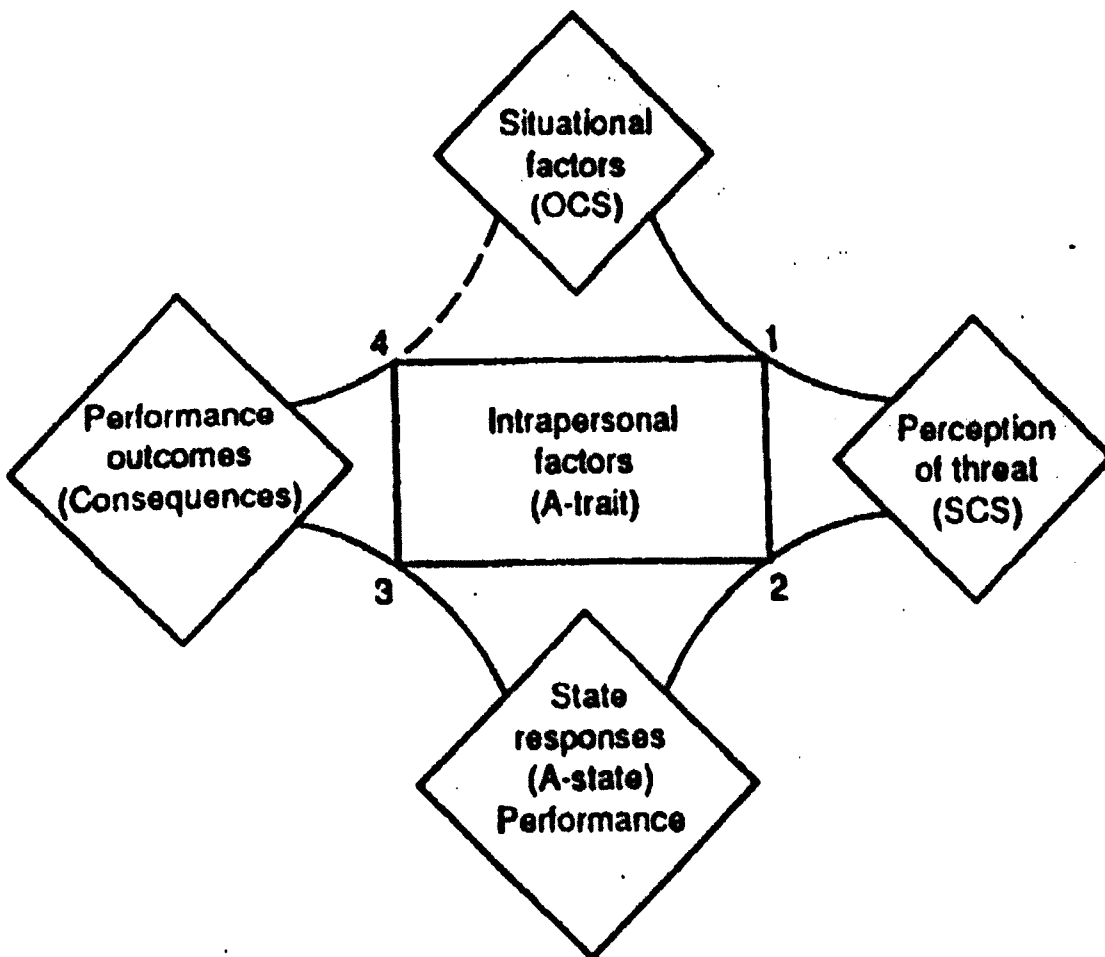


Figure 2.2: A model of competitive anxiety (Martens et al., 1990).

definitions and concepts of the anxiety response is the assumed negative impact on performance that the construct possesses. Therefore, anxiety is viewed as a maladaptive emotional condition or unpleasant emotional reaction, that accompanies the arousal of an individual's autonomic nervous system. Through the duration of this thesis Martens et al.'s (1990) conceptualisation of anxiety will be adopted to describe the construct.

As a consequence of the multiple definitions, a major problem constraining previous anxiety research has been the confusion surrounding terms employed to define and examine the response. Too often anxiety has been employed interchangeably with terms such as stress, activation and arousal, all of which, as many recent authors have pointed out, are independent terms (Gould & Krane, 1992; Hardy, Jones, & Gould, 1996; Smith, Smoll, & Wiechman, 1998). Arousal is commonly acknowledged as the physiological and energy mobilisation in response to situations that threaten the physical integrity of the organism (Cannon, 1929). Behaviour, here, is viewed along two conceptual dimensions of intensity and direction, of which arousal is referred to as the intensity dimension. Arousal is a concept that has been used interchangeably with terms including tension, drive, and activation and is often viewed as varying along a continuum ranging from deep sleep to peak excitement.

Stress is often employed in two different, but related ways. In the first instance, stress is used in relation to situations, termed as 'stressors', which place demands on an organism. Stress is therefore conceptualised under the balance between situational demands and the individual's resources (Lazarus & Folkman, 1984). Under the latter conceptualisation stress is acknowledged as a cognitive-affective response involving appraisal of threat and increased physiological arousal (Lazarus & Folkman, 1984). In this context, stress is referred to aversive states such as anxiety, depression, and anger (Smith, Smoll, & Wiechman, 1998). As a consequence of these misconceptions,

researchers have been using purported anxiety measurement instruments to assess other constructs.

Traditionally, measurement of competitive anxiety has favoured a psychometric approach with assessment encapsulating various self-report measures. However, in addition to cognitive methods, physiological indices and behavioural methods (anxiety and coping behaviours) have been employed. The rationale underpinning physiological assessment of anxiety surrounds the notion of the body's immediate and intermediate anxiety responses. Immediate anxiety responses are characterised by stimulation of the sympathetic nervous system by fear perceptions in the cerebral cortex, resulting in stress responses lasting in duration from a few seconds to several minutes. Sympathetic activation, therefore, stimulates the vital organ systems, one of which, the cardiovascular system, subsequently prepares the body for the 'fight or flight' syndrome (Hackfort & Schwenkmezger, 1993). Intermediate anxiety responses arise from sympathetic nervous system stimulation of biochemical catecholamines into the circulatory system. The anxiety response process is therefore one of a longer duration due to the time passage of the biochemical triggers to locate their target sites (i.e., the myocardium). In addition, the anxiety response is lengthened due to the longer lifetime of the catecholamines in the bloodstream. Subsequently, procedures to measure the peripheral cardiovascular and respiratory responses assess immediate anxiety responses, whilst biochemical indices are purported to be more indicative of intermediate anxiety reactions. Specific measures employed in anxiety, therefore, consist of cardiorespiratory responses such as pulse rate, blood pressure and respiration rate, together with biochemical indicators (adrenalin and noradrenalin levels), and electrophysiological measures including EEG correlates, muscle potentials, and skin conductance/resistance. In support of this method of anxiety assessment, Hackfort and Schwenkmezger (1993)

suggest three major advantages over existing measures of anxiety. First, assessment is not restricted to participant's verbal skills and consequently verbal expression ability. Second, physiological measures can be employed with all types of athletes as introspection and self-analysis are not a prerequisite. Finally, the physiological parameter of state anxiety can be assessed during activity without interrupting performance.

Despite support for this alternative measurement approach, the physiological assessment of anxiety has several conceptual flaws (Hackfort & Schwenkmezger, 1993). In the first instance, the relationship between physiological indices of anxiety are quite low, indicating researchers may obtain different results contingent upon the nature of the physiological index selected. Equally, it has been observed that stress does not trigger similar responses across participants (Lacey & Lacey, 1958). This differential of the stress response has been termed 'individual response stereotypy'. Potentially, two athletes could exhibit similar levels of a physiological index in response to high level sporting competition, the former may be experiencing challenge or excitement to play his/her best, whilst the latter extreme anxiety reactions, clearly a different psychological state altogether. As a consequence of these limitations, it has been difficult to establish specific physiological parameters that solely represent anxiety (Burton, 1998). A final criticism draws attention to the notion that physiological measures of anxiety may only be practical in sporting environments that involve little movement, or where the athlete is relatively stationary (e.g., pistol shooting and archery). This is due to the fact that peripheral circulatory and biochemical indicators change more due to movement and physical activity than the athlete's anxiety response. The concept of 'movement artifact', therefore, restricts in-event assessment of state anxiety to such fine motor skills

sports whereby physiological indices are not confounded by changes in movement (Hatfield, Landers, & Ray, 1984).

In addition to conceptual limitations, empirical relationships between physiological and self-report measures of competitive state anxiety have been reported as weak and relatively non-significant (Burton, 1989; Karteroliotis & Gill, 1987). Furthermore, self-report instruments themselves have produced more effective performance measures than their physiological counterparts (Burton, 1989; Yan Lan & Gill, 1984). Potential supporting explanations for these observations surround the athlete's perception of the anxiety experience in the assessment process (Martens, 1977). As Burton (1998) states:

“Anxiety is a response to a complex cognitive evaluation of mental and physiological stimuli. Measures that directly tap this perceptual process should more accurately reflect the state anxiety experienced compared to direct measures of the physiological responses that may often be perceived inaccurately.” (p.130).

Therefore, at this current stage of knowledge, given the limitations in the application and assessment of physiological indices, self-report measures would appear to be the most reliable and accurate measures to employ when examining the competitive anxiety response.

Conceptual Advances in Competitive Anxiety Research

General versus Situation-Specific Distinction

Early stages of Test anxiety development regarded the variable as a general construct. Researchers such as Taylor (1953) believed there existed a constant level of internal anxiety, or emotionality, regardless of the situation in which this level of

anxiety was manifested i.e., whatever the context of a stressful situation, people would respond in an individual manner. Anxiety was therefore measured using general scales, including the Manifest Anxiety Scale (MAS; Taylor, 1953) and Inter Personality Anxiety Test (IPAT; Cattell, 1957). However, at the same time researchers such as Child (1954) and Mandler (1954) reported intra-individual differences in anxiety, both in content and intensity, from one situation to another. Mandler and Sarason (1952) were the proponents of the need for a far more sensitive situation-specific anxiety measure, and developed the Test Anxiety Scale (TAS). They believed anxiety to be a learned response to situations and not solely a unitary, general phenomenon. The resulting implication of the development of TAS meant that the increased situational-specificity of the item content allowed for a more sensitive measure of anxiety and consequently its effect in academic achievement situations. Subsequent research has reported the merits of situational-specificity, over generality, of item content (Alpert & Haber, 1960) and as a consequence of Mandler and Sarason's research, displayed improved behavioural prediction when a person's situation-specific anxiety disposition is known. Other situation-specific anxiety scales were developed in the areas of audience anxiety (Pavio & Lambert, 1959), fear of negative evaluation, social avoidance and distress (Watson & Friend, 1969) and fear of snakes, heights and darkness (Mellstrom, Cicala, & Zuckerman 1976), with Spielberger (1972) concluding:

“In general, situation-specific trait anxiety measures are better predictors of elevation in A-state for a particular class of stress situations than are general A-trait measures.” (p.490).

State versus Trait Distinction

Anxiety research in the 1950's produced confusion as to whether certain instruments assessed a general tendency to be anxious or immediate or moment anxiety

states. Charles Spielberger (1966) is credited with formalising the State-Trait Theory of anxiety (figure 2.3) based upon an interactional paradigmatic approach distinguishing between state and trait anxiety. State anxiety was defined as:

“Anxiety states that are characterised by subjective, consciously perceived feelings of apprehension and tension, accompanied by or associated with activation or arousal of the autonomic nervous system.”

(Spielberger, 1966; p.17).

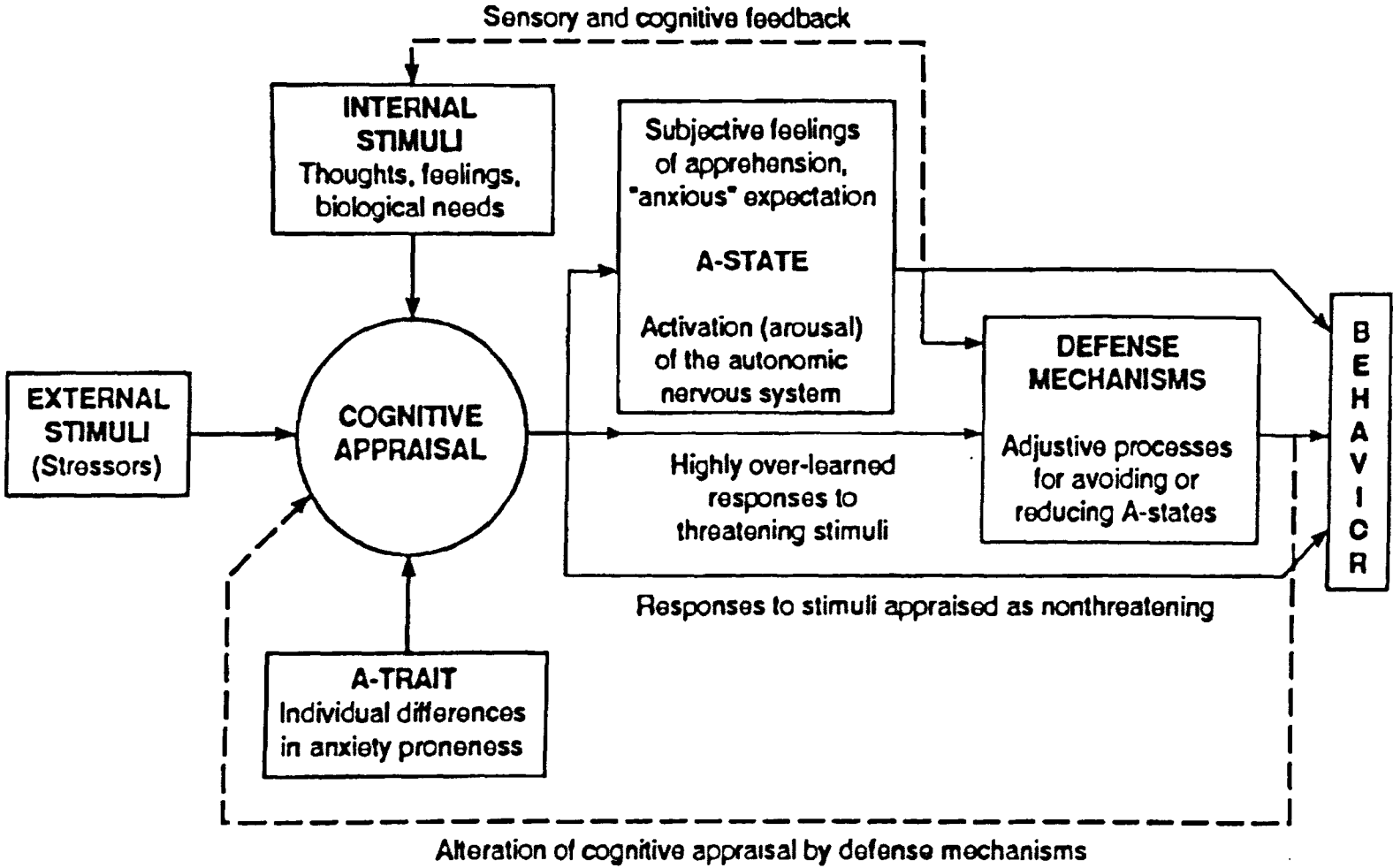
This condition is described as varying from moment-to-moment and fluctuates proportionately to the perceived threat in the immediate situation. Trait anxiety is described as the predisposition to perceive certain situations as threatening and to respond to these situations with varying levels of state anxiety.

“Motive acquired behavioural disposition that predisposes an individual to perceive a wide range of objectively non-dangerous circumstances as threatening and to respond to these with state anxiety reactions disproportionate in intensity to the magnitude of the objective danger.”

(Spielberger, 1966; p.17).

Spielberger's (1966) model of the State-Trait Theory of anxiety predicts that high trait individuals will either perceive more situations as threatening, or respond to threatening situations with more intense levels of state anxiety, or both. Subsequently, this led to the development of a measurement instrument, the State Trait Anxiety Inventory (STAI; Spielberger et al., 1970), with the intention of providing reliable, relatively brief, self-report measures of state and trait anxiety. Consequently, future scales have identified themselves specifically as examining either trait or state anxiety.

Figure 2.3: Spielbege's (1966) state-trait theory of anxiety.



A Multidimensional Conceptualisation of Anxiety

The third major conceptual development in anxiety theory involved the distinction between cognitive and somatic anxiety. Previously, within anxiety research, substantial progress had been made from the situation-specific and state-trait conceptualisations of the anxiety response. Researchers were, however, increasingly questioning the adoption of a unidimensional approach to anxiety. As early as the mid 1960's anxiety was beginning to be viewed as a multidimensional as opposed to a unidimensional construct. An increasing realisation was evident that the anxiety construct required greater specificity due to the emergence of evidence separating the response into differing independent components (Davidson, 1978; Schwartz et al., 1978) or cognitive (worry) and somatic (emotionality) groupings.

In 1967, Liebert and Morris introduced a two component conceptualisation into the test anxiety literature. They proposed anxiety comprised 'Cognitive Worry' and 'Emotional Arousal'. Endler (1978), Davidson and Schwartz (1976), and Borkovec (1976) identified similar components since termed cognitive and somatic anxiety, a distinction applied to both state and trait responses. Cognitive anxiety is defined as:

“The cognitive elements of anxiety, such as negative expectations and cognitive concerns about oneself, their situation at hand and the potential consequences about success or by negative self-evaluation.”

(Morris, Davis, & Hutchings, 1981; p.541).

Somatic anxiety is described as the physiological and affective elements of the anxiety experience that develop directly from autonomic arousal. Somatic anxiety is purported to be reflected in such responses as rapid heart rate, shortness of breath, clammy hands, butterflies in the stomach and tense muscles.

“Ones perception of the physiological affective elements of anxiety, that is, of autonomic arousal and unpleasant feeling states such as nervousness and tension.”

(Morris, Davis, & Hutchings, 1981; p.541).

Although the two components are hypothesised to be independent, Morris et al., (1981) have noted that they are likely to co-vary in stressful situations due to the fact that these situations contain elements of each component.

State and trait anxiety have also been differentiated into interpersonal and intra-group components (Hanin, 1989). Here anxiety is viewed from a social-psychological perspective, studied as the interaction between the person and their environment. Thus, anxiety is examined within the context of relationships with other people and specific qualities of the environment. Hanin (1989) divides performance anxiety, an emotional reaction while working on a specific task, into interpersonal and inter-group state anxiety. Both constructs refer to:

“emotional reactions experienced by a person at a given moment in time as a function of his/her involvement with a particular partner or team, and/or as a member of a group or team.” (Hanin, 1989; p.21).

Multidimensional Anxiety and the CSAI-2

In the early years of sport psychology research there was an absence of sport-specific psychometric measures with which to assess the anxiety response. Spielberger et al., (1966) made the distinction between state and trait anxiety and consequently developed the STAI (State Trait Anxiety Inventory) which possessed separate state (SAI) and trait (TAI) anxiety scales. One drawback to this measurement instrument was that the nature of STAI was non sport-specific. Evidence from other disciplines in psychology suggested anxiety was situation-specific and that anxiety measures should be sensitive

to the unique characteristics of different situations (Mandler & Sarason, 1952; Mellstrom et al., 1976; Watson & Friend, 1969).

Based on the proposition that a sport-specific trait anxiety scale would likely to be a better predictor of state anxiety in competition than a general anxiety inventory, the SCAT (Sports Competition Anxiety Test; Martens, 1977) was developed. The SCAT proved to be a reliable and valid measure of competitive trait anxiety, demonstrating impressive psychometric properties in both laboratory and field settings (Martens et al., 1990a). This construct of competitive anxiety was conceptualised within a theoretical framework based on the interactional paradigm, situational specificity, and the distinction between personality traits and states. Since the original development and conceptualisation, the scale has been employed extensively in competitive anxiety research.

Through validation research for SCAT, it became apparent a sport-specific state anxiety scale was also required. A modified version of the SAI was developed called the Competitive State Anxiety Inventory (CSAI; Martens, Burton, Rivkin, & Simon, 1980). Research employing the CSAI verified it to be a more sensitive scale than the SAI for measuring state anxiety in sport contexts (Martens et al., 1990). The scale consisted of ten items from the SAI that were applicable to the competitive sport environment. Whilst the use of the CSAI scale has not been as widespread as the use of the SCAT, due to being superseded shortly afterwards by CSAI-2, a number of studies utilising the CSAI have provided evidence of a significant relationship between competitive trait and state anxiety in competitive situations (e.g., Cooley, 1987; Scanlan & Lewthwaite, 1984).

Despite these advancements, recent theory and research, accompanied by a growing displeasure with unidimensional theory, suggested that even with these

conceptual developments, anxiety may be a more useful construct with even greater specificity (Davidson, 1978). Additionally, unidimensional anxiety was purported to be, “too amorphous to be useful as a predictor of behaviour, and possess no relationship between anxiety and performance” (Martens et al., 1990; p.10). Since the 1960’s research into the area of competitive state anxiety has resulted in the conceptualisation of a multidimensional construct, with the anxiety response observed to be separated into cognitive and somatic components. Endler (1978) identified five A-trait components and two A-state components, whilst Davidson and Schwartz (1976) and Borkovec (1976) identified cognitive and somatic anxiety based upon ‘Cognitive Worry’ and ‘Emotional Arousal’ (Liebert & Morris, 1967; Wine, 1971). Liebert and Morris (1967) also developed the WEI (Worry Emotionality Inventory). This view was later revised by Morris et al., (1981) who pronounced that cognitive anxiety and cognitive worry were the same. Subsequent scales were also developed to measure the components, including the CSAQ (Cognitive Somatic Anxiety Questionnaire; Schwartz, Davidson, & Goleman, 1978) and the TAI (Test Anxiety Inventory; Spielberger et al., 1978).

The conceptual distinction between cognitive and somatic anxiety and the subsequent development of instrumentation to tap these multidimensional components of anxiety, initiated the reconceptualisation of competitive anxiety with the modification of the CSAI to account for both components of state anxiety to produce the Competitive State Anxiety Inventory-2 (Martens et al., 1990b). The CSAI-2 was originally intended to measure cognitive and somatic anxiety plus fear of physical harm and generalised anxiety. The initial item pool for the CSAI-2 included one hundred and two items generated in three ways. First, through items borrowed from the CSAI, second, items modified from other cognitive-somatic A-state scales to make them more sport-specific. Third, items were composed specifically for the new inventory. Judges rated each item

on the basis of syntax, clarity, and face validity. Five subsequent versions of the CSAI-2 were developed and underwent several adaptations before a revised scale of 27 items was developed, consisting of three, nine item sub-scales, measuring cognitive state anxiety, somatic state anxiety and state self-confidence. At each stage of development the revised scales were subjected to various statistical procedures including factor analysis and discriminant analysis. The factor structure of the E form was eventually deemed sufficient for investigation of reliability and validity procedures, which was examined in a subsequent series of studies (Martens et al., 1990a). Initial reliability procedures upon the instrument demonstrated adequate internal consistency with alpha reliability coefficients ranging from .79 to .90. In addition, further studies have reported internal consistencies ranging from .76 to .91, supporting the multidimensional nature of state anxiety (Burton, 1998). Concurrent validity over these series of initial studies demonstrated consistent relationships with eight previously validated state and trait inventories. In their examination of construct validity, Martens et al., (1990a) conducted four studies employing the CSAI-2, guided by a validation model modified from Martens' (1977) procedures for validation of the SCAT. The studies tested conceptual predictions regarding the antecedents and consequences of multidimensional state anxiety, including variables influencing competitive A-state, temporal patterning of A-state components prior to performance, and relationships between CSAI-2 sub-scales and performance.

The initial validation studies, together with subsequent research into competitive anxiety by sports psychologists employing the CSAI-2, has provided evidence to support the separation of cognitive and somatic components, which have been observed to differ as a function of several person and situation variables, including antecedents (Gould, Petlichkoff, & Weinberg, 1984; Jones, Swain, & Cale, 1990; 1991), temporal

characteristics (Gould et al., 1984; Jones et al., 1991; Martens et al., 1990), performance consequences (Burton, 1988; Gould et al., 1987; Jones & Cale, 1989; Parfitt & Hardy 1987; 1993), goal expectancies (Jones & Hanton, 1996; Krane, Williams, & Feltz, 1992) and in response to interventions (Burton, 1990; Maynard, Hemmings, Warwick-Evans, 1995; Maynard & Cotton, 1993; Maynard, Smith et al., 1995).

Multidimensional Anxiety and Performance

Multidimensional Anxiety Theory

The adoption of a multidimensional approach has led to an increasing number of theoretical perspectives that have attempted to examine the relationship between performance and specific components of the competitive state anxiety response. The first of these perspectives was proposed by Martens et al., (1990a) shortly after development of the multidimensional concept of anxiety. The authors proposed cognitive anxiety and self-confidence to be stronger predictors of performance than somatic anxiety, due to the dissipation of somatic anxiety at the onset of competition. Cognitive anxiety and self-confidence on the other hand, were linked to social evaluation, both of which were observed to continue throughout competition. Theoretical predictions (figure 2.4) regarding the specific relationships between anxiety sub-components and performance proposed that performance would decrease linearly with increases in cognitive anxiety, whilst increasing linearly with increases in self-confidence. Somatic anxiety, however, was proposed to possess an inverted-U relationship with performance (Martens et al., 1990).

Research findings examining these theoretical proposals have, however, proved inconclusive, with little evidence of the predicted relationships. Gould et al., (1984) examined intercollegiate wrestlers over two matches and observed in the first match that

no relationships arose between anxiety and performance. However, in the second match, cognitive anxiety was observed to be a significant predictor of performance. No relationships with somatic anxiety or self-confidence were found. Barnes et al., (1986) and Rodrigo, Lusiard, and Pereira (1990) observed similar findings showing cognitive anxiety to be the main influence on performance. Other studies, however, have also observed no significant relationship (Caruso et al., 1990; Hammermeister & Burton, 1995; Karteroliotis & Gill, 1987; Krane & Williams, 1987; Martens & Gill, 1991; Maynard & Howe, 1987; Maynard, Smith, & Warwick-Evans, 1995; McAuley, 1985). In all of these studies none of the three sub-scales emerged as a subsequent predictor of performance.

Gould et al., (1987) investigated the anxiety-performance relationship within the sport of pistol shooting. They found somatic anxiety to possess an inverted-U relationship with performance, self-confidence to have a negative linear relationship, whilst cognitive anxiety bore no relationship. The findings were suggested to be due to the nature of the task, which involved fine neuromuscular control and was proposed to be more sensitive to changes in somatic anxiety.

One suggestion forwarded for the overall lack of findings in the literature has been that the scores employed to measure performance have been absolute. Consequently, this has led to a relationship between anxiety and performance that has been described as non-existent or at best dismal (Bird & Horn, 1990). Other criticisms levelled at this form of approach have been directed towards the nature of performance measure employed (Sonstroem & Bernado, 1982), and the linear as opposed to curvilinear analysis of the results (Gould et al., 1987). In addressing some of these criticisms, Burton (1988), employing intra-individual measures of performance (Sonstroem & Bernado, 1982), observed a positive relationship for self-confidence,

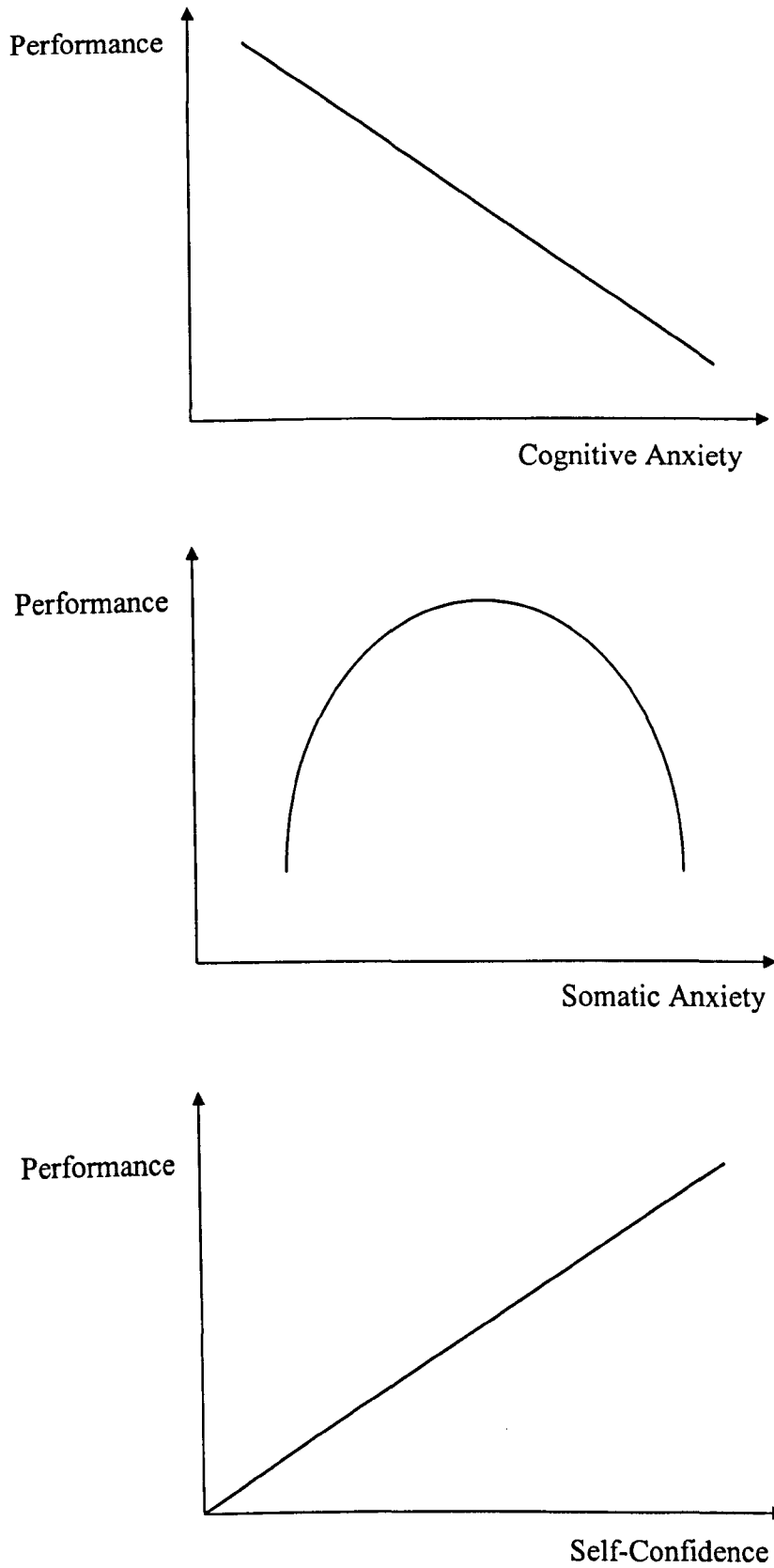


Figure 2.4: Theoretical predictions for the relationship between competitive anxiety and performance (Martens et al., 1990).



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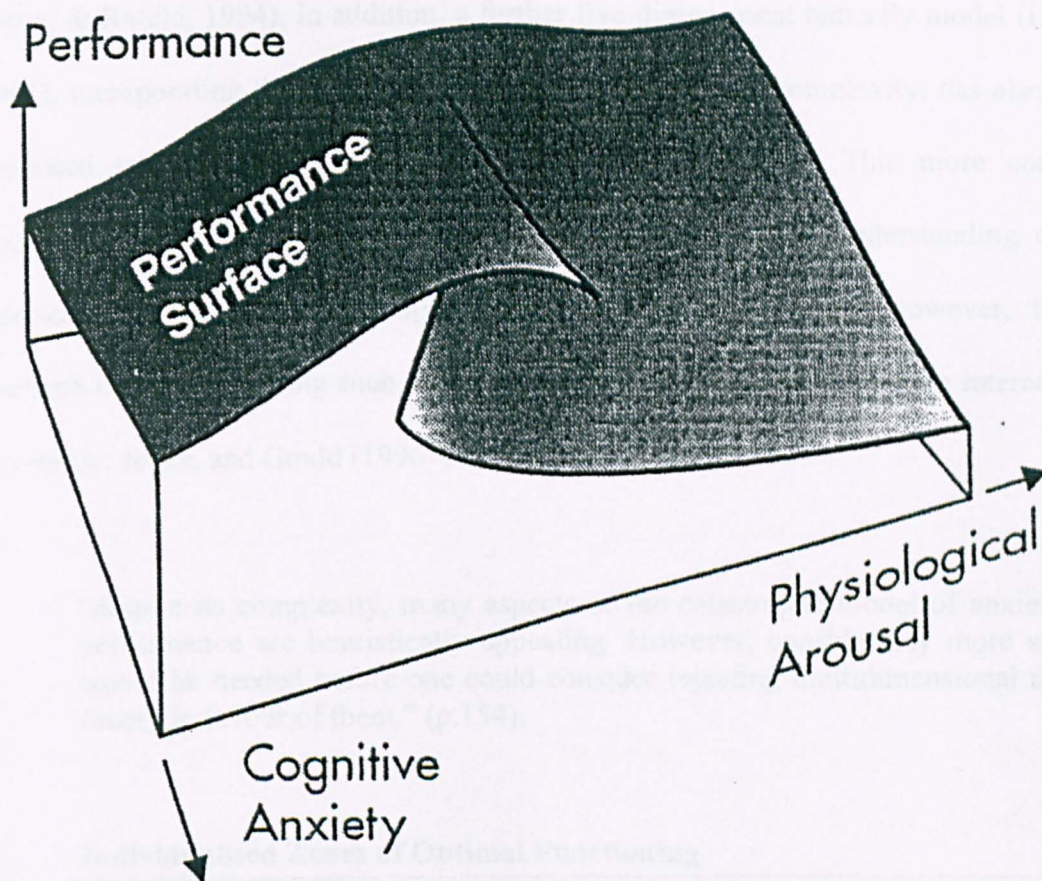


Figure 2.5: A 3D catastrophe model of anxiety and performance (Hardy, 1990).

extremely demanding due to the sophisticated statistical procedures required. However, research in limited settings support the original theoretical predictions (Edwards & Hardy, 1996; Hardy, Parfitt, & Pates, 1994; Hardy & Parfitt, 1991; Krane, 1990; Krane, Joyce, & Rafeld, 1994). In addition, a further five-dimensional butterfly model (Hardy, 1991), incorporating the notions of self-confidence and task complexity, has also been proposed to more comprehensively explain the relationship. This more complex approach would appear to be a stronger model to assist the understanding of the interaction of the various competitive anxiety sub-components. However, further research is required testing such models to comprehend the nature of these interactions. As Hardy, Jones, and Gould (1996) state:

“despite its complexity, many aspects of the catastrophe model of anxiety and performance are heuristically appealing. However, considerably more support would be needed before one could consider rejecting multidimensional anxiety theory in favour of them.” (p.154).

Individualised Zones of Optimal Functioning

One of the criticisms of existing anxiety-performance research such as Multidimensional Anxiety Theory predictions (Martens et al., 1990) has been the adoption of a nomothetic approach to the study of the area. Potential influences of anxiety upon performance have been assessed from a group perspective. In response to calls for a more sensitive measure, Hanin (1980; 1986) proposed an idiographic approach, constructed upon the notion of optimal levels of anxiety, and the practically-oriented belief associated with performers ‘getting in the zone’. This idiographic approach was initially developed as a practical tool for helping athletes determine optimal levels of anxiety within certain limits or bands known as ‘Zones of Optimal Functioning’ (ZOF; Hanin, 1980; 1986; 1989) to facilitate or maximise performance.

Anxiety levels below or above these bands are proposed to be consistent with inhibited performance. Optimal functioning was described (Hanin, 1986) as an individual's optimal level of state anxiety, plus or minus four points (half a standard deviation) on a unidimensional measure of anxiety (STAI; Spielberger et al., 1970).

Hanin (1986) provided initial support for his hypothesis with two case studies that observed best times of swimmers were recorded when they were within their established personal ZOF. Despite the findings, questionable methodology was employed, specifically, the use of state anxiety measures three days prior to competition, despite distinct temporal patterning effects that have observed changes in competitive anxiety sub-components in the time to event (Gould et al., 1984; Jones, Swain, & Cale, 1991). Indirect support for the ZOF has also been cited from research with elite distance runners (Morgan, O'Connor, Elickson, & Bradley, 1988; Morgan, O'Connor, Sparling, & Pate, 1987). However, these studies suffered from a number of methodological, definitional and statistical limitations. First, no direct investigations of the tenets of the ZOF hypothesis, i.e., specific zones for the individual athletes, were made (Woodman et al., 1997; Randle & Weinberg, 1997). Second, ZOF was calculated utilising group means instead of Hanin's suggested intra-individual approach. Third, the studies conceptualised competitive anxiety as a unidimensional construct, despite its acknowledged cognitive and somatic components (Hardy, 1990; Martens et al., 1990). Finally, Morgan et al.'s (1987; 1988) initial studies assessed arousal instead of state anxiety (Randle & Weinberg, 1997). Further studies (Carda, Stanbrough, Dreiling, & O'Connor, 1993; Turner & Raglin, 1993) have since tested the ZOF with track and field athletes and found partial support for best performance when individuals were within their optimal zones of anxiety. However, these studies have also suffered from similar statistical and methodological problems.

In response to calls for a multidimensional approach (Gould & Krane, 1992) researchers have adopted the multidimensional CSAI-2 to examine the ZOF hypothesis in populations including middle distance runners (Gould, Tuffey, Hardy, & Lochbaum, 1993; Dennis, Bartsokas, Lewthwaite, & Palm, 1993) and collegiate soccer players (Krane, 1993). Employing post-meet retrospective recall methods, together with combined optimal somatic and cognitive state anxiety points, Gould et al., (1993) observed athletes subjective performance scores to be inversely correlated to the distance from their individual zones. No such correlations were found with objective performances. Krane (1993) utilised a soccer equation as a performance measure in her study, with CSAI-2 scores corresponding to best performance defined as optimal anxiety levels. Worst performances were observed when players were above cognitive and somatic anxiety zones. Dennis et al., (1993) also found partial support for the model, observing that performance within the somatic anxiety ZOF was significantly better than performance outside the zone. No significant relationships were found for cognitive anxiety.

Whilst these studies provide partial support for the ZOF hypothesis, from a multidimensional perspective, they have also suffered from methodological and statistical limitations (Woodman et al., 1997). The primary criticism relates to the sole use of retrospective recall of questionnaire (measurement post-competition) procedures for assessing anxiety. The rationale for which lies in the ethical concerns surrounding administering tests shortly before competition, as completion of questionnaires prior to performance may become too intrusive and direct athletes' attention toward affective states, thereby increasing initial anxiety (Hackfort & Schwenkmezger, 1993). Whilst some research supports the predictive validity of recall measurements (Harger & Raglin, 1994; Annesi, 1997), it has been argued (i.e., Woodman et al., 1997) such methods

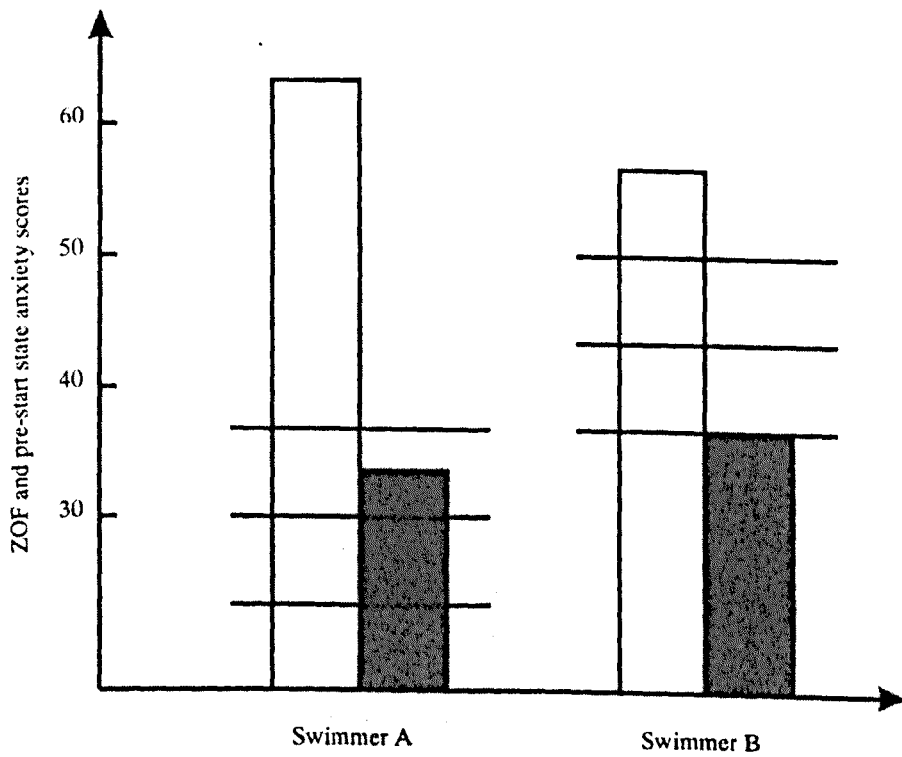


Figure 2.6: An example of two zones of optimal functioning with performers in and out of the zone.

of data collection twenty-four hours post performance are open to attributional effects, in that the result of a particular performance could influence an athlete's recollection of his or her precompetition state anxiety. Further criticism has also been directed towards the adoption of poor performance measures (i.e., subjective measures of performance) and the need to determine ZOFs by the calculation of combined cognitive and somatic anxiety scores (Woodman et al., 1997).

In addressing these methodological limitations, Randle and Weinberg (1997) investigated ZOF within a multidimensional anxiety approach with competitive female collegiate softball players, comparing retrospective recall and precompetitive methods of identifying an athlete's ZOF. The CSAI-2, was employed to assess a combined cognitive and somatic anxiety zone of optimal functioning (in addition to separate cognitive and somatic zones), and an intra-individual approach was utilised to develop athletes' ZOF together with a combination of both subjective and objective measures of performance. The findings observed no differences in subjective performance whether performers were in, or outside, single or combined anxiety zones. Superior objective performance was only observed when performers were outside their combined anxiety zone. However, no significant differences were observed between the three methods of zone of optimal functioning measurement (i.e., retrospective-best vs. retrospective-post-competition and precompetitive). Lack of findings was attributed to participant selection and problems with statistical procedures employed.

A further progression in IZOF research has seen the adoption of the model within investigations measuring the potency of psychological interventions in helping athletes regulate competitive anxiety states. Annesi (1998) measured the effects of a precompetitive anxiety regulatory system employing a multidimensional IZOF model in a case study with three elite adolescent tennis players. In the first phase of the study,

participants' multidimensional anxiety optimal functioning zones were established. Phase two proceeded to implement a precompetitive anxiety regulation system based upon the specific-effects hypothesis (Martens et al., 1990) and employing performers 'in zone'/'out of zone' A-state scores. Subsequent psychological skills training observed regulation of competitive anxiety symptoms and significantly higher performance values post-treatment with participants achieving 'in zone' values.

Despite the growing research interest into ZOF, the perspective has inherent problems. Hardy et al., (1996) raised several theoretical concerns regarding ZOF, the first questions the fact that Hanin's original model utilised a unidimensional conceptualisation of anxiety, which has since been applied to a multidimensional concept with little or few theoretical justifications. Second, ZOF is essentially an individual difference theory without any individual difference variables. Little or no attempt is made to identify these differences or explain the underlying mechanism by which ZOFs actually influence performance. Finally, concerns exist regarding the indifferent research (Woodman et al., 1997) that has neither supported nor disproved the theory. Where support does exist, studies show one, either, or none of the components of competitive anxiety to elicit best performance when 'in the zone'.

A major methodological concern expressed towards ZOF Theory is the separate assessment of the multidimensional components of anxiety in relation to performance despite the proposed interactive effects of Catastrophe Theory (Hardy & Parfitt, 1991). Where attempts have been made to examine the combined effects of these factors in ZOF research, studies (i.e., Randle & Weinberg, 1997) have only measured absolute levels of multidimensional components together (Gould et al., 1993), ignoring whether somatic anxiety was increasing or decreasing.

Recent work by Woodman et al., (1997) has shown initial promise in matching these two approaches. In a study of competitive bowlers, the ZOF hypothesis was investigated within a multidimensional framework, whereby zones of optimal functioning were computed for cognitive and somatic anxiety. A significant main effect for somatic anxiety zone level and a significant interaction between cognitive and somatic anxiety zone levels were observed, providing support for the cusp catastrophe model. In the study, however, only an objective measure of performance was taken. As the authors themselves conceded:

“Subjective measures of performance provide an effective complement to objective measures, as they account for factors that are not amenable to quantification (e.g., training status, injury, illness, condition)”. (p.139).

In addition to these acknowledged conceptual and theoretical limitations, ZOF research suffers from several procedural and assessment problems. One aspect relates to the variation in the timing of preperformance assessment of anxiety. Temporal patterning effects have been observed pre-competition, not only between separate cognitive and somatic anxiety components, but between sports of varying pace and intensity (Burton, 1988; Martens et al., 1990b). Therefore, researchers need to apply caution and awareness of such mediating variables when attempting to assess consistent precompetitive anxiety experiences of performers.

A further measurement issue concerns the different methods employed to calculate ZOF. Hanin's (1980) initial method requires the calculation of zones that were ± 4 points either side of participants mean scores on STAI. Participants were deemed either 'in' or 'out' of the zone. Gould et al.'s (1993) method employed zones 0.5 of a standard deviation on cognitive and somatic anxiety scores. Participants were deemed to be below, inside or outside their zones (No below zones for cognitive anxiety were

calculated, as under Martens et al., (1990) predictions, cognitive anxiety has a negative relationship with performance). The final method calculates 'in' and 'out' zones based upon 0.5 standard deviations derived from population norms based on the research of Martens et al., (1990). The different procedures in calculating ZOF raise the problem of deciding the optimal bandwidth, and the correct method. If athletes possess individual differences in optimal levels of competitive anxiety, potential individual differences may exist in the bandwidths and abilities to tolerate levels of anxiety. It would be expected that some performers can tolerate higher levels, or wider zones, of optimal functioning than others. Further research is warranted to identify the correct statistical procedure for identifying zones of functioning.

Perhaps the most important criticism regarding ZOF Theory is the notion that the intensity of the anxiety symptoms may not be the crucial factor in determining performance. Jones and Swain (1992) stated that sports performers' directional perceptions of the competitive anxiety response may be more important than their absolute levels or intensity of anxiety experienced. Further, Eysenck's (1984) Processing Efficiency Theory maintains that athletes can sustain performance under conditions of high anxiety through increased effort and use of attentional resources. In relation to ZOF Theory, it would seem that zones of optimal functioning for intensity of competitive anxiety may be redundant, and at best, not very important, compared to how performers interpret experiences of anxiety symptoms. In addition, performers may be able to alter the width of their zone of optimal functioning, and sustain performance by increasing levels of effort and concentration.

In spite of criticism, partial support exists in the psychology literature for ZOF Theory (see Gould & Tuffey, 1996 for a full review). The theory itself is intuitively appealing (Hardy et al., 1996), in that it helps identify an optimal zone for anxiety, and

employs the individual as a unit of analysis (due to the great variability amongst athletes). It also has practical significance for applied sport psychologists (Hardy et al., 1996) in that it helps identify peak performance relatively easily. As Martens (1987b) states:

“As applied sport psychology develops, important knowledge and techniques will be derived from reports of practitioners as they work with individual athletes, teams and athletic organisations.” (p.34).

It is important to remember, however, that empirical evidence is still essential to test and support theory. Therefore, whilst the zone of optimal functioning hypothesis may be practically appealing it requires further empirical investigation before it can be taken seriously as a theory to explain the relationship between anxiety and performance. As Woodman et al., (1997) point out, acknowledgements of the current research limitations need to be addressed, including (a) use of prospective questionnaires in a retrospective fashion, (b) small sample sizes, (c) questionable performance measures, and (d) methodologies that allow for the interactive effects of cognitive and somatic anxiety to be measured.

Intensity and Direction: The Modified CSAI-2

In the last decade investigators have argued that research employing the CSAI-2 suffers from limitations in terms of the actual measurement of anxiety (Burton 1990; Jones, 1991; Parfitt et al., 1990). Jones (1991) stated “...it is very important to recognise the CSAI-2, like many other state anxiety measures is based on a somewhat limited dimension of the anxiety response.” (p.153). The CSAI-2, therefore, essentially measures the ‘intensity’ of the symptoms (certain cognitive and perceived physiological symptoms) which are purported to signify the presence of anxiety. However, the

inventory fails to measure what has been referred to by Jones (1991) and his colleagues as the 'directional perceptions' of the symptoms, that is the nature of the individual's interpretation of those symptoms as to whether they are positive (facilitating) or negative (debilitating) in relation to upcoming performance (Jones & Swain, 1992; Jones, Swain, & Hardy, 1993). Hypothetically, performers can report identical levels of the intensity response experienced, but, may differ considerably in their interpretation of the debilitating-facilitative consequences for performance of that response. Jones and his colleagues (Jones, 1991; Parfitt et al., 1990) proposed that future research should examine how sports performers interpret these 'anxiety' symptoms in terms of their likely effect on performance. This was based on the proposal that 'directional perceptions' of anxiety symptoms may predict skill level and performance better than mere intensity.

The 'intensity alone' approach to measuring competitive anxiety has prevailed in the sports psychology literature due to the fact that the concept of anxiety has for a long time largely been viewed as negative and detrimental to performance.

"Cognitive and somatic anxiety are always negative in direction due to their links with the negative affect; high levels of cognitive and somatic anxiety are experienced as unpleasant."

(Martens et al., 1990a; p.6).

Recent findings in sport suggest this is not the case and that competitive anxiety is not necessarily negative, i.e., debilitating, and can have positive effects that facilitate performance (Hardy & Parfitt, 1991; Jones & Cale, 1989; Mahoney & Avenier, 1977; Parfitt & Hardy, 1987; Jones et al., 1993; Parfitt & Hardy, 1987; 1993).

The notion of debilitating and facilitating dimensions of the anxiety response has been prominent in test anxiety literature for a number of years. Alpert and Haber distinguished between debilitating and facilitating anxiety as long ago as 1960, and

found that a scale that measured both dimensions of anxiety (i.e., the Achievement Anxiety Test; AAT) provided a significantly stronger predictor of academic performance than a conventional debilitating anxiety scale. Subsequent investigations employing the AAT have also supported the value of distinguishing between debilitating and facilitating anxiety (Munz, Costello, & Korabek, 1975; Hudesman & Weisner, 1978; Gaeddert & Dolphin, 1981; Couch, Garber, & Turner, 1983; Carrier, Higson, Klimoski, & Peterson, 1984). Wine's (1980) bi-directional model of test anxiety further supports the notion of positive and negative dimensions and even greater specificity of the state anxiety response. The control process model of anxiety and performance developed by Carver and Scheier (1986; 1988) hypothesises anxiety to have the capacity to facilitate and debilitate performance, depending upon the individual's expectancy (favourable against unfavourable) of being able to cope with the level of anxiety experienced to complete the task that attempted (i.e., goal attainment). Carver and Scheier hypothesised that anxiety will enhance performance providing the performer maintains a favourable expectancy regarding goal attainment.

Whilst the work within the test anxiety context has provided the basis for important developments in anxiety research, its application to other areas, such as competitive anxiety, has been described as somewhat limited on two counts (Jones et al., 1994). First, it has examined the bi-directional model in the context of cognitive (i.e., academic) performance, so that there is a need for investigation in the area of motor performance. Second, the research on debilitating and facilitating anxiety has largely examined an undifferentiated, unidimensional 'test' anxiety state as opposed to the more recently favoured multi-component conceptualisation of anxiety. Additionally, little research in the test anxiety literature has examined how individual difference variables may mediate an individual's interpretations of their states.

Following on from this work, the notion of 'direction' of anxiety has been introduced into the sport psychology literature (Jones, 1991). This refers to assessing how sports performers label the cognitive and physiological symptoms they experience on a facilitative-debilitative continuum. For example, Jones (1991) indicates that one performer may be very concerned about an impending competition or game, to the extent that they are worried and in a near-panic, debilitative state. Another performer who is 'very concerned' might view such a state as necessary, since it signals the importance and means that they will invest effort in it (Eysenck, 1984), thus constituting a motivated, facilitative state. Eysenck further proposed that anxiety effectively reduces working memory capacity due to task irrelevant cognitive activity or worry, as it impairs processing efficiency. He argued that this reduction in effective capacity could be countered by an increased effort. Therefore, whilst processing efficiency is impaired, performance effectiveness may be maintained or even enhanced under conditions of high anxiety but at the expense of utilising a greater proportion of the available resources. Similarly, two athletes experiencing similar levels of physiological arousal precompetition might label their symptoms at opposite ends of the direction continuum. This process may be seen as a further level of cognitive appraisal which has the function of interpreting the meaningfulness of the cognitive and physiological symptoms experienced following earlier appraisal of the congruence between the situational demands and ability to meet those demands (Jones, 1995).

In addition to a direction dimension, a frequency dimension was also proposed by the authors. Frequency was described as the amount of time that cognitive intrusions regarding the performers' forthcoming competition occupied their thoughts. An initial study by Jones and Swain (1992) observed the frequency of cognitive intrusions to increase as a function of proximity to competition, i.e., the closer to the competition the

more cognitive intrusions entered the sports performers' minds. Support for the distinction between 'intensity' (i.e., level) and 'direction' (i.e., debilitating/facilitative) of competitive anxiety symptoms has been provided in a growing body of empirical investigations in the sport psychology literature. A subsequent line of research has been employed using the modified version of the CSAI-2, which possesses a directional scale for competitive anxiety in addition to the original intensity construct.

Jones and Swain (1992) found no differences in intensity of cognitive anxiety and somatic anxiety, or on direction of somatic anxiety between high and low competitive groups. However, as hypothesised, the highly competitive group reported their anxiety as more facilitative and less debilitating than the low competition group. Jones et al., (1993) examined intensity and direction dimensions of competitive state anxiety as a function of performance level in female gymnasts. The results showed no differences between good and poor performance groups on cognitive and somatic anxiety intensity scores, or on somatic anxiety direction scores. However, the good performance group reported their cognitive anxiety as being more facilitating and less debilitating to performance than the poor performance group. Jones, Hanton, and Swain (1994) reinforced the importance of performance level as an individual difference variable in a sample of elite and non-elite swimmers. No differences emerged between elite and non-elite swimmers in terms of intensity of cognitive and somatic state anxiety symptoms one hour prior to an important race. However, elite performers interpreted both anxiety states as being more facilitative to performance than the non-elite. Elite performers further reported experiencing higher levels of self-confidence. Additional analysis investigated differences between those swimmers who perceived their anxiety as debilitating and those who reported it as facilitative in the elite and non-elite groups. The findings observed anxiety intensity levels to be higher, and self-confidence levels to

be lower, in the debilitated than the facilitated swimmers in the non-elite group. No such differences were observed in the elite group. Findings by Eubank et al., (1995) have supported this initial research in the context of success in badminton players.

In a follow-up to the study performed by Jones et al., (1994), but in the context of an assessment of trait responses, Jones and Swain (1995) examined competitive anxiety symptoms of competitive cricket performers using the modified trait version of the CSAI-2, the Competitive Trait Anxiety Inventory-2 (CTAI-2). No difference was observed between the two groups on intensity of cognitive and somatic anxiety symptoms, but the elite performers interpreted both anxiety states as being more facilitative to performance than the non-elite performers. Further analysis showed that cognitive anxiety levels were higher in the debilitated than the facilitated cricket performers in the non-elite group, but no such differences were observed in the elite group. The results for somatic anxiety revealed no differences as a function of skill level or direction but the facilitated cricket performers reported higher levels of self-confidence than the debilitated group.

The direction dimension has also been explored with regard to the theoretical predictions of the anxiety-performance relationship. Swain and Jones (1995) examining performance variance in university basketball performers, observed for cognitive anxiety intensity that the intensity-performance relationship was best explained by an inverted-U relationship and accounted for 18.4% of the performance variance, whereas the direction performance relationship was best explained by a positive linear relationship which accounted for 25% of the variance. Somatic anxiety direction formed a positive linear relationship with 18% variance accounted for compared to somatic anxiety intensity, which only accounted for 2%. Testing Catastrophe Theory, Edwards and Hardy (1996) examined the interaction of facilitating and debilitating anxiety and

self-confidence upon performance. It was observed that directions of competitive anxiety symptoms failed to predict netball performance. Here, somatic anxiety predicted performance better than cognitive anxiety. The intensity dimension of cognitive and somatic state anxiety was observed to contribute more to performance variance than the direction dimension. Finally, combined intensity x direction scores accounted for less variance than each score separately and the combination did not significantly enhance prediction efficiency.

Further support for the distinction between intensity and direction of the competitive anxiety response has come from qualitative research interviewing athletes and their perceptions of stress (Jones & Hardy, 1990). In-depth interviews conducted with Olympic and national athletes revealed the majority of the performers viewed their experiences of competitive stress as positive or facilitating to forthcoming performance. In the applied context, intervention studies have been conducted to influence the performers perceptions of anxiety symptoms. Maynard, Hemmings, and Warwick-Evans (1995) and Maynard, Smith, and Warwick-Evans (1995) observed the efficacy of multi-modal strategies to intervene and lower competitive anxiety intensity, leading to subsequent increased facilitating, and reduced debilitating symptoms of anxiety symptoms.

In view of the growing empirical support for the distinction between intensity and direction of competitive anxiety symptoms, Jones (1995) has proposed a control model of facilitating and debilitating competitive anxiety (figure 2.7) based upon Carver and Scheier's (1988) Control Theory. The model hypothesises that the interaction of performers' individual difference variables and their ability to control the stressor (sporting situation), in terms of expectancies of ability to cope and maintain goal

attainment, determines how athletes will interpret their anxiety symptoms as either debilitating or facilitative to performance.

Several studies have subsequently followed to test this model. Jones and Hanton (1996) investigated performance expectations (i.e., outcome, performance, process goals) in swimmers' perceived facilitative and debilitating anxiety symptoms. Those swimmers who saw themselves as being able to cope with a 'threatening situation' were theorised to have positive expectancies of goal attainment, thus perceiving anxiety symptoms as facilitative to performance. Similarly, swimmers who perceived themselves as having a lack of control over the outcome of the situation, were hypothesised to develop negative expectations towards performance, and subsequently, debilitating experiences of anxiety. Although no differences emerged between the two groups in terms of intensity symptoms, the positive group had significantly higher facilitative scores for both cognitive and somatic anxiety symptoms for all three types of expectations.

Ntoumanis and Jones (1998) investigated differences in cognitive labelling of competitive trait anxiety as a function of locus of control beliefs. Employing the CTAI-2 and internal-external locus of control scale (Rotter, 1966), no differences in intensity of competitive trait anxiety were observed. However, those athletes who labelled themselves as having an internal locus of control perceived trait anxiety symptoms as more facilitative than those who viewed themselves as having an external locus of control. Locus of control (internal) was further associated with more adaptive emotional responses in sport.

Wiggins (1998), following up an initial study (Wiggins & Brustad, 1996) identified temporal patterns of anxiety and self-confidence levels, with respect to both

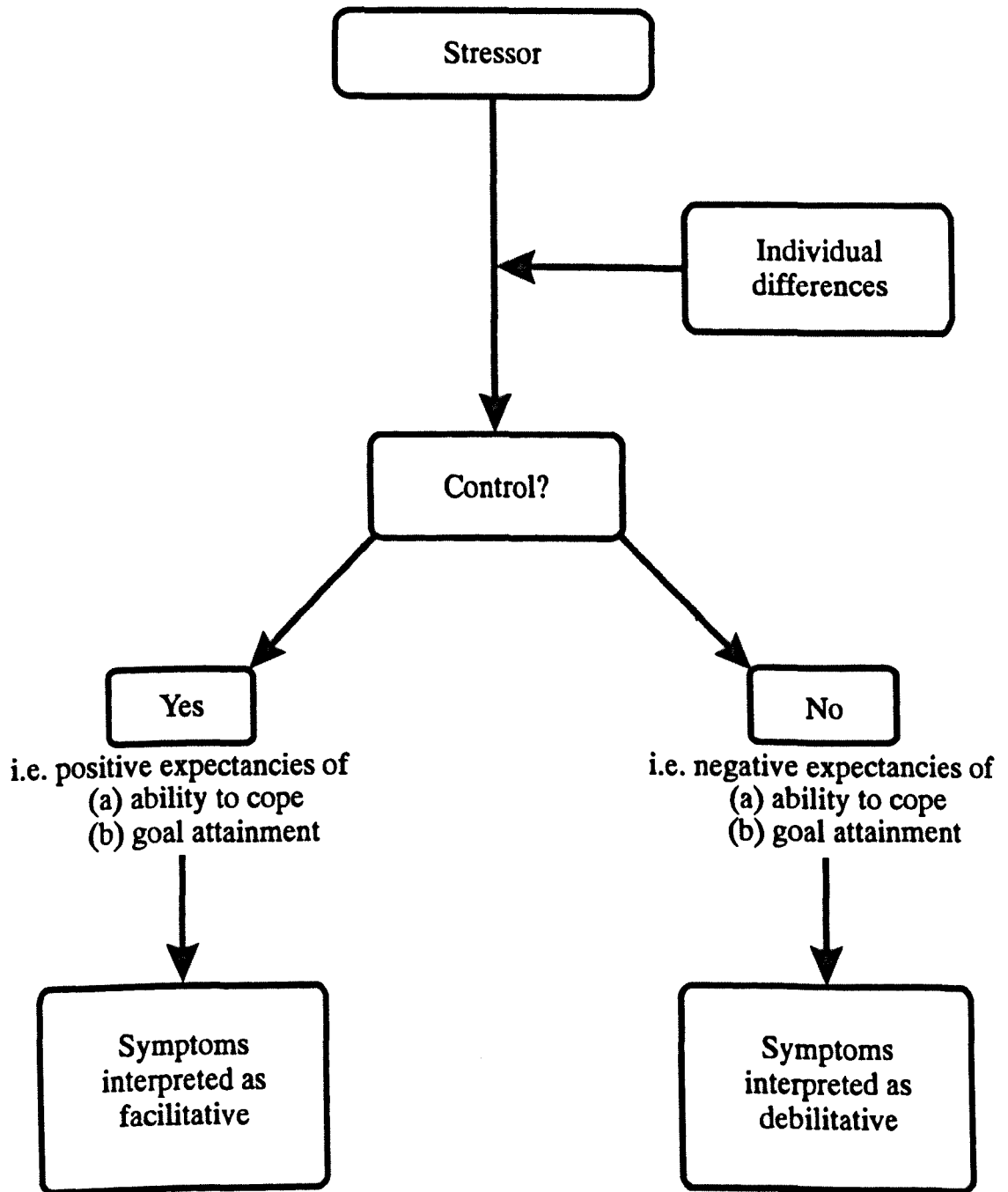


Figure 2.7: A control model of debilitating and facilitative competitive state anxiety (Jones, 1995).

intensity and direction (i.e., perceived favourability) of symptoms, and precompetitive performance expectations at three times prior to competitive high school and collegiate athletes performance. Results indicated that anxiety symptoms followed the predicted temporal patterns prior to competition (Martens et al., 1990). Temporal patterns for directional anxiety and self-confidence, and performance expectations did not change significantly over time prior to competition. The authors cited the possible implication that perceived directional anxiety symptoms and performance expectations may influence each other equally, from the initial stages of development until the actual competition. Other proposed mediating variables, such as gender and skill level, have also been investigated by Perry and Williams (1998) who compared competitive state anxiety intensity and direction of advanced, intermediate and novice tennis players. No differences were observed for somatic anxiety intensity, whilst for cognitive anxiety intensity the novice group reported lower cognitive anxiety and the advanced group higher self-confidence levels. In respect to direction, only advanced players reported more facilitative interpretations against the proposed progressive increase across skill level. With regard to gender influences, no differences were reported in self-confidence and anxiety intensity across the two groups. Males reported a more facilitative interpretation of anxiety. Those participants who were classified as debilitators experienced higher cognitive and somatic anxiety intensity, and lower self-confidence, than their facilitating counterparts. With further regard to skill level, Hanton and Jones (1997) examined the antecedents of both intensity and direction of state anxiety components. Here the crucial role of the coach for the non-elite performer in the maintenance of facilitating anxiety interpretations was observed.

Hanton, Jones, and Mullen (in press) investigated the predictions of Martens et al., (1990) and Jones (1995), regarding the potential differences in experience of anxiety

symptoms as a function of the nature of the sport, with Rugby League performers, who participated in relatively short duration explosive sports, and experienced both competitive anxiety states as more facilitative to performance than pistol shooters, who participated in a sport of more finely controlled skill of a longer duration. Self-confidence scores were also higher for the explosive sport. No differences were emergent with regard to intensity of competitive anxiety symptoms experienced.

Since the conceptualisation of the direction dimension of competitive anxiety, an ever-growing body research has therefore demonstrated interpretations of anxiety symptoms to differentiate between a number of individual and situational variables.

Facilitating Anxiety vs. Positive Emotions?

Whilst the acknowledgement of directional perceptions of competitive anxiety symptoms has been widely recognised amongst sport psychology researchers, the notion of facilitating and debilitating anxiety has recently received criticism. Burton (1998), in addressing the conceptualisation of anxiety based upon cognitive interpretations, stipulates three primary criticisms. The first problem surrounds the notion that anxiety can actually be facilitative to performance. Burton and Naylor (1997) state, "anxiety researchers have mistakenly mislabelled other positive emotions such as challenge and self-confidence as facilitating anxiety." (p.297). The authors (Burton & Naylor, 1997; Burton, 1998) cite Lazarus' (1991) model of emotion, which, in addition to comparison with Jones' (1995) control model of anxiety and Eysenck's (1984) version of Processing Efficiency Theory, suggests negative expectations of goal attainment and coping lead to negative emotions such as cognitive anxiety. Positive goal attainment and coping expectations, however, prompt the development of more positive emotions including

challenge, excitement and self-confidence. Subsequently, Burton and Naylor (1997) have commented:

“The measurement approach taken by Hardy and Jones seems to be confounding anxiety with other more positive emotions. Consequently, competitive anxiety theorists must address the question of whether anxiety is really facilitating, or whether positive emotions such as challenge, excitement, or self-confidence simply have been mislabelled as facilitative anxiety?” (p.296).

Given the potential misnomer that intensity and direction symptoms represent positive and negative emotions, it has been implied that a composite measure of intensity and direction symptoms may be more appropriate (Burton & Naylor, 1997; Burton, 1998) to capture the nature of the emotion and the intensity to which it is experienced

A second criticism (Burton, 1998) is directed towards the measurement of the direction symptoms, and how individuals rate the nature of their anxiety symptoms, despite experiencing varying levels of a state intensity. Here, it is posited that individuals with a wide range of intensity symptoms, may find a particular intensity level to be equally facilitating or debilitating. Burton (1998) adds:

“Because the stimuli being rated are variable rather than standard across subjects, this approach violates the tenets of nomothetic research in which individuals receive a standard prompt to which they must respond. The result should be dramatic increases in error variance that cast serious doubts on the validity of the scale” (p.142).

The third criticism draws attention to the impact of temporal factors upon the stress anxiety process. Burton and Naylor (1997) cite Lazarus' (1991) model of emotion that contends anticipatory stress prior to competition is often perceived as facilitative to performance, whereas stress during competition is perceived as significantly more debilitating. They further state:

“Prior to competition individuals appraise discrepancies between perceived environmental demands and response capabilities as challenges rather than threats if they believe they have the time and resources to reduce or eliminate the source of the threat..... Conversely during competition demand/response imbalances are appraised as threats that are debilitating to performance if athletes lack the time or resources necessary to cope effectively.” (p.300-301).

Preperformance anxiety is therefore implied to be interpreted in a positive and challenging way, whilst in competition, anxiety is seen as debilitating to performance. Support from Eysenck and Calvo’s (1992) more recent version of processing efficiency theory posits that preparatory anxiety facilitates performance by having a motivational effect on preparation, whereas during competition, anxiety is debilitating because it reduces the availability of coping resources (cf. Burton & Naylor, 1997).

In response to these criticisms it has been argued that anxiety can have a positive effect upon performance (Hardy, 1997; 1998; Hanton & Jones, 2000). Processing Efficiency Theory (Eysenck & Calvo, 1992) explains the impact of the motivational effects of cognitive anxiety upon performance through signalling to the performer the importance of the upcoming event, and the need to muster all available resources in order to perform the necessary actions on the field (Hardy, 1997). Furthermore, Hardy (1996) has argued:

“such (negative) cognitions may be precisely what is needed in order for performers to muster the very high levels of motivation and commitment that may be necessary in order to perform at the absolute limits of their capabilities.”
(p.280).

Further support is provided by an aspect of Processing Efficiency Theory that posits cognitive anxiety will only have a positive effect upon performance if the performer is moderately confident of success in the competitive situation. These proposals are consistent with the direction research findings that have observed high

levels of self-confidence to be moderately associated with positive interpretations of anxiety (Jones et al., 1993). In addition, Hardy cites further problems with the assumption that positive emotions are always beneficial to performance and negative emotions detrimental. Anecdotal evidence exists of people performing incredible feats under the most threatening of circumstances (Hardy, 1998).

Whilst these issues have yet to be fully resolved or substantiated, researchers (Burton & Naylor, 1997; Hardy, 1998) do agree that a problem exists with the conceptualisation of competitive anxiety in its present state, together with fundamental flaws in the measurement instrument, the CSAI-2. Furthermore, it has also been highlighted that current anxiety scales fail to account for the individual who is high in anxiety on only a few of the item scales whilst low on the remainder of the items. Two individuals may achieve scores similar on a current measurement instrument yet experience completely different symptoms and intensity related to competitive anxiety. The use of alternate measures, including stimulated videotape recall and abbreviated versions of anxiety scales, such as the Mental Readiness Form (MRF; Murphy et al., 1989), the measurement of the interactive effects of cognitive and somatic anxiety, together with statistical procedures to reduce multicollinearity and reductions in the impact of social desirability will aid in improved measurement of competitive state anxiety (Burton, 1998).

The MRF, a field measure of the CSAI-2, was developed in response to the criticism that the CSAI-2 was too long to be utilised in field testing situations (Krane, 1994; Martens, Burton et al., 1990; Murphy, Greenspan, Jowdy, & Tammen, 1989). Further, an expedient measure of was required to assess anxiety directly prior to, and during, competition. A common obstacle presented by the CSAI-2 was the reluctance by coaches and athletes to agree to complete an anxiety questionnaire in the final minutes

prior to competition whilst attempting to achieve mental readiness (Krane, 1994). Consequently, an abbreviated 3-item measure of the CSAI-2 was developed. The MRF employs single items to measure the traditional CSAI-2 sub-scales. Participants are asked to mark a spot on a 10cm line bounded by descriptors representing high and low levels of cognitive A-state, somatic A-state and state self-confidence. Scores are obtained by measuring (in millimetres) from the left end of the line to the respondents mark on the line. Scores range from one to one hundred.

Murphy et al., (1989) administered the original MRF scale to elite athletes at an Olympic training centre and observed moderate correlations between the scale and the CSAI-2. However, this version was found to be quicker and easier to use in field research that had time constraints preventing the entire use of the full version of the CSAI-2. Krane (1994) developed subsequent revised versions of the abbreviated scale to incorporate a Likert scale (MRF-2) and modified anchor items (MRF-3). Initial validation research (Krane, 1994) with the revised versions of the MRF, and initial construct validity for the MRF-2 has also been reported (Krane, Joyce, & Rafeld, 1994). However, in spite of the adequate concurrent validity shown by the scales in the preliminary research, together with the absence of any social desirability bias, some reservations remain regarding the use of such an abbreviated measure. As Krane (1994) adds:

“The MRFs are very attractive to applied sport anxiety researchers because of their brevity, yet researchers should remain cautious in interpreting results obtained with them. A significant consideration is that the three items of the MRF will not provide as an adequate measure and confidence with the more psychometrically sound CSAI-2. when the CSAI-2 is not pragmatic, the MRF can serve as an adequate alternative.” (p.200-201).

Trait Anxiety - A Reconceptualisation

Although a trait version of multidimensional anxiety has been employed using the Competitive Trait Anxiety Inventory-2 (CTAI-2), validation and reliability measures could at best be described as brief. The existing trait measurement of competitive anxiety, the SCAT (Martens, 1977), adopts a rather limited unidimensional conceptualisation of anxiety. The Sports Anxiety Scale (SAS; Smith, Smoll, & Schultz, 1990) was developed, therefore, based upon a more conceptually sound and theoretically grounded model to measure competitive trait anxiety (figure 2.8). The model is constructed upon conceptions of emotionality and anxiety from researchers in anxiety and emotion including those of Spielberger (1966), Smith (1989), and Lazarus and Folkman (1989). Included in the conceptualisation is the state-trait distinction, the differentiation between situational, cognitive, physiological, and behavioural components of the process of anxiety. Also included is the directional component of anxiety (Jones & Swain, 1995). The 21-item SAS scale measures somatic anxiety, cognitive worry, and concentration disruption. Reliability and validity measures have been reported (Smith et al., 1990; Krane & Finch, 1991). However, since its inception few studies have actually employed the SAS as a measure of trait anxiety. Research has examined competitive trait anxiety in modalities including injury prediction (Smith, Ptacek, Everett, & May, 1995) and in intervening to reduce levels of coach experienced stress (Smith, Smoll, et al., 1995).

Despite this attempt at the advancement of the understanding of trait anxiety, the SAS suffers from several limitations. The scale itself aims to examine the predisposition to experience competitive trait anxiety immediately prior to, and during, competition. Collectively 'lumping' the two time frames together and asking the performer to provide a composite response to describe how they feel during and prior to competing

may not be an accurate enough differential of the competitive anxiety response. There is a strong body of evidence that supports the differential temporal patterning of competitive state anxiety symptoms in the time to event (Jones, 1995). Equally, this body of evidence indicates that once competition commences competitive anxiety levels change considerably contingent upon the task demands of the sport (Martens et al., 1990a). Conceivably, asking performers to provide a common score to constitute pre and during competition anxiety levels may yield little success. Further, distinctions have been established in content and structure between in-event performance and preparatory preperformance anxiety (Burton, 1998). Research examining the interpretations of anxiety state and trait anxiety clearly indicate that performers may view preparatory anxiety as positive, yet view performance anxiety during competition as debilitating (Mellalieu, Hanton, & Jones, 2000). Finally, Hardy, Jones, and Gould (1996) question Spielberger's (1966) basic premise that highly trait anxious performers should respond to stressful situations by demonstrating high levels of state anxiety and, therefore, the subsequent insinuation that the impact of competitive anxiety upon performance is totally mediated by performers' state anxiety responses. The authors cite evidence from cognitive psychology (Eysenck, 1992) which maintains that an interaction between state and trait levels of anxiety will influence performance. In the SAS model of sport performance anxiety, the conceptualisation of sport performance trait anxiety is perceived to have a direct link to the level of state anxiety experienced.

Despite these limitations the SAS is still a major advancement in the measurement of trait anxiety, and provides a more reliable and valid measure than previous instruments. As Smith et al., (1998) state:

“The availability of a multidimensional trait scale like the SAS may provide a tool for answering important theoretical questions about the dynamics of anxiety and how it affects cognition, affect, and behaviour.” (p.123).

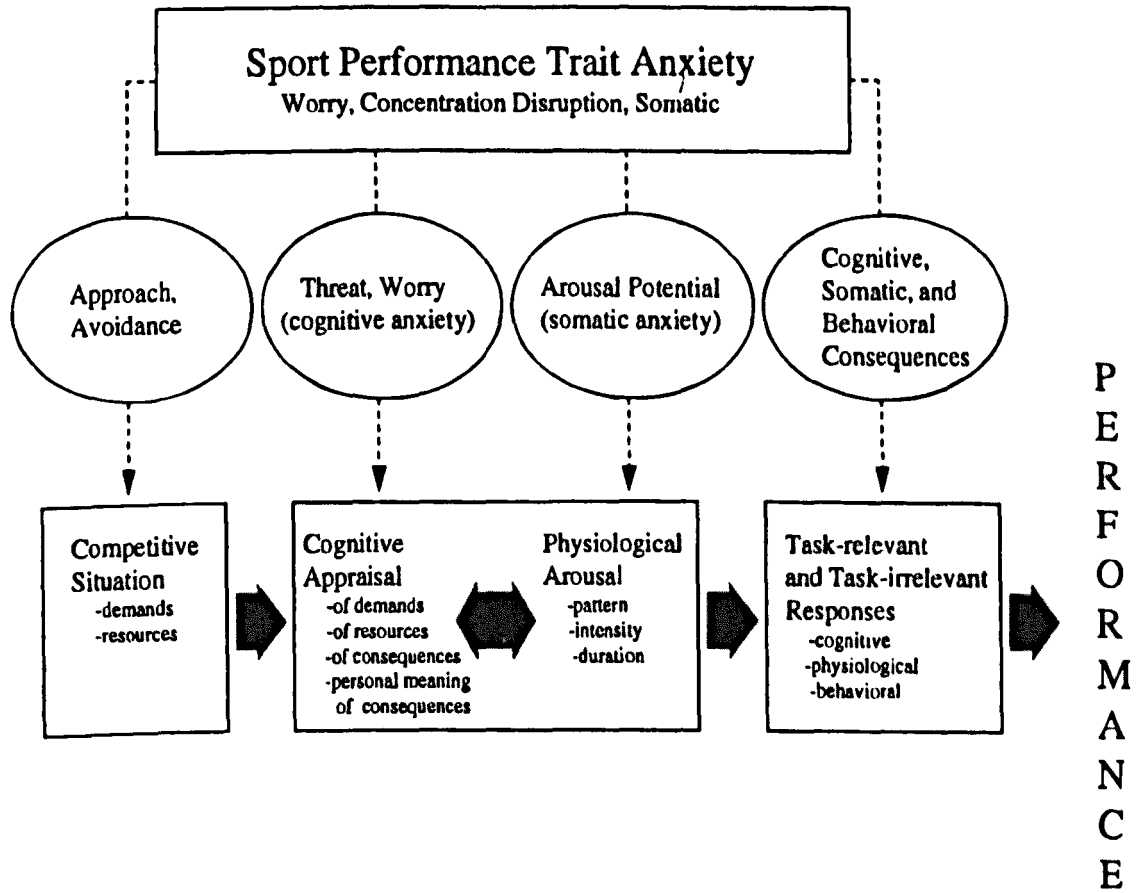


Figure 2.8: A conceptual model of sport performance anxiety (Smith, Smoll, & Wiechman, 1988).

Affect

Anxiety and Affective states

Despite the prevalence of competitive anxiety research in sport psychology over the past two decades (Tenenbaum & Bar-Eli, 1995; Jones, 1995; Biddle, 1997), for almost a similar duration, there has been a call for a broader examination of affect in sport. This request commenced with researchers (e.g., Vallerand, 1983; 1984) who viewed precompetition emotions as playing a more significant role in athletic performance (Silva & Hardy, 1984; 1986). More recently, this request has re-emerged.

“Anxiety is only one possible aspect of an athlete’s affective experience. Both practical experience and empirical research suggest that a wide range of pleasant and unpleasant emotions can be experienced prior to competition.”
 (Males & Kerr, 1996; p.18).

Despite the fact that emotions and emotional aspects are “indigenous to sport and physical activity” (Boutcher, 1993; p.799), there has been a lack of investigation into positive emotions, with an overemphasis on more specific unitary constructs such as anxiety (Biddle, 1992). Existing psychometric measures employed at assessing affect in sport psychology literature to date include the Profile of Mood States (POMS; McNair, Lorr, & Dropleman, 1971) and the Positive and Negative Affect Scale (PANAS; Watson, Clarke, & Tellegen, 1988). Alternative approaches have attempted to describe athletic performance through examination of optimal zones or bands of measures of emotions (Hanin & Syrja, 1995; 1996; Hanin, 1997), together with more eclectic perspectives integrating the generation of arousal, thoughts and feelings to explain the emotion-performance relationship (Kerr, 1997).

Underlying the varied affective measures employed has been a lack of clear definition in relation to distinguishing between mood, affect, emotion and feeling states (Ekman & Davidson, 1994; Diener, Smith, & Fujita, 1995). Further contention surrounds the debate regarding the structure of affect and subsequent production of moods, feelings and emotions (Lazarus, 1991).

The following review provides a description of these underlying conceptual and theoretical issues surrounding the measurement and understanding of affective responses in social psychology. Specifically, the review examines the disagreement surrounding the structure of affect, definitional issues related to mood, emotions and feelings, and theoretical arguments that attempt to explain the production of emotions. In addition, the review describes sport and exercise psychology affect research, together with the theoretical attempts purported to describe and comprehend the relationship between affect and performance.

Measurement of Affect: Definitional and Conceptual Issues

The Structure of Affect

Before researchers can attempt to define and classify such unique concepts as 'mood' and 'emotion' an underlying argument first needs to be clarified. No consensus exists regarding whether such concepts are collectively best described as discrete states or dimensions (Ekman & Davidson, 1994). One of the major conceptual disagreements present in the affect literature surrounds the relative structure of affect. The argument surrounds the notion of whether affect constitutes a bi-polar structure, or, that positive and negative affect are relatively independent of each other.

The relative independence of positive and negative affect was first proposed some forty years ago (Bradburn, 1969; Bradburn & Caplovitz, 1965). Researchers adhered to the principle that positive and negative affect are largely independent and can be experienced simultaneously, i.e., someone can experience joy tinged with sorrow, hatred tempered with love, and anger coincident with kindness. In direct contrast, another school of thought contended that affect was bipolar (see Guilford, 1954; Russell, 1979). The researchers believed positive and negative affect represented opposite poles of one underlying dimension. Therefore, for example, joy and sorrow represent opposite ends of a single dimension. A happy person was one who was not sad, and a sad person was one who could not be simultaneously happy. Russell (1979), in support of this concept, argued bipolarity was suppressed in most studies of affect because of a series of measurement issues that credited systemic error. Prevalent amongst these issues included, the sample of words contained on measurement scales that underrepresented one end of a continuum, instructions which often asked participants to rate how they feel over extended periods of time, response formats that resulted in bi-modal rather than normal distributions for each item (the modal response was often *'not at all'*) and items in close proximity on the scale often indicating spuriously inflated intercorrelations. Russell (1979) found strong evidence that these limitations had previously obscured the relative bi-polarity of affect, which he believed was defined by two bi-polar factors, pleasure-displeasure, and arousal-sleepy.

More recently, support for the independence of affect has re-emerged (Zevon & Tellegen, 1982; Diener & Emmons, 1985) from Watson and his colleagues (Watson, 1988; Watson, Clark, & Tellegen, 1984; Watson & Tellegen, 1985) with a proposed two factor structure of affect (figure 2.9). Despite this support for the relative independence of affect the concept is still debated. Green, Goldman, and Salovey (1993) have argued

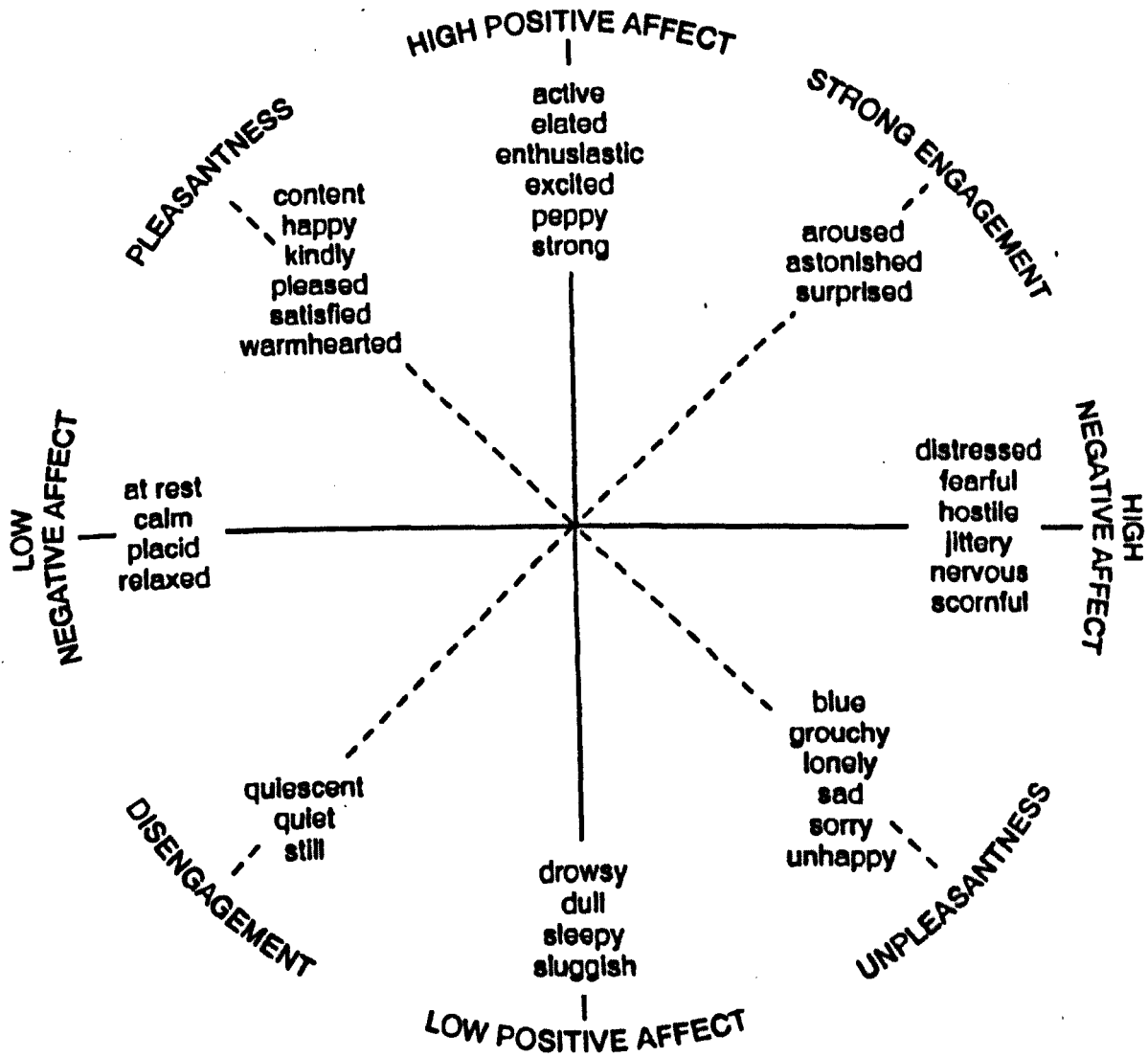


Figure 2.9: Watson & Tellegen's (1985) two factor structure of affect.

the relative independence of positive and negative affect only occurs when measurement error is uncontrolled. They suggest the relative independence of positive and negative emotions occurred in earlier studies primarily because of the large amount of error in affect measures, which in turn decreased the inverse correlation between the two (Diener, Smith, & Fujita, 1995). Acknowledging these criticisms, Diener et al., (1995) provide evidence for the conceptual and methodological refinements required with previous work. These criticisms are based upon the nature of emotion sampling, the degree of independence, therefore, is underpinned by problems with unsystematic sampling approaches including non affect-based words (Shaver, Schwartz, Kirson, & O'Connor, 1987), or selection of only pleasant and unpleasant emotion words that researchers know to be orthogonal. Subsequently, the process prejudices the outcome of the studies designed to test the orthogonality of affect. A further sampling problem has been the reluctance of researchers to include basic emotions (Ekman, 1992). Researchers have not ensured a balanced sampling of affect because they often included more synonyms for some emotions than others. Therefore, future scales and conceptualisations require control of measurement error, the use of multiple method measurement beyond self-report measures and the strict use of affective concepts such as emotions, together with clarifications of statistical definitions surrounding the notion of independence (Ekman, 1994).

A major criticism with the factor structure of affect is that the words in the circular matrix, though placed in the same position, do not represent the same state (Clore, Ortony, & Foss, 1987; Lazarus, 1991). As Lazarus (1991) states:

“Much of the value is lost by putting these reactions into dimensions, because the simplifying or reductive generalisations wipe out important meanings about person-environment relationships, which hundreds of emotion words were created to express. If we want to know what makes people or any given person angry, for example, the task is not facilitated - in fact it is actually undermined - by a preoccupation with the so-called underlying response dimensions, which supposedly transcend emotion categories. Anger, then, becomes only a kind of unpleasant activation, when in reality it is a complex, varied, and rich relational pattern between persons, one that is distinctive and powerful in its effects on the participating persons and the larger social setting.” (p.63-64).

It seems clear, therefore, that before researchers can effectively measure psychological states, a definite structure and understanding of the conceptual construction is vital.

What is an Emotion/Mood/Feeling?

In addition to conceptualising a structure, perhaps the major problem with the measurement of affect is the fact that there has been a lack of clear definition in relation to distinguishing between mood, affect, emotion and feeling states (Ekman & Davidson, 1994; Diener, Smith, & Fujita, 1995). As Gauvin and Spence (1998) state:

“One of the most daunting problems facing researchers interested in studying exercise (& hence sport) induced changes in psychological states is the difficulty associated with defining concepts of feeling states, mood and emotions.”
(p.326).

This lack of understanding has led to the terms and definitions for emotion, affect, feelings and mood being employed interchangeably and often misdirected in their description of affective states. Therefore, the first challenge faced by the interested researcher is to identify what affective states (i.e., mood, emotion, feeling state) are the focal point of the investigation.

Categorical theorists (Frijda, 1987; Izard, 1977) have focused upon defining and describing a narrow group of emotions and emotional experiences. Here, research has been specifically directed towards the feelings, physiology, behavioural expression and antecedents of these specific emotions. At present, researchers have established a small number of discrete emotions (Ekman & Davidson, 1994). In social psychology, definitions of emotion tend to be dependent upon the favoured theory of emotion. Theoretical routes taken include behavioural, cognitive (Lazarus, 1984) and physiological (Cannon, 1932; McClean, 1981). These routes vary both in views and definition (see Strongman, 1987 for a full review).

Pekrun and Freise (1992), examining emotions in work achievement situations, see the subjective experience at the heart of most definitions. In this context, emotion is seen as an integrative subjective experience, comprising emotion-specific feeling states, perceptions of physiological and expressive processes and emotion-specific cognitions. Boutcher (1993) sees emotion in sport as “a complex process that possesses cognitive, physiological, behavioural and experiential components” (p.800). Vallerand (1983) describes these processes as the conscious subjective experience of emotion, the physiological changes in the autonomic nervous system and observable emotional behaviours.

Contrasting this approach is the view that conceptualises defining broad dimensions of the affective experience (Diener & Emmons, 1985; Russell, 1979; Watson & Tellegen, 1985) with concepts such as activation and hedonic tone. Batson, Shaw, and Oleson (1992) view affect as more general and primitive than mood and emotion. Affect is described in terms of hedonic tone and intensity such as:

“Change from a less valued to a more valued (feeling state) is accompanied by positive affect; change from a more valued to a less valued (feeling) state is accompanied by negative affect. Intensity of affect reveals the magnitude of the value preference” (Batson et al., 1992; p.298).

The authors see affect as the most fundamental expression of the value attached to a given feeling state. Batson et al., (1992) consequently view mood as a more specific type of affective state that is also defined in terms of hedonic tone and activation, and one which can be distinguished from affect in that it is accompanied by a series of beliefs about impending pleasure or pain. Positive moods indicate anticipation of positive affect whereas negative moods relate to anticipated negative affect. Emotion is conceptualised as a more specific and narrow construct than mood and affect that also involves hedonic tone and intensity. “The existence of a specific goal or of perceived change in one’s relation to a specific goal in the present.” (Batson et al., 1992; p.301).

One approach employed in exercise settings to counter the problematic use of words has been that of feeling states (Gauvin & Spence, 1998). The concept of affect is based around the notion of ‘*feeling states*’, whereby individuals can experience *feelings* of something, *feelings* about something, or *feeling like* doing something. According to Averill (1994) the term *feeling* is inherently ambiguous, as three types of feelings may occur simultaneously and cannot always be distinguished from one another at a given point (Gauvin & Spence, 1998). The *feelings of* category refers to bodily reactions and experiences. In sport and exercise this would relate to feelings of exertion, tiredness and energy. The *feelings about* category refers to cognitive appraisals of the value ascribed to different objects or activities. Sport-related examples include positive feelings about competition, training or events. Finally, the *feeling like* category refers to actual or potential instrumental responses. These may include feeling motivated to perform an act or task. Essentially, therefore, the researcher needs to be cognisant of the exact

definition of affective states being employed. Furthermore, an understanding of the specific context of how that affective state is generated is required before entering into an assessment of affect in sport.

A Theory of Emotion?

Given the uncertainty surrounding definitional issues in affective states, a clear understanding of the theoretical underpinnings of the generation of these emotional states may be more productive when conceptualising appropriate measurement procedures in sport psychology. Most of the attempts to explain the production of affective states have fallen under the category of emotion. In the past one hundred years many theories have been proposed to describe how emotions are produced, these include early behavioural theories such as Body Reaction Theory (James, 1884) and Central Neural Theory (Cannon, 1927). Latter cognitive theories, from a social psychological perspective, have included those of Schacter (1964), who believed “emotion results from a labelling of arousal produced by a cognitive interpretation of the situation context.” (Vallerand, 1987; p.200). Other theorists such as Arnold (1960), viewed cognitive appraisals representing the critical determinants of emotion. Here, appraisal was described as consisting of two categories, ‘intuitive’ and ‘reflective’. Intuitive appraisal is essential to production of the emotion whilst reflective serves only to modify, change or reinforce the primary appraisal. Weiner (1981), views the subjective experience of emotion as diversified and dependent upon the meaning attached to the situation. Subjective outcome leads to a general type of effect whereas causal ascriptions for the outcome leads to more distinct emotions. Within the context of sport, Vallerand (1983; 1984; 1987) has adapted these social psychological approaches and proposed a cognitive model for self-related affects in achievement situations.

A common theory employed within anxiety literature has been Lazarus's (1966) Theory of Stress. Recently, Lazarus (Lazarus, 1991; Lazarus & Folkman, 1984) has broadened this approach, away from anxiety to one of stress and emotion. In Lazarus' (1991) reconceptualisation, stress is viewed as a complex cognitive evaluation in which individuals consider information in three stages in order to determine the amount of stress experienced, and the consequent emotional responses. These stages include, primary appraisal, secondary appraisal and the subsequent coping resources. Primary appraisal is the initial assessment made about a transaction in which individuals evaluate personal significance of the encounter for them (Folkman, 1992). In this stage the individual considers the potential impact of the environment on well being. Primary appraisals of the stressor are classified into three types; threat, challenge and harm/loss. These appraisals are subsequently influenced by three constructs; goal relevance, or the extent to which the encounter impacts upon personal goals; ego involvement, the diverse aspects of ego identity or personal commitment that are at stake; and goal congruency, the degree to which the transaction facilitates or impairs goal attainment. These three components of primary appraisal impact upon the individual cognitive evaluation of the transaction, leading to the subsequent development of discrete emotions.

Once individuals determine what is at stake in an encounter, secondary appraisal occurs. During this process the individual focuses on assessing how well he/she can handle or manage the encounter (Folkman, 1992). Here, individuals assess how much control they have over preventing or overcoming harm and/or improving their prospects for receiving positive benefits from the transaction. The key to secondary appraisal is therefore the perceived ability of the individual to cope, and the subsequent impact it will have upon the person-environment relationship (Lazarus, 1991). Consequently,

high stress will be experienced when environmental demands are thought to exceed coping capabilities, either due to environmental demands perceived as uncontrollable, or, due to a perceived lack of coping resources to effectively deal with these demands. The final component of the model relates to the coping resources an individual has at his/her disposal to deal with the encounter and the resultant emotional well-being that arises as a consequence of the appraisal. Two main categories of coping have been established: problem and emotion-focused coping (PFC and EFC; Lazarus & Folkman, 1984). Problem focused coping strategies include cognitive or behavioural efforts to reduce or eliminate the sources of stress. Emotion focused coping techniques are cognitive and behavioural strategies that aim to decrease emotional distress and increase well-being, despite the threat or stressor remaining unchanged (Lazarus & Folkman, 1984).

Based upon the model, therefore, Lazarus (1991) posits that the stress process prompts an elicitation of anxiety responses when primary appraisal is threatening and coping resources seem insufficient to effectively deal with the threat. Similarly, appraisal of the situation as challenging will lead to the experience of more positive emotions, such as challenge or excitement. Consequently, factors that raise the perceived threat during primary appraisal and decrease perceived control during secondary appraisal, should increase competitive state anxiety, specifically cognitive anxiety. Equally, primary appraisal factors that increase perceived challenge, secondary factors that increased perceived control, and general enhancement of perceived coping resources should promote more positive emotions such as excitement and self-confidence.

Affect in Sport: Emotions

Attribution-Emotion Links

One cognitive approach to the study of emotion in sport ascertains that the production of emotions is dependent upon the participant's cognitions, especially causal attributions. These causal attributions are influenced by perceptions of individual ability and the ability of others. This approach stems from Weiner's (1987) Attribution Theory of Achievement Motivation and Emotion (figure 2.10). Under this conceptualisation, emotional feeling is viewed as related to both the objective outcome as well as the attribution appraisal of the outcome. Based upon these assumptions, Vallerand (1987) has proposed an 'intuitive-reflective appraisal model' of emotion in sport, which claims that subjective appraisal of performance is related to emotional feelings.

Despite the relative importance of emotion in sport, combined with the popularity of Attribution Theory, and the fact that Weiner's theory has been widely tested in social psychology, only a limited number of studies exist in the sports domain (for a full review see Biddle, 1992; McAuley, 1992; Willimcsik & Rethorst, 1995). The limited research conducted has provided partial support for Weiner's model of attribution-emotion links.

"Weiner's model appears to have some utility in the sport context, but more needs to be known on how well the model fits sports situations."

(Willimcsik & Rethorst, 1995; p.241).

Despite partial support for the theory of attribution-emotion links in explaining post performance emotions, a number of researchers (Biddle, 1988; 1992; Biddle & Hill, 1992) list several methodological problems regarding researching cognitions and

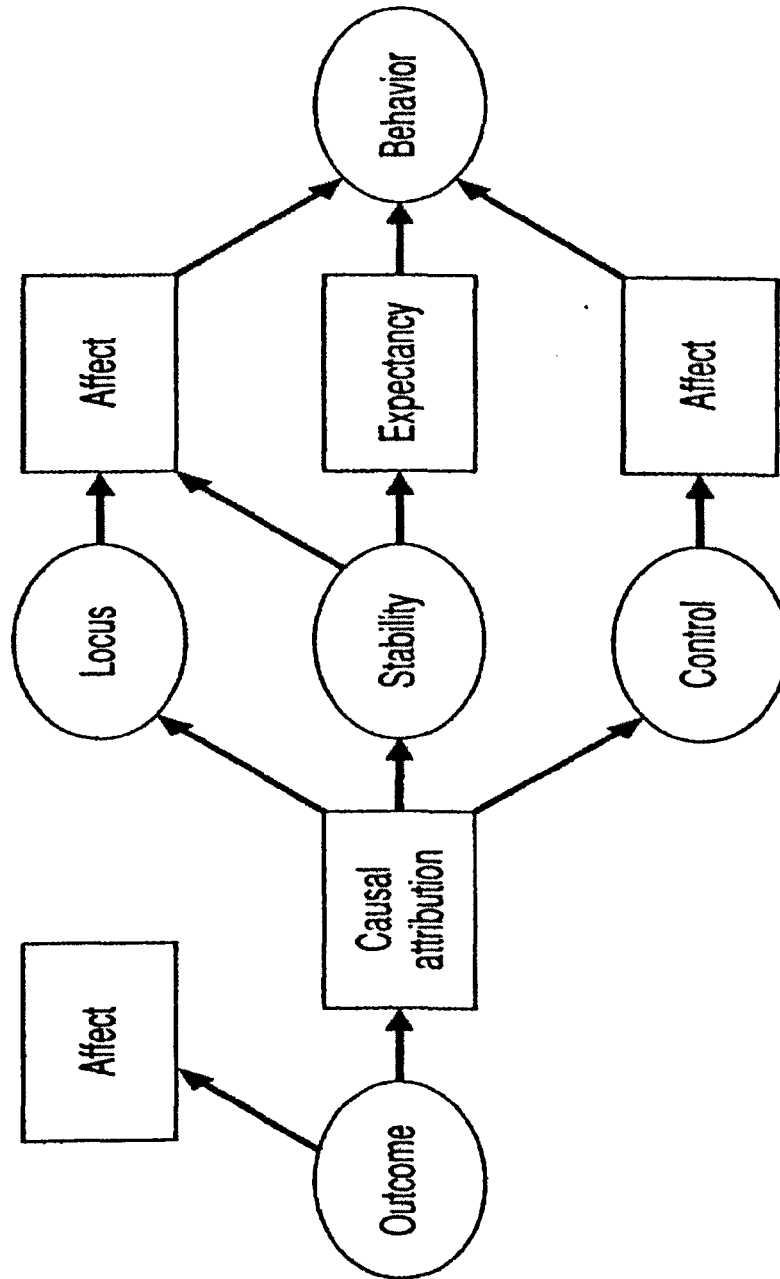


Figure 2.10: Wiener's (1987) Attribution theory of achievement and emotion

emotions. These relate to the nature of the event studied, the method of eliciting attribution and emotions, and prior states of expectancy and task importance (see also Willimcsik & Rethorst, 1995). Further criticism has attacked the narrowness of the approach to attribution research in sport (McAuley & Duncan, 1990; Rejeski & Brawley, 1983; Biddle, 1992). Theoretical criticism has also been levelled by Lazarus and his colleagues as to the role of attributions in the emotion process.

“Attributions of causality are cold perceptions or cognitions; they are simply statements about how things work. They are relevant to emotions but not equivalent to cognitive appraisal, which adds the dimension of the significance of the attribution for the person’s well being.”

(Lazarus & Folkman, 1984; p.271).

Further, from a conceptual view, the theory merely explains performers’ emotions as a consequence of outcome of the sporting situation or achievement setting, i.e., based upon whether they win or lose. No attempt is made to relate the attribution-emotion link to affective states either before or during actual performance. Despite its potential implications, as authors such as McAuley (1992) point out, it does not mean that researchers blindly accept the proposition that affect occurs only as a function of post-outcome causal search. Other cognitive processes are known to influence post-outcome affect (Vallerand, 1987; McAuley & Duncan, 1990; Robinson & Howe, 1989).

Arousal and Emotions in Sport

A proliferation of terms have been employed to define the concept of arousal, with researchers associating the term with differing constructs, and consequently differing definitions. These conceptualisations, have, over time, varied from early definitions such as energy mobilisation (Cannon, 1929; Hebb, 1955; Malmö, 1959) to more multidimensional perspectives whereby the construct has been purported to

possess both intensity and direction dimensions (Malmö, 1959; Duffy, 1957). In the sports context, arousal has been associated with motivation (Sage, 1984; Magill, 1989; Brehm & Self, 1989), alertness (Cox, 1990), activation (Ursin, 1978) and psychic energy (Martens, 1987b). Gould and Krane (1992) define arousal as a “general physiological and psychological activation of the organism that varies on a continuum from deep sleep to intense excitement.” (p.120). Neiss (1988) in his reconceptualisation of psychobiological states has provided a more thorough definition.

“A multidimensional construct that refers to an energising function of the mind and body. This energy varies on a continuum from low (e.g., sleep) to high (e.g., extreme excitement). It contains a general physiological response in which several systems may be activated simultaneously, including heart rate, sweat gland activity, and electrical activity of the brain. Behavioural responses (e.g., motor performance and cognitive processes (e.g., appraisal of consequences) are also indicators of arousal.”

(Zaichkowsky & Takenaka, 1993; p.512).

Accompanying the variety in definitions of arousal has been a diversity in the measurement procedures employed. Assessment methods have included electrophysiological, respiratory, cardiovascular, and biochemical approaches together with more traditional indirect self-report measures such as the CSAI-2 (Martens et al., 1990; Landers & Boutcher, 1986). However, problems with low correlations between self-report and biochemical measures, stereotypical autonomic responses, and errors in measurement and social desirability, have produced confusion in the research (cf. Zaichkowsky & Takenaka, 1993).

The role of arousal in the production of emotions in sport has attempted to be explained by researchers such as Landers and Boutcher (1986), who view arousal as a consequence of the athlete’s cognitive appraisal of the sporting situation or stressor, resulting in arousal and the subsequent emotional responses. One problem, however,

with such attempts to explain the role of arousal in generating emotions is the 'turf war' regarding the primacy of affect versus cognition in the actual production of emotions (Lazarus, 1984; Zajonc, 1984). One explanation to integrate the role of arousal into the competitive process and clarify the confusion over terms such as arousal, anxiety and appraisal has come in the form of a proposed model (figure 2.11) of the stress-arousal process (Gould & Krane, 1992). To date, however, no empirical studies have been conducted to test the conceptual model.

Despite this attempt to comprehend arousal and the influence it has upon performance, the notion of arousal as a unitary concept has received severe criticism (Hockey & Hamilton, 1983; Lazey, 1967; Neiss, 1988). Evidence has been presented to suggest at least three different types of activation exist (Lazey, 1967); electrocortical, autonomic and behavioural. Electrocortical activation, or arousal, describes the degree of electrical activity in the cortex of the brain. Autonomic activation can be described in terms of the amount of physiological activity being conducted within the autonomic nervous system. Behavioural activation describes the overt activity of the organism. In presenting his evidence for the differentiation of the activation system, Lazey (1967) observed that activation of one system could be elevated whilst another was depressed, termed directional fractionation. The concept of situational stereotypy has also been proposed. Here, the phenomenon describes the process whereby different patterns of activity within each system can be reliably reproduced across different situations.

This conceptualisation of activation clearly presents problems for those researchers who have adopted the notion of a unitary conceptualisation of arousal. It is not the intention of this chapter to review the literature investigating the arousal-performance relationship, reviews can be found elsewhere (Gould & Krane, 1992; Landers & Boutcher, 1986; Neiss, 1988), yet it is evident that a more 'fine grained'

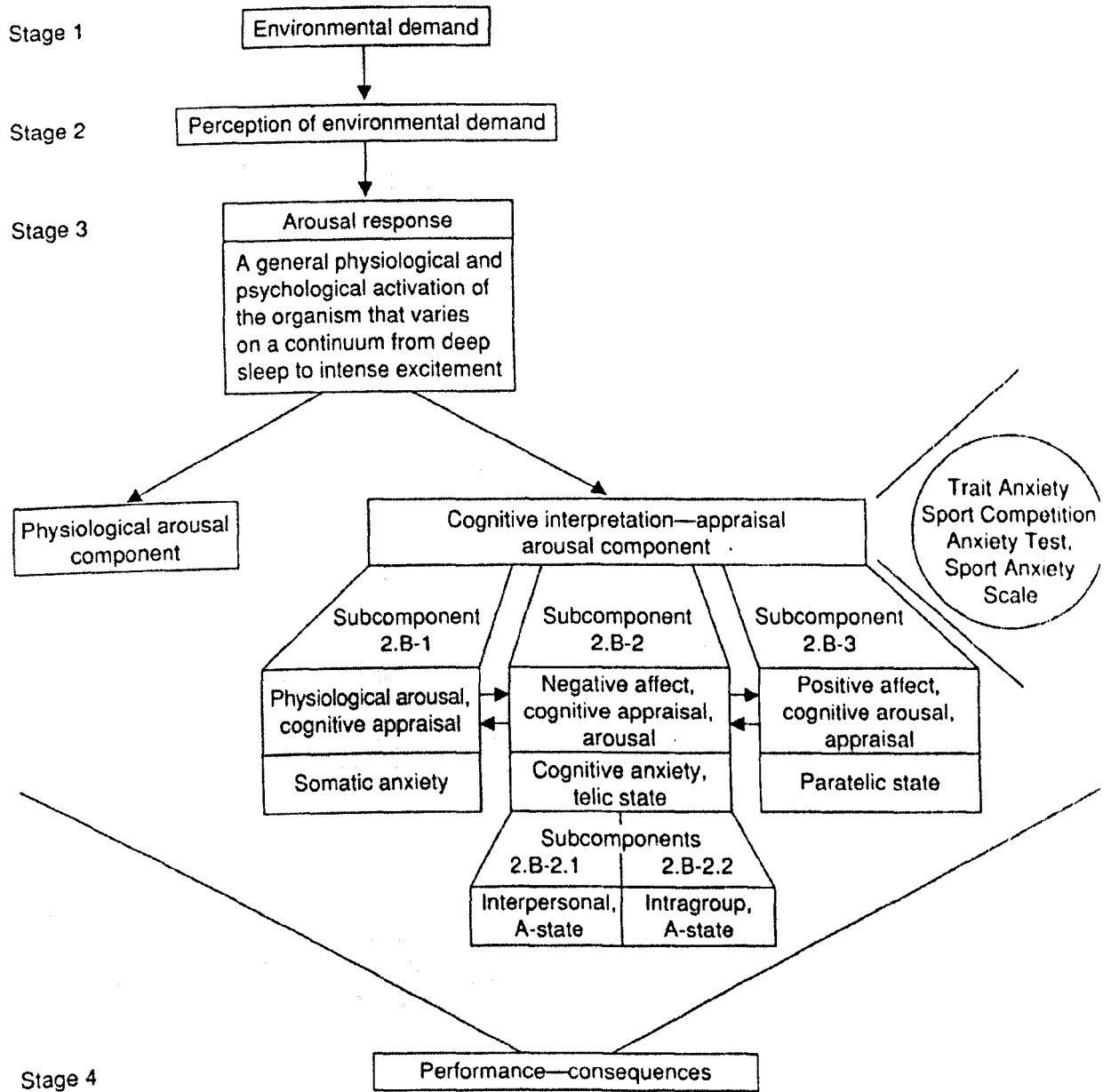


Figure 2.11: The proposed model of the relationship between the stress process and arousal terminology (Gould & Krane, 1992).

approach to the concept of arousal is required in order to fully comprehend the effects of the differential subsystems of arousal upon performance (Hardy et al., 1996).

In arguing that arousal is best considered as a patterning of different physiological parameters (Neiss, 1988), researchers have added that performance efficiency may be affected by the appropriateness of the pattern with respect to performance on the task at hand (Hockey & Hamilton, 1983). Consequently, if the physiological arousal pattern established is appropriate for the task, then performance is maintained. However, if not, performance will be impaired. Further, researchers have attempted to distinguish between the concepts of arousal and activation (Pribram & McGuinness, 1975). Under this conceptualisation clear distinctions are made between activity (cognitive and physiological) that occurs in response to a new or external output to the system, and activity aimed at preparing a planned response appropriate to the current situation. Activation is therefore viewed as the cognitive and physiological activity geared towards preparing a planned response to a given situation, such as preparing mentally and physically to perform in a race, match, or tournament. Appropriate activation states are therefore composed of varying levels of activation of the different sub-systems. Further supporting this claim is the notion that appropriate activation states are task-specific (Parfitt et al., 1990). Therefore, weight-lifters, performing a task characteristic of high activation, would be expected to produce a different activation state compared to those of a more fine neuromuscular sport, such as pistol shooting.

In direct contrast to activation states, arousal is viewed as the cognitive and physiological activity that occurs in response to a new input into the system (Pribram & McGuinness, 1975). Therefore, the notion of arousing agents occurs, which impose an increase in the activation state of an individual across a relatively short time period. In

sport this may be evident through such actions as listening to loud music, or intense verbal encouragement from the coach directly prior to performance. The beneficial or detrimental effect of an arousing agent is contingent upon the nature of the activation pattern required to perform the task at hand, together with the nature of the arousing agent (Hockey & Hamilton, 1983; Parfitt et al., 1990).

In distinguishing between arousal and activation, several theories have been proposed to explain the potential relationship between activation states and performance. These include existing theories acknowledged by sport psychology, such as Cue Utilisation Theory (Easterbrook, 1959), as well as those theories employing multidimensional activation states, that suggest different arousing agents possess the ability to have differential effects upon performance. These theories include Hockey and Hamilton's (1983) broad band approach, Sanders (1983) three arousal system model, and Humphreys and Revelle's (1984) two arousal system model.

Reversal Theory

In acknowledging in the arousal literature that a limited picture is presented by merely examining the intensity of the arousal response, researchers such as Neiss (1988), have purported that greater understanding may be gained by considering the athlete's interaction of thoughts and feelings with arousal. Empirical research suggests that arousal is accompanied with concomitant thoughts and feelings (Males & Kerr, 1996). Therefore, the focus has shifted to examining discrete psychobiological states that include cognition and affect as well as arousal, with the belief that emotional states can be represented by their underlying components. Additionally, arousal-performance researchers have called for future studies to expand beyond this limited construct to include other emotions (Gould & Udry, 1994; Gould & Tuffey, 1996).

Raedeke and Stein (1995) have employed the concept of what they define as 'Felt arousal', a derivative of actual physiological arousal describing "How aroused or activated a person feels" (p.361). In their study with skiers, employing the Sport Grid measurement scale, they observed that high felt arousal is not associated with poor performance ratings if it is accompanied by positive thoughts and feelings. Other research (Males & Kerr, 1996; Raedeke et al., 1993) has supported this belief that high felt arousal may be accompanied by positive thoughts, feelings or emotions in the precompetition period. Specifically, this particular body of research has employed a concept known as Reversal Theory. Developed by Apter (1982) and adapted to sport by Kerr (1993), Reversal Theory attempts to explain potential differences in how levels of arousal are experienced. Males et al., (1998) state, "While subjective experience is dynamic and inconsistent it can be categorised according to a clearly demarcated structure." (p.186). The main tenets of Reversal Theory posit that motivation is characterised by regular and frequent movement or reversals between paired opposite mental states (Kerr, 1993). The structure comprises four pairs of metamotivational states to describe ways of being (Apter, 1982) that determine the nature of an individual's emotional experience and subsequent motivation.

The first pair of states, *telic-paratelic* and *conformist-negativistic*, provide a structure for the individual's experience, or preference, for different intensities of emotional experience, or levels of felt arousal. Felt arousal is referred to as the individual's experiential, rather than physiological, levels of arousal. For example, high felt arousal experienced in a *telic* or evaluative state will typically be experienced as unpleasant and labelled as *anxiety*. A similar level of arousal, however, experienced in a *paratelic* or non-evaluative state will be experienced as *excitement*. Under evaluative conditions, low arousal will be experienced as *relaxation*, whereas under non-evaluative

conditions similar levels of arousal will be experienced as *boredom*. Interaction of high cognitive and somatic anxiety is therefore indicative of leading to poor performance, whereas low levels promote good performance (figure 2.12).

The remaining two pairs of metamotivational states relate to the nature of transactional outcomes in relation to others, namely mastery-sympathy, and autic-alloic states. The former pair orientates towards a state or desire for control or domination compared to one of being liked, or nurtured, by others (Males et al., 1998). In the latter pairs of states, autic represents self-centred and pleasure-displeasure gained from what happens to oneself, whilst in an alloic state, pleasure or displeasure is contingent upon on the other experience.

Initial research in sport surrounding the concept of Reversal Theory focused upon questionnaire based studies of personality variables (Kerr, 1987) together with nomothetic based pre and post event self-report measures of felt arousal and telic states (Cox & Kerr, 1989; Kerr & Vlaswinkel, 1993). In a case study examining pre-event emotions and performance in slalom canoeing, Males and Kerr (1996) observed there to be few significant differences in unpleasant emotions prior to participants best and worst performances throughout a competitive season. One constraint with the methodology cited by the authors for the inconclusive findings was the utilisation of quantitative based methods (i.e., questionnaires) to measure what essentially was a dynamic experience that may change due to metamotivational reversals. Essentially, questionnaires only capture an imperfect snapshot of the athlete's experience (Males et al., 1998). In an attempt to remedy this problem, Males et al., (1998) employed a qualitative based approach, conducting fifty interviews with nine slalom canoeists. The findings revealed all participants consistently experienced autic-mastery (self-focused control), whilst they varied in their tendency to exhibit a telic (serious and future

orientated) or paratelic (spontaneous and present focused) orientation. Also significant to emerge from the findings was the reversal of participant's experience at different stages of competition in response to errors or external events. Finally, above average performances were found to occur more frequently when participants were experiencing a paratelic-autic mastery state.

Despite its intuitively appealing concept, Reversal Theory has yet to provide substantial studies to support its structure. However, as Males et al., (1998) state:

“The strength of reversal theory is that it offers a comprehensive model of human experience and allows for the integration of cognitive, motivational and affective factors. It satisfies Martens (1987) call for an investigative framework based upon introspection that allows for testing and validation.” (p.188).

One useful aspect of Reversal Theory is the applied implication that the research has produced. Specifically, the findings have shown support for what Jones (1995) and his colleagues have observed to be cognitive restructuring of pre-race competitive anxiety experiences i.e., perceiving competitive anxiety symptoms as facilitative for performance. In the context of Reversal Theory the evidence shows that performers cite how the unpleasant experience of nervousness (telic high arousal) just prior to the start of performance can be reversed to excitement and focus (paratelic high arousal). As Kerr (1997) suggests, this would go some way to explaining the potential confusion between directional perceptions of competitive anxiety and possible positive affective states such as excitement or focus.

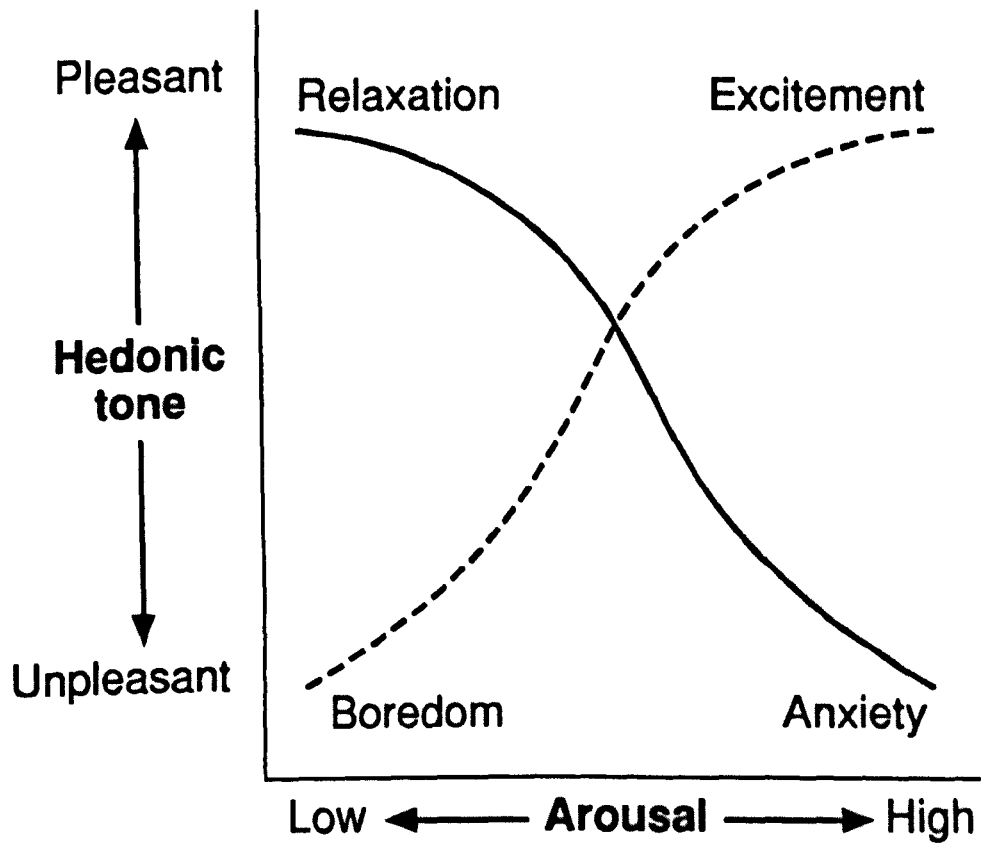


Figure 2.12: Interaction between felt arousal and metamotivational state experienced (Kerr, 1997).

Individual Zones of Optimal Functioning

An additional perspective to the examination of emotions in sport has been provided by the application of the individual zone of optimal functioning hypothesis (IZOF; Hanin & Syrja, 1995; 1996; Hanin, 1997). Originally intended to assess unidimensional state anxiety, then multidimensional competitive anxiety (see earlier section), studies have attempted to broaden this approach to more global affect. Athletes are asked to identify a whole range of emotions experienced prior to performance, and subsequently establish the frequency and intensity of emotions that precede good and bad performance.

In a recent publication Hanin (1997) introduced the notion of emotion-effect in relation to athletic performance. Specifically, he proposed the existence and impact of functionally optimal and dysfunctional positive and negative emotions upon performance. The IZOF framework is conceptualised within two closely related, but independent, factors 'positivity-negativity' and 'optimality-dysfunctionality'. Derived from these two dimensions are four global affect categories:

- a) Pleasant functionally optimal emotions (P+)
- b) Unpleasant functionally optimal emotions (N+)
- c) Pleasant, dysfunctional emotions (P-)
- d) Unpleasant, dysfunctional emotions (N-)

Positive and negative emotions of different intensity are proposed to be functionally optimal-helpful (P+ N+) or dysfunctional-harmful (P- N-) for an individuals performance. The categories are then employed to construct an idiographic profile of an athlete in a similar approach to that adopted by Hanin's previous work. Research employing this perspective has provided partial support in identifying PNA content and intensity patterns of subjective emotional experiences related to successful

and unsuccessful game performance (Hanin & Syrja, 1995a, 1995b; 1996). Findings have also established that although PNA content is functionally idiosyncratic, the same emotions can be optimal for some athletes, but dysfunctional for other athletes within and across different sports.

In a summary of existing work on optimal zones of emotions, involving one hundred and thirty eight athletes representing seven sports, Hanin (1997) investigated the content of the most commonly selected emotions in each of the four basic categories. For positive affect, the top nine functionally optimal emotions were selected as helpful in 94.1% of cases, whereas positive dysfunctional emotions were selected as harmful by 77.5% of cases. For optimal emotions, and negative dysfunctional emotions, the figures were 85.3% and 93.0% respectively. As Hanin (1997) states:

“the fact that content of most frequently selected emotions did not overlap even at the group level seems to indicate that these emotions represent two relatively independent factors. Thus, the orthogonality of the positive-negative and optimal dysfunctional dimensions of the emotion content has been confirmed, at least, at the descriptive and intuitive levels.” (p.50).

Emotion content and intensity has also been investigated across different settings in sport, including competition versus practice (Hanin & Syrja, 1997). The researchers concluded that not only were patterns of optimal and dysfunctional emotions individual within, and across different sports, but that optimal and dysfunctional emotions were different across performance settings. Investigating the emotion content and intensity in the specific context of the IZOF hypothesis, studies by Syrja, Hanin, and Pesonen (1995) and Syrja, Hanin, and Tarvonen (1995) employed recall and current idiographic scaling to identified patterns of athletes' emotional experiences in successful and unsuccessful performances, in both practice and competition. Significant differences were observed between PNA content prior to performance with successful players who

were observed to be closer to their optimal zones, whilst outside dysfunctional zones. Regression analyses indicated the joint impact of the negative harmful and positive helpful emotions, and accounted for 41.8% of performance variance. Negative and harmful emotions alone accounted for 34.0% of variance in game performance. PNA intensity changed significantly over time, during and after performance in both successful and unsuccessful athletes.

Collectively, the findings provide support that the best predictors of performance before, and during, competition were positive optimal and negative dysfunctional emotions. Equally, idiographic scaling of emotion content and intensity prior to competing can be used to predict future performance to a certain aspect. Support for this concept has been provided by Syrja and Hanin (1997) who observed similarity in the content of words chosen by athletes compared with normative scales (i.e., STAI, POMS, PANAS). Further, the PNA scale employed to derive the idiosyncratic emotion scale contained more overlap with the selected athlete's words. These findings indicate that a significant part of relevant emotion content may not be included in traditional sports scales that are acceptable at a group level.

Whilst employing a within-subject approach that adopts the notion of facilitating and debilitating emotions, IZOF has received criticism due to a lack of serious theoretical underpinning (Hardy, Jones, & Gould, 1996). Little or no attempt is made to identify why differences occur between individuals with regard to emotions experienced, or explain the underlying mechanisms and the contribution emotions make to performance. Specifically, no explanation is provided as to why being in the zone contributes to better performance than being out of the zone. The exact mechanism by which facilitating functional emotions lead to performance is therefore unanswered. In response, Hanin (1997) has provided an initial tentative explanation to the latter of these

inquiries, proposing that emotions serve ‘energy mobilisation’ and ‘energy utilisation’ functions, whereby energy is referred to as ‘an active force, an intensity of effort, persistence, decisiveness in reaching one’s goal.’ (p.54). Hanin identifies optimal functioning emotions as generating energy to initiate and maintain task execution processes with adequate effort level, and efficient utilisation of available resources until the task is successfully completed. Conversely, dysfunctional emotions are proposed to result in too much (or too little) energy generation and in inefficient, erroneous or inappropriate utilisation (task-irrelevant focus). As Hanin (1997) states:

“Optimal and dysfunctional effects of emotions upon the quality of individual performance are manifested in the increase or decrease in the energising (increasing intensity, effort) and energy utilising functions’ (p.55).”

Consequently, Hanin (figure 2.13) has proposed four types of closely related, and relatively independent, emotion functions:

- a) energising or energy mobilising (M+) function
- b) energy de-mobilising (M-) function
- c) energy utilisation or regulation (U+) function
- d) energy miss-use or de-regulation (U-) function

Mobilisation (M+)

- generation
- production
- release
- storage

Utilisation (U+)

- efficient
- appropriate
- task-relevant
- adequate

Demobilisation (M-)

- decrease
- discontinue
- give up
- stop

Miss-use (U-)

- inefficient
- inappropriate
- task-relevant
- inadequate

Figure 2.13: Hanin’s (1997) proposed functions of emotion in relation to performance.

Hanin (1997) provides support for these explanations from some of his earlier research (Hanin, 1993) investigating best and worst performances in junior ice hockey players. When asked about the effect of the emotions upon performance, for positive and negative optimal emotions, performance was described, and related, to the generation of additional energy and increased effort. A further theme that emerged was efficient energy utilisation. For positive and negative dysfunctional emotions, descriptors were related to failure to generate enough energy and inadequate utilisation of energy (inefficient information processing). Additional analysis revealed 63.3% of optimal emotions were mentioned in both energy generation and energy utilisation function. Further research by the author and his colleagues (Syrja, 1993; Hanin & Syrja, 1995a) has observed that positive optimal emotions serve mobilising and organising functions, whereas negative optimal emotions are typically more instrumental in energy production than in energy utilising function. Therefore, the dysfunctional effect of positive emotions may result in the reversal of the energy generation function. Positive dysfunctional emotions were observed to disturb effective utilisation of available resources due to inefficient effort or less than efficient strategies in information processing. Finally, negative dysfunctional emotions were observed to trigger erroneous or inappropriate use of energy by distracting available resources to task irrelevant (performance damaging) aspects of the situation.

In spite of the intuitively appealing nature of this explanation for IZOF Theory, its grounding is relatively weak in that the support is relatively scant and based upon intuitive, rather than grounded concepts. Similarly, Hanin has made no conceptual justifications for the move of an approach away from anxiety to one of emotion (Kerr, 1997). Further, on a conceptual basis the word emotion would not adhere to many of the labels employed by Hanin in his profiles of athletes' experiences. Methodologically,

most of the research examining emotion-performance relationships is very global in nature and unstandardized. Finally, studies conducted examining IZOF have employed a relatively small cultural sample of athletes. To further substantiate the approach, stronger and more diverse populations of athletes and performers require examination before IZOF can be acknowledged as a theoretical explanation for the role of emotions in sporting performance.

Affect in Sport: Moods

Despite the lack of emotion-specific research, a wealth of studies have investigated other emotion-related constructs. Researchers, rather than examining specific emotions, have tended to examine general affective states. Perhaps the most widely researched area of affect has been that of mood states. This line of research is grounded in the development of a scale originally conceptualised to measure mood in clinical psychology, the Profile of Mood States (POMS; McNair, Lorr, & Dropleman, 1971). Subsequent research employing the POMS has been employed extensively in the sport and exercise psychology literature (For a bibliography of mood state research in sport see LeUnes & Burger, 1998). Research has investigated many different areas of mood states and how they differ as a function of variables including personality (Prapavessis & Grove, 1994), successful versus unsuccessful performance (Hassmen & Blomstrand, 1995), and expected performance (Hall & Terry, 1995; Terry, 1993; 1995a; 1995b). The original POMS questionnaire contained 64 items designed to assess mood states experienced in clinical psychology. Since its original conception, several adapted versions of the POMS have been employed in the sport and exercise literature. These include, a Bi-polar scale (Lorr & McNair, 1988) and several uni-polar abbreviated

versions, consisting of a 37 item (Shacham, 1983), 40 item (Grove and Prapavessis, 1992), and a 27 item scale (Terry, Keohane, & Lane, 1996; Terry et al., 1999).

Research employing the POMS in sport originally focused upon differentiating successful and less successful athletes (Morgan & Pollock, 1977) as a function of competitive affect prior to and during competition (for a full review see Silva & Hardy, 1985). Following his work on the personality mood profiles of successful distance runners, Morgan (1980) developed the 'mental health' model of performance. This model was based upon the premise that ideal performance states are characterised by high levels of vigour, and low levels of tension, depression, anger, fatigue and confusion. Morgan summarised these findings in the form of an 'iceberg profile of mood states' (figure 2.14). Based upon Morgan's proposals, individual mood states that deviate from the model are proposed to subsequently incur performance impairments. Successful sporting performance will be reflective of the iceberg profile (Morgan, 1980). Subsequent research has investigated and supported this profile in athletes (Silva, Schultz, Haslam, & Murray, 1981; 1985; Morgan et al., 1987; 1988; Morgan & Johnston, 1977; 1978; Newcombe & Boyce, 1995). Research has examined the iceberg profile across many sport-specific populations such as disabled athletes (Asken, 1991; Shephard, 1990) and triathletes (Bell & Howe, 1988).

Studies employing an abbreviated version of the POMS (Shacham, 1983) have also been employed to differentiate mood states between winners and losers post-competition, pre and post-training, and during injury rehabilitation (see Grove & Prapavessis, 1992). Furthermore, the abbreviated POMS has been utilised to examine the temporal patterning of pre-competition emotions as a function of sport-related personality variables and individual difference variables (Prapavessis & Grove, 1994). Research employing the POMS has shown personality to be a mediator of pre-

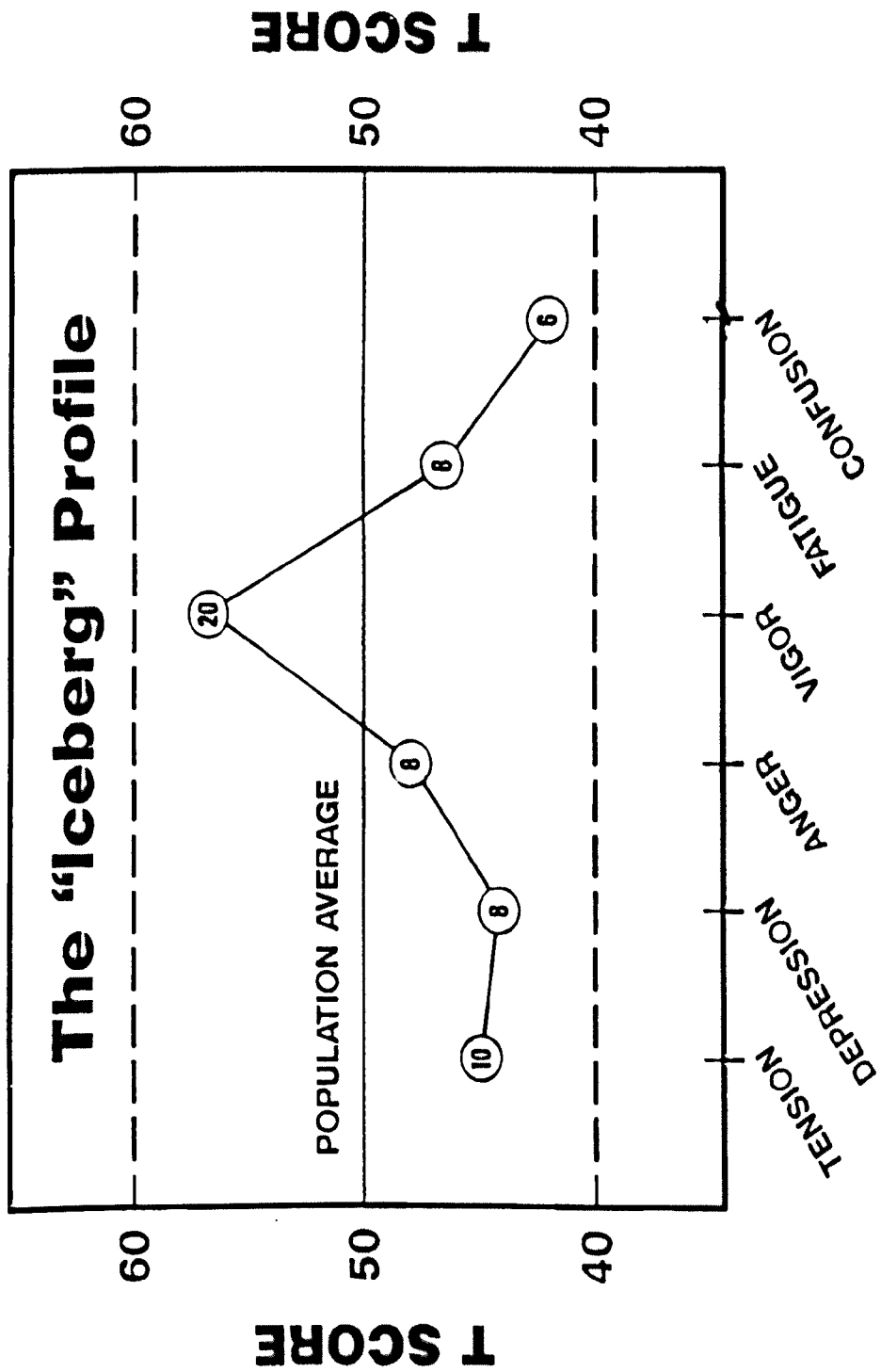


Figure 2.14: Morgan's (1988) 'iceberg' profile for elite male distance runners.

competitive mood and mood temporal patterning, by using an applied model of Martens (1977) model of the competitive process (figure 2.15), to include other traits and emotions as well as competitive anxiety. In spite of these advancements, however, such research is recognised to be in its relative infancy and the authors have requested for further investigation into the influence of personality and environmental factors, including expectations of success, precompetitive readiness and selected demographic variables such as gender, skill level and sport type. Despite the supporting evidence, there are also findings contrary to the mental health profile and model predictions (Frazier, 1988; Miller & Miller, 1985). Cockerill, Nevill, and Lyons (1991), for example, observed elevated tension and anger, but reduced depression associated with high levels of performance in club cross-country runners.

Despite widespread use, the POMS questionnaire has received criticism. In a review of the North American literature, Renger (1993), together with a meta-analysis by Rowley et al., (1995), questioned the ability of the scale to discriminate moods between successful and unsuccessful performers, between non-athletes and athletes, and between performers of different abilities. In a second review of the literature, in which a broader range of studies were reviewed, Terry (1995) identified several factors which accounted for the confounding results observed by the previous authors. Further, Terry (1995) observed the scale had little utility in differentiating between sporting samples of heterogeneous ability, and limited capacity in differentiating athletic from non-athletic populations. However, the POMS was concluded to be a useful predictor of successful and unsuccessful performances in certain elite sport environments.

Aside from the equivocal research findings, the scale itself has also drawn methodological criticism (Krane, 1992; Renger, 1993; Rowley, Landers, Blaine, Kyllö

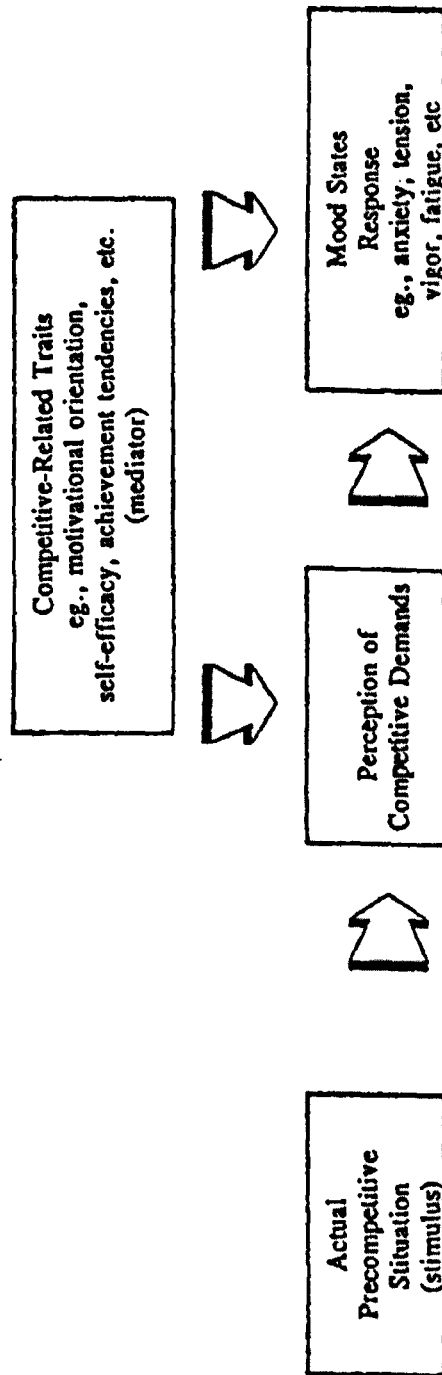


Figure 2.15: An extension of Martens' (1977) competitive process model to sport-specific and general traits other than anxiety (Prapavessis & Grove, 1994).

& Etnier, 1995; Terry, 1995) directed towards the inappropriate choice of research design, inconsistencies in the measurement of performance, and the susceptibility of the scale to social desirability and other response sets. Conceptually, criticism is also drawn towards the fact that the POMS contains several moods that are not characteristic of sports performance. Similarly, the scale does not contain some moods and specific emotions that characterise sports performance (Kelly, 1985; Mahoney & Avener, 1977; Jones & Hardy, 1989). As Hardy et al., (1996) comment:

“It is also worth noting that the Profile of Mood States was not in fact developed with sport populations in mind. Consequently, it is at least possible that it does not even tap the moods and emotions which are most relevant to sport.” (p.158).

Notable dissatisfaction exists with the fact that researchers have employed scales, such as the POMS, borrowed from areas of social psychology, resulting in problems of content and construct validity of these scales in sport settings. Specifically, this criticism questions the credibility of measures designed for clinical use and their transfer to sport, due to the biased negativity of the scale (Gauvin & Spence, 1998; Kerr, 1997). Indeed Gauvin and Spence (1998) state:

“A more critical limitation pertains to the conceptual foundation underlying the POMS. As indicated previously, the POMS was developed for clinical purposes. It is not clear how the constructs measured by the POMS relate to the broader conceptions of affective experience. Thus, although the POMS represents a measurement tool with good psychometric qualities, it does not systematically apply to the study of all phenomena pertinent to exercise (*sic sport*) related feeling states, affect, mood, and emotions.”

(Gauvin & Spence, 1998; p.332).

More recent research has, however, dealt with several of these criticisms (Lane & Terry, 1998; Lane, Sewell, Terry, Bartram, & Nesti, 1999). Work has gone some way to

dealing with these problems by working towards normative scales for the POMS in sport (Lane & Terry, 1998). As Terry (1995) himself has acknowledged:

“Further research is needed to fully understand the moderating effects of the nature and duration of the activity upon mood-performance relationships, to understand how intra-individual mood fluctuations influence athletic performance, and to understand the impact of preperformance and inter-performance mood trends upon performance.”

(p.322).

Affect in Sport: Positive and Negative Affect

Whilst some psychologists have investigated transitory mood states, other researchers (Watson & Clark, 1984; Watson & Tellegen, 1985; Russell, 1979) have chosen to classify affect into general dimensions within which specific emotions are placed. Here, affect is classified as lying within positive or negative scales. In the 1980's, positive affect (PA) and negative affect (NA) emerged as the two dominant, and relatively independent, dimensions in social psychological studies of affective structure (e.g., Tellegen, 1985; Watson & Clark, 1984; Watson, Clark, & Tellegen, 1988). These mood factors have been associated with an individual's tendency to display adaptive or aversive mood states (Watson, 1988). PA is the extent to which a person feels enthusiastic, active or alert. NA can be viewed as a general dimension of subjective distress. Based upon these concepts, Watson et al., (1988) developed the Positive And Negative Affect Scale (PANAS). This has subsequently proved to be a reliable, valid and efficient means of testing these two important dimensions of mood state and trait levels (Watson & Clark, 1994).

Despite the wealth of research investigating positive and negative affect in the social psychology literature, limited sports research of any value exists examining affect. One study employing the PANAS has been conducted by Jones, Harwood and

Swain (1996). Research has linked PA and NA to an individual's level of anxiety (Tellegen, 1985; Watson & Clark, 1984; Watson et al., 1988). It has been demonstrated how NA tends to correlate with anxiety to a much greater extent than PA. In applying this work to competitive anxiety, Jones et al., (1996) recognised that whilst PA may not be important in predicting the intensity of the response, it may predict the direction of the response in addition to NA. Specifically, the authors proposed that performers high on trait NA and low on trait PA would perceive their anxiety symptoms, irrespective of intensity, as debilitating. Conversely, performers high on PA and low on NA will interpret their symptoms as more facilitative. Employing the modified version of the CTAI-2, the authors observed that positive affect predicted competitive anxiety direction more strongly than negative affect, which more strongly predicted competitive anxiety intensity. Also, individuals high on PA and low on NA were more likely to view their competitive anxiety as facilitating, whilst those individuals high on NA and low on PA scores were more likely to see their anxiety symptoms as debilitating.

The PANAS (Watson et al., 1988) has also been used to examine the relationship between self-efficacy and positive and negative affect (Treasure, Monson, & Lox, 1997). The findings observed self-efficacy to be positively related to PA, whilst being negatively relative to NA and intensity of cognitive and somatic anxiety. NA was also found to be strongly related to intensity of cognitive and somatic anxiety. No examination of the direction of the competitive anxiety response was made.

In spite of the increasing research into the areas of affect and affective dimensions, Lazarus (1991) has levelled criticism at the notion of categorising emotions into dimensions. In criticising Watson and Tellegen's (1985) two-factor solution, Lazarus (1991) questions whether the words placed in the same position in the circular matrix represent the same state.

"The differences among them (the words) are, perhaps, as important as their similarities. Not only are they products of different generating emotions, they are experienced differently under different conditions." (p.62).

Further concerns have been raised regarding the relevance of the items of the PANAS scale to sport (McAuley & Cournea, 1994), and, in social psychology fields, surrounding the overall conceptual basis of the scale (Green, Goldman, & Salovey, 1993). Other measures, such as The Eight State Questionnaire (8SQ; Silva & Hardy, 1984) have been applied in sport to examine athletic performance as a function of pre-competitive affect. The research employing the scale has shown that generally successful athletic performance is related to positive precompetitive affect (Silva & Hardy, 1986). However, few studies have employed this scale since these initial studies, mainly due to the lack of conceptual clarity surrounding the instrument.

Affect in Sport: Feelings

Affective research in sport and exercise psychology does not appear to have one comprehensive measure to adequately assess the psychological experiences of the competitive athlete. Measures often describe unitary concepts such as emotion or mood. A further compounding problem is that existing affect measures have ignored the athlete's perceptions of his/her physical states. This is a key factor important in an athlete's preparation for competition. Physiological cues are elemental to sport and exercise participation, and must result in some psychological responses that represent the individuals' feelings resulting from those cues. Therefore, individuals' perceptions of their somatic states (i.e., fatigue, pain, full of energy), whilst perceived as subjective feeling states and hence affective responses, may be seen as representative of perceived

physiological activation (i.e., non-mental states). Subsequently, these states may possibly be discarded as affects (McAuley & Courneya, 1994).

One approach to solving this problem comes from the work of Clore, Ortony, and Foss (1987), who describe affect and affective experiences in terms of feeling states. The understanding here is that how a person feels will have a large influence on the emotions and mood experienced.

“Whilst feeling states are not direct measures of mood or emotion they certainly appear to be a measure of responsivity from which particular emotional states may emanate.”

(p.173; McAuley & Courneya, 1994).

This approach has been described and employed by researchers in the exercise psychology setting, with the development of several scales to measure the construct. These include the Subjective Experiences Exercise Scale (SEES; McAuley & Courneya, 1994), a 12 item adjective scale that measures three sub-scales assessing the stimulus properties of exercise, positive well being, psychological distress and fatigue. The Feelings Scale (FS, Rejeski, Best, Griffith, & Kenney, 1987) is a 1 item inventory represented by an 11 point bi-polar scale to assess participants' overall feelings, a measure of hedonic tone (pleasure-displeasure) of affect during exercise. Finally, the Exercise Feelings Inventory (EFI, Gauvin & Rejeski, 1993), is a 12 item adjective scale designed to measure four feeling states sensitive to the stimulus properties of exercise, namely positive engagement, revitalisation, physical exhaustion and tranquillity.

Research employing these measures has shown that whilst feelings are not directly representative of emotions they are representative of an experience from which emotional states may emanate (see Rejeski et al., 1987; Gauvin & Spence, 1998 for a review). Furthermore, the EFI and SEES have shown strong psychometric properties

(McAuley & Cournea, 1994). Further investigations have also observed the SEES to be useful in understanding selected outcomes of exercise interventions (e.g., McAuley, Shaffer, & Rudolph, 1995). Despite these initial developments it is of primary importance to note that the research has been solely directed towards the exercise setting, with no attempts to deal with competitive sport settings. However, despite this shortcoming, the concept of feeling states is an intuitively appealing one in order to account for and label, the whole complexity of affective responses experienced in the precompetition period by the competitive athlete.

Flow States

A further approach to the examination and experience of affect in sport has been to describe the individual's overall psychological state experienced prior to, and during competition. This particular perspective focuses upon individual subjective experiences of an athlete's peak (psychological) performance state in sport. The notion of experiencing a peak performance state has been associated with the concept of flow and flow states (Csikszentmihalyi, 1990).

“Flow state is a valued experience and source of motivation for many individuals undertaking physical activity, whether it be in high-level competitive sport or a fitness endeavour. Being able to attain flow during sport or exercise participation can elevate an experience to higher levels of enjoyment and achievement.”

(Jackson, 1996; p.76).

Flow is described as a state of optimal experiencing involving the total absorption in a task, and creating a state of consciousness where optimal levels of functioning occur (Csikszentmihalyi, 1990). Characteristics of flow include, focused attention, clear performance goals and feedback, mind and body unison, effortless

concentration, complete control, a loss of self-control, time distortion and intrinsic enjoyment. Flow is therefore proposed to occur when athletes perceive a balance between above average skills and these demands. The experience of flow is often associated with peak performance. However, discernible differences exist between the two concepts. Peak performance denotes a standard of accomplishment rather than a psychological state. Peak experience may bear the closest similarity to flow, with the main difference being one of the intensity of the experience. It is possible, however, that peak experiences may not necessarily involve flow (Jackson, 1996).

The concept of flow emanates from the work of Csikszentmihalyi (1975) examining the experiences of participants in self-motivating activities including chess, rock climbing and dancing. Here, participants were observed to have total involvement in the activity and described the term 'flow' to express the sense of seemingly effortless movement characteristics of the experience. Subsequent studies led Csikszentmihalyi (1990) to define nine characteristics of the flow experience. Challenge skill balance refers to the match between perceived skills and challenges in a particular situation. Merging of action and awareness describes the deep involvement that leads to spontaneity and automaticity, with a lack of distinction between the awareness of self from the actions one is performing. Clear goals is the third dimension described to give the individual in flow a strong sense of what he/she is going to do. Unambiguous feedback refers to the clear and immediate feedback the individual receives in reaching his/her goal. The fifth dimension is concentration on the task at hand. Paradox of control is described as having a sense of control without actively trying to be in control. Loss of self-consciousness is proposed to occur as concern for the self disappears and the person becomes one with the activity. The eighth dimension describes a sense of transformation of time, in which time disorientation or a loss of time awareness is

experienced. The end result of experiencing these elements or dimensions of flow is an autotelic experience in which the individual is in a state of deep enjoyment and experiences the activity as intrinsically rewarding (Jackson, 1996). Support for the flow experience has been observed in many different cultures and in settings ranging from daily life experiences to major life achievements (see Csikszentmihalyi, 1990).

Research on the peak performance experience has both indirectly (Ravizza, 1984; Cohn, 1991; Garfield & Bennett, 1984; Loehr, 1984) and directly examined and described the flow states of athletes of various sports (Della Fave & Massimini, 1988; Allison & Duncan, 1988; Han, 1988; Jackson & Roberts, 1992). Jackson (1995), following on from interviews with elite ice skaters (Jackson, 1992) regarding experiences of flow states, investigated flow states in a larger and more diverse sample of athletes. For the study, 28 elite level athletes from seven sports were interviewed about the factors they perceived influenced their experience of flow state. Inductive content analysis of athlete's responses to questions about what facilitates, disrupts and prevents flow was performed. Some of the more salient factors influencing whether or not flow occurred included: preparation, both physical and mental; confidence; focus; how the performance felt and progressed; and optimal motivation and arousal level. The study also asked elite athletes about the perceived controllability of these factors, and of the state of flow itself. The majority of the athletes interviewed perceived the flow state to be controllable, however factors viewed as disrupting flow were largely seen as uncontrollable. These included unity with partner, physical readiness, maintaining focus, positive precompetitive/competitive affect (relaxed, control of anxiety-optimal arousal, enjoyment of activity) and positive mental attitude which included confidence, positive thinking and high motivation. Hindering factors to flow were physical problems/mistakes, inability to maintain focus, negative mental attitude and lack of

audience responses. Subsequent studies have provided support for Csikzentmihalyi's (1990) conceptual model of flow in samples of elite athletes (Jackson, 1996) and recreational sport participants (Stein, Kimiecik, Daniels, & Jackson, 1995). In addition, a quantitative approach to flow has been adopted (i.e., Jackson & Marsh, 1996), with the design and validity of a flow state scale, in an attempt to improve measurement and understanding of flow states.

The strength of the flow state approach is that it presents an intuitively appealing, if not comprehensive view of the individual's experience of ideal performance states. A further strength of this approach is that it is athlete driven by the nature of its existential basis. In spite of this, however, the research literature examining flow states is in its relative infancy. A broader understanding of the conceptual and theoretical explanations with regard to the generation of flow states is required, to more fully comprehend the mechanism between the experience of flow states, the subsequent affective responses and performance outcomes.

“While there has been some effort to describe those situations which ensure the highest likelihood of a flow experience (such as when task challenges match skill level) there needs to be more investigation of this experience before the applied professional can use the concepts in any practical way.”

(Bond & Sargent, 1995; p.414-415).

The preceding review of literature has highlighted the dominance of the study of competitive anxiety within the investigation of the preperformance period. This dominance has enabled researchers to gain a greater understanding of the properties of the anxiety response experienced prior to performing. However, in doing so, an overemphasis on investigating such a narrow unitary construct has been highlighted. Further, the importance of the examination of the broader preperformance affective response has been demonstrated, including the experience of facilitating perceptions of anxiety symptoms and the relationship with positive affective states. The review has also highlighted the lack of conceptual clarity, and relative infancy, surrounding the current measurement and understanding of existing affective approaches within sport psychology.

The overall picture created by this review, therefore, is one that requires a more comprehensive approach to the measurement and understanding of the affective state experienced by the performer prior to competition. Particularly, with reference to the relationship between anxiety symptoms experienced and the nature of the subsequent affective state exhibited (i.e., positive/negative). Clearer identification of the content of the preperformance mental state experienced will provide a subsequent grounding from which the nature of the psychological skills employed by sports performers, in order to facilitate such mental states, can be investigated. Consequently, the efficacy of appropriate interventions identified to facilitate preperformance mental states can then be assessed.

PART TWO: IDENTIFICATION OF
PREPERFORMANCE STATES I

Despite the advancements in the understanding of directional perceptions of competitive anxiety the notion has recently received severe criticism (Burton & Naylor, 1997; Kerr, 1997). This dissatisfaction questions whether facilitating interpretations of competitive anxiety can actually be labelled as positive experiences of anxiety symptoms, or, that it may be indicative of some other positive emotion or feeling experienced (Burton & Naylor, 1997). In addition, a growing perspective is held by a number of researchers (e.g., Jones, 1995; Kerr, 1997; Prapavessis & Grove, 1994) supporting existing calls for a wider investigation of affect in sport (Vallerand, 1983; 1984). This perspective views research as over-restrictive in its investigation of affective states, by relying on narrow constructs such as anxiety and arousal which appear unnecessarily limiting (Biddle, 1988; 1992). In light of these recommendations, a more eclectic approach to the preperformance period has been advocated.

“researchers should combine investigations of performers’ interpretations of their competitive state anxiety and the emotions they experience precompetition, by examining the relative influence of various cognitions and emotions in the competitive sport environment upon performance.”

(Jones, 1995; p.13).

Directional perceptions of precompetitive anxiety responses may, therefore, provide an indication of how performers will experience their preperformance states (i.e., positive/negative). Further, they may also be more important in mediating performance than merely the intensity of the anxiety symptoms experienced. Recent studies (i.e., Hanton & Jones, 2000; Hanton, Mellalieu, & Jones, 2000) observed performers who indicated experiencing facilitative perceptions of competitive state anxiety symptoms experienced significantly higher scores for positive emotions and lower scores in negative emotions. Likewise, debilitators of competitive anxiety

symptoms reported experiencing significantly higher scores of negative emotions and lower for positive emotions. Initial research, therefore, implies a relationship between perceptions of competitive anxiety symptoms and the overall content of the affective response experienced. However, the exact nature of this relationship is still unclear. Consequently, the aim of this section is to investigate the relationship between perceptions of competitive trait anxiety symptoms and the accompanying affective responses usually experienced by sports performers directly prior to participating in competition.

The following section contains three studies identifying the nature of athletes' preperformance mental states, and the relationship with cognitive interpretations of competitive anxiety symptoms. Before deciding whether to investigate a specific sporting population such as rugby union, it is necessary to examine general athletic populations in order to derive any potential relationships between the experiences of anxiety and affect. Therefore, the current phase will investigate a sample of competitive athletes from a range of sports. Chapter three investigates performers' directional perceptions of competitive trait anxiety symptoms and the relationship with an existing global measure of affect employed in social psychology. In establishing a relationship between the specific symptoms, chapter four then attempts to develop a more accurate, and sport-specific, trait measure of affect to investigate the relationship with competitive anxiety. Having designed and validated such a scale, chapter five proceeds to employ the scale to more accurately investigate the relationship between directional perceptions of trait anxiety symptoms and the exact composition of affective states experienced prior to performing.

CHAPTER THREE**Intensity and Direction of Competitive Trait Anxiety and the Relationship with Positive and Negative Affect**

Jones et al., (1994) implied an important individual difference variable in mediating the direction of the competitive trait anxiety response experienced may be the concept of positive and negative affect (Watson & Clark, 1984; Watson & Tellegen, 1985). Subsequent research (Jones, Swain, & Harwood, 1996; Treasure, Monson, & Lox, 1996) has observed that NA mediates the intensity of cognitive and somatic anxiety, whilst PA plays a more significant role than NA in the interpretation of both cognitive and somatic anxiety symptoms. Self-efficacy has been observed to be positively related to PA, whilst negatively related to NA and intensity of cognitive and somatic anxiety. However, no direct comparison of the relationship between direction of anxiety symptoms (i.e., facilitative/debilitative) and affect experienced has been undertaken. In their conclusion, Jones et al., (1996) did hypothesise that participants high in PA and low in NA would interpret anxiety symptoms as facilitative, whilst participants high in NA and low in PA would experience anxiety symptoms as debilitating.

Existing research has failed to employ direct measures to examine how facilitators and debilitators, respectively, experience their affective symptoms. Consequently, the aim of this chapter was to examine sports performers' experience of directional interpretations of competitive trait anxiety symptoms and positive and negative affect, employing a traditional, validated, positive and negative affect model from the social psychology literature. Given the previous findings of Jones et al., (1996) and Treasure et al., (1996) the following hypotheses were constructed:

- (a) PA would correlate strongly with direction of competitive anxiety symptoms.
- (b) NA would correlate strongly with intensity of cognitive and somatic anxiety symptoms.
- (c) Facilitators of competitive anxiety (positive scores on cognitive and somatic anxiety direction scales) would experience greater levels of PA and lower levels of NA than their debilitating (negative scores on both cognitive and somatic anxiety direction scales) counterparts.
- (d) Self-efficacy (self-confidence) would have stronger relationships with PA than NA.

Methodology

Participants

Data for the study were obtained from 166 male and female varsity athletes from one of the top collegiate sporting institutions in the UK, constituting a sample of high performance competitive performers. In order to be selected for the study, the participants had to be currently competing, or at least have represented the university in some form of national collegiate competition or championship. The participants represented a range of over 15 team and individual sports. The ages of the participants ranged from 18 to 34 years. The average age was 21.8 years (SD=3.1).

Instruments.

The Competitive State Anxiety Inventory-2 (Martens et al., 1990) was developed as the first sport-specific multidimensional competitive state anxiety scale. Albrecht and Feltz (1987) modified the scale to form a trait measure of

multidimensional competitive anxiety and referred to it as the 'Competitive Trait Anxiety Inventory-2' (CTAI-2). The CTAI-2 (appendix B) asks about the 'intensity' of the cognitive and somatic symptoms, and also self-confidence, usually experienced immediately prior to competition. The CTAI-2 has been modified by Jones and Swain (1995) to include a 'direction' response scale to the cognitive and somatic anxiety sub-scales (see Jones & Swain, 1992; Jones et al., 1993). This version of the CTAI-2, was employed in the study reported here. The 'Modified CTAI-2', therefore, was a 27-item questionnaire, with nine items for each of the sub-scales of cognitive anxiety, somatic anxiety, and self-confidence. Responses on the 'intensity' scale are on a Likert format ranging from 1 ("not at all") to 4 ("very much so"), so that the possible scores for each sub-scale range from 9 to 36. On the 'direction' scale, each participant was asked to rate the extent to which the experienced intensity of each cognitive and somatic anxiety symptom was usually either facilitative or debilitating to subsequent performance. With a response scale ranging from -3 ("very debilitating") to +3 ("very facilitative"), the direction scores on each sub-scale range from -27 to +27.

The Positive and Negative Affect Scale (PANAS; appendix C) consists of two 10-item scales. Items on the PA scale include "interested", "excited" and "alert"; while items on the NA scale include "distressed", "nervous" and "afraid". The participant is required to indicate to what extent s/he generally experiences that "feeling" or "emotion" on a five point scale ranging from 1 ("very slightly/not at all") to 5 ("extremely"). Thus, possible scores on both scales range from 10 to 50. Extensive reliability and validity have been reported on the scales (Watson et al., 1988; Watson & Clark, 1994; Watson & McKee Walker, 1996). For example, Watson et al., (1988) have shown the scales to be high on internal consistency ($\alpha = .86$ to $.90$ for PA; $.84$ to $.87$

for NA), largely uncorrelated (intercorrelations ranging from -.12 to -.23) and stable over a two month period (test-retest reliability = .68 for PA, .71 for NA).

Procedures

All participants involved in the investigation were asked to respond to the trait questionnaires away from the competitive environment. This normally took the form of a lecture theatre or seminar room. The participants were presented with trait oriented instructions regarding completion of the questionnaires. These emphasised the confidentiality of the response at an individual level, the need for honesty, and an indication of the thoughts and feelings *usually* experienced just prior to participating in an important match or competition. In addition, included in the CTAI-2 was an anti-social desirability statement recommended by Martens et al., (1990). Similar instructions were presented with the PANAS instrument.

Data Analysis

The data from the study were analysed by means of correlations and multivariate analyses of variance. Correlation analysis was employed to examine the relationships within and between the sub-scales of the CTAI-2 and PANAS questionnaires. Specifically, between the intensity and direction of the CTAI-2 sub-scales and positive and negative affect. Multivariate analysis of variance was employed to examine significant differences between the CTAI-2 and PANAS questionnaire sub-scales. For the purpose of the current study, following the procedure employed by Jones et al., (1994), analysis was conducted whereby an independent variable was created. This was derived from each participant's scores on the cognitive and somatic anxiety direction variables. Specifically, participants were dichotomised into those who had

positive scores (facilitated group) and those who had negative scores (debilitated group) on both of the direction variables. Thus, the facilitated group comprised those participants who had positive scores on both cognitive and somatic anxiety direction (n=68), and the debilitated group comprised those participants who had negative scores on both (n=48). Those participants who had a combination of a positive score and a negative score (n=50) were omitted from the analysis. Therefore, facilitated/debilitated groups were employed as the independent variable with sub-scale scores on the PANAS as the dependant variables.

Data screening procedures

Prior to analysis, participants' scores on the CTAI-2 and PANAS questionnaires were examined for accuracy of data entry, missing values and fit between their distribution and the assumptions of multivariate analysis. No missing values were recorded. There were no univariate or multivariate within-cell outliers at $p=.001$. Results of evaluation of the assumptions of normality, homogeneity of variance-covariance matrices ($F(3,74928) = 1.21, p>.05$), linearity, and multicollinearity were also observed to be satisfactory.

Results

Correlation analyses

Table 3.1 shows a moderate correlation between cognitive anxiety intensity (CAI) and somatic anxiety intensity (SAI), supporting previous research employing the CSAI-2 (Martens et al., 1990; Jones, Swain, & Cale, 1991; Jones, Swain, & Harwood, 1996). Furthermore, very low, and non-significant correlations were observed between positive and negative affect (PA & NA), reinforcing the independent nature of the two

affective dimensions (Watson, Clarke, & Tellegen, 1988). Closer examination of the relationships between CTAI-2 sub-scales and positive and negative affect displayed results that agreed with the previous research of Jones et al., (1996). Therefore, CAI displayed a significant positive correlation with NA ($p < 0.01$), but no significant relationship emerged with PA. These results were replicated for SAI ($p < 0.01$). A significant positive correlation was observed between PA and Self-confidence ($p < 0.01$). For direction sub-scales, Cognitive Anxiety Direction (CAD) displayed a significant positive correlation with PA ($p < 0.01$), and a significant relationship with NA. Somatic Anxiety Direction (SAD) also displayed a significant positive correlation with PA and no relationship with NA.

ANOVA analyses

A one way MANOVA was conducted with groups (debilitated versus facilitated) as the independent variable and scores for the performers' CTAI-2 sub-scales as the dependent variables. The MANOVA was significant (Wilks Lambda = 0.98, $F(1, 114) = 12.4$; $p < 0.01$). Mean scores and results for univariate analysis are presented in table 3.2. For intensity of competitive anxiety, significant differences between facilitators and debilitators in terms of somatic anxiety ($p < 0.05$) and self-confidence ($p < 0.01$) were observed. No significant differences emerged for cognitive anxiety. For direction, significant differences were observed between facilitators and debilitators for both cognitive and somatic anxiety ($p < 0.01$). These results partially support the research of Jones and Swain (1992) that observed no differences in intensity of cognitive and somatic trait anxiety symptoms experienced between facilitators and debilitators.

Table 3.1
Correlations between CTAI-2 sub-scales and positive and negative affect

sub-scale	Positive affect	Negative affect
Cognitive anxiety intensity	-.05	.38**
Cognitive anxiety direction	.31**	-.13
Self-confidence	.42**	-.28**
Somatic anxiety intensity	-.005	.37**
Somatic anxiety intensity	.42**	-.15

* $p < .05$, ** $p < .01$

Table 3.2
Summary of ANOVA and means for CTAI-2 sub-scales

sub-scale	Facilitators (n=68)		Debilitators (n=48)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Cognitive anxiety intensity	19.21	3.33	22.3*	2.87
Somatic anxiety intensity	22.50	2.65	19.00	3.54
Self-confidence	22.70	4.21	19.50**	1.65
Cognitive anxiety direction	7.00	0.78	-6.00**	1.23
Somatic anxiety direction	8.00	0.98	-4.60**	1.09

* $p < .05$, ** $p < .01$

Table 3.3
Summary of ANOVA and means for PANAS sub-scales as a function of facilitators/debilitators

sub-scale	Facilitators (n=68)		Debilitators (n=48)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Positive affect	38.2	4.67	33.3**	2.67
Negative affect	17.8	3.24	19.8**	3.39

* $p < .05$, ** $p < .01$

For PANAS scores as a function of facilitators/debilitators, a one way MANOVA was conducted with groups (debilitated versus facilitated) as the independent variable and performers' PA and NA scales as the dependent variables. The MANOVA was significant (Wilks Lambda = 0.87, $F(1,114) = 8.45$; $p < 0.01$). Mean scores and results for univariate analysis are presented in table 3.3. The results show facilitators significantly higher on PA and lower on NA than their debilitating counterparts ($p < 0.01$).

Discussion

Support was found for all the hypotheses under investigation in the present study. The findings concur with previous research examining the relationships between anxiety and affect (Jones, Swain, & Harwood 1996; Treasure, Monson, & Lox 1996). These studies observed that NA is more important in mediating competitive trait anxiety intensity, and that PA is more important in mediating competitive trait anxiety direction.

The first hypothesis in the present study examined the relationship between cognitive interpretations of competitive trait anxiety and positive and negative affect (PA & NA). It was hypothesised that NA would influence intensity of competitive trait anxiety symptoms and PA would influence direction of competitive trait anxiety intensity. The results in the current study concur with previous research (Jones et al., 1996) showing NA to be more significantly correlated with the intensity of cognitive anxiety and somatic anxiety symptoms than PA. PA was also found to be significantly more strongly correlated with both cognitive and somatic anxiety direction than NA. In the previous study by Jones et al., (1996), the authors only compared direction of cognitive and somatic anxiety symptoms separately to PA and NA. No direct

comparison was made between facilitators (positive scores on both somatic and cognitive anxiety direction) and debilitators (negative scores on both cognitive and somatic anxiety direction) of competitive anxiety to PA and NA respectively. In their conclusion, however, the authors did hypothesise that those participants who scored high in PA and low in NA would interpret their anxiety symptoms as facilitative, whilst those participants who were high in NA and low in PA, would experience their symptoms as debilitating. In light of these predictions, the third hypothesis examined how facilitators and debilitators would differ in terms of the positive and negative affect experienced. It was observed that facilitators of competitive anxiety experienced significantly greater levels of positive affect and lower levels of negative affect than their debilitating counterparts.

The final hypothesis examined the relationship between self-confidence and positive affect. Previous research (Treasure et al., 1996) observed self-efficacy to be significantly associated with positive and negative affect and cognitive and somatic anxiety. The authors suggested that successful athletes maintain a more positive affective state than their less successful counterparts. The role of self-efficacy in maintaining positive affect has also been approached by Jones et al., (1993). They observed high levels of self-confidence to be moderately associated with a positive interpretation of anxiety. Higher levels of self-efficacy were suggested as protecting the athlete against the debilitating effects of competitive anxiety. The present study also showed similar findings, with facilitators of competitive anxiety scoring higher levels of self-confidence and PA, and lower NA than their debilitating counterparts.

In spite of these advancements in the understanding of predispositions to experience positive and negative affect, the measurement of such constructs, through instruments such as the PANAS, holds conceptual limitations. The primary problem

surrounding the development in the understanding of mood and affect is the lack of sport-specific measures employed to effectively describe the precompetition experience in the sport psychology literature. Current mood/emotion questionnaires (e.g., PANAS) utilised are drawn from clinical and social psychology backgrounds (Gauvin & Rejeski, 1998). Intuitively, scales developed for testing on clinical patients are hardly likely to predict athletic performance as effectively as sport-specific instruments. Indeed, this may further explain why empirical research has been unable to predict significant performance variance employing existing instruments. The current measure employed in the study, the PANAS, although reported as a sound psychometric instrument for the measurement of affect, was not specifically designed with sports performers in mind. Such instruments, therefore, perhaps fail to reflect an area of emotions exclusive to the sports experience. Indeed, Hanin (1997) has added:

“normative affective scales from non-sport settings with excellent psychometric characteristics may be functionally inadequate in the assessment of emotional experiences in sport” (p.684).

Any attempts to utilise these non sport-specific scales may, therefore, potentially question the validity of studies. In order to establish more accurate assessments prior to competing, research needs to employ affect scales that are sport-specific in nature and designed with the competitive athlete in mind, enabling the researcher to overcome existing conceptual and measurement limitations. Furthermore, the conceptualisation of affect, and its subsequent measurement requires acknowledgement of the distinct differences in the content of affective states such as those between moods, feelings and emotions. A model for designing measurement tools in affect is provided by Gauvin and Spence (1998). They advocate studies investigating affective constructs require

classification of what precise dimensions the researcher is attempting to measure before examining any specific relationships within, and between, psychological variables.

The aim of the current study was to further examine the relationship between direction of competitive trait anxiety and positive and negative affect in competitive sports performers. Significant relationships were observed between positive affect and positive interpretations of competitive trait anxiety. Relationships were also observed between competitive anxiety intensity and negative affect. The findings provide further support for the role of positive and negative affect in the influence of performers' predispositions to experience facilitating and debilitating interpretations of competitive trait anxiety. They also indicate the need to further explore the positive affective experience in the build up to athletic competition. However, whilst the PANAS instrument employed in the current study is a useful measure of global affect, it is restricted with regard to its validity in the sport domain. Consequently, the findings of the present study are limited in their ability to reflect the comprehensive affective experience of the performer prior to competing. Given the potential uncertainty surrounding the relationship between facilitating interpretations of competitive anxiety and positive emotions (Burton, 1998), there is a requirement to more accurately reflect and examine the positive affective states performers experience prior to competition, and their subsequent relationship with competitive anxiety. A sport-specific affective scale is therefore required to enable the researcher to be better equipped to investigate such potential relationships between anxiety symptoms and affective states.

CHAPTER FOUR**Construction and Validation of a Scale to Measure Preperformance Feelings in Sports Performers**

The findings in chapter three have identified that a sport-specific scale is required in order to investigate the exact nature of the composition of the performers affective state, and allow examination of the impending relationship with directional perceptions of competitive trait anxiety symptoms in the preperformance period. The review of literature in chapter two highlighted the current limitations of affect measurement in sport with regard to employment of scales borrowed from areas of social psychology (Biddle, 1997; Brawley & Martin, 1995) and the subsequent conceptual problems that have ensued (Gauvin & Spence, 1998; Kerr, 1997). One of the most salient problems identified was the lack of a clear definition pertaining to distinguishing between mood, affect, emotion and feeling states (Ekman & Davidson, 1994; Diener, Smith, & Fujita, 1995) and the consequent interchangeable employment and frequent misconception of such affective states. Furthermore, existing affect measures ignore the athlete's perceptions of his/her physical state, a crucial factor in monitoring an athlete's preparation for competition. One approach to overcoming these limitations, proposed by Clore, Ortony, and Foss (1987), is to describe affect in terms of feeling states. Consequently, in view of the limitations within the literature, and the findings of chapter three, the aim of the present study was to generate a more comprehensive trait measure of preperformance affect in competitive sports performers. Specifically, it was intended to adopt the perspective of Clore, Ortony, and Foss, (1987), and develop, construct, and validate, a sport-specific feelings scale to assess the usual affective experiences of competitive sports performers directly prior to competition. The following study is split into two phases. The first, reports on the construction and

development of the sport-specific feelings scale. The second, describes the initial validation procedures employed to assess the psychometric strength of the scale.

Scale Development

The primary purpose of the first phase was to identify those feelings that were typically experienced by the competitive sports performer in the preperformance period. The second objective was to further refine this pool of items into a conceptually meaningful structure that could be employed as a questionnaire.

Methodology

Participants

Data for the study were obtained from 300 male and female varsity athletes from one of the top collegiate sporting institutions in the UK, constituting a sample of high performance competitive performers. In order to be selected for the study the participants had to be currently competing, or at least, have represented the university in some form of national collegiate competition or championship. Participants represented a range of over 15 team and individual sports. The ages of the participants ranged from 18 to 34 years. The mean age was 21.8 years (SD=3.1).

Instrument & Procedures

For the instrument development, an initial item pool of some 600 items representing feeling states were generated. These were drawn from two sources: First, the affective lexicon, an exhaustive list of feeling states compiled by Clore, Ortony, and Foss, (1987). These describe a range of affective responses that a person may experience or feel. The second source, consisted of items from existing affect

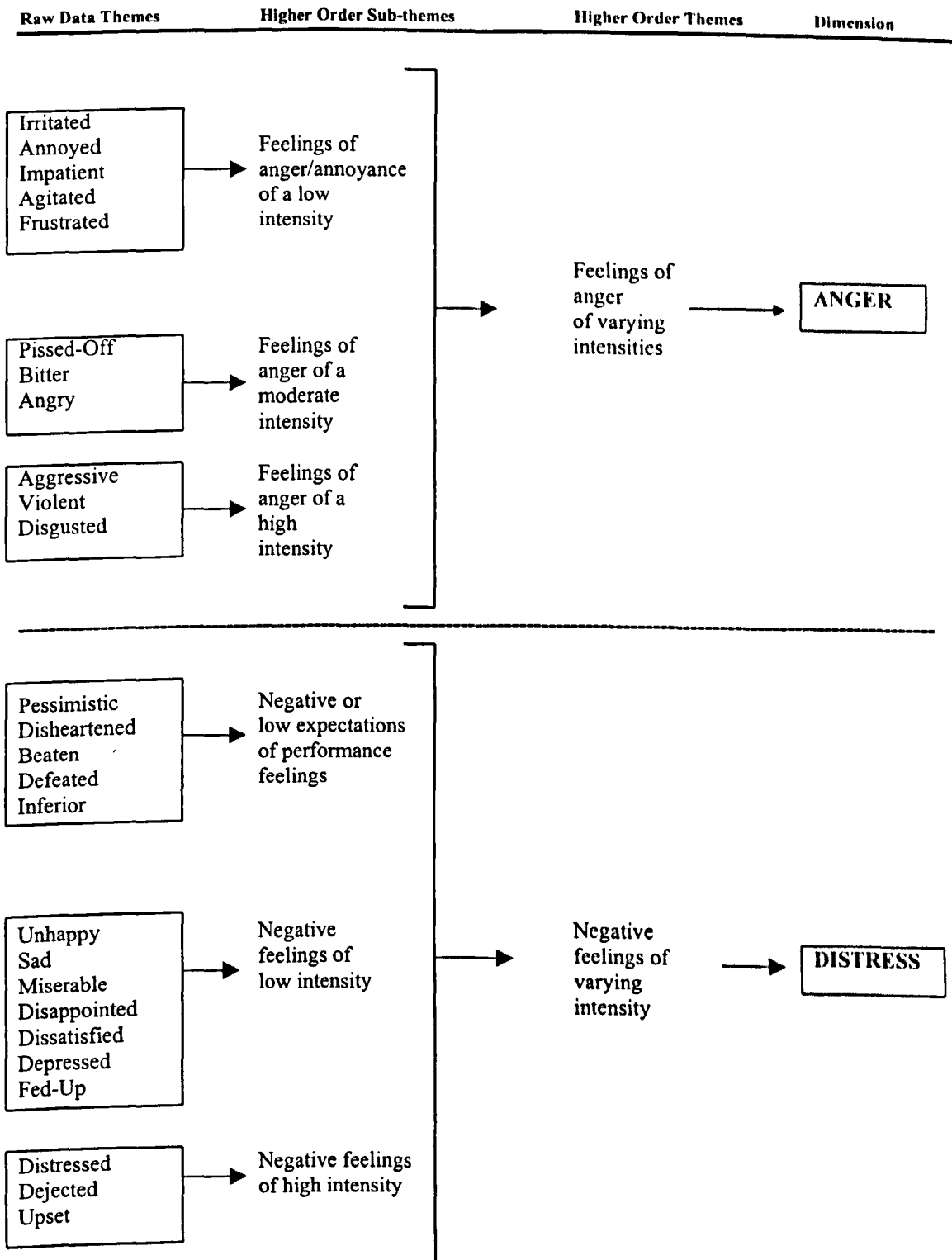
measurement scales. These included all items from questionnaires such as the Profile of Mood States (POMS; McNair, Lorr, & Dropleman, 1971) and the Positive and Negative Affect Scale (PANAS; Watson et al., 1988). The resulting pool of items contained over 600 words that represented feelings of affective states.

The initial list of 600 items was administered to all participants. Participants involved in the investigation were asked to respond to the questionnaires away from the competitive environment and were presented with trait oriented instructions. These emphasised the confidentiality of the response at an individual level, the need for honesty, and an indication of the thoughts and feelings *usually* experienced just prior to participating in an important match or competition. Participants were asked to indicate if they had ever experienced any of the feelings, prior to performing in sport, that were contained on the list. An additional space was made to indicate any feelings experienced but not contained on the list.

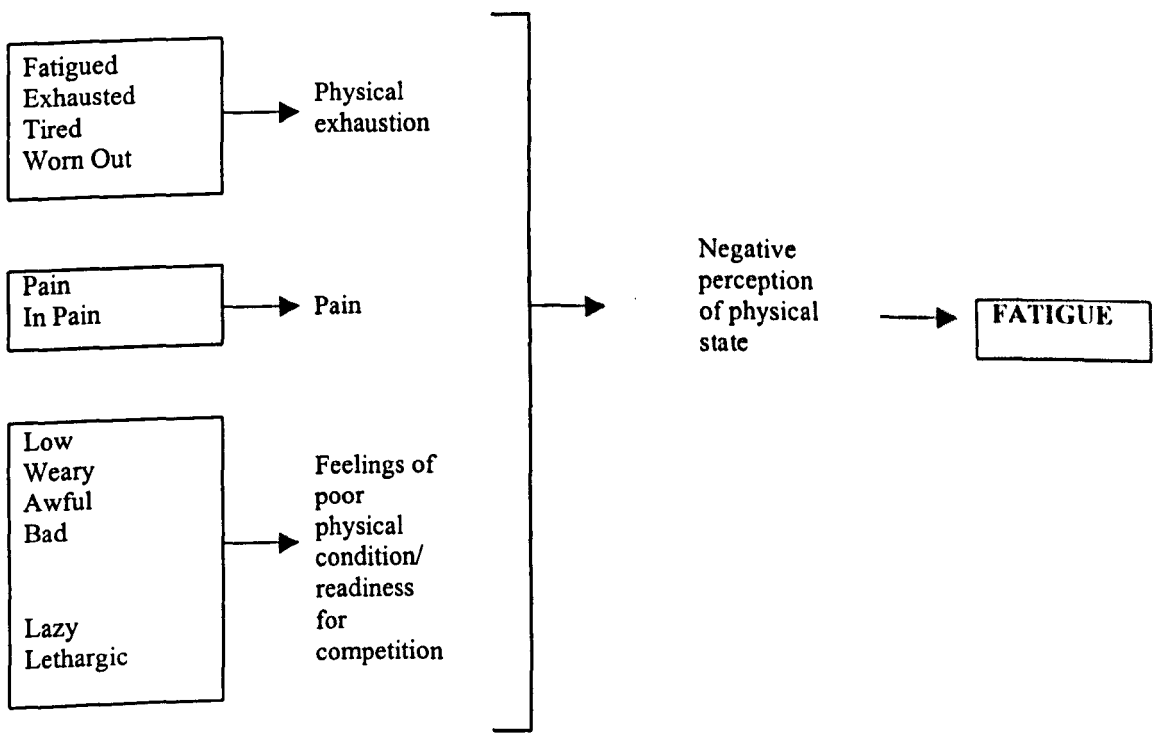
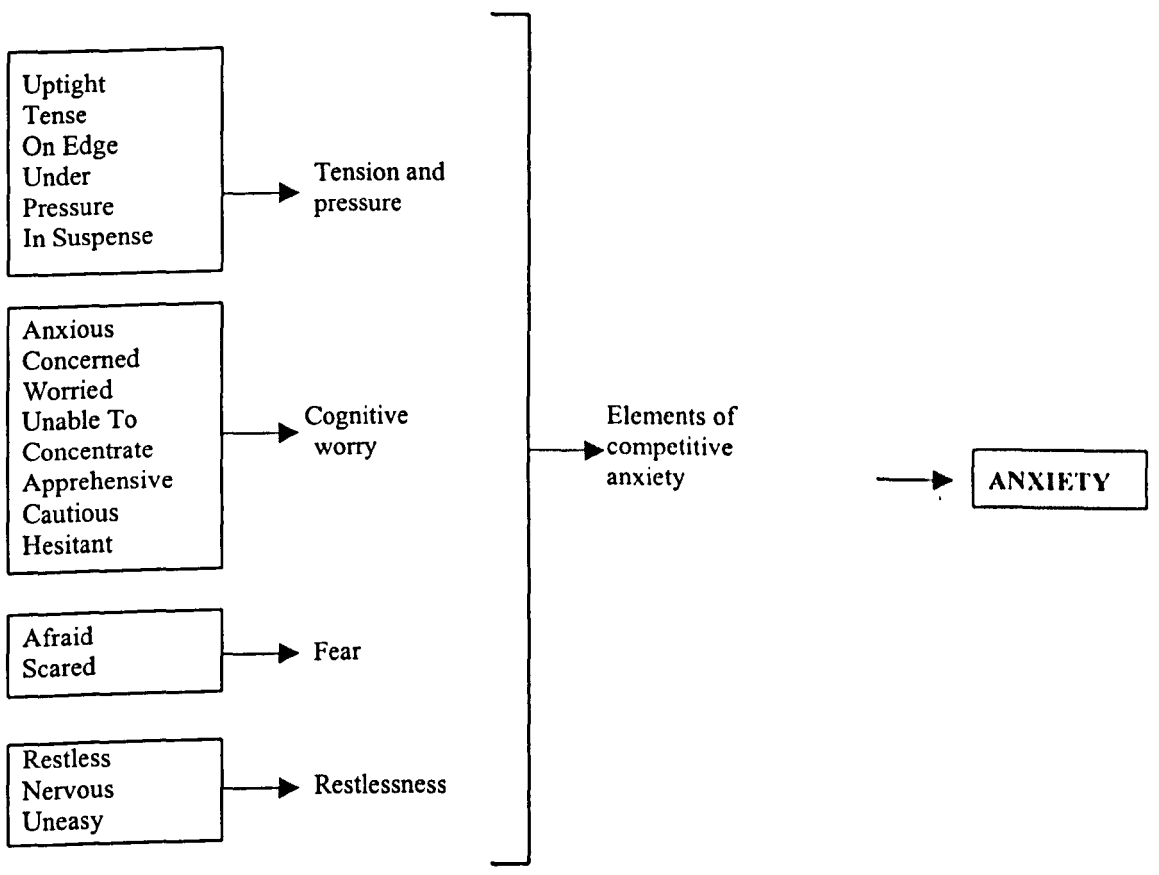
Results and Discussion

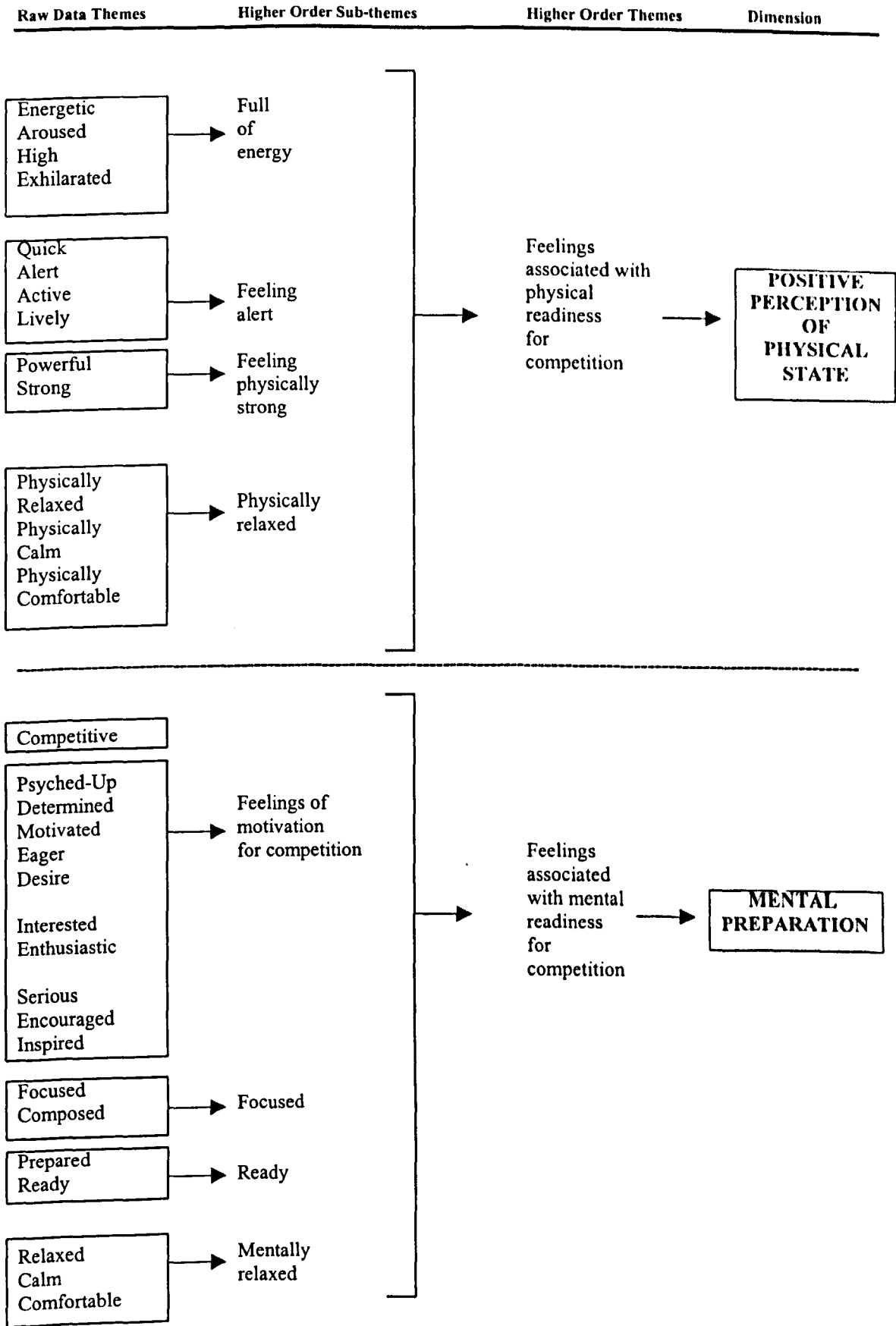
The total frequencies of each word listed by the participants were calculated. Words scored by fewer than 5% of the sample were omitted from analysis in order to create a manageable list that represented 95% of the samples' selections. The initial analysis produced a list of 141 words. Hierarchical content analysis was then performed on the remaining words employing a 3 step procedure (Patton, 1990; Gould et al., 1992). First each word was labelled as an individual raw data theme and compiled into a list. Second, once the list was compiled, inductive content analysis was undertaken to generate higher order themes that linked similar raw data feelings into a higher order concept. Third, a subsequent further analysis linked the higher order themes into general dimensions (figure 4.1). Triangular consensus was performed at each level of

Figure 4.1: Hierarchical content analysis of raw data themes.

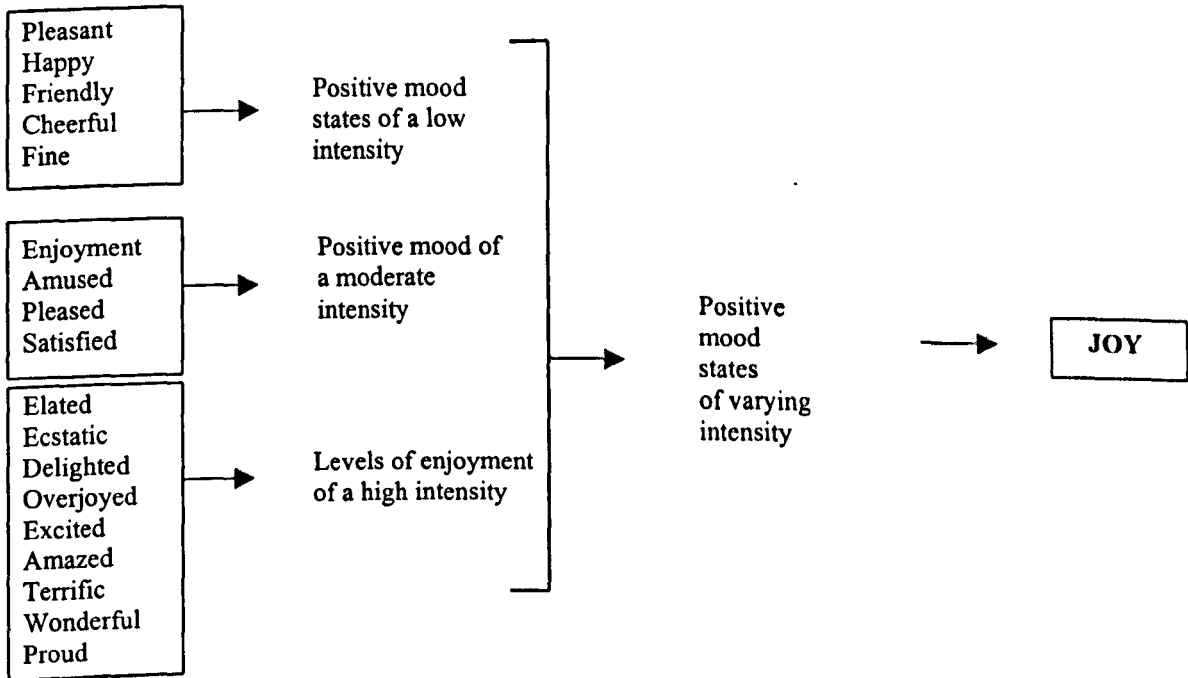
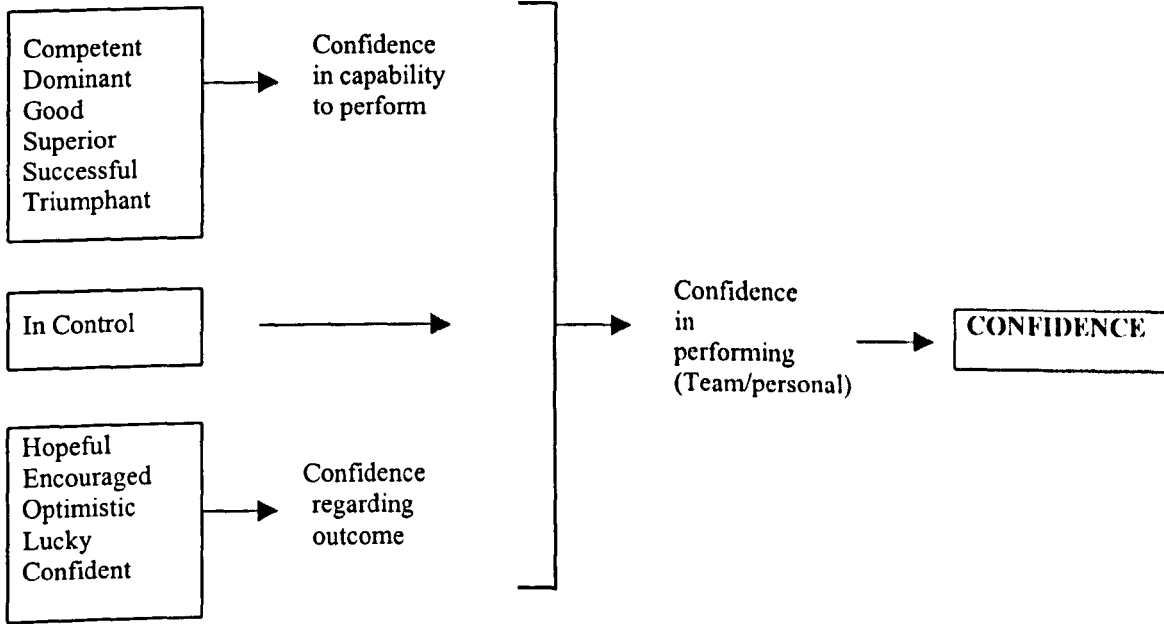


Raw Data Themes	Higher Order Sub-themes	Higher Order Themes	Dimension
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Raw Data Themes Higher Order Sub-themes Higher Order Themes Dimension



analysis employing two other researchers experienced in qualitative research procedures. Trustworthiness procedures (Lincoln & Guba, 1987; Patton, 1990) were observed throughout the analysis by independent consensus validation and audit trail procedures. Therefore, at each step, two other members of the research team achieved consensus upon the appropriateness of the analysis. Following the completed analysis, an independent researcher acted as devils' advocate to highlight or contest any possible interpretations contained in the findings. Any problems or inconsistencies were then highlighted and changed by the investigator where deemed relevant.

In total, eight higher order dimension themes emerged, with two general dimensions. These general dimensions were labelled overall positive and negative feeling states. The eight higher order dimensions that emerged within these two general dimensions were labelled mental preparation, anger, distress, confidence, joy, competitive anxiety, positive perceptions of physical state and negative perceptions of physical state. These dimensions were observed to be consistent with previous research that has examined precompetition mental states (Gould et al., 1992; Eklund, 1994).

The results of the content analysis appear to concur with existing sport psychology research that has investigated preperformance affect. Studies have examined mental states prior to optimal and non-optimal performance (Gould et al., 1992; Eklund, 1994) and peak performance or flow experiences, deemed characteristic of optimal preperformance mental states prior to competing (Csikszentmihalyi, 1988; Jackson, 1995). In both groups of studies, flow states and optimal performance have been associated with mental states characteristic of symptoms associated with feelings of positive affect, relaxation, focus, physical readiness, confidence and enjoyment of the activity. Non-optimal states are associated with negative affect, anxiety, anger and inability to concentrate. In the present study the dimensions of positive affect (i.e., joy,

confidence) and readiness for competition (mental preparation) emerged together with those of competitive anxiety and anger.

The eight higher order dimensions that emerged in the current study would therefore appear to be a credible, and comprehensive, representation of the experience of preperformance feelings in sporting competition. In conjunction with present data and previous research, the eight dimensions were then assigned five adjectives deemed representative of each dimension. A panel of three experienced sport psychology researchers agreed upon these five adjectives. For the purpose of measurement, the questionnaire scale was given an intensity and direction dimension. The intensity scale was given a 7 point Likert scale, rating from 1 'not at all' to 7 'very much so'. The directional scale was also given a Likert scale scored from -3 'very debilitating' to +3 'very facilitative'. The four positive sub-scales of the Preperformance Feelings Scale combine to give an overall composite measure of positive feelings (mental preparation, confidence, joy and positive perceptions of physical state) whilst the remaining four (anger, distress, competitive anxiety and negative perceptions of physical state) comprise an overall composite negative dimension. General measures of positive and negative feeling states can also be calculated using the scale.

Preliminary Validation and Reliability

Having identified an eight-factor structure through the use of qualitative methods, the second phase of the study had two purposes. The first was to examine the internal consistency of the developed scale. The second purpose was to test the construct validity of the scale, by confirming its factor structure and examining convergent and discriminant validity properties, through comparison with existing measures of affect in the sport psychology literature. The first of these scales, a measure of affect, was the

Positive and Negative Affect Scale, PANAS, and the second a traditional measure of competitive trait anxiety, the modified Competitive Trait Anxiety Inventory-2, CTAI-2. These scales were chosen because of their conceptual similarity to several of the PPFS sub-scales. Therefore, through examination of the preliminary reliability and validity of the scale it was hypothesised that; (a) the subscales of the PPFS would possess strong internal consistency values (b) structural equation modelling would confirm the eight factor structure of the scale (c) the positive sub-scales of the PPFS would correlate positively with the positive affect (PA) sub-scale of the PANAS (d) PPFS negative sub-scales would correlate positively with the negative affect (NA) scale of the PANAS (e) anxiety, negative perceptions, and confidence scales of the PPFS would correlate positively with the cognitive and somatic anxiety and self-confidence scales of the CTAI-2.

Methodology

Participants

Data for the study were obtained from 302 male and female varsity athletes from one of the top collegiate sporting institutions in the UK, constituting a sample of high performance competitive performers. In order to be selected for the study the participants had to be currently competing, or at least, have represented the university in some form of national collegiate competition or championship. The participants represented a range of over 15 team and individual sports. The ages of the participants ranged from 18 to 30 years. The average age was 21.23 years (SD=4.12).

Instruments

The Modified Version of the Competitive Trait Anxiety Inventory-2 (CTAI-2) and the Positive and Negative Affect Scale (PANAS) were employed for the study. Full description of the scales and psychometric properties can be located in the methodology section of chapter three.

The Preperformance Feelings Scale (PPFS)

The PPFS (appendix D) is a trait measure constructed in the first phase of this chapter. The proposed scale consists of 40 adjectives that describe how sports performers usually 'feel' prior to competing. The list is derived from measures of 'feelings' taken from the affective lexicon (Clore, Ortony, & Foss, 1987), used to describe affective experiences, together with existing sport mood state measurement scales (e.g., POMS; McNair, Lorr, & Dropleman, 1971). The proposed scale structure, established through hierarchical content analysis of feeling labels, consists of eight sub-scales (four negative and four positive), each of five adjectives, which describe common feelings for that sub-scale. The eight sub-scales proposed are mental preparation, anger, distress, confidence, joy, competitive anxiety, positive perceptions of physical state, and negative perceptions of physical state.

Each item on the scale has an intensity and direction component. For intensity, participants were asked to rate the extent to which they experienced the feeling on a scale of '1' "Not at All" to '7' "Extremely So". Thus, possible sub-scale scores ranged from 5 to 35. On the 'direction' scale, participants were asked to rate the extent to which they experienced the intensity of each symptom as usually either facilitative or debilitating to their subsequent performance. The response scale ranged from -3 ('very

debilitative') to +3 ('very facilitative'). Thus the direction scores on each sub-scale ranged from -27 to +27.

Procedures

All participants involved in the investigation completed the modified CTAI-2, PANAS and PPFS questionnaires. The participants were asked to respond to the trait questionnaires away from the competitive environment. The participants were presented with trait oriented instructions regarding completion of the questionnaires. These emphasised the confidentiality of the response at an individual level, the need for honesty, and an indication of the thoughts and feelings *usually* experienced just prior to participating in an important match or competition. In addition, included in the CTAI-2 was an anti-social desirability statement recommended by Martens et al., (1990). Similar instructions were present in the PANAS.

Data screening procedures

Prior to analysis, participants' scores on the CTAI-2, PANAS, and PPFS questionnaires were examined for accuracy of data entry, missing values and fit between their distribution and the assumptions of multivariate analysis. No missing values were recorded. There were no univariate or multivariate within-cell outliers at $p=.001$. Results of evaluation of the assumptions of normality, homogeneity of variance-covariance matrices ($F(15,13737) = 1.84, p>.05$), linearity, together with multicollinearity were observed to be satisfactory.

Results and Discussion

Reliability measures

Reliability analysis was performed by calculating Cronbach's (1951) alpha values for internal consistency. The internal consistency estimates (Cronbach, 1951) of the eight dimensions of the Preperformance Feelings Scale are provided in table 4.1, ranging from .72 to .92 ($M=.82$). All of these values are higher than the value of .70 suggested by Nunally and Bernstein (1994) for a minimum acceptable level of Cronbach's alpha. All the scales, therefore, provided adequate reliability. In addition, separate composite measures of overall positive and negative dimensions were taken, constituting the four positive and negative sub-scales respectively. Estimates indicated that overall positive and negative feelings dimensions displayed strong internal consistency.

Construct validity

Confirmatory factor analysis

A confirmatory factor analysis employing the EQS computer package (Bentler, 1995) was conducted to evaluate the eight factor structure of the PPFs established by the qualitative analysis in phase 1. Various fit indices were employed to determine the adequacy of the fit of the model (cf. Gauvin & Rejeski, 1993; Hausenblas, Hall, Rodgers, & Munroe, 1999). These were the chi-square statistic (χ^2), the ratio of chi-square to degrees of freedom (χ^2/df), the root mean square residual (RMSR) and the standardised root mean square residual (Standardized RMSR), the goodness of fit index (GFI) and the adjusted goodness of fit index (AGFI), the normed fit index (NFI) and the non-normed fit index (NNFI), as well as the comparative fit index (CFI).

Chi-square is a measure of the fit of the model to the data. Smaller values indicate better models. A non-significant χ^2 index indicates a good fit, but is rarely obtained in practice. The chi-square obtained in this analysis, $\chi^2 (324) = 35.4$ $p < .001$ was not found to be significant. However, it has been reported that the chi-square test is better employed as a descriptive statistic than a criterion of model fit, as, regardless of the model fit, the value is sensitive to sample size and can remain significant due to this factor alone (cf. Hoyle, 1995). The model is therefore only regarded as an approximation to reality. The chi-square/*df* ratio is often used as an alternative analysis of goodness-of-fit. A χ^2/df index that is smaller than 2.0 suggests a good fit. The chi-square/*df ratio* was 1.87, which represents an acceptable fit of the observed data (PPFS items) to the eight factor structure.

The goodness of fit index (GFI) is a measure of the relative amount of variances and covariances jointly accounted for by the model. The adjusted goodness of fit model (AGFI) adjusts for the degrees of freedom. Both GFI and AGFI vary between 0 and 1, with higher values indicating better fit. For this study the GFI was .93 and the AGFI was .91, indicating an adequate fit of the data to the model. The normed fit index (NFI) and the non-normed fit index (NNFI), compare the value of the χ^2 model to the value of the independence model, including adjustment for degrees of freedom. Finally the comparative fit index (CFI), a fit of the χ^2 model relative to other χ^2 models, employs the noncentral distribution with the noncentrality parameters. It is desirable to have non-normed fit indices and comparative fit indices that are .9 or higher (Hoyle, 1995). In the present study values of .94 and .92 were recorded for the NFI and NNFI, and .96 for CFI respectively, providing further support for the eight factor structure of the model.

The root mean square residual (RMSR) indicates the average discrepancy between the elements in the sample and the hypothesised matrices with values from 0 to 1. Smaller numbers are purported to indicate better model fit, with values less than .05 being desirable. An RMSR index of .1 indicates a reasonably good fit, whereas an RMSR of .05 represents an excellent fit. For this study the analysis was .67 representing a good fit of the factor structure.

Convergent/discriminant validity

For convergent and discriminant validity measures correlation analysis was performed between various sub-scales of the three questionnaires employed in phase two. The Pearson correlation coefficients and Bonferroni corrected probability levels are presented in table 4.2. In order to possess adequate construct validity a scale must demonstrate convergent and discriminant validity. In the present study, for convergent validity, all the positive PPFS sub-scales, mental preparation, joy, confidence and perceptions of physical state correlated positively with the PA sub-scale of the PANAS. Conversely, all the negative sub-scale of the PPFS correlated positively with the NA sub-scale of the PANAS. Table 4.3 and table 4.4 show the correlations between the CTAI-2 and PPFS. The negative PPFS sub-scale correlated positively with cognitive and somatic anxiety sub-scales. For discriminant validity, the positive PPFS sub-scale correlated negatively with cognitive and somatic anxiety intensity sub-scales.

The overall trend in these correlations is consistent with the hypothesised relationships for convergent and discriminant validity. The data from this study support the position that the sub-scales of the PPFS have good convergent and discriminant validity with existing measures of mood and affect.

Table 4.1
Internal consistency estimates for PPFS

Dimension of PPFS	Cronbach's Alpha (n=302)
Mental preparation	.80
Anger	.72
Distress	.83
Confidence	.86
Joy	.74
Competitive anxiety	.84
Positive perception of physical state	.72
Negative perception of physical state	.82
Overall Positive Dimension	.92
Overall Negative Dimension	.86

Table 4.2
Correlations between PPFS intensity sub-scales and positive and negative affect

PPFS sub-scale	Positive affect	Negative affect
Mental preparation	.49**	-.1
Distress	.21*	-.05
Anger	-.03	.01
Confidence	.44**	-.28**
Joy	.44**	-.08
Competitive anxiety	.26**	.09
Positive physical state	.31**	-.13
Negative physical state	.009	-.09

**p<0.01, *p<0.05

Table 4.3
Summary of correlations between CTAI-2 and PPFS intensity sub-scales

Sub-scale	Cognitive anxiety intensity	Somatic anxiety intensity	Self-confidence
Mental preparation	-.19*	-.15	.54**
Distress	.20*	.18*	.08
Anger	.22**	.21*	-.18*
Confidence	-.27**	-.17*	.63**
Joy	-.03	.03	.40**
Competitive anxiety	.50**	.51**	-.28**
Positive physical state	-.13	-.12	.49**
Negative physical state	.12	.12	-.13

**p<0.01, *p<0.05

Table 4.4
Summary of correlations between CTAI-2 and PPFS direction sub-scales

PPFS sub-scale	Cognitive anxiety direction	Somatic anxiety direction
Mental preparation	.33**	.40**
Distress	.35**	.31**
Anger	.15	.17*
Confidence	.24**	.32**
Joy	.06	.18*
Competitive anxiety	.33**	.47**
Positive physical state	.26**	.46**
Negative physical state	.29**	.20*

**p<0.01, *p<0.05

General Discussion

The current investigation developed, and initially validated, a sport-specific trait scale to assess competitive sport performers' usual feelings prior to performance. Previous problems with affect measures have included a lack of construct validity in employing non-sport-specific scales, problems with establishing correct definitions of affect (Ekman & Davidson, 1994; Gauvin & Spence, 1998), ignorance of participants' perceptions of physical symptoms (Clare, Ortony, & Foss, 1987) and employing mood state measures that have prejudiced dimensions towards negative moods or emotions. In addition, there exists the continuing debate over the actual structure of affect (Watson & Clark, 1997; Feldman, Barret, & Russell, 1998). The current study overcomes some of these limitations by constructing a sport-specific measurement scale of feelings drawn from a lexicon of feeling states, sampled from a population of competitive sports performers.

The dimensions that emerged from the hierarchical content analysis were similar to those produced in quantitative investigations examining the affective states of athletes prior to competing (Eklund, 1994; Jackson, 1995). Intuitively, the dimensions also appear to be representative of preperformance experiences in many sports. The intensity and direction elements added to the sub-scales for the questionnaire also allow for the possibility of distinguishing between the intensity of feeling experienced by a performer and whether the level of that feeling is perceived as facilitating/debilitating to personal performance. This may be a useful tool to employ in conjunction with Hanin's (1997) Individual Zone of Optimal Functioning hypothesis for examining optimal combinations of experiences of emotions.

Reliability measures show internal consistency values of a moderate to high range which provide adequate support for the reliability of the scale. Confirmatory

factor analysis, employed to provide method triangulation to the content analysis, supported the 8-factor structure of the scale. Discriminant and convergent validity measures also support the scale as a potentially valid measurement tool.

“Theoretically confirmed convergent and discriminant relationships between affect variables and other variables may prove to be the most useful indicators of validity in the domain of feeling states, affect, mood and emotions”

(Gauvin and Spence, 1998; p.330).

The generation of a sport-specific trait scale to measure performer's preperformance affective state provides an advance in assessing the psychology of the preperformance period. However, cross-cultural differences between performers will obviously lead to different interpretations of the words employed for the actual scale. Equally, this scale is designed in the context of feeling states and is in no way directly representative of emotions or mood states. However, whilst feeling states are not emotions and moods they characterise an affective position from which emotions and moods will emanate (Rejeski et al., 1987).

Given the lack of understanding and conceptual clarity surrounding many of the current measures employed in sport psychology, this current scale provides a strong conceptual basis with which to measure and examine the performers' affective experiences in the preperformance period. The study has provided a sport-specific scale designed to assess the performers' preperformance affective state. The scale can now be employed to more accurately identify the content of the preperformance psychological experience. In addition, the nature of the relationship between affective states and directional perceptions of competitive trait anxiety symptoms, as identified in chapter three, can also be further investigated.

CHAPTER FIVE**Facilitating Interpretations of Competitive Anxiety and Positive Affective States**

In identifying the general nature of the preperformance affective experience, chapter three observed that a strong relationship existed between perceptions of competitive trait anxiety symptoms and the experience of positive and negative affective states. However, the specific nature of this relationship was unclear due to the employment of a non sport-specific instrument that merely assessed global measures of positive and negative affect. In order to glean a more comprehensive understanding of the composition of the experience of affective states and the relationship with competitive anxiety, a sport-specific affective measure was designed in chapter four. Consequently, the major purpose of this study was to employ the sport-specific measure to accurately examine the content of the preperformance affective experience, and any potential relationships with direction of competitive trait anxiety symptoms. Additionally, the concept of facilitating and debilitating interpretations of anxiety symptoms has been criticised by researchers (i.e., Burton & Naylor, 1997; Kerr, 1997). They question whether facilitating interpretations of anxiety may be representative of some other positive emotion or feeling experienced and subsequently misrepresentative of Martens et al.'s definition of anxiety (Burton & Naylor, 1997). Therefore, a further aim of the study was to examine performers' facilitating interpretations of competitive trait anxiety symptoms, and the relationship with the nature of the positive affective states experienced.

Constructing hypotheses surrounding these objectives, it was proposed that facilitating interpretations of anxiety would experience greater positive affective responses than debilitating interpretations. Further, facilitating interpretations of

competitive trait anxiety symptoms would correlate significantly strongly with the various measures of positive affect being assessed.

Methodology

Participants

Data for the study were obtained from 316 male and female varsity athletes. In order to be selected for the study, participants had to be currently competing, or at least, have represented the university in some form of national collegiate competition or championship. The participants represented a range of over 15 team and individual sports. The ages of the participants ranged from 18 to 34 years. The average age was 22.45 years (SD=4.41).

Instruments

The Modified Version of the Competitive Trait Anxiety Inventory-2 (CTAI-2) and the trait version of The Preperformance Feelings Scale (PPFS) were employed for the study. Full description of the scales and psychometric properties can be located in chapters three and four.

Procedure

All participants involved in the investigation were asked to respond to the trait questionnaires away from the competitive environment. The participants were presented with trait oriented instructions regarding completion of the questionnaires. These emphasised the confidentiality of the response at an individual level, the need for honesty, and an indication of the thoughts and feelings *usually* experienced just prior to participating in an important match or competition. In addition, included in the CTAI-2

was an anti-social desirability statement recommended by Martens et al., (1990). Similar instructions were present in the PANAS and PPFS instruments.

Data screening procedures

Prior to analysis, participants' scores on the CTAI-2 and PPFS questionnaires were examined for accuracy of data entry, missing values and fit between their distribution and the assumptions of multivariate analysis. No missing values were recorded. There were no univariate or multivariate within-cell outliers at $p = .001$. Results of evaluation of the assumptions of normality, homogeneity of variance-covariance matrices ($F(18,14537) = 1.51, p > .05$), linearity, and multicollinearity were observed to be satisfactory.

Results

Data were analysed by means of correlation and multivariate analyses of variance. Correlation analysis was employed to examine the relationships within, and between, the sub-scales of the CTAI-2, PPFS, and PANAS questionnaires. Due to concerns regarding the validity of employing direction scale measures (cf. Burton, 1998) it was decided that the direction scale of the PPFS would not be considered for the analysis. Multivariate analysis of variance was employed to examine significant differences between the CTAI-2 and PPFS questionnaire sub-scales. For the purpose of the current study, following the procedure employed by Jones et al., (1994), analysis was conducted whereby an independent variable was created which was derived from each participant's scores on the cognitive and somatic anxiety direction variables. Specifically, participants were dichotomised into those who had positive scores (facilitated group) and those who had negative scores (debilitated group) on both of the

direction variables. Thus, the facilitated group comprised those participants who had positive scores on both cognitive and somatic anxiety direction ($n=156$), and the debilitated group comprised those participants who had negative scores on both ($n=110$). Those participants who had a combination of a positive score and a negative score ($n=50$) were omitted from the analysis. Therefore, facilitated/debilitated groups were employed as the independent variable with the sub-scale scores on the PPFS as the dependant variable.

PPFS scores as a function of facilitators/debilitators

A one way MANOVA was conducted with groups (debilitated versus facilitated) as the independent variable and performer's PPFS sub-scales as the dependent variables. A significant difference was demonstrated (Wilks Lambda = 0.83, $F(1, 264) = 5.67$; $p < 0.01$). Mean scores and results for univariate analyses are presented in table 5.1. The results indicate that facilitators of anxiety symptoms scored significantly higher on intensity sub-scales for mental preparation, confidence and positive perceptions of physical states than their debilitating counterparts ($p < 0.01$). For direction scales, facilitators perceived their levels of feelings as significantly more facilitating for mental preparation, anger, confidence, cognitive anxiety and positive perceptions of physical state than their debilitating counterparts ($p < 0.01$). Debilitators also perceived negative perceptions of physical feelings as significantly more negative than their facilitating counterparts ($p < 0.01$).

Correlation Analyses

Correlation analysis was employed to examine the relationships within, and between, the sub-scales of the CTAI-2 and PPFS questionnaires. Table 5.2 provides a

Table 5.1.
One way analysis of variance between CTAI-2 and PPFS intensity sub-scale scores

Sub-scale	Facilitators (n=156)		Debilitators (n=110)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Mental preparation	24.9	2.34	21.82**	3.54
Anger	11	7.98	12	2.65
Distress	6.1	9.76	6.2	7.56
Confidence	23.2	2.43	18.5**	3.3
Joy	18.1	1.23	17.2	2.34
Competitive anxiety	16.1	3.2	17.3	1.2
Positive physical state	23.2	4.2	20.3**	6.45
Negative physical state	8.4	2.1	9.5	5.34

*p<.05, **p<.01

Table 5.2.
Correlations between CTAI-2 and PPFS intensity sub-scale scores

Sub-scale	Sub-scale				
	Cognitive anxiety intensity	Somatic anxiety intensity	Self Confidence	Cognitive anxiety direction	Somatic anxiety direction
Mental preparation	-.19*	-.15	.54**	.28**	.41**
Anger	.20*	.18*	.08	-.02	.10
Distress	.22**	.21*	-.17*	-.17*	-.11
Confidence	-.27**	-.17*	.63**	.38**	.42**
Joy	-.03	.03	.40**	.04	.17*
Competitive anxiety	.50**	.51**	-.24**	-.16	-.16
Positive physical state	-.13	-.12	.49**	.27**	.45**
Negative physical state	.12	.12	-.13	-.19*	-.22**

*p<.05, **p<.01

summary of the relationships. For intensity of competitive anxiety (cognitive anxiety intensity and somatic anxiety intensity), a significant positive relationship was observed ($p < 0.05$) for anger, distress and cognitive anxiety intensity sub-scales. A significant negative correlation was displayed for mental preparation and confidence intensity sub-scales ($p < 0.05$). For direction of competitive anxiety (cognitive anxiety direction and somatic anxiety direction; CAD & SAD), a significant positive relationship was observed ($p < 0.05$) with each of the PPFs direction sub-scales, except between CAD and distress and joy. For self-confidence, significant positive correlations were observed with mental preparation, confidence and positive perceptions of physical state ($p < 0.01$). Significant negative relationships were also observed with distress and cognitive anxiety intensity sub-scales ($p < 0.05$).

Discussion

The present study examined the relationship between facilitating interpretations of competitive trait anxiety symptoms and positive affective states. Support was found for the hypotheses under investigation. Facilitating interpretations of competitive trait anxiety symptoms correlated significantly with the various measures of positive affective states employed. Additionally, facilitating interpretations of anxiety were found to be significantly higher on positive sub-scales of the PPFs than their debilitating counterparts. The findings concur with previous research examining the relationship between anxiety and affective states (Hanton & Jones, in press; Hanton, Jones, & Mellalieu, 2000). The results also support studies that have examined the relationship between competitive anxiety and positive and negative affect (Jones et al., 1996; Treasure et al., 1996). The observations further concur with those in chapter three

that found facilitators of competitive anxiety symptoms experienced greater positive affect and lower negative affect than their debilitating counterparts.

The findings of the study raise several issues. First, the findings provide additional information to suggest that anxiety is perhaps not one of the most intense affective responses experienced prior to athletic performance. In the current study, the top five highest mean sub-scale scores of the PPFS consisted of 'positive feelings' sub-scales (i.e., mental preparation, confidence, joy, and positive perceptions of physical state). These results provide additional information to highlight the prevalence of positive affect in the preperformance period. The notion of the performer's general positive affective state may conceivably be more important in determining performance readiness than the presence of anxiety per se, which, may not be the most influential emotion with regard to performance. This view is in keeping with existing research that has called for a broader investigation of affect in sport, beyond merely anxiety (Jones, 1995; Kerr, 1997). Preliminary research by Hanton, Mellalieu, and Jones (2000) observed anxiety as only 5th in a list of the top ten emotions experienced precompetition by some 300 competitive athletes. The top four experienced were all traditional positive emotions e.g., excitement. Findings from qualitative investigations examining precompetition affect and cognitions (Gould, Eklund, & Jackson 1992; Eklund, 1994) also support the notion that a positive affective state plays a large role in the period leading up to performance. Here, successful performance has been associated with preperformance affective states common with feelings of relaxation, mental preparation and positive affect. The current study supports the findings of an overall positive precompetitive experience. Mean PPFS sub-scales scores indicated that performers reported experiencing high levels of positive affect, mental preparation, and positive perceptions of physical state and self-confidence.

Research has observed self-efficacy to be significantly associated with positive and negative affect, and cognitive and somatic anxiety (Treasure et al., 1996; Jones et al., 1996). In the current study, it was observed that facilitators of competitive anxiety symptoms scored significantly higher on mental preparation and confidence sub-scales of the PPFS than their debilitating counterparts. Preliminary analysis also revealed facilitators to score higher on the self-confidence sub-scale of the CTAI-2 than their debilitating counterparts. One explanation for this finding is that more successful athletes maintain a more positive affective state than their less successful counterparts. Jones et al., (1993) observed high levels of self-confidence to be moderately associated with a positive interpretation of anxiety. This, they suggested, protected against the debilitating effects of anxiety. A theoretical explanation used to explain this phenomenon is that of Processing Efficiency Theory (Eysenck & Calvo, 1992). The theory states that levels of cognitive anxiety can only exert a positive effect on an athlete's performance if the performer is at least moderately confident of success. The theory further maintains that high levels of cognitive anxiety may have a motivational effect on performance by making the performer realise the importance of the upcoming event, together with the fact that he/she requires high levels of motivation and commitment (indicators of mental preparation for performance) in order to cope with the forthcoming competition.

One of the aims of this chapter was to examine the concept of facilitating interpretations of anxiety symptoms and the subsequent dissatisfaction expressed regarding this notion (Burton, 1998). One perspective is that the measurement instrument for anxiety, the CSAI-2 has fundamental failings. A growing body of literature employing statistical procedures is finding further problems with the construct validity of the CSAI-2 scale itself (Lane & Terry, 1998; Sewell, Bartram, & Nesti;

1998; Lane et al., 1999). Furthermore, it has been suggested that directional perceptions of anxiety symptoms may not actually be measuring what they are purported to. The origins of this criticism also emanate from problems with the CSAI-2. Here, criticism is directed with the specific wording of the questions employed in the instrument. Burton and Naylor (1997) state, 'Many symptoms are worded neutrally so they are not only characteristic of anxiety states but also representative of other more positive affective states' (p.296). The authors cite the example of such CSAI-2 questions as 'I feel nervous' or 'I am concerned about this competition' and claim that they may be perceived as negative and debilitating to some, whereas to others they may be seen an indication of positive excitement and effective mental preparation. Clearly this view confounds the original conceptualisation of anxiety (Martens et al., 1990).

Burton and Naylor (1997) further add that positive emotions such as 'challenge', 'excitement' and 'self-confidence' have been mislabelled as facilitating anxiety. This would account for the previous research findings that have shown direction of competitive anxiety to be mediated by positive affect, and intensity of competitive anxiety to be mediated by negative affect (Jones et al., 1996; Treasure et al., 1996; Hanton & Jones, in press). In the current study, strong correlations were observed between cognitive and somatic anxiety direction and positive PPFs sub-scales, such as mental preparation, confidence and positive perceptions of physical state. Positive correlations were observed between negative sub-scales and cognitive and somatic anxiety intensity. It appears, therefore, that facilitating interpretations of competitive anxiety appear representative of, or closely linked to, positive affective states and feelings. Indeed Jones (Jones et al., 1994) himself has indicated:

“a state in which cognitive and physiological symptoms, however intense, are interpreted as being facilitative to performance is unlikely to represent ‘anxiety’...it will be probably be labelled by the performer as ‘excitement’, ‘psyched up’, ‘motivated’, etc.” (p.13).

An ally in support for the mis-representation of anxiety symptoms has emerged from the advocates of Reversal Theory in sport (Kerr, 1997). Despite the main theoretical underpinning of Reversal Theory surrounding a performer’s physiological arousal, Kerr (1997) is in agreement with the mislabelling of the CSAI-2 sub-scales and the subsequent conflicting results that anxiety direction research has produced. In fact, Reversal Theory may adequately explain how, what has been labelled as facilitating or debilitating interpretations of anxiety symptoms, may arise. In Reversal Theory, precompetition arousal is deemed either to be interpreted as anxiety or excitement, dependant on the prevailing metamotivational state of the individual (Kerr, 1997). With a measurement instrument such as the CSAI-2, therefore, performers may be allowing themselves to misconstrue their own positive affective states as facilitating interpretations of competitive anxiety.

Theoretical attempts to explain directional interpretations of anxiety have come from a proposed model of control (Jones, 1995). The model states that expectations of goal attainment (positive or negative) and perceptions of locus of control regarding the potential stressor (i.e., forthcoming competition) determine whether the performers experience debilitating or facilitating perceptions of anxiety. If the athlete has favourable perceptions of control and goal attainment in relation to the stressor of competition, then facilitating interpretations of the competitive anxiety symptoms will ensue. Unfavourable expectations, and a lack of perceived control, will result in debilitating effects of the competitive anxiety response. Despite initial support for the model (Hanton & Jones, 1997; Jones & Ntoumanis, 1998) it has received criticism

(Burton et al., 1997). The authors claim 'the notion of anxiety being debilitating and facilitating to performance confounds the notion of positive and negative emotions.' (p.297). They cite an earlier Cognitive-Motivational Theory of Emotion (Lazarus, 1991), along similar lines to that of Jones' (1995) model. In Lazarus's model, if negative goal expectancies and perceptions of control occur regarding the forthcoming competition, then the athlete is expected to experience negative emotions i.e., anxiety, anger and negative perceptions of physical state. Conversely, if the athlete experiences positive goal expectancies and perceptions of control regarding forthcoming performance, positive emotions (i.e., excitement, motivation, and confidence) are expected to prevail. It could be argued, therefore, that facilitating/debilitating interpretations of anxiety actually represent favourable/unfavourable goal expectancies and perceptions of control, and the resulting affective states occur as a consequence of the subsequent appraisals.

Clearly, therefore, the present study has touched upon several potential theoretical explanations to describe the relationship between competitive trait anxiety and affective states in the preperformance period. Closer, more detailed examinations are warranted to provide more conclusive support for one argument or the other.

Section Discussion

The overall aim of this section was to investigate the nature of the usual affective responses experienced by sports performers in the precompetition period, and provide a general indication of the subsequent relationship with perceptions of competitive trait anxiety symptoms experienced. The results of the studies support the proposals of Burton and Naylor (1997) that anxiety symptoms may be potentially misrepresented by the current anxiety measurement instruments and conceptualisations. The findings also

support the notion that facilitating interpretations of anxiety may actually be representative of a positive affective state that signifies 'mental readiness' or 'preparation' for competition. Furthermore, the section supports the growing body of literature that suggests anxiety is one of many affective responses experienced by performers in the precompetition period, and other mental states, specifically, a positive affective state, may be more salient in determining sporting performance.

One problem with the current line of inquiry is that the analysis merely indicates relationships between anxiety and affect variables. It does not indicate any degree of causality. The precise nature of whether athletes' are perceiving anxiety as facilitating due to the overall experience of positive affect, or, because athletes' are able to facilitate anxiety symptoms, they experience more positive affective states, having coped with their anxiety, is unanswered. Further investigation is required to allow for the notion of causality, and provide some indication of the salience of affective responses, other than anxiety, in the performance spectrum. When investigating these general relationships within a specific sample of participants from one sport, employment of alternative methods of inquiry, such as qualitative interviews, will allow closer examination of the proposed links between directional perceptions of anxiety symptoms and affective feelings experienced by the performer.

Finally, in response to the call for a more holistic approach to investigation in sport psychology (Hardy, Jones, & Gould, 1996), future investigations require examination of the performer's precompetitive mental state as a whole. Potentially, cognitions, thoughts or emotions alone, may not sufficiently describe the experience of precompetition period. Therefore, identification of the overall psychological responses may be more influential in determining a performer's precompetition state and mental readiness. The movement towards the understanding of such influences will not only

aid in identifying affective experiences, but, assist in the development of appropriate sport-specific interventions.

“such knowledge may allow clinicians to develop an objective technique by which interventions can be advanced to optimise performance by removing or replacing habitual patterns of dysfunctional pre-competitive affect. Such an approach may strengthen the scientific basis of applied sport psychology and intervention prescriptions.” (Silva & Hardy, 1986; p.107).

PART THREE: IDENTIFICATION OF
PREPERFORMANCE STATES II

CHAPTER SIX

Alternative Methods of Inquiry in Sport Psychology I: Qualitative Methods

The second section of the thesis has identified the need to employ alternative methods to investigate the nature of the preperformance affective response. Further, in order to identify the psychological skills performers employ to facilitate mental states, it is necessary to adopt such methods of inquiry. Over the past decade sport psychology researchers have requested alternative approaches to the acquisition of knowledge through understanding different ways of knowing (Dewar & Horn, 1992). One suggested route includes the adoption of alternative paradigms and methodologies to comprehend these different ways (Martens, 1979; 1987). Through these alternative views to the construction of knowledge, it is believed sport psychologists may be better equipped to answer the questions sought.

“A variety of methods and theories is beneficial to the field..... The challenge is to do quality work with a given method and to use divergent methods to get convergent information. We need to pursue the richness of the sport context, but we also have to realise the potential benefits of laboratory studies, less conventional methods, and multi-method approaches. As we expand our acceptance of methods, we also will benefit from recognising the merit of multiple knowledge types.”

Strean & Roberts (1992; p.56).

“It is my belief that sport scientists should be armed with a variety of methodologies and design possibilities. By being familiar with the spectrum of methodologies, sport psychologists can then make intelligent decisions about what methodology to use and under what condition.”

Zaichowsky (1980; p.178).

One alternative advocated by researchers is the qualitative or interpretative methodology (Martens, 1987). In spite of the strong requests, only now, some fifteen years later, sport psychology literature is beginning to experience a proliferation in the

generation and publication of such work. In the last five years a substantial increase has arisen in the amount of qualitative research being conducted and published in sport psychology (Hardy et al., 1996).

The following chapter provides a consideration of the two approaches to knowledge construction and an overview of one such alternative methodological approach employed by sport psychology researchers, the qualitative interview. The chapter then provides an examination of the existing literature that has adopted this particular method and highlights some of the pertinent issues regarding the employment of such an approach.

The Quantitative/Qualitative Debate

Underlying the augmentation of qualitative studies within sport psychology is the ongoing debate surrounding the utility of the adoption of emerging naturalistic and existing scientific approaches to the acquisition of knowledge. The debate is grounded in the two philosophical paradigms employed to underpin each approach.

“A paradigm is a world view, a general perspective, a way of breaking down the complexity of the real world paradigms are deeply embedded in the socialisation of adherers and practitioners: paradigms tell us what is important, legitimate and reasonable. Paradigms are also normative, telling the practitioner what to do without the necessity of long existential or epistemological consideration.”

(Patton, 1990; p.203).

Underpinning these belief systems are assumptions regarding the questions of ontology and epistemology. Ontological assumptions revolve around questions regarding the nature of existence i.e., whether the reality to be investigated is external to the individual and of an objective nature, or the product of individual consciousness, and hence individual cognition. Closely linked to the issues of ontology are assumptions of

an epistemological nature that refer to questions surrounding knowing and the nature of knowledge, and about how one might begin to understand the world and communicate this knowledge to fellow human beings. Consequently, researchers either view that it is possible to identify and communicate the nature of knowledge as being hard, real and capable of being transmitted in tangible form, or that knowledge constitutes a softer, more subjective form, based upon experience and insight of a unique and essentially personal nature. Such assumptions determine perspectives that view knowledge as a concept that can be acquired, or something that can only be personally experienced. Further linked to ontological and epistemological concerns, regards the view of human nature, including a deterministic perspective, whereby people and their experiences are perceived to be the products of the environment in which they are conditioned by their external circumstances (Sparkes, 1992). An opposing view contends people have control over their lives and are actively involved in determining their own environment.

These three sets of assumptions then have a bearing upon how researchers set about gathering data. The nomothetic approach is based upon the view that emphasises the importance of basing research upon systematic protocol and technique. Procedures entail the standard methods employed in the natural sciences such as hypothesis construction and testing, and the employment of standard techniques for quantitative analysis. The idiographic approach views that in order to understand the social world first hand knowledge of the subject under inquiry is required. Therefore, getting close to the participant or subject area, in order to establish detailed background and life history is of primary importance.

“Ontological assumptions give rise to epistemological assumptions which have methodological implications for the choices made regarding particular techniques of data collection, the interpretation of these findings and the eventual ways they are written and presented At the most fundamental level this will mean that those operating with different sets of paradigmatic assumptions will see the world in a different way, go about investigating it in different ways and report their findings in different ways.”

(Sparkes, 1992; p.14-15).

The philosophical standpoint taken will then be contingent upon how the researcher views the nature of such assumptions or axioms, assumptions not susceptible to proof or disproof, but universally accepted as given. The positivistic paradigm adheres to axioms that assume reality can be studied by reducing it to smaller parts (reductionism), that the knower and the participant are independent, that generalisations are possible, that causal relationships can be identified, and that scientific inquiry is value free. In direct contrast, the naturalistic paradigm assumes realities are holistic, created, and multiple, that the knower and subject are inter connected, that generalisations cannot be made, that causal relationships cannot be determined and that inquiry is value bound, and not value free.

The scientific or positivistic approach emphasises a focus upon studying a selected sample from a larger population for the purposes of producing factual, reliable, and objective data that can be generalised to the larger population. This approach eschews the adoption of quantitative methods employed within the physical sciences. Emphasis is placed upon research outcomes that derive causal relationships through the adoption of experimental and quasi-experimental designs. The primary goal of a positivist is to be unbiased and distance themselves from the data in order to achieve a more objective process. Characteristic methods employed within this approach include collection of objective numerical data and subsequent employment of inferential statistics to tests significant relationships between variables of interest.

The interpretative or naturalistic approach emphasises the employment of various 'alternative' methods in order to comprehend the psychological phenomena surrounding the experiences of individuals and groups. Comprehension of experiences is achieved through the obtainment of rich, 'in-depth', detailed information from the view of an insider. This view emphasises the perspective of the participant and attempts to comprehend the context or experience within which this experience occurs. Rather than attempting to distance themselves from the data, as in quantitative research, the interpretative research attempts to immerse themselves in the participants or group under examination.

Creswell (1998) has identified five traditions that characterise the process of naturalistic inquiry: the biography, the phenomenological study, the grounded theory study, the ethnographic study and the case study. A biographical study refers to the study of an individual and his/her experiences as told to the researcher or found in archival material. Whereas a biographical study reports the life of a single individual, a phenomenological investigation describes the meaning of the lived experiences for several individuals surrounding a concept or phenomenon. Whilst this perspective emphasises the meaning of an experience for a number of individuals a contrasting approach is to conduct qualitative research with a specific view to derive, generate, or discover a theory. Hence, a grounded theory approach attempts to construct an abstract analytical schema of a phenomenon that relates to a particular situation. This situation is one in which individuals interact, take actions, or engage in a process in response to a phenomenon. Ethnography is a description and interpretation of a cultural group or system. Here, the researcher investigates the group's observable and learned patterns of behaviour, customs, and ways of life (cf. Creswell, 1998). Finally, the case study is an exploration of a bounded system or a case (or multiple cases) over time through

detailed, in-depth data collection involving multiple sources of information rich in context.

When considering such approaches within an applied sport psychology context, no unitary tradition may be singularly appropriate to employ for investigation. Potentially, two or more perspectives may be applicable. The aim of applied sport psychology research is to describe the performers' psychological experiences and investigate relationships between such phenomena. To comprehend the experiences of the performer a phenomenological approach is required. However, to generate scientific constructs and test theory, a grounded perspective is warranted. The selection and the adoption of one or more of the appropriate perspectives are, therefore, a selection that the researcher needs to consider and acknowledge.

Whilst the debate continues as to the most appropriate methodological paradigms required in sport psychology research (i.e., qualitative vs. quantitative), it is now widely acknowledged that the choice of appropriate method or methods to best answer the question being asked is now of paramount importance (Hardy et al., 1996).

“To ignore other points of view, or to dismiss a variety of methodologies, is to miss out on possible sources of understanding and ways of advancing our field. This is not science, but dogmatism!”

(Stearns & Roberts, 1992; p.64).

Qualitative Research in Sport Psychology

Research conducted into sport psychology from a qualitative perspective is still in its relative infancy (Sparks, 1999). Fifteen years ago, few, if any papers were published dedicated to such alternative applied methodologies. Current research publications now contain a substantial, ever-growing catalogue of such work (Biddle, 1995; Tenenbaum & Bar-Eli, 1995). The majority of qualitative research conducted in sport psychology has focused upon the competitive experiences of elite athletes or

performers. Specifically, perceptions of competition and success, and the various coping strategies employed to deal with the stress of top-level competition have been examined.

One of the initial areas of research adopting a qualitative perspective has been the investigation of perceptions and experiences of success in different sporting populations, such as ice skaters (Scanlan, Ravizza, & Stein, 1989; Gould, Jackson, & Finch, 1993b). Subsequent research has extended this to examining Gold medal winners (Jackson, Dover, & Mayocchi, 1998) and Olympic wrestlers (Gould, Eklund, & Jackson, 1990; Eklund, Gould, & Jackson, 1993). Gould et al., (1993a; 1993b) observed that athletes who have achieved success in National Championships or Olympics Games were not necessarily confident in their abilities to perform or defend their positions. Furthermore, the main benefits and consequences that arose from becoming champions were identified as the National Championship experience, the effects of winning or defending a title upon an individual performer's level of self-esteem, national champion perks and a growing self-awareness after losing a title. Further, negative experiences were associated with 'top dog' pressures from self or partner, injury, skating politics, and external obligations. Later research (Jackson, Dover, & Mayocchi, 1998) also observed the notion of 'tall poppy syndrome' evident in the psyche of many of the successful athletes.

Research examining coping strategies employed by elite athletes has investigated samples that include ice skaters (Gould, Finch, & Jackson, 1993a; 1993b), gold medalists and world champions (Jackson, Mayocchi, & Dover, 1998; Kreiner-Phillips & Ravizza, 1993). Kreiner-Phillips and Ravizza (1993) indicated that athletes who reached the top in their respective sports subsequently experienced many additional demands. Little or no help was reported as given to the athletes in order to assist them to

handle these demands, and the athletes did not repeat their winning performances for at least another year.

Investigative research has also examined preperformance affect in collegiate wrestlers (Gould, Eklund, & Jackson, 1992a; 1992b; Eklund, 1994). Eklund (1994) reported results from a season long investigation of collegiate wrestlers and their cognitions and affective experiences immediately prior to performance. All time best and worst performances within two days of 38 season matches were conducted via in-depth retrospect interviews. Observable patterns in the organisation and content of precompetitive psychological experiences were identified in high, moderate, and low quality performances and observations made regarding associations with the competitive psychological experience. The authors observed good performance states to be associated with positive affective experiences and perceptions of control, together with symptoms of flow states. Similarly poor performances were associated with negative affective states and symptoms associated with a lack of flow.

Specific research has also examined competitive stress from a qualitative perspective in elite ice-skaters (Gould, Horn, & Spreeman, 1983; Gould et al., 1993; Scanlan, Stein, & Ravizza, 1991). Retrospective in-depth interviews saw elite ice-skaters report greater stress after winning national titles. Main sources of stress included relationship issues, performance expectations and pressure, psychological demands, and life direction concerns.

Gould and his associates (Gould, Tuffey, Udry, & Loehr, 1996a; 1996b) have also examined burnout symptoms in competitive junior tennis players. Here, they identified mental and physical characteristics of burnout. In this unique multi-method approach, the first phase of the study adopted a quantitative process by which individuals were identified as being burned out. The second phase then conducted

interviews to examine the symptoms and characteristics of the phenomenon. Two major categories of burnout symptoms were revealed by the content analysis. These were classified as mental and physical symptoms. Characteristic mental symptoms included problems staying motivated, lacking motivation/energy, negative feeling-affect, feelings of isolation, concentration problems, and highs and lows. Physical symptoms included, having injuries, illness, or lacking energy.

More recently qualitative approaches have been employed to investigate and test specific research questions. For example, James and Collins (1997) examined sources of competitive stress during performance in collegiate athletes, from the viewpoint of testing Self-Presentation Theory. A qualitative investigation was conducted to identify sources of stress and the self-presentational mechanisms that may underpin stress during competition. The authors observed that concerns regarding athlete's self-presentation towards performance manifests itself in the form of social evaluation, and hence, perceived sources of stress. These perceptions, it was reported, are characteristic of previous findings into antecedents of stress. Twenty athletes described factors they perceived as stressful during competition. Content analysis revealed eight general sources of stress, including significant others, competitive anxiety and doubts, perceived readiness, and the nature of the competition (e.g., importance). Two thirds (67.3%) of all stress sources appeared to heighten the athlete's need to present themselves in a favourable way to the audience. Factors that increased perceived likelihood of poor personal performance lowered the athletes' ability to convey a desired image to their audience. Social evaluation and self-presentation were also identified as a general source of stress in their own right. The findings suggested that the athletes were sensitive about the impressions people formed of them during competition, and

secondly, stress responses were maybe triggered by factors that primarily influence the self-presentational implications of performance.

Within exercise psychology research relatively fewer qualitative studies have been conducted. Concepts examined include areas such as the influence of peer groups on children's psycho-social development (Weiss, Smith, & Theeboom, 1996). Here, current and former sport programme participants (n=38) took part in an in-depth interview that concerned their best friend in sports. An inductive content analysis revealed the existence of twelve positive friendship dimensions; companionship, pleasant play/association, self-esteem enhancement, help and guidance, pro-social behaviour, intimacy, loyalty, things in common, attractive personal qualities, emotional support, absence of conflicts, and conflict resolution. Four negative friendship dimensions were extracted; conflict, unattractive personal qualities, betrayal and inaccessibility. These conceptions of friendships were both similar and unique to friendship conceptions found in mainstream developmental research.

Methodological Issues in Qualitative Research

The content of current qualitative research in sport psychology therefore varies not only in contrast in its areas of inquiry (i.e., competitive stress, perceptions of friendship, precompetitive affect and flow states), but in its approach to the rigour of the methodology employed. This diversity merely highlights one of many problems that confront the advocate of qualitative research in the current sport psychology climate - attempts by the researcher to ensure the trustworthiness of the research process. What the positivistic scientist recognises as validity and reliability, some qualitative researchers may view in terms of trustworthiness, credibility and dependability (cf. Lincoln & Guba, 1985). A general discussion follows that highlights some of the salient

issues currently faced by the researcher in pursuing qualitative research within sport psychology. The qualitative research reviewed in this chapter highlights a number of issues that arise when conducting and publishing qualitative research in contemporary sport psychology. These include themes pertaining to the generation of measurement instruments, collection and analysis of data, and subsequent presentation of reports.

The first issue that arises in the conduction of qualitative research surrounds the generation of measurement instruments to gather data. In qualitative research a common theme that surfaces is the notion of *a priori* knowledge versus the *a priori* hypothesis. It is important for researchers to recognise when qualitative studies are exploratory or descriptive in nature, and when they are guided by theoretical disposition. For example, in the current chapter, the study by Weiss et al., (1998) was exploratory in nature, and the interviews were employed to elicit rich detail surrounding the respective areas. The study by James and Collins (1997), however, was theory driven and employed the interviews as means of testing pre-determined research questions. Some staunch qualitative researchers may view this procedure as unacceptable. As Krane et al., (1997) acknowledge, "a priori data can help us to understand phenomena better, provided that some acknowledgement is made towards researcher bias." (p.213).

When collecting qualitative data researchers must be cognisant of several key issues. The first relates to the experience of the interviewer conducting the research. The knowledge and experience of the interviewer in a particular sport is vital in the interview process. This can be the key factor in gaining the respect of the participants in the interviews, ensuring their trust, and eliciting more truthful and rich information. In all of the reviewed studies the authors, at one time or another, had coached, been participants, or had experience of the sports they were investigating. Similarly, all of the researchers had training and experience in qualitative interview techniques.

When collecting the interview data the researcher further needs to be aware of techniques to establish the credibility of the data, including procedures such as persistent observation and member checking. Persistent observation (several interviews across a season) and member checking of scripts not only help to gain the respect of the participants, but ensure intentions and interpretations of data are reliable. They are viewed as the most crucial techniques for establishing credibility (Lincoln & Guba, 1985). If the investigator is able to purport that his or her reconstructions are recognisable to audience members as adequate representations of their own and multiple realities, it is essential they are given the opportunity to react to them. The process provides a check on intentions, interpretations and an assessment of the overall adequacy of data. If credibility is to be further established more formal checks are required (i.e., whole days reviewing).

When deciding whether or not to adopt such trustworthiness procedures, caution must be paid to the feasibility of member checking when working with elite athletes. First, the practicality of having athletes read scripts, essentially direct transcriptions of their comments, may prove unnecessary, unless the researcher is involved in formal discourse analysis as the focal point of the investigation. Here, the researcher may wish to derive specific meaning from the rhetoric employed by the individual. Second, the notion of inviting performers to comment upon interpretations of the researcher's findings and analysis procedures, may also prove a pointless exercise. Whilst the performer is the bearer of knowledge and information, the researcher is the possessor of the scientific skills and knowledge to interpret these constructions. The performer may provide the knowledge, but be unable to construct it into a meaningful coherent structure relevant to scientific investigation. Finally, adopting a more naturalistic perspective, each individual performer's construction of reality is different, therefore the

investigator's interpretations of findings may always differ from those of the participant, rendering member checking a futile exercise. The investigator must therefore decide the extent of his/her philosophical underpinnings when considering such procedures.

The use of probes in the interview process is a key tool for exploring links and relationships in order to extract as rich as possible information from the participant (Patton, 1990). The use of probes is put to good effect in the James and Collins (1997) study. Here, the authors employ the technique in order to determine the reasons behind explanations provided by participants for self-presentation concerns. Once again, the effective use of probes lies in the skill of the researcher with regard to his/her interview technique. Also important is the researchers experience and knowledge of the sport, in order to provide them with the necessary language to communicate with the performers and elicit the relevant information (Eklund, 1994).

No single method of analysis of data exists in qualitative research. Therefore, the researcher is confronted with various procedures for analysis and presentation of data. Authors are now exploring alternative ways of conducting analysis of qualitative interview data other than the common inductive content analysis currently employed in sport psychology literature. Many researchers, versed in these qualitative techniques, are now calling for alternative data analysis procedures (Krane et al., 1997). As of yet, however, little alternatives have been proposed. The studies reviewed in present chapter describe the employment of 'inductive' content analysis procedures to elicit themes, concepts and dimensions. Unfortunately, many of the analytical procedures are not truly inductive or grounded in nature, i.e., whereby theoretical positions are drawn from data. Essentially, many of the analysis procedures employed reflect a more abductive reasoning approach, whereby theory, data analysis and data generation are produced dialectically (Mason, 1996). Sport psychology researchers, due to the nature of their

experience in sport, are rarely devoid of any knowledge, information or theoretical influence when conducting such investigative procedures and performing subsequent analysis. Closer attention is therefore warranted when selecting, employing and describing the nature of such procedures in sport psychology.

Further contention regarding treatment of raw data surrounds frequency analysis of qualitative findings. Several of the studies reviewed (i.e., James & Collins, 1997; Weiss et al., 1998) 'convert' raw data themes into percentages by employing frequency counts. Researchers such as Lincoln and Guba (1985) would argue that creating numerical values from qualitative data is mixing of paradigms. Further, a more practical argument that arises with the process is the actual value, in real terms, of each raw data theme to the athlete. Whilst 80% of one higher order theme may be realised by all athletes, intuitively, these themes may (and probably will) differ in salience in the individual's construction of importance upon various psychological constructs. Perhaps, through member checking, participants could be invited to assign or rank priorities at a later date. More simply, during the interview process probes could be employed to ask how important these themes are to each athlete.

It is acknowledged that one of the routes for achieving trustworthiness of data is through triangulation of data and methods. Common procedure requires several researchers to achieve consensus on various themes and dimensions at the stage of content analysis. Some researchers would argue that member consensus or triangulation of data creates further problems (Krane et al., 1997). It is claimed that multiple researchers with similar viewpoints actually magnifies subjectivity and does not decrease it. The researcher may, therefore, receive greater benefit by employing an external advisor, playing potential devils' advocate, as opposed to peer debriefer, to

question the stages of data collection and analysis, reviewing decisions made by the researcher at each step of the procedure.

As more qualitative research becomes published in sport psychology journals, closer scrutiny is directed to the format of the presentation of the data. Unlike quantitative studies, the emphasis for qualitative articles focuses more on presentation of primary data and less on analysis. This allows the provision of a rich source of information, separate from the interpretations of the researcher. The data is therefore left to speak for itself. The interpretation is left to the individual who reads the information. The researcher therefore creates a sense of neutrality. In ensuring trustworthiness procedures, provision of thick description (Patton, 1990) obliges the researcher to be methodological in reporting sufficient details of data and analysis in order to allow the readers of the information to assess the trustworthiness and/or credibility of the output. A strong report of an interpretative study will therefore convey appropriate richness and detail of the data collection and analysis procedures.

A further issue related to the description of data-analysis procedures employed in qualitative research relates to the problem that being required to describe in detail all procedures, may lead to redundancy in literature, and remove valuable space away from the rich description of the study results. In a similar fashion, the reporting in depth of trustworthiness may also be deemed to consume valuable space (Krane et al., 1997). Authors such as James and Collins (1997) use brief description of trustworthiness procedures, whilst in contrast, the description of procedures provided by Weiss et al., (1998) is lengthy. Indeed the authors go so far as describing the room in which the children were interviewed in great detail. This thick description was established in order to convince the reader of the attempts made to create the appropriate environment for the children to feel comfortable and able to talk. Clearly, therefore, formal or informal

consensus regarding accepted standard procedures needs to be established amongst journal reviewers, publishers and peers alike to clarify such issues of presentation.

The second section of the thesis proposed that a greater understanding of the psychology of the precompetition period may be achieved through the employment of qualitative methods of inquiry, in conjunction with a more eclectic perspective, through the examination of a range of cognitions, feelings and emotional experiences. The adoption of such an investigative approach to sport psychology inquiry has observed researchers utilising a richer, more qualitative, perspective toward the understanding of elite sports performers' competitive experiences. However, in the area of preperformance affect, few interview-based studies currently exist (Gould, Eklund, & Jackson 1992; Eklund, 1994). Despite this contribution to the comprehension of preperformance affective states, the existing studies possess several limitations. Participants have been sampled from mostly individual sports, predominantly wrestling, from either North America or the Southern Hemisphere. In addition, to date, aside from flow state research, no follow-up investigations comparing the findings to other sports have been conducted. Few in-depth studies have investigated samples of elite level British or European athletic populations. Finally, relatively little is known about the psychological effects that being a member of a team may have on an individual's preperformance mental state. Group dynamics are known to have a powerful effect on sport performance (Carron & Hausenblaus, 1998). One team sport with such dynamics is rugby union, a prominent sport in British and European society. Rugby union is a contact sport that requires demanding mental and physical skills for elite level performance. Appropriate preperformance mental states are, potentially, a key protagonist in determining successful performance. Furthermore, factors such as home

advantage have been shown to influence the level of precompetitive mood in rugby union (Terry, Walrond, & Carron, 1998). The next chapter of the thesis will therefore consider the psychology of the preperformance period in rugby union.

CHAPTER SEVEN**An Investigation into the Preperformance Mental States of Elite Male Rugby Union Players**

The initial findings of the thesis have identified relationships between anxiety and affective states in general samples of competitive sports performers. It was established that to identify the nature of the performers' precompetitive psychological experience a qualitative approach is warranted, within a sport-specific sample of performers. Further, in order to derive an appropriate intervention to enhance an athlete's preperformance psychological state, it is necessary to adopt an investigative approach to identify strategies that elite performers utilise to facilitate such states. Identification of psychological strategies employed by elite performers will then provide a basis for the measurement of the efficacy of such a suitable intervention strategy within those groups requiring assistance in mental skills training i.e., sub-elite performers. Therefore, to identify the content of the preperformance affective experience, and the nature of the psychological strategies employed, the purpose of the present study was to investigate the precompetitive psychological experiences in a sample of elite rugby union players.

Methodology

Design

The study employed retrospective interviews with international level, male, rugby union players. In selecting an appropriate form of qualitative inquiry to adopt for the interviews, the method viewed as most apt for applied sport psychology (see chapter six) was an adaptation of both phenomenological and grounded theory perspectives. This was deemed appropriate in order to describe both the participants' experience of

the preperformance period and attempt to construct explanations for the influence of factors such as competitive anxiety upon the preperformance mental state.

Written consent was obtained from the participants prior to commencement of the interviews (appendix E). The interviews were transcribed and content analysed in an effort to identify the performers' preperformance psychological states experienced, and any potential factors that affected these themes. Strategies for achieving ideal preperformance mental states were also identified through the analysis.

Participants

Participants were 12 elite male rugby union players aged between 24-31 ($M=26.83$, $SD=3.21$). They had been playing senior rugby competitively for an average of 9.08 ($SD=2.11$) years. All of the participants were full time professional rugby union players. All had represented their country at full senior international level. The sample therefore represented some of the top 10 ranked players in the world in their respective positions, and was deemed truly representative of an elite population of professional sports performers. On average, the number of times participants had represented their country was 20 ($SD=5.71$). Five of the participants represented Wales, four from England, and the remainder from the rest of the British Isles. With regard to field positions, eight were forwards, and four were backs. Selection of participants was based upon the researchers' contacts within the sport of professional rugby union in the British Isles. Purposive sampling was therefore deemed an appropriate technique for the basis of the study due to the potential for selection of information rich cases for in-depth study (Lincoln & Guba, 1985; Patton, 1990).

Interviews and Interview Protocol

All of the rugby players participated in an in-depth semi-structured interview lasting between 60-90 minutes. The interviews were retrospective in nature and conducted halfway through a competitive season. No player had been involved in a competitive match for more than 7 days. All interviews were tape recorded and conducted by the same individual, a 26 year old male, trained in qualitative research methodology, a former junior international rugby union player who had played national league rugby, and been involved in coaching for 10 years. The playing and coaching experience of the interviewer was thus deemed a key aspect in gaining access to the participants. In addition, the experience in professional rugby union of the researcher was a further strength in gaining the trust of the participants and understanding potential idiosyncrasies and terminologies within the sport, enabling the extraction of rich data (Eklund, 1994).

All of the interviews were conducted in person and away from the competitive or training environment to establish consistency. In an attempt to acknowledge subjective researcher bias, a reflexive journal was compiled throughout the duration of the study. Here, any related thoughts, comments and interpretations experienced by the investigator during the research process were noted and inspected. Potential bias or influences upon the conduction of interviews, analysis of data and interpretations of the resultant findings was then acknowledged and made available for inspection to fellow researchers at the independent checking stage of the inquiry.

An interview guide was used to standardise all interviews and minimise bias (appendix E). The rationale for the structure of the interview guide was based upon previous qualitative research investigations in sport psychology that have studied elite performers preperformance affective experiences (Gould et al., 1992; Eklund, 1994).

Question areas were constructed upon themes derived from the initial section of the thesis. Specifically, the identification of the nature of the preperformance affective experience, the relationship with competitive anxiety symptoms, potential influences upon these constructs, and the psychological skills employed to facilitate ideal precompetitive mental states. The interview guide was divided into the following seven sections:

1. Background demographic information (e.g., years playing rugby etc.).
2. Psychological experiences in the build up to kick-off.
3. Perceived ideal/non-ideal preperformance mental states.
4. Influences on pre-match psychological experience.
5. Skills/strategies employed to facilitate appropriate mental states.
6. Experiences and perceptions of competitive anxiety.
7. Coaching advice and recommendations regarding the facilitation of appropriate preperformance psychological states.

Further, to aid the recall of appropriate affective experiences and responses, all participants were provided with the following definition of preperformance mental states:

By preperformance mental state I am referring to the thoughts, feelings, emotions and behaviours that you experience in the time period directly before you go out to play on the field in competitive matches. These may include feelings of excitement, apprehension, enjoyment, exhilaration, arousal, aggression etc.

The interview guide was pilot tested on national league players (N=5) sampled from the Welsh and English Premier divisions. All participants were full-time professional performers and, at the time of interviews, were currently in the competitive

season. The pilot study enabled the interviewer to practise and refine interview techniques and skills, including the use of appropriate follow-up probes to elicit more detail on specific topic areas.

Following the pilot study, minor refinements were made to the nature of the interview questions and structure. Specifically, the pilot study highlighted potential temporal patterning effects in the performer's affective experience in the build up to commencement of performance. Subsequently, for the main study, to aid stimulation of recall, a 'time to event' taxonomy was constructed. Significant temporal events that occurred in the build up to the commencement of the match were constructed and presented in a diagrammatic time frame to the participants in order to aid in recall of psychological experiences. Additionally, the pilot study highlighted that further assistance in examining the temporal nature of these experiences could be gleaned by classification into cognitions, affective states and behaviours. Therefore, for the main study, participants, in the context of the time frame, were asked what they thought, felt and did across each temporal context.

Data Analysis

Interview data were abductively analysed employing hierarchical content data analysis procedures as outlined by Gould, Eklund, and Jackson (1993). Major themes identified within each section of the interview (i.e., ideal preperformance states) were logged and grouped into patterns of like categories, establishing a hierarchy of responses, moving from specific to general levels. Prior to the analysis, it was decided not to employ consensus validation procedures due to the potential magnification of subjective bias that has been highlighted (see Krane et al., 1997). Furthermore, due to the unequal expertise of the interviewer in the sport of rugby union, it was deemed that

the investigator should perform the analysis and present the completed findings to two colleagues, who then, separately, would act as a devils' advocate. Specifically, the following seven step procedure was employed.

1. All tape-recorded interviews were transcribed verbatim by the researcher following the interview, which resulted in over 250 double-spaced pages of text.
2. The investigator read and reread all the transcripts until familiar with the content. The investigator had a background knowledge and training in qualitative research analysis methods and knowledge and experience of professional rugby union.
3. Raw data themes (quotes or paraphrased quotes that captured the major ideas conveyed) were identified, characterising each participant's responses within each subsection of the interview. Subsequently, a list of subsection raw data themes characterising participants' responses was constructed.
4. Sectional raw data themes characterising each individual participants' response in step were compiled. This resulted in a listing of raw data themes within each subsection that characterised all participants.
5. Following the general procedures (Patton, 1990; Lincoln & Guba, 1985) first introduced in sport psychology by Scanlan et al., (1989), subsequently followed by other researchers employing a qualitative methodology (e.g., Gould et al., 1993), an abductive analysis (Mason, 1996) was conducted to identify common themes of greater generality from the list of subsection themes generated in step four. First and second level themes were labelled 'higher order themes', whereas the highest level themes (those of greatest abstraction) were labelled 'general dimensions'.

6. Two researchers trained in qualitative methodologies and experienced sport psychologists, separately, ran an external audit check of the interview transcripts, raw data themes, higher order dimensions and completed analysis. At this stage each researcher acted as devils' advocate, challenging the investigators description and conceptualisation of themes or dimensions.
7. The investigator acknowledged these interpretations, and subsequently added, adjusted, or ignored comments in the construction of the final presentation and interpretation of the findings.

A central feature of the analysis was the self-reflexivity of the researcher conducting the interviews, analysis and study, whereby acknowledgement of the researchers own subjective experiences within the research phenomenon were logged via a journal, examined for tacit biases and assumptions, and subsequently analysed. The journal contained critical and self-relective emblems to document and enrich the analytic process. Thus, the journal contained questions, musing and speculations about the interviews, the data and emerging theory, reflecting personal reactions to participants' narratives. On completion of the study, the journal, including the researcher's reflections, were presented with the data analysis, study findings and write up, to the independent researcher, acting as devils' advocate, to discuss any potential biases or perceived misinterpretations contained the research process.

In addition to the hierarchical content analysis, a cross-case analysis was performed on the interview transcript raw data themes, to investigate any temporal patterning effects in the participants' psychological experiences across the build up to kick-off on the day of the match. Each raw data theme was placed into one of the

temporal contexts identified in the build up to the competition, and categorised into one of three categories representing either cognitive, affective or behavioural responses.

Reflexive Journal

The process of self-reflexivity during qualitative data collection allows the development and review of analytic ideas and enables the researcher to formulate precise problems, hypotheses and an appropriate research strategy and is viewed as an emergent feature of the research programme itself (Hammersley & Atkinson, 1995). In the present study, the research process elicited several key themes or ideas noted in the researcher's journal of thoughts and reflections. Specifically, in the data collection phase of the pilot studies it was noted that details regarding the perceived relationship between optimal/non-optimal preperformance mental states and subsequent performances was not emerging. What was emerging was the notion that there was a perceived or ideal preperformance mental state necessary to provide the platform for peak performance to occur. For the main studies this particular aspect of questioning was modified to invite performers to clarify their perceptions of what ideal preperformance mental states constituted and how important achievement of these states was perceived as to achieve successful forthcoming performance.

An additional reflection during the pilot study phase drew attention to the impact of Reversal Theory (Kerr, 1997). Here, the participants experienced reversals in preperformance perceptions of nerves on the day of the competitive situation. The presence of certain factors at significant temporal events during the build up to the match led to reversals in the experience of nerves from one of 'worry' and 'concern' to that of 'anticipation', 'apprehension' and 'excitement'. Reflecting on these experiences enabled the researcher to examine the specific temporal patterning effects of the

participants' mental state in the build up to competition or 'time to event' (see procedure), and decide upon the undertaking of cross-case analysis for the main study.

During the main interview phase a key aspect of the reflections was the presence of the influence of the team upon the individual and their preparation for performance. Specifically, the researcher noted experiencing similar feelings of a presence/absence of atmosphere in the changing room prior to performance, and the consequential influences such feelings have upon cognitions and affective experiences. Subsequently, when analysing the interview transcripts, the impact of the team upon individual mental preparation was explored. These key influences are reported in the results and discussion section of this study.

A further influence was noted in the data analysis phase. During the examination of the mental skills utilised by the participants it was noted that the researcher was influenced by the work of Hall et al. (1998) and their scheme proposed to classify the uses and outcomes of imagery. Subsequently, the mental imagery skills employed by the participants were examined, viewed and discussed with reference to this classification system.

Results & Discussion

The following section presents the findings of the content analysis of the interview transcripts. The results are discussed in relation to the categories identified in the interview guide. Specific themes examined include: (1) temporal patterning of the pre-match psychological experience, (2) influences on the psychological experience of the build up to performance, (3) strategies to achieve preperformance mental readiness, (4) ideal/non-ideal pre-match mental states, (5) the relationship between mental states and forthcoming performance, and (6) perceptions of the experience of competitive anxiety

symptoms. Further themes, emergent from the analysis, but deemed not directly pertinent to the research question, are located in section G of the appendices.

Temporal patterning of pre-match psychological experience

Previous research examining the temporal patterning of affective states has employed a narrow approach. Single constructs have been investigated, such as competitive state anxiety (Jones & Cale, 1989; Ussher & Hardy, 1986). Where potential, more global, affect has been studied, measurement instruments have been employed with questionable psychometric properties (Prapavessis & Grove, 1994). The current study provides a more comprehensive examination of the precompetition affective experience by investigating the psychological experience in terms of a cognitive, affective, and behavioural perspective to identify any changes across the specified time frames (figure 7.1).

Research examining the temporal patterning of multidimensional anxiety components in the time to event has observed cognitive anxiety to remain fairly stable during the precompetition period, whilst somatic anxiety elevates directly prior to competition (Martens et al., 1990; Jones & Cale, 1989). The current analysis of the temporal patterning of cognitive and affective responses indicated similar findings in the context of the achievement of activation states. The results revealed that symptoms associated with competitive anxiety or nervousness were experienced at a consistent intensity across the precompetition period. Perceptions of symptoms associated with physical activation, however, were observed to build steadily, and peak directly prior to kick-off.

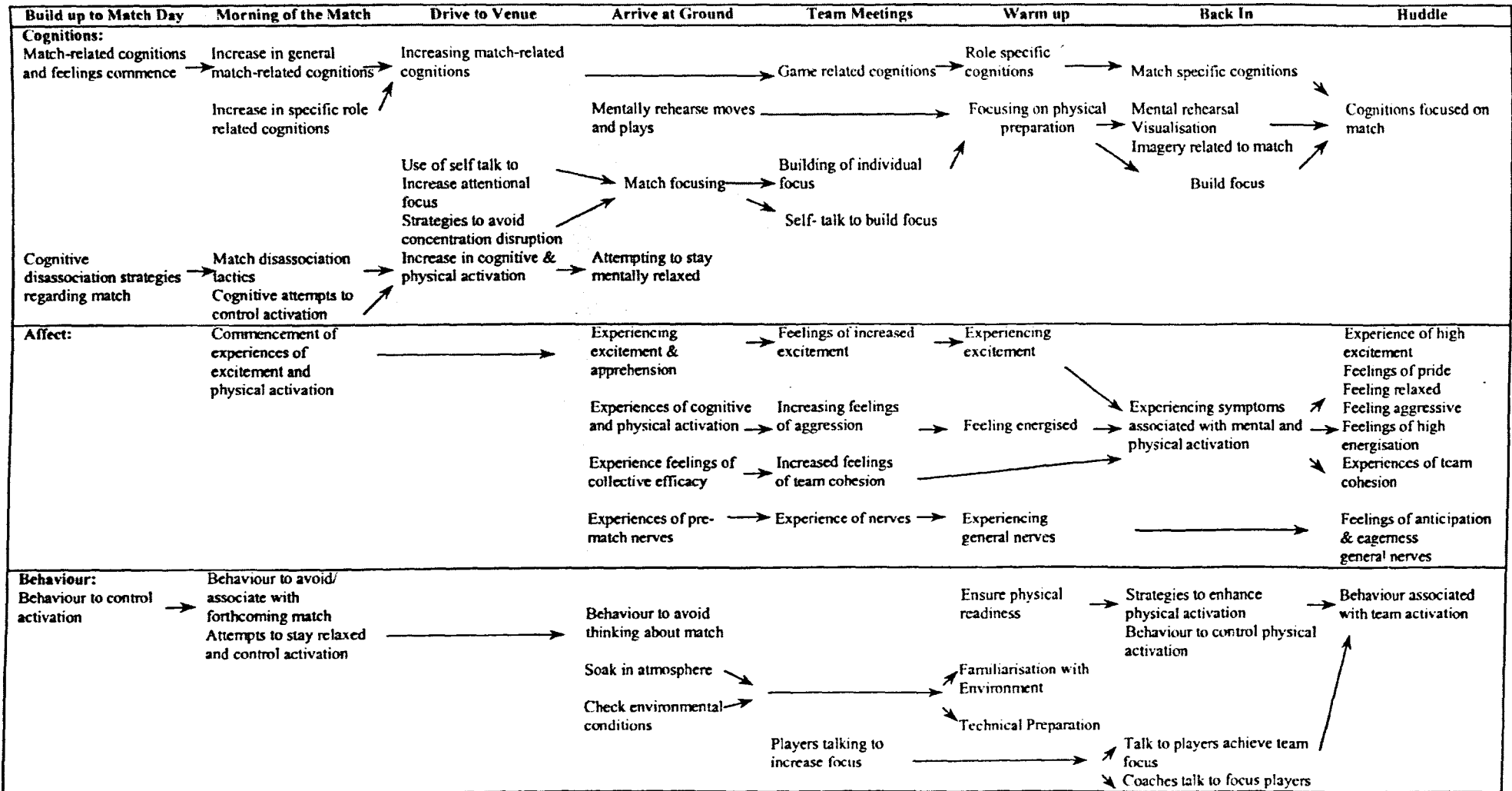


Figure 7.1: Temporal patterning of pre-match cognitive, affective and behavioural experiences.

I am just excited and eager to get out there and play. My head, my body, its all just buzzing, you can feel the blood boiling and you just want to go out there and play. I am ready for battle at that stage. All the wait is nearly over and the doors are open and you can let all the feelings out and let the energy go.

More interestingly, the notion of the reporting of an increase in the frequency of match-related cognitions experienced by the performers, in the time to kick-off, emerged from the findings. Jones (1991) introduced the concept of the frequency of competitive anxiety symptoms, describing competition related cognitive intrusions, or the amount of time the competition occupied the performers' thoughts. Subsequent research demonstrated that the frequency of cognitive intrusions, or worries regarding competition, increased progressively through the period leading up to performance (Swain & Jones, 1993). The current findings indicate that the participants did not seem to experience anxiety as defined by the existing conceptualisation (Martens et al., 1990), instead they were experiencing match or competition related thoughts, or intrusions, regarding their upcoming performance.

The game starts in the week, or thinking about it does. As soon as you know you are involved, it all begins to build up. Just thoughts about the match build up and build up towards the weekend. Not like worries, just thoughts and little tingles that increase and increase to the day of the match. So all the hard work, physical and mental, starts in the week.

I am not really that much of a worrier..... I wouldn't say I worry, I am just thinking about the game..... just running through plays and scrums in my mind.

Several other interesting temporal patterning findings emerged from the analyses relating to the control of psychological states. From an emotional perspective, participants directly prior to kick-off reported intense experiences. Cognitions and match-related thoughts, however, were reported as experienced earlier in the build up to

kick-off. Attempts at controlling emotions and activation were characterised by employment of several cognitive strategies in the early stages of match preparation. On commencement of preperformance routines, however, participants reported strategies to induce appropriate feelings and emotional responses, in order to achieve appropriate activation states and mental readiness.

On the morning I am trying to stay as relaxed as possible. That means not thinking about the game too early. I let some of my thoughts about the match come in, just to give me little bit of focus. But it has been building for a while, since selection and increasing since then. You let it build in the week to keep your motivation. But on the day you have to keep control of it, and not let your energy get released too early.

Collectively, a change in focus was also reported. This was characterised by a shift from an individual to a team focus. Further, in the build up to the match, players reported increased feelings of collective efficacy and team cohesion when they first met before the match.

In the morning I am excited, more a bit nervous about my own performance..... I always feel better when I get to the ground and start seeing the players..... When I see the players it's always a big confidence booster. You know you are playing with quality players.

A further finding to emerge from the analysis related to the role of mental imagery in the context of the precompetition preparation and routine. The findings revealed that the participants employed mental imagery techniques as part of their overall 'warm up routine'. Mental imagery is employed when the performers arrive at the ground, whilst they are getting changed, then immediately afterwards, whilst they are sat in the changing room waiting to go back out for the kick-off. These findings are characteristic of existing recommendations regarding the integration of mental skills

routines with technical and physical routines in the precompetition period (Weinberg & Williams, 1993).

I like to get a feel for the surface...get a feel for the conditions, the wind and where it is blowing from, if the sun is out and is going to be in your eyes..... I have always done it really, walked the pitch. I like to walk to all the lines and just visualise the ball coming to me.....I walk and put myself in all the corners where I will receive the ball, I also stand on the lines and picture myself catching takes in the lineout. I find it really helpful, So when I get out on the pitch for the match I have been there already and done it successfully. So I know that I can do it again.

Finally, the analyses revealed that in the final minutes before competition, performers experience a mixture of affective states associated with physical and mental activation, alongside more traditional feelings of nervousness and anxiety. These findings support those of the initial section of the thesis and the existing research (Hanton & Jones, in press; Mellalieu, Hanton, & Jones, 2000) that purports athletes are able to experience positive emotional states together with feelings of anxiety or nervousness in the precompetition period. One participant reported:

For me it's a feeling of relaxation and calmness, but with a slight building of excitement ... a little bit of edge, a bit of tension.

Influences upon psychological experience of precompetition

Several themes emerged as influences upon participant's mental preparation for competition. These included the level of physical, mental, and technical readiness together with situational and environmental factors (figure 7.2).

How motivated you are also plays a big part....there are times when you really have to dig deep to get yourself up and psyched to play..... I have had games, for whatever reason, tired, or carrying an injury, or perhaps the last game before an international, that I have had problems with my motivation..... the type of games that you just want to get over and done with, get it out of the way.

..... you can be injured, carry an injury or coming back from injury and that can be playing on your mind, stopping you from giving 200%. It could be that you are playing in an easy match, or you play a club match off the back of an international, or big game, then you have to go back to the club and play against a team and there is no motivation..... it is very hard to keep your motivation and focus up for every game.... you will have peaks and troughs. You may have had a hard period of games, and feel tired, that will affect how you feel. You also may have had a hard training week, and then you feel tired and your motivation is not there and it is hard to get yourself ready.

A further key dimension that emerged from the results was the influence of team factors upon team and individual preparation. Pre-match psychological state was perceived to be influenced by the level of group cohesion and collective efficacy experienced within the team.

You are just proud to be playing in the same team, playing for each other and the whole squad really. You know that nobody to your left or to your right will let you down. You know... and vice versa. It's a big thing, unity, for us..... It makes such a big difference to know you can rely on your team mates. You know that if you go into a situation and make a mistake then somebody will be there, one of the rest of the guys to be there to back you up. You miss a tackle and somebody will come across and make that tackle for you. Once you get in that huddle like, it's like, 'Come on let's get it on, we're there now, we are here to win, not make up the numbers'. You are looking forward to it. Looking forward to the physical confrontation.

In those last five minutes (before the match) you are all very close....you're looking at each other..... It's sort of a feel of although you are an individual, it's a team game. You're stood there and you're close to the other 14 guys..... You're a member of a team, you're one person in a team but you know you've got to perform, you know you're working for each other. You are going out there and you are doing it for each other, and you are doing it for the supporters. It's definitely a sort of a pride feeling, just before you go out it sort of wells up inside you a little bit. Sort of 'I'm gonna do it for the team' type stuff.

Rugby is a very unique team game where if your mates let you down you can get seriously hurt. Having confidence in one another is very important. If I don't think one or more of the team is capable of doing the business, or I have doubts and anyone else in the team has doubts then you have got problems already 'cos players will be worried about them doing their jobs. With us at the moment there are no weak links and we have got a really good team spirit and that gets you through a lot of hard times.

Furthermore, the atmosphere amongst team members also emerged as an influence upon an individual's perception of mental readiness for competition. The changes in the dynamics of the team were also perceived to affect the team atmosphere and hence preparation for competition.

..... before a game sure you get nervous, you get nervous when you are doing your preparation in the build up to the match. You can feel your butterflies and all that. Once you get in the warm and in the changing room and you are with all your mates, that's when the nerves go. Everyone gets switched on, for the jobs they have to do. Not just to play but to play well. That's the thing about X it's such a proud club that everyone wants to play well for themselves and the club.

..... it tends to be not as fired up. People aren't as worried and don't tend to be as switched on.... It's difficult for yourself then to get fired up. You know I think as a professional player you have got to go out there and you have got to motivate yourself and work harder, get fired up yourself. Rather than rely on other people to try and help you along. Because they tend not to be as switched on, that's for sure.

Finally, participants discussed potential differences that emerged in the psychology of the preperformance period as a function of performing in club versus international competition (figure 7.2b). A general dimension emerged that described an overall increased psychological experience when participating in international matches. Specific increases in the intensity of affective and motivational experiences, and the level of pre-match preparation emerged as higher order sub themes.

Psychological skills employed in pre-match period

Several cognitive strategies were identified amongst participants, that were characteristic of elite or international performers achieving mental and physical readiness (Gould et al., 1992; 1993; Jones & Hardy, 1990; Orlick & Partington, 1988). Two strong themes to emerge were the employment of imagery based skills, and game and skill-specific cognitions (figure 7.3).

I am probably picturing myself from above, from a camera angle. I see myself doing these things well with other people there. The opposition I am playing that day is in there as well. The image is not particularly clear. It's probably more clear than a dream is, but it's not really as sharp. I go through the weaknesses really and I picture myself doing things well, whatever it be. Getting a ball from a kick-off and running the length and scoring or something like that you know. I'm sure one of these days it will happen because I have done it so many times.

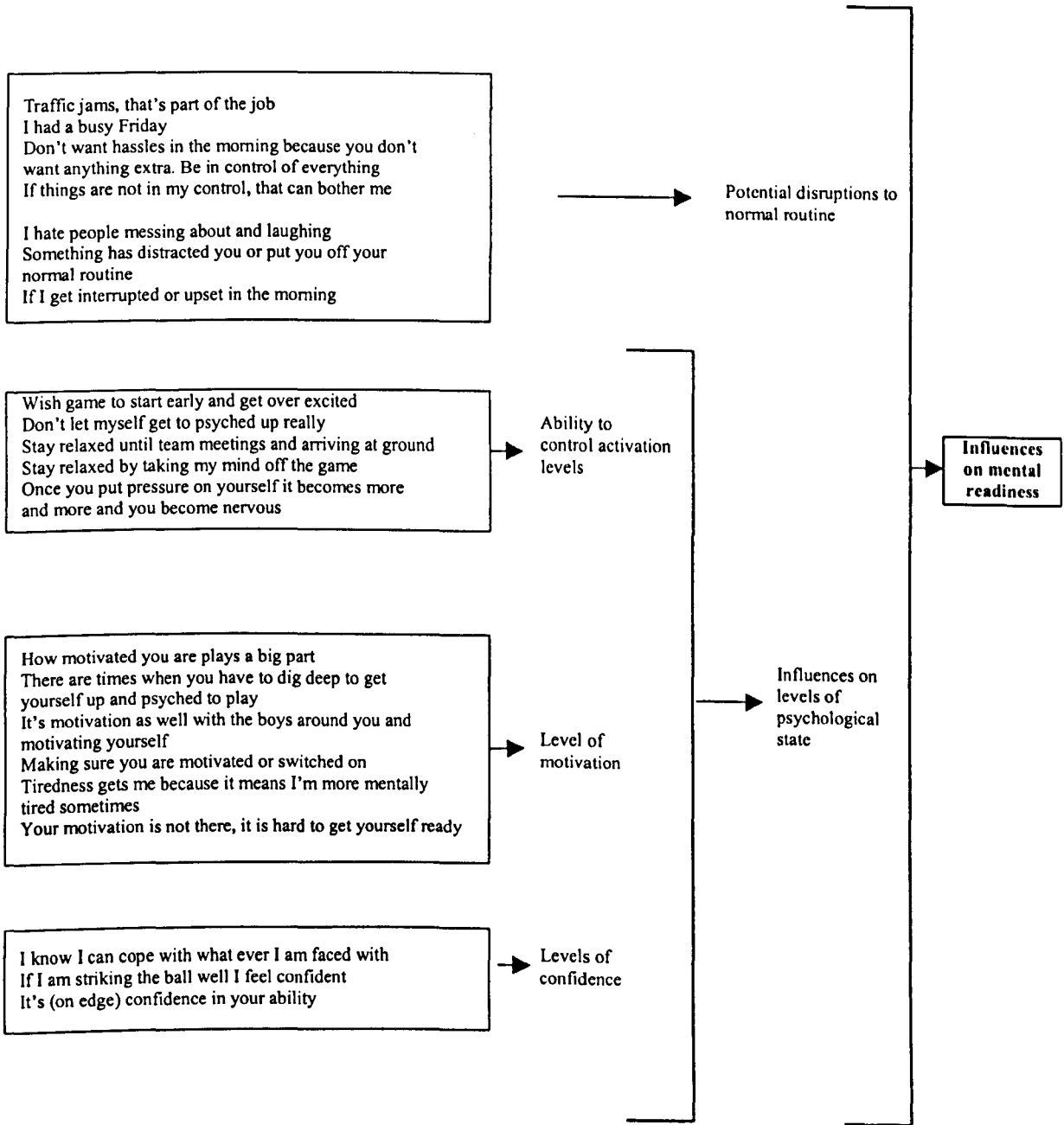
I see myself doing my jobs against the team we are going to be playing against. I am inside my body, I am making hits, taking pops and going through moves. The contact stuff I can feel in my body as well, my shoulders, my arms, what it is like to break the line and what it feels like to bury someone into the floor..... I am inside my body for the hits, but the team moves... they are outside body views, like on the video. I don't tend to feel those either, more the contact I aim to feel..... the video stuff is just to organise how things will run in my mind, and out on the field, giving you an idea of the space and timing. The contact is just really getting your body warmed up and psyched up.

..... It's getting through the adrenalin, it's getting through the excitement, the anxiety, the nerves to a clarity of what I am going to do. That's what you are trying to get to. That, for me, is achieved by seeing myself going through it. I am obviously doing it for a reason, and the reason is that when I get on the pitch, I can actually physically do it. The nerves, seeing myself do it, the nerves then becomes genuine excitement to get out there, and you know, 'I've done the physical' and 'I've now seen it now I'm gonna do it'. Then it's, 'I'm gonna do it, we are gonna do it, no problems at all.'

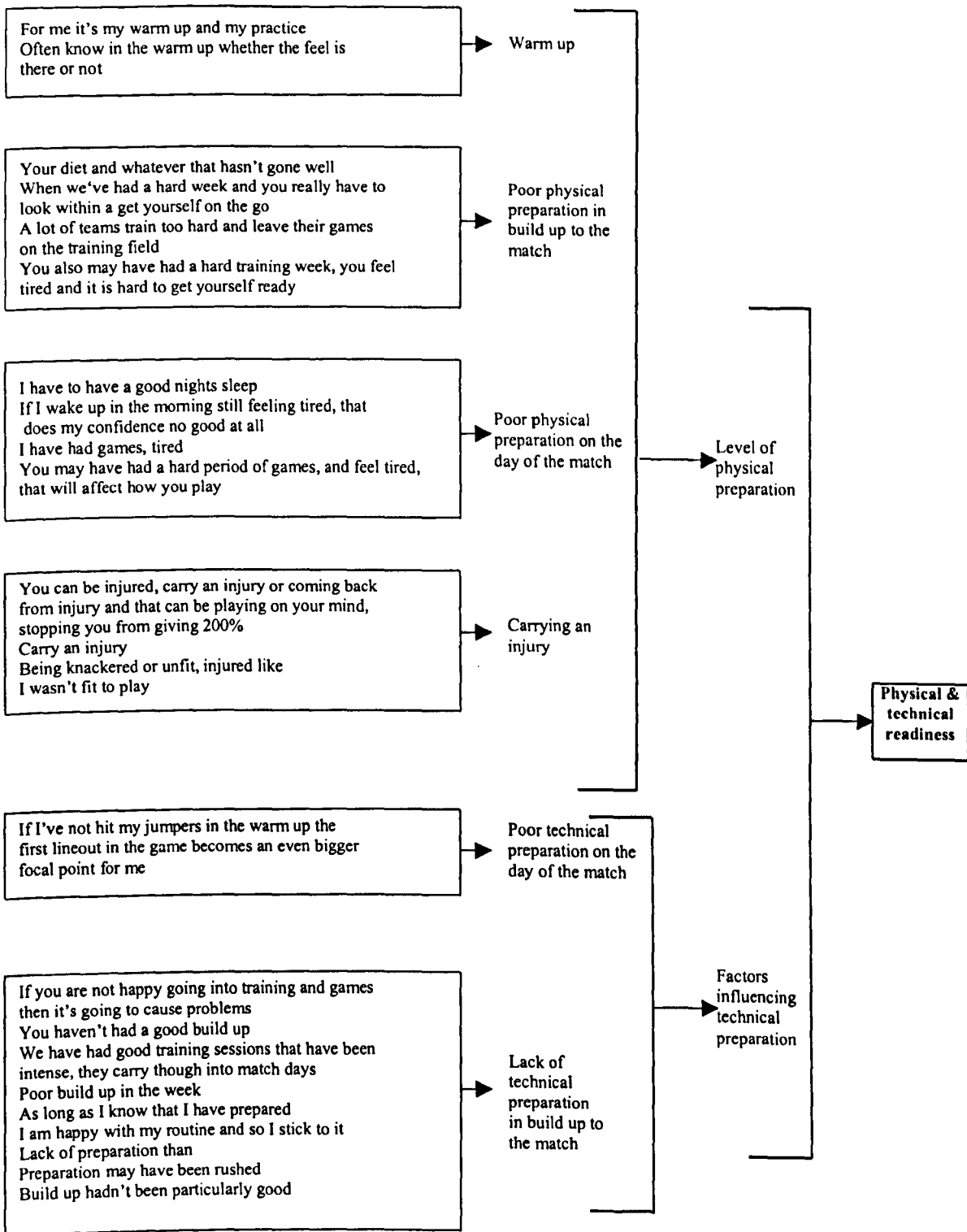
A further theme emergent in the analyses, previously unidentified in the literature, was the role of significant other individuals in achieving individual and team

Figure 7.2a: Influences on psychological experience of build up.

Raw Data Themes **Higher Order Sub-themes** **Higher Order Themes** **Dimension**



Raw Data Themes **Higher Order Sub-themes** **Higher Order Themes** **Dimension**



Raw Data Themes

Higher Order Sub-themes Higher Order Themes Dimension

It's good for us (the crowd) if we are playing well because their crowd will be quiet
 You want to go out there and show off
 We do the warm up, they cheer and roar as we go past and its yeah, it is a lift
 Sometimes that (the crowd) can be disruptive
 Get the boost a bit more when you are at home
 Gives you quite a sort of warm feeling
 Gets you up there (points to his head)
 You feel a bit of pride welling up inside you
 A home crowd hypes you even more, makes you more wound up, more excited, gives you more hywl

→ Influence of crowd

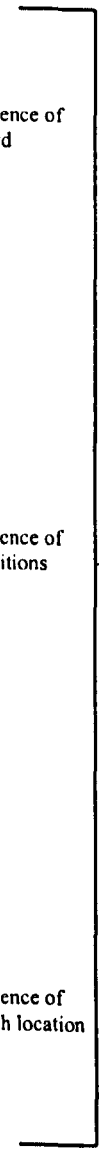
It's pouring down or it's the middle of winter, it's absolutely bog underfoot
 A different environment, different changing rooms can make a difference
 Pitch was heavy, it was raining
 There was an inch of snow on the ground, which had started melting and then froze, so it was like ice, it was freezing freezing cold
 We were in the smallest changing room in the world
 I played Wasps at dog shit park in Slough

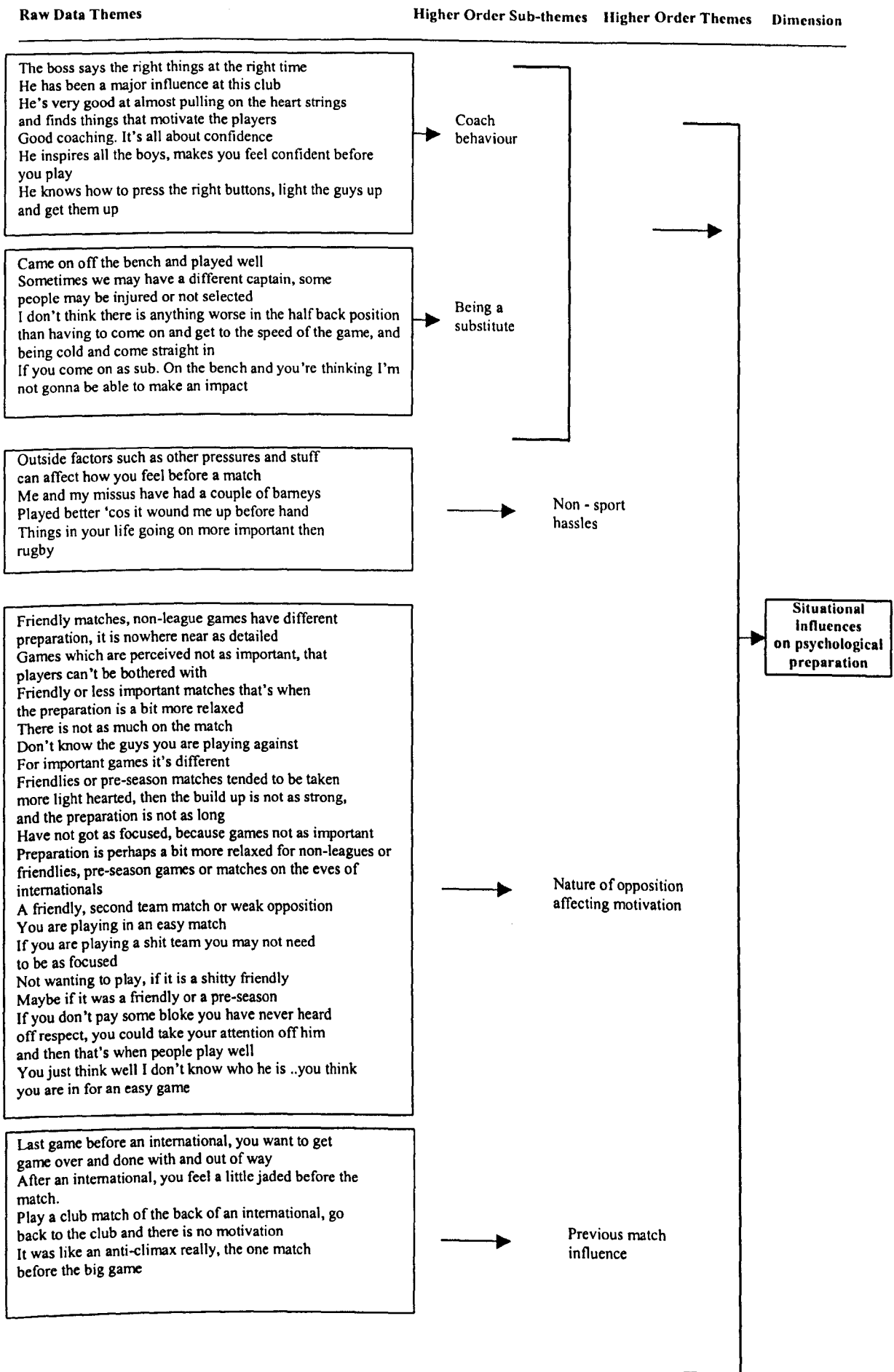
→ Influence of conditions

→ Influence of environment factors

Played away, turned up two hours before kick-off
 Got to ground twenty minutes before kick-off
 I didn't feel quite sharp enough. because of the travelling up the day before
 It can get boring and eat you up
 It is hard to win away. Teams play better at home
 Away trips would mess up preparation and people's motivation
 People switch off you know, laugh about the place and the dressing rooms or they just shake their heads that they have to play in places like that. can lead to flat dressing rooms and flat games, or games that take a while to get into
 Staying in a hotel or travelling on a coach for a long distance in the morning
 If you are playing away from home you have to be especially switched on
 If you are playing a top level game, you can guarantee the opposition will be up there, switched on, especially if they are at home

→ Influence of match location





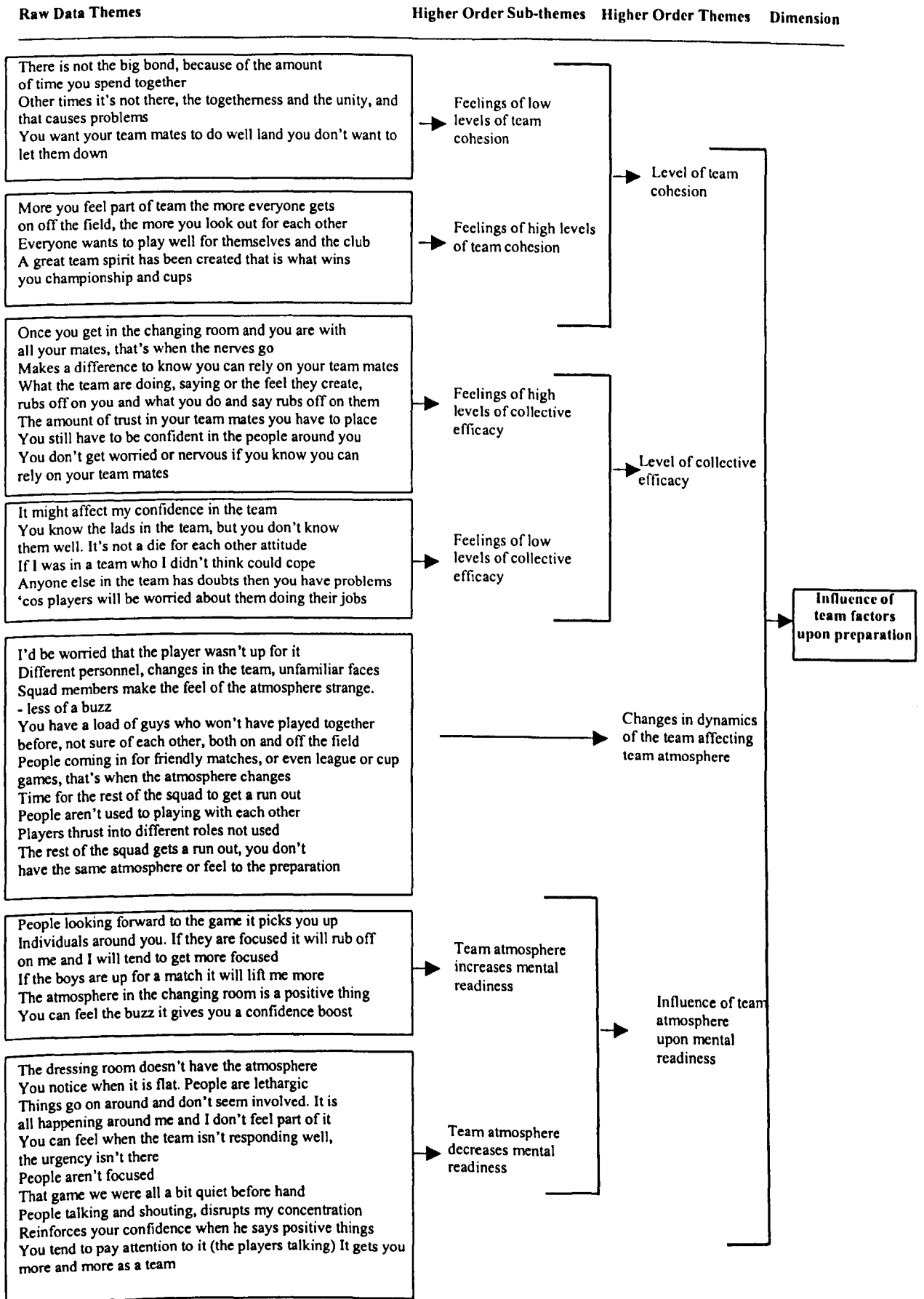


Figure 7.2b: Influences on psychological experience of build up - Internationals.

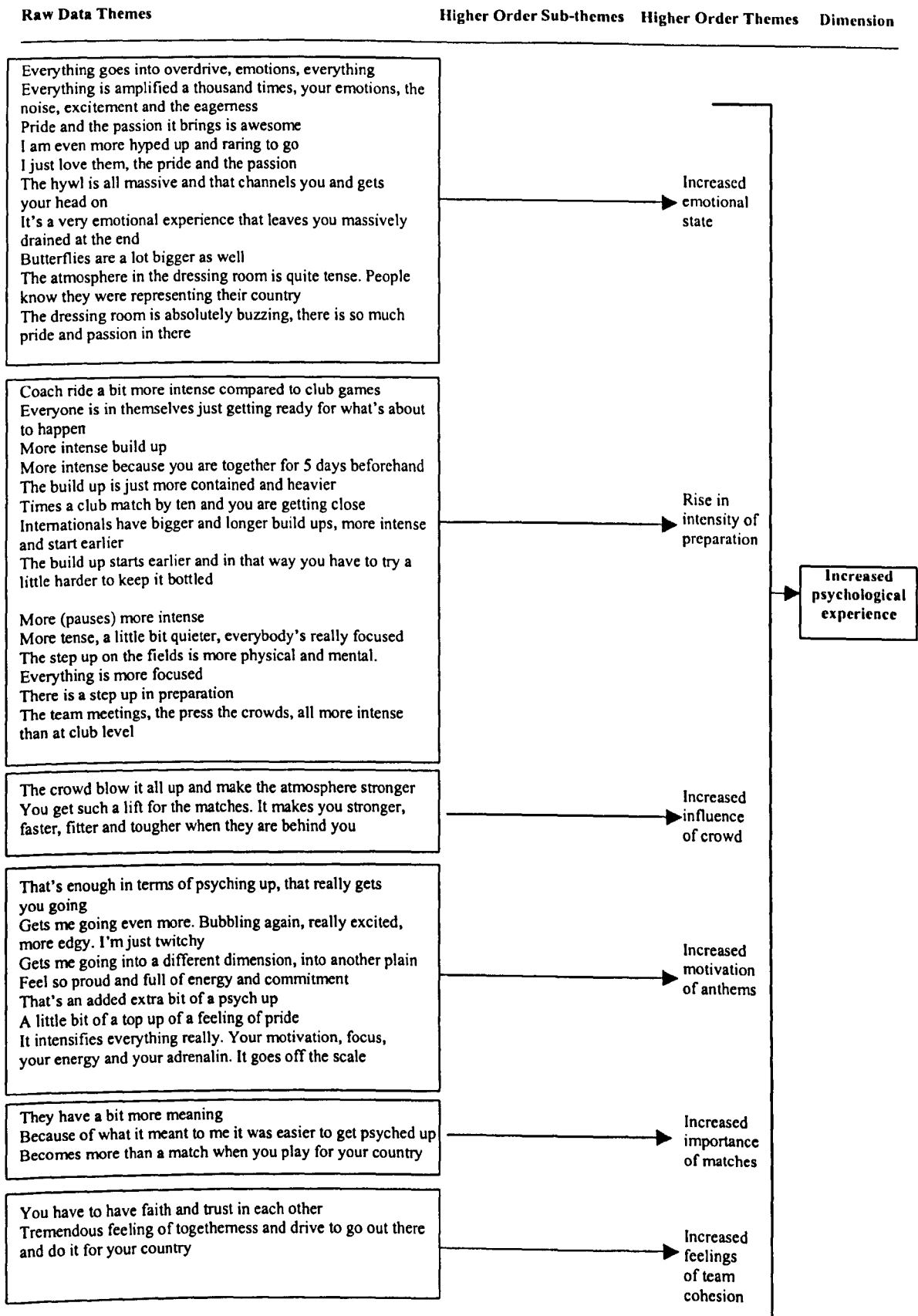
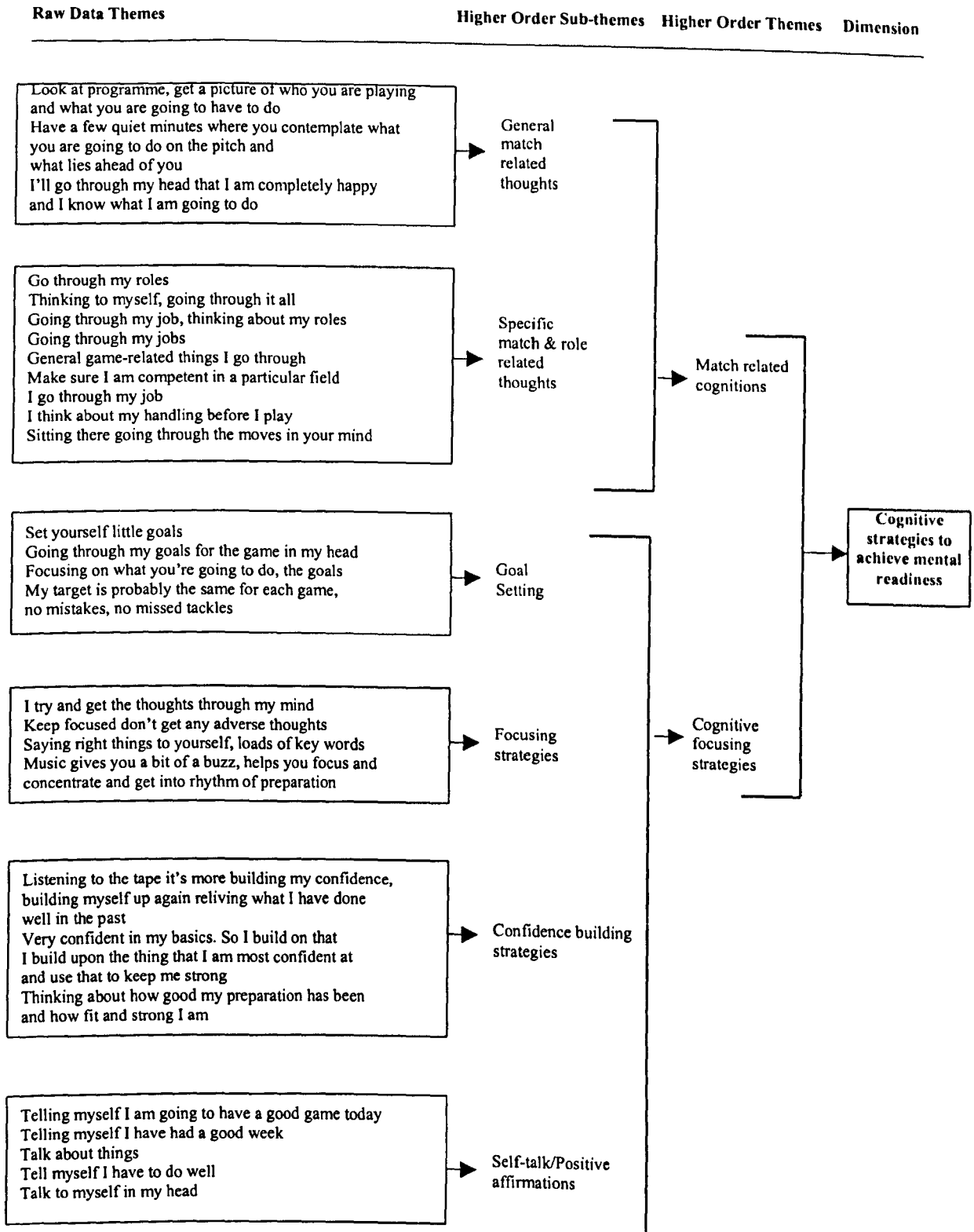
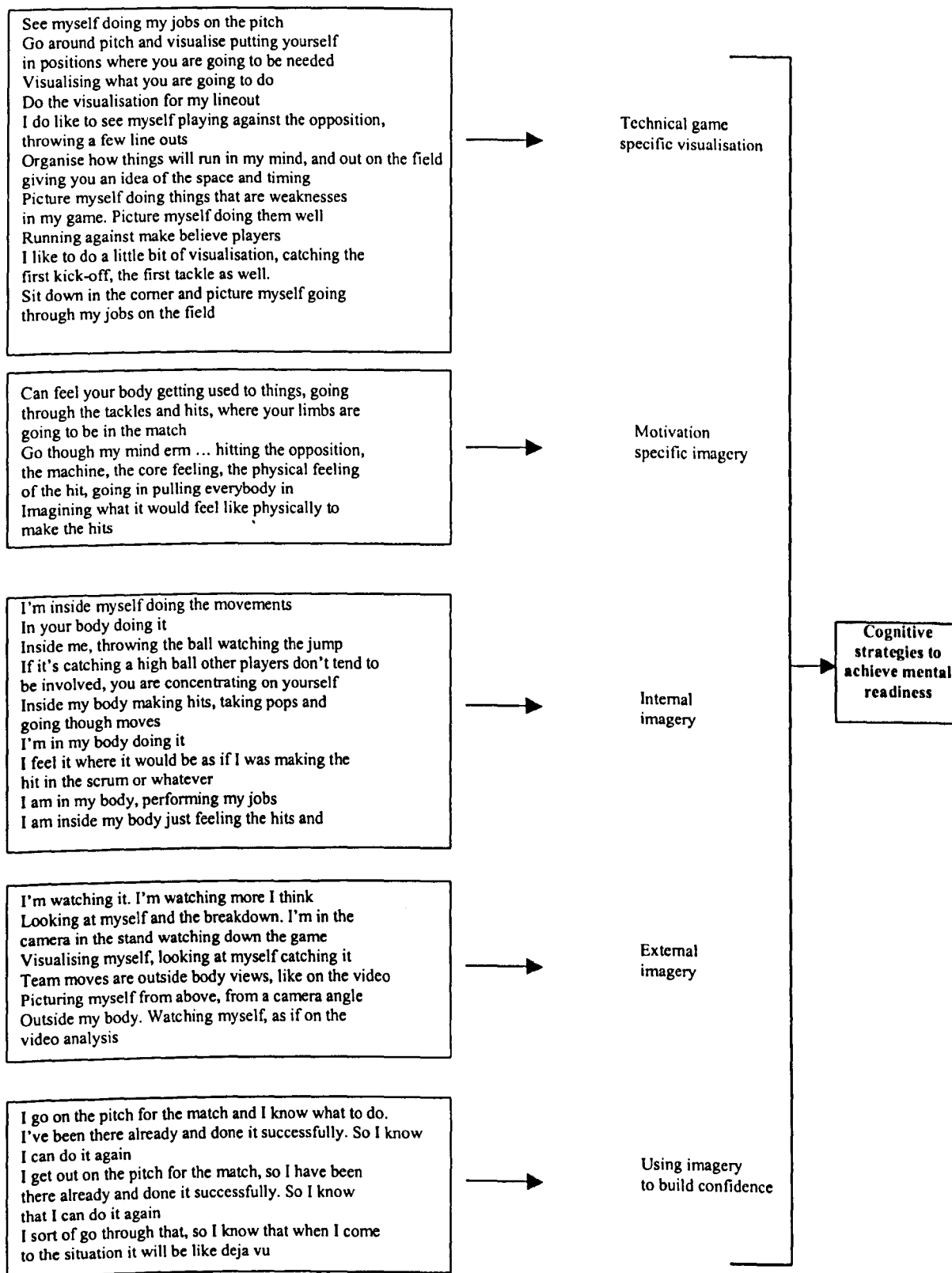


Figure 7.3: Pre-match psychological strategies employed to achieve mental readiness.



Raw Data Themes

Higher Order Sub-themes Higher Order Themes Dimension



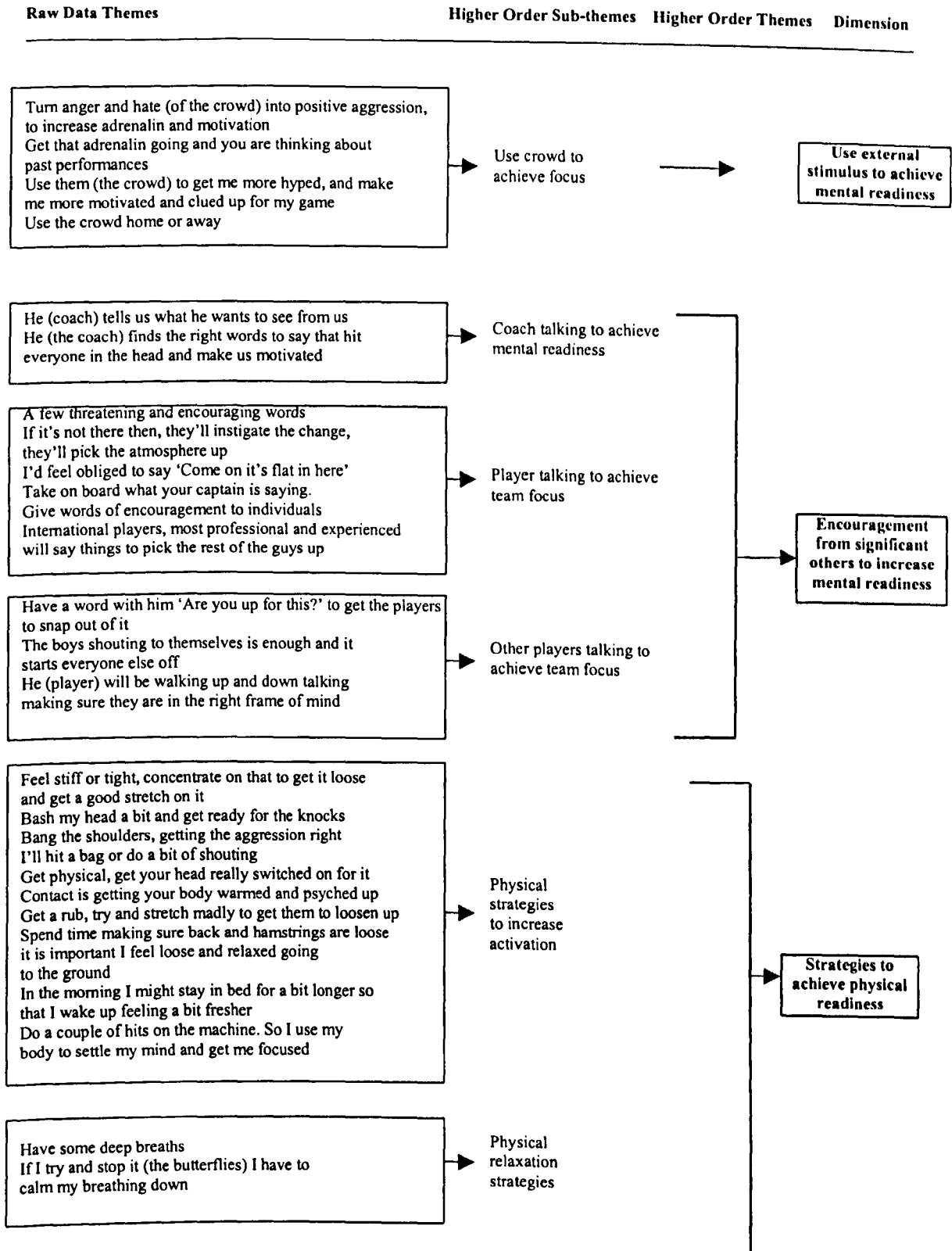


Figure 7.4: Perceived appropriate mental states for good performance.

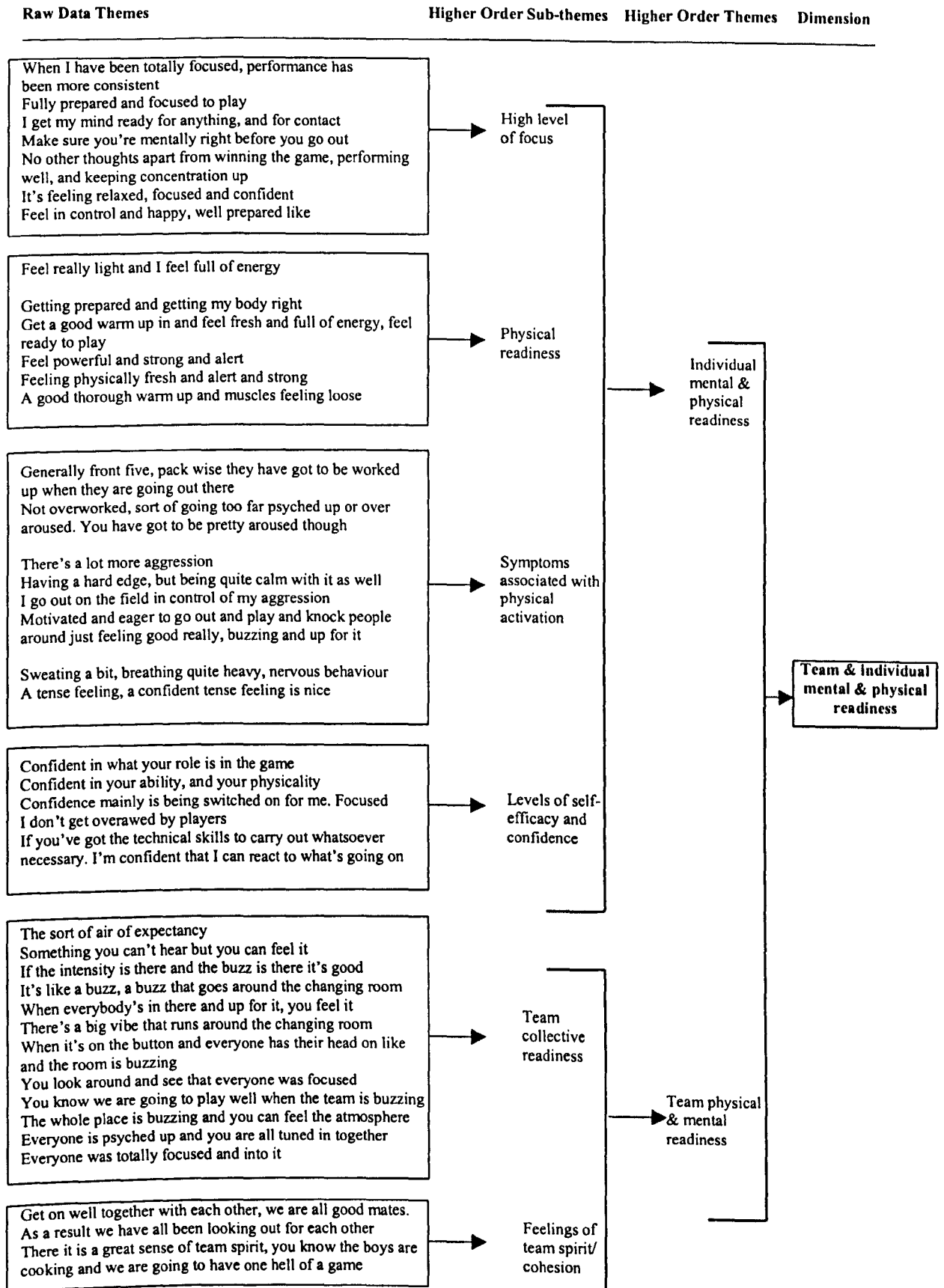
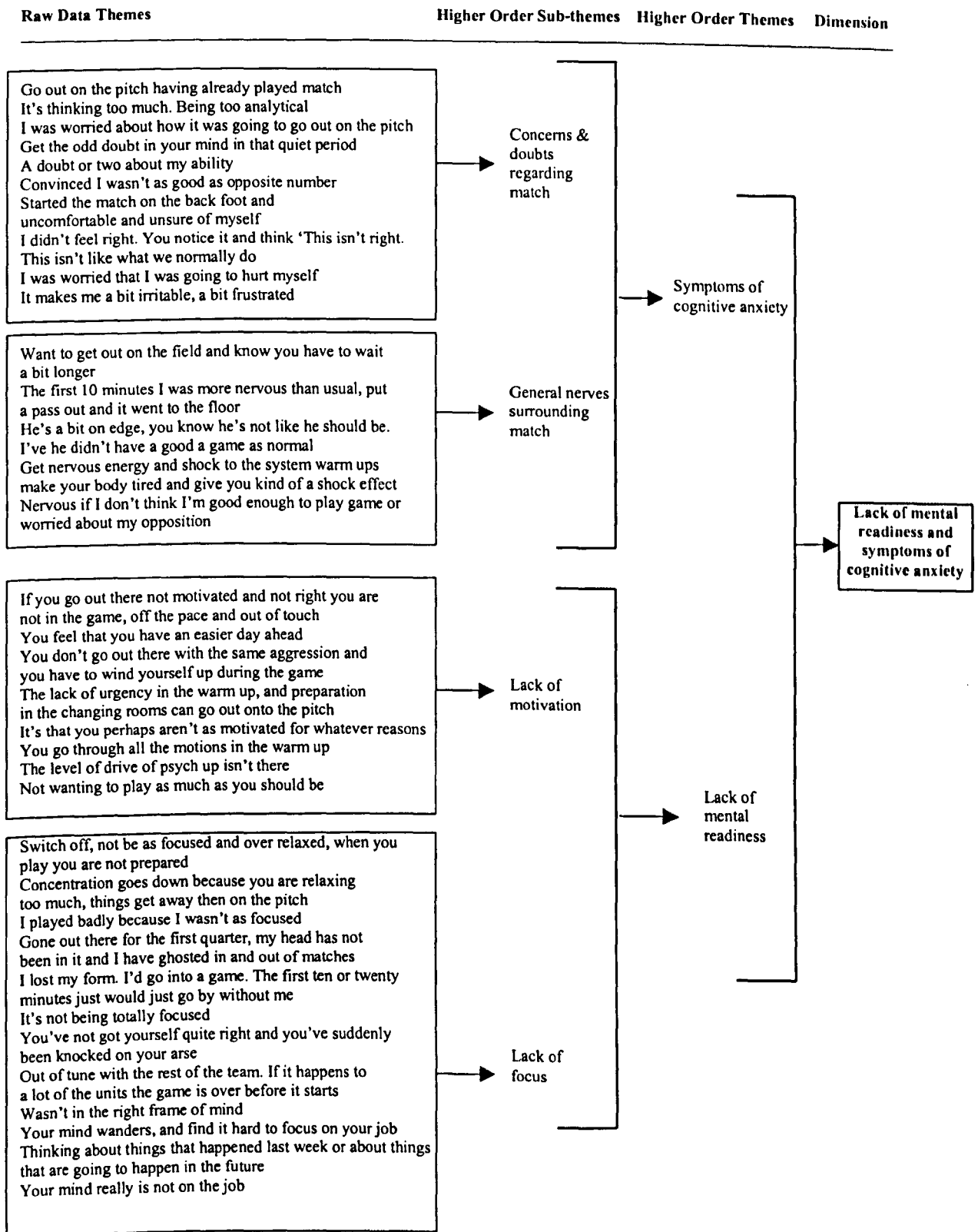


Figure 7.5: Perceived inappropriate mental states and bad performance.



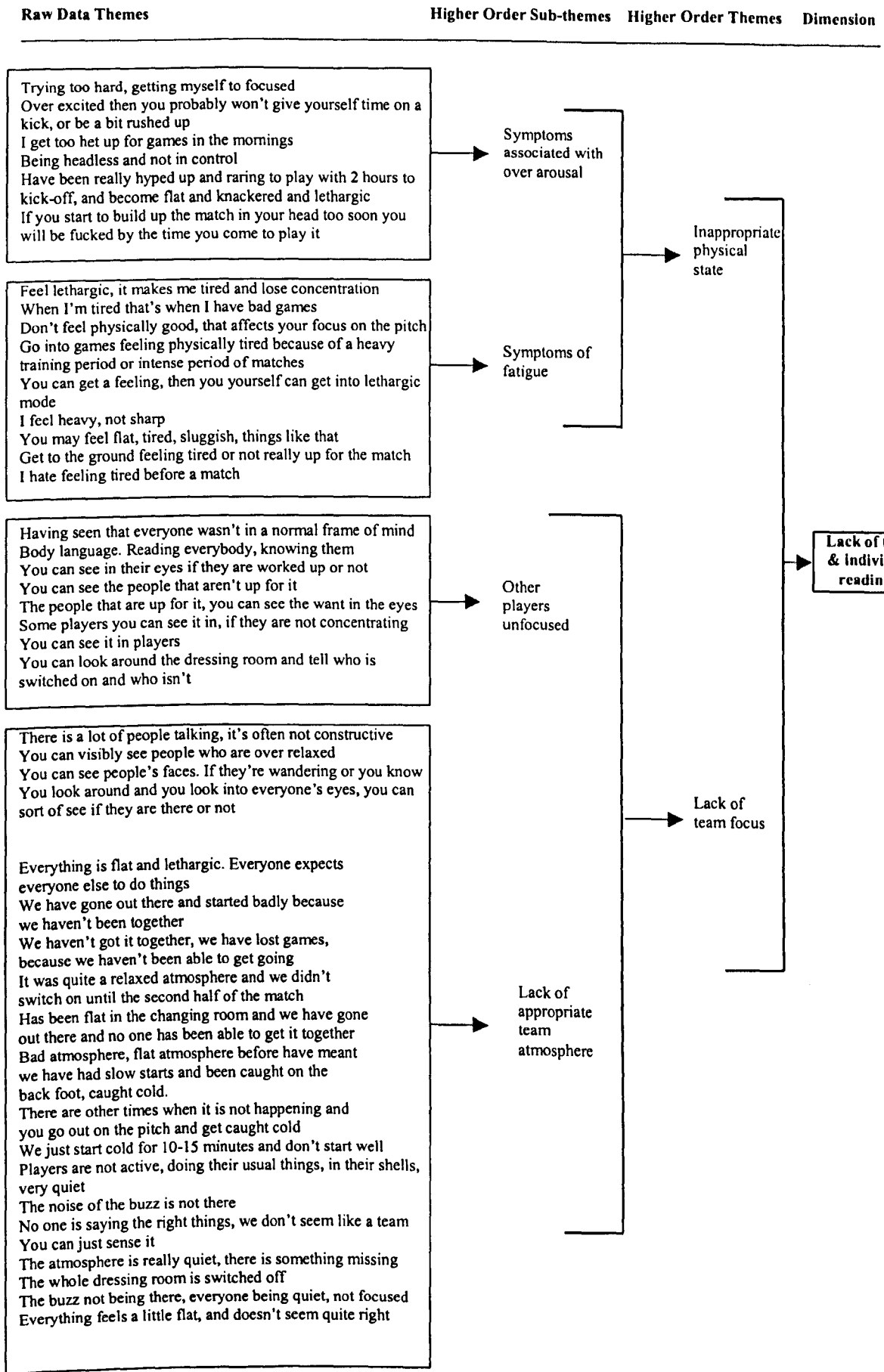


Figure 7.6: Rationale for relationship between mental states and performance.

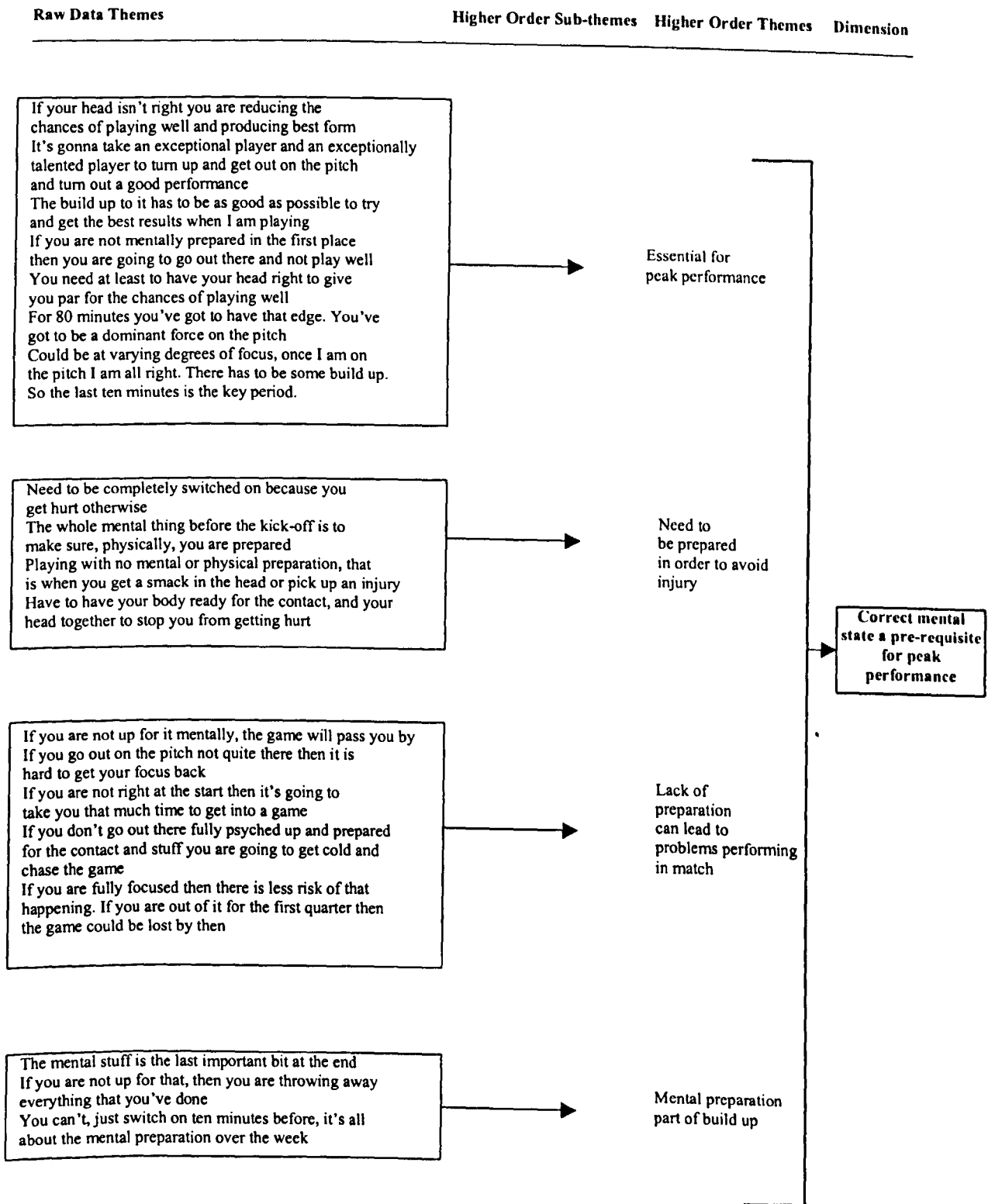


Figure 7.7: Rationale for lack of relationship between mental states and performance.

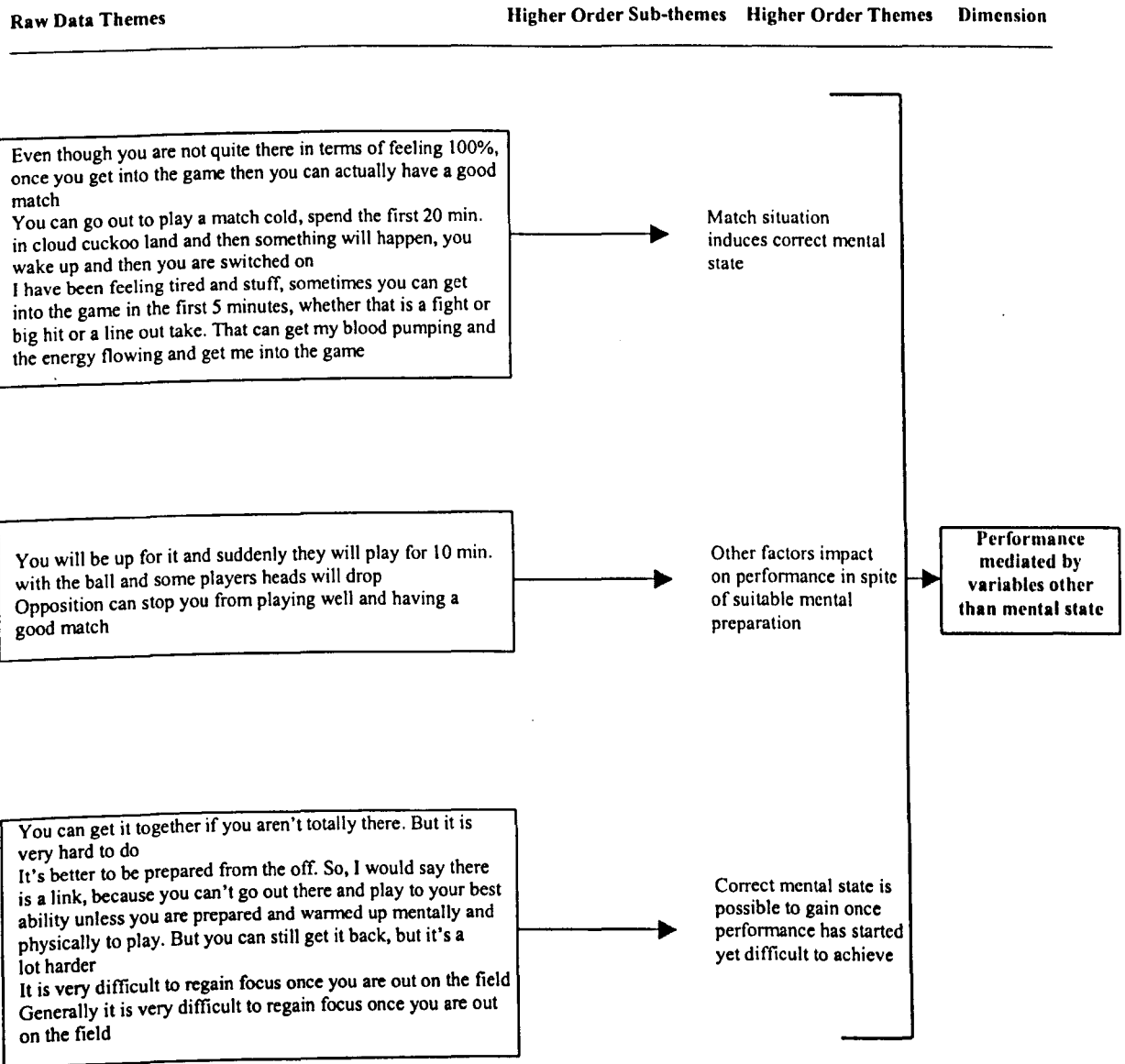


Figure 7.8: Experiences of nerves.

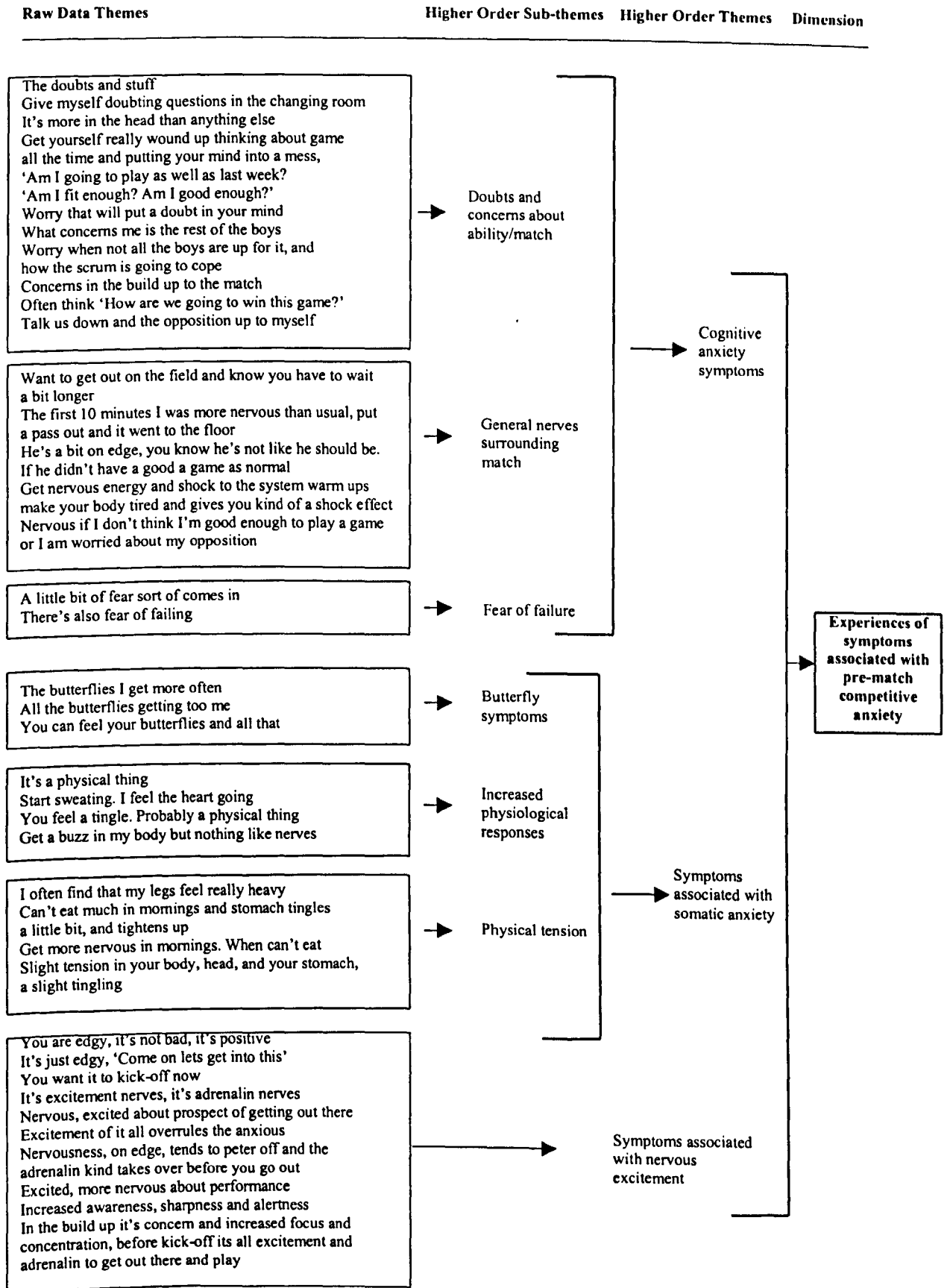
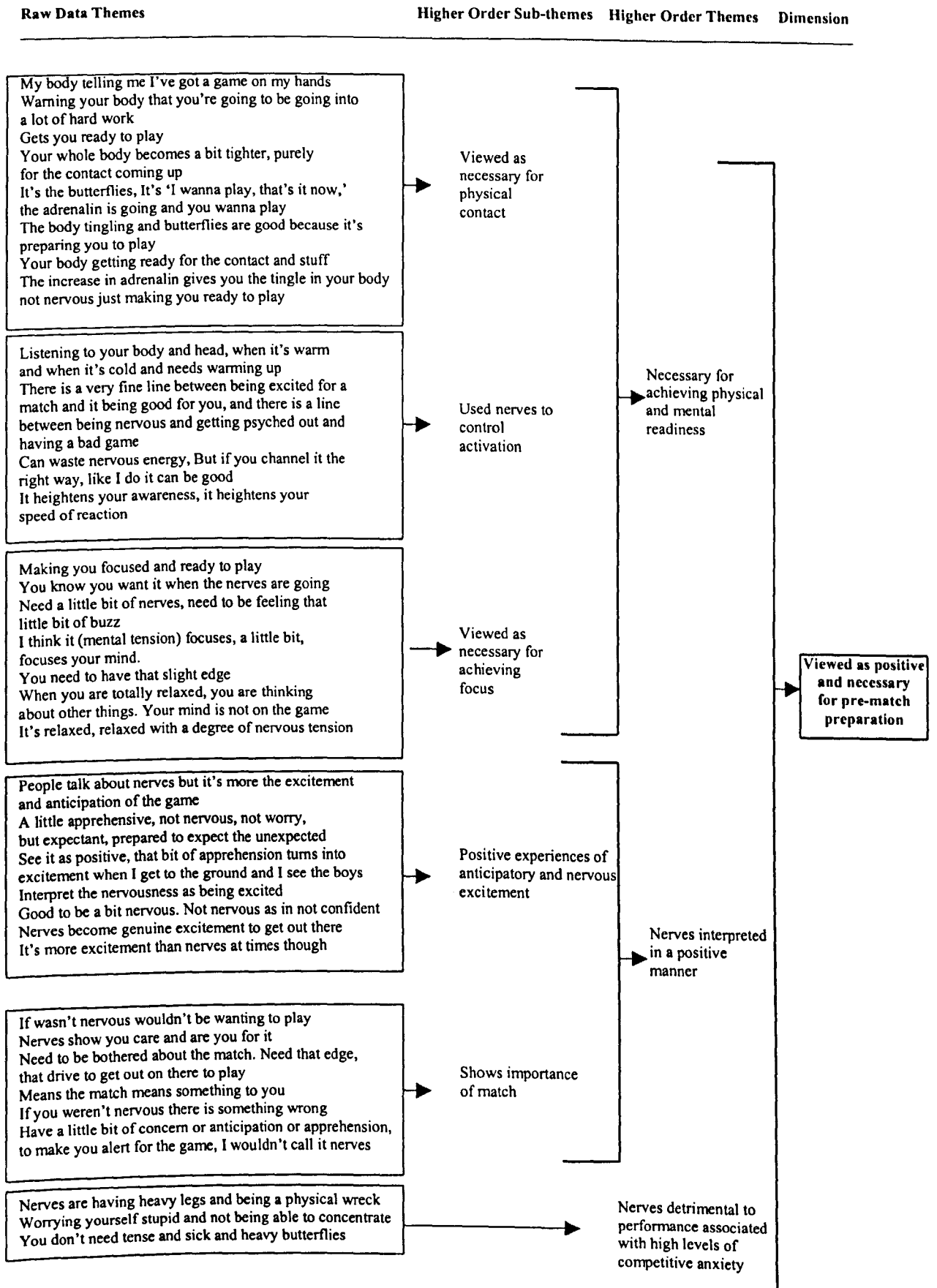


Figure 7.9: Perceptions of experiencing nerves.



mental readiness for performance. Existing research into the psychology of the precompetitive experience has only identified individual preparation for competition.

You really have to try and feed off the other guys in the team.... Tune into their energy and their motivation... listen and focus on what they are saying and the words of motivation they are using.

After the coach's talk everyone gets fired up..... some of the senior players are talking, and some are shouting ...reinforcing that we have to be up for the game, making sure we are psyched up, we know our jobs and we are up for the challenge..... everyone is making sure everyone else is up for it.

Perceived ideal/inappropriate preperformance psychological states

Themes emerged (figure 7.4) supporting previous work investigating preperformance states associated with good performance (Eklund, 1994; Gould et al., 1992), and antecedents of optimal performance experiences or flow states (Jackson, 1992). Ideal preperformance psychological states were identified as associated with mental and physical readiness, including high levels of motivation, confidence and focus, and positive precompetitive affect. Previously unidentified themes that the participants associated with good performance included, the perceived need for team collective readiness and feelings of team cohesion experienced pre-match.

It's like, it's like a family. You spend so much time together, there is so much camaraderie and what not. When they say look at the people around you. You want it for them as well. You are thinking about everybody, a team, the whole team performing well.

At X we have got a good understanding with each other, we are mates off the field as well. That's a massive thing at X, we all sort of really get on. The ones that don't get on, who don't get on with each other, don't last there. The ones who after the game don't mix with the players. The more you feel part of a team the more everyone gets on off the field. Then the more you look out for each other. With X we are all mates, we are close. We know how each other is going to react and what we are going to do on and off the pitch.

Mental states related to poor performance (figure 7.5) were identified as associated with a perceived lack of mental readiness, negative experiences of competitive anxiety symptoms and inappropriate physical states. These findings regarding inappropriate preperformance states support previous research that has examined hindrance to flow states and pre-match affect associated with poor performance (Gould et al., 1992; Jackson, 1992; 1995).

When that has happened it hasn't been quite right, maybe a doubt or two about my ability, or a worry about things outside of the game. Sometimes you can be sat in the changing room and everyone else around you is there and you 'aint..... You are trapped in this bubble looking out at everyone doing their business, and you are there but you just can't get a hold of the atmosphere. Your mind wanders, and you find it hard to focus on your job. So you're thinking about things that happened last week or about things that are going to happen in the future. Your mind really is not on the job. The level of drive of psych up isn't there for whatever reason.

No, but I used to get really nervous .. well not nervous really more up for it. Right from when I would wake up on match day. I'd get to the ground feeling tired. Whereas there was no reason why I should be. You just get there feeling tired. Everything you do then tends to make you feel a bit more tired. The warm up makes it worse. You just feel so lethargic then. Yeah, because you tend to just feel tired and lose concentration.

Once again the team element emerged as a significant theme perceived as associated with poor performance pre-match mental states. Specifically, a lack of team focus and team atmosphere were highlighted as symptoms of inappropriate mental states prior to poor performance.

You can notice when it is flat. There are people who are a bit lethargic or whatever. People aren't sort of bouncing up and down. I think if people are looking forward to the game it picks you up a bit. The opposite can happen as well I guess. You can get a feeling and then you yourself can get into that lethargic mode. Like it is just going to happen, you tend then to go out there and think that it is just going to happen. Instead of you going out there with the notion that you are going to make it happen.

Rationale for the relationship between pre-match mental states and performance

In addition to asking the participants what they perceived as their ideal preperformance psychological states, it was also discussed whether these identified mental states were important to performance. Further the extent to which these states were important, and what rationale was given for this belief were elicited. From the findings, themes emerged that indicated participants perceived a relationship between mental states and performance (figure 7.6). An overall general dimension was established that indicated the participants perceived the correct preperformance mental state as essential as a pre-requisite for forthcoming performance.

I think if you don't get yourself in the right frame of mind then you can find yourself drifting. Especially in a contact sport like rugby. You find yourself drifting and then when you're out you lose that sort of mental edge and mental toughness if you like. For that 80 minutes you've got to have that edge. You've got to be a dominant force on the pitch.

Further themes that supported this dimension were the need to be prepared in order to avoid injury and the theme that an inappropriate mental state can lead to problems of concentration and focus in the match, and prevent participants getting into the game. For those performers that perceived their mental state as non-essential to forthcoming successful performance a general dimension emerged that viewed performance as being mediated by other variables, in spite of ideal mental preperformance preparation (figure 7.7).

I think there are outside factors such as other pressures and stuff that can affect how you feel before a match, other things that can upset you. But the preparation thing is not just on the day of the game, it is in the whole build up. It's how you prepare for the match. You know when you have a big game on the Saturday, on the Monday you start to prepare yourself, both physically through training and mentally - getting your mind right. On the Monday and Tuesday things are starting to go through your mind about how you are going to play, so things are starting to build from then. It all leads up to the match on the Saturday for me, the intensity builds and the game occupies my mind more. You can't, for me personally, just switch on ten minutes before, It's all about the build up, the mental preparation over the week.

You need to be fully prepared and focused to play. Whether or not you will play really well after that depends on so many conflicting factors. The opportunities for runs and tackles may not come your way. But you will be giving yourself the best possible opportunity to allow yourself to play to your maximum. On the other hand, if you aren't fully prepared or your head isn't right. Whether that's because you are carrying an injury, you had a fight with your wife on the morning of the match, which has happened before (*laughs*). Then you are reducing the chances of you playing well and producing your best form. So I guess the two are linked to a certain extent.

Themes that emerged in support of a lack of relationship included the reasoning that once the match had begun an appropriate level of focus could be achieved. It was noted, however, that achieving an appropriate focus once matches had commenced was a difficult objective to achieve.

The thing about this game though is that you can go out to play a match cold, spend the first twenty minutes in cloud cuckoo land and then something will happen, you wake up and then you are switched on. If you are fully focused then there is less risk of that happening. If you are out of it for the first quarter then the game could be lost by then.

Sometimes you can go into games feeling physically tired because of a heavy training period or intense period of matches. Other times you can go in there feeling mentally not quite there and it takes a while to get into the game. But even though you are not quite there in terms of feeling 100%, once you get into the game then you can actually have a good match.... When I have been totally focused and spot on, my performance has been a lot more consistent, than the occasions when I haven't perhaps quite been there.

Experiences of competitive anxiety

Emergent from the themes experienced by the performers were symptoms of nervousness associated with heightened experiences of physiological arousal, and physical tension associated with symptoms of somatic anxiety (figure 7.8).

By tension I mean a feeling of increased awareness, increased sharpness and alertness, a slight tension in your body, your head, and things like your stomach, a slight tingling. It's like you know something special is going to happen, that you are going to do what you have been waiting for all week. So I guess it's a feeling of anticipation tension.

The doubts and stuff, they don't occur very often, and they aren't that massive or anything. The butterflies I get more often. But it's not like I get sick like some players do. It's more a tingling in my stomach, just my body telling me I've got a game on my hands. I think it's the fight or flight thing. So the tingling is just my body's way of telling me I am going to fight! (*laughs*). But I don't really see that as being nervous. Nerves are having jelly or heavy legs and being a physical wreck. Worrying yourself stupid and not being able to concentrate. I don't get that.

A further higher order theme that emerged was the experience of what may be associated with more positive experiences of nerves. These include nervous excitement and anticipation.

I don't know if I would call it nerves, more match preparation or something like that. A lot of people talk about nerves but it's more the excitement and anticipation of the game. A lot of people, like myself experience, you only, well I only get nervous if I don't think I am good enough to play in a match or I am worried about my opposition.

It's the butterflies, I mean there's good butterflies and bad butterflies. It's not 'oh my god I'm gonna fail' .. it's just 'I wanna play, that's it now', the adrenalin is going and you wanna play and you are thinking about the first, for me it's the first contact..... That's what we are building towards. So it's more excitement and adrenalin for me. Definitely the adrenalin.

Concerns were also expressed about the level of nervousness or anxiety experienced in relation to forthcoming performance.

You don't need tense and sick and heavy butterflies. A little on edge is good because it sharpens you. Not fear, but a little bit of edge of the unexpected. It's more excitement than nerves at times though. To me nerves is wandering around in a mess worrying yourself like about the match..... There is a very fine line between being excited for a match and it being good for you, and there is a line between being nervous and getting psyched out and having a bad game.

One participant spoke of the role of confidence in his experience of nerves and anxiety.

I think I have more confidence in myself now. A lot more practice, if it goes wrong now, I'm cross with myself and disappointed, but focused that, 'Right I'll do it right this time'. I am confident, I know that we have practiced all week, and that I have thrown this throw that I am doing now hundreds and hundreds of times. So for me before the kick, the nerves for me are nerves that we do well. It's excitement nerves, it's adrenalin nerves.

Participants were also asked to provide explanations for how they viewed their symptoms associated with experiences of competitive anxiety. Interestingly, performers viewed their anxiety symptoms experienced as necessary or facilitative and positive for competition (figure 7.9). Several themes emerged as to why anxiety was seen as facilitative for performance and considered part of the preparation for performance. One prominent theme identified that being nervous was necessary for achieving mental readiness. One participant stated:

I think what I experience, if you can call them nerves, the body tingling and butterflies if you like to call it that, are good because it's preparing you to play. Making you aware that you have to be focused and ready to play. Those kinds of nerves, they are good for you. Being a wreck, being sick and worrying yourself stupid, that isn't good for you, that can only use up your energy.

..... you need, I feel you need to have a bit of tension in there. I think it focuses, a little bit. Not a lot focuses your mind..... otherwise when you are totally relaxed, you are thinking about other things. Your mind is not on the game. So for me it's relaxed but focused at the same time. Relaxed with a degree of nervous tension.

I think you have got to be a little apprehensive, not nervous, not worry or anything like that in your head, but be expectant..... be prepared to expect the unexpected.

A further theme that emerged was the explanation by the participants that experiencing a level of nervousness was necessary for achieving physical readiness.

I think if you weren't nervous then there is something a little bit wrong..... I think you've got to be a little bit nervous, just, the nervousness gets you going, it gets the blood pumping round your body, and gets you ready to play.

You have to be warmed up to play. You need the adrenalin for the contact. Your body needs to be ready. I think the increase in adrenalin gives you the tingle in your body, not nervous just making you ready to play.

..... For me nerves aren't really nerves they are the physical tingle that you get before you play, you know the slight butterflies, not nerves, I think that's good for you, that's just your body getting ready for the contact and stuff.

Several performers viewed the experience of nervousness as important as it indicated the relative importance of the forthcoming match.

You know if you got a few butterflies or whatever then that's good. It means that the match means something to you. If you're not nervous about something then it really means nothing to you.

Being nervous is good up to a point. You need to be bothered about the match. You need that edge, that drive to get out on there to play.

The positive experiences of competitive anxiety in conjunction with the co-existence of positive affective states support the previous chapters findings that have

observed positive interpretations of competitive anxiety symptoms and the role of positive affect in the preperformance period (Hardy, 1997; Jones & Hanton, in press). The findings would seem to imply that performers can experience symptoms associated with competitive anxiety, which are perceived as favourable to performance, whilst maintaining an overall positive affective state.

Section Discussion

The results and findings of the current chapter raise several issues concerning the individual experience of preperformance affective states in elite team sports and the psychological skills employed by performers to achieve such states. One of the principal findings of the thesis has been the notion that performers experience high levels of positive affect in the precompetition period. The current study provides further support for this observation from a more qualitative perspective, indicating that the performers' experience of preparing to compete is not characterised solely by anxiety (Jones, 1995). These findings further support the belief of performers experiencing symptoms associated with competitive anxiety, whilst engaged in an overall positive psychological state (Hanton & Jones, in press; Mellalieu, Hanton, & Jones, 2000). Further insight is therefore provided into the research debate surrounding the notion of facilitating anxiety (cf. Hardy, 1997;1998; Burton & Naylor, 1997). The current findings would appear to support the view that elite performers experience preperformance symptoms associated with positive interpretations of competitive anxiety, whilst maintaining an overall positive affective state. Burton and Naylor's (1997) suggestion that symptoms associated with competitive anxiety are being mislabelled or confused with such emotions such as 'excitement' or 'challenge' is somewhat confounded. The present study reveals performers can experience symptoms associated with competitive anxiety

in conjunction with positive labels of feeling states such as excitement, focus and motivation.

As a consequence of the current findings, a further implication, supporting those of chapter five, is the limitation of the current conceptualisation of precompetitive anxiety and the association it has with preperformance activation (Burton, 1998; Mellalieu, Hanton, & Jones, 2000). Many of the symptoms reported as associated with competitive anxiety appear far different from the original definition purported by Martens et al., (1990). In the current study, for example, observations of the temporal patterning of match-related cognitions experienced by performers, occur in direct comparison to the experience of the frequency dimension of competitive anxiety construct (Jones, 1991). Under the traditional conceptualisation of the frequency of competitive anxiety responses, cognitive intrusions, or thoughts and images regarding competition and forthcoming performance, are construed as negative. However, in the present study, similar cognitions related to forthcoming performance, are very much viewed as positive and an active part of the mental preparation process. Intuitively, these two perspectives, may potentially be one and the same, and provide further evidence for the potential misconception of preperformance activation states.

Theoretical explanations for the experience of a positive interpretation of competitive anxiety symptoms can be found in Processing Efficiency Theory (Eysenck & Calvo, 1992). Essentially, the theory posits that facilitating interpretations of anxiety symptoms will be experienced, providing the performer raises levels of increased effort and concentration. The current findings indicated that the participants viewed their experiences of symptoms associated with nerves as facilitative to performance, whilst simultaneously experiencing high levels of focus and concentration in the precompetition period. In a similar vein, the more complex Cusp-Catastrophe Theory

(Hardy & Parfitt, 1991) has posited that performance levels can be maintained when athletes experience high levels of cognitive anxiety and physiological arousal, provided levels of self-confidence are maintained. Here, self-confidence is proposed to act as a form of protective mechanism to ward off the potential harmful effects of anxiety. The findings in the current study would appear to concur with this theoretical approach, with participants reporting that they experienced preperformance activation states characteristic of high levels of physiological arousal, symptoms of cognitive anxiety, together with high levels of confidence in their ability to perform.

A second major finding from the research is the potential role of the team, and its influence upon an individual's mental state prior to performance. Scant research has investigated the impact that the team can have on an individual's mental preparation for competition. Whilst social psychology research has examined the impact of significant others and their role in increasing arousal levels through social facilitation (Zajonc, 1965), the potential impact on decreased levels of motivation through social loafing effects (Latane, 1981), or the role that the size of the group impacts upon individual participation and feelings of responsibility (Carron & Hausenblaus, 1998), no studies have examined the potential effects that fellow group members have on individual psychological performance states. The current study identified that perceptions of the team climate, and team readiness for competition, are factors that influence an individual's mental preparation for competition. Such perceptions of team activation and readiness appear in some way to impact subsequently upon feelings of collective efficacy and team cohesion. From the current work, therefore, positive perceptions of team climate and team readiness appear to facilitate individual mental preparation for performance. Similarly, negative individual perceptions regarding a lack of team focus

or atmosphere and team preparation, appear to contribute to inappropriate preperformance states.

Comprehensive findings supporting the necessity to achieve ideal preperformance states in order to obtain forthcoming successful performance have yet to be firmly established. Studies (i.e., Hanin, 1997) appear to suggest an optimal recipe of emotions associated with peak and sub-optimal performance (cf. Hardy, Jones, & Gould, 1996). However, as of yet, the link between emotions and subsequent performance consequences could best be described as tenuous. One line of investigation is to invite the performers to describe the perceived importance of establishing an ideal preperformance mental state. Establishing potential importance is vital in the context that, without the necessity to achieve an appropriate preperformance state, subsequent psychological interventions may actually prove worthless. Interestingly, in the present study, the findings indicate a strong relationship between perceptions of mental states and forthcoming performance. A general theme emerged describing ideal preperformance mental states to be a prerequisite for good performance. Specific explanations for this relationship imply the need to activate the mind and body to prevent occurrence of injury, and prepare the individual for the high levels of physical contact the game requires. Furthermore, explanations also state the need to be mentally prepared to prevent a lack of attentional focus and subsequent performance decrements related to inappropriate concentration levels. These findings would appear to concur with previous suggestions provided that describe potential effects of inappropriate mental states upon performance through problems with attentional mechanisms and muscular tension/co-ordination (Gould & Tuffey, 1996), task irrelevant thoughts and inappropriate mental and physical activation states associated with poor performance (Boutcher, 1990). The present study further highlighted that optimal performance does

appear to be a possibility if performers have failed to achieve an appropriate level of preperformance focus. Various critical moments or incidents were provided as evidence of having the potential to induce or trigger an appropriate focus. However, it was indicated that it was extremely difficult to achieve such a focus once the match had commenced. Further it was established that ideal preperformance states were a prerequisite for performance. If future investigations examining the relationship between affective states and performance are to prove worthy, then stronger links and associations require investigation.

Research into the psychology of elite performers has observed the utilisation of psychological skills as a key influence upon mental preparation for competition (Scanlan, Ravizza, & Stein, 1989; Gould, Jackson, & Finch, 1993). The current study reported the use of several mental skills in the precompetition period. One of the primary skills utilised was that of mental imagery. Mental imagery has been observed to influence various psychological factors including levels of arousal, attentional focus, maintaining positive perceptions of oneself and levels of confidence in the precompetition period (Murphy, 1994; Murphy & Martin, in press; Orlick, 1990). Hall and his associates (Hall, 1995; Hall, Mack, Paivio, & Hausenblaus, 1998, Martin, Morritz, & Hall, 1999) have recently advanced the understanding of this construct with the employment of a taxonomy of classification and proposed model of imagery use in sport.

In relation to the precompetition period, the employment of motivation general arousal-imagery (i.e., imagery that represents feelings of relaxation, stress and arousal in conjunction with sport competition; Martin et al., 1999; p.250) has been observed to be more prevalent and possess a greater effect upon physiological arousal and activation states than other forms of imagery use (Hall, 1995; Murphy, 1994; Vealey & Walter,

1993; White & Hardy, 1998). However, the mechanism by which imagery facilitates performance in this manner is as yet unknown. Martin et al., (1999) have suggested possible effects on arousal, anxiety and self-confidence.

The present study provides partial support for Martin's proposals, in that the use of motivation general-arousal was observed to be prevalent, as part of the performer's 'psych up' strategies, for the purposes of achieving physical activation and preparing themselves for competition. In addition, the employment of cognitive specific imagery was also found to be prevalent. Cognitive specific imagery is defined as 'imagery of specific sport skills such as penalty shots in hockey or double axels in figure skating' (Martin et al., 1999; p.250). Previously observed uses of this type of imagery have been in relation to the development and learning of sport skills. No performance improvements or effects have been reported with respect to employment in the precompetition period. From the present findings, it can be gleaned that performers employ a form of cognitive specific imagery to maintain and build confidence through rehearsal of their match-related roles and tasks. This type of imagery appears to act as a means of initial performance accomplishment. Rehearsal of task-specific skills builds confidence with respect to the performer perceiving they have already achieved successful performance of the skill in their mind, when they go out to compete.

The current study attempted to identify elite international team sports performers' psychological experiences in the build up to the commencement of matches. The existence of symptoms associated with competitive anxiety and an overall positive affective state have further been observed, and the importance of achieving a positive affective state, from a team and individual context, has also been identified. In

addition, the employment of various mental, physical and behavioural strategies to control physical and psychological activation have been observed.

With regard to the identification of appropriate strategies employed by elite performers to facilitate ideal preperformance mental states, the current study identified that the employment of cognitive specific imagery was prevalent for mental preparation throughout the duration of the preperformance period. Furthermore, this skill was utilised to enhance mental readiness for competition. Given the relative lack of research examining the effect of this mental skill upon an outcome variable such as psychological readiness for competition, research is required to investigate the impact of mental skills upon preperformance mental states and achievement of mental readiness for competition. The next section of the thesis will therefore consider the efficacy of such an intervention in the sport of rugby union.

PART FOUR: ENHANCEMENT OF
PREPERFORMANCE MENTAL STATES

CHAPTER EIGHT**Alternative Methods of Inquiry II: Single-Case Designs & Mental Imagery**

Having identified the need to measure the efficacy of mental imagery upon preperformance mental readiness, it is necessary to select an appropriate methodology with which to carry out this investigation. Empirical investigations in applied sport psychology have, until recently, adopted a nomothetic or group approach to the evaluation of programme or intervention effectiveness. The group approach to measuring the efficacy of psychological interventions has received much methodological and conceptual criticism (Smith, 1988; Hrycaiko & Martin, 1996). Problems range from ethical concerns regarding employment of control groups to a lack of potency in detecting changes in performance due to averaging of results (Bryan, 1987). Furthermore, equivocal research findings by designs employing a nomothetic approach, with regard to assessing the efficacy of various mental skill interventions, have not conclusively supported or rejected the implementation of such skills. Greenspan and Feltz (1989), in a meta-analysis of psychological studies investigating mental skills training (MST), observed that educational relaxation-based interventions and remedial cognitive restructuring interventions were effective in improving collegiate and adult athletes' performance in competitive situations. However, Weinberg and Williams (1993) suggested more controlled studies were required before definitive conclusions could be reached. These, and other, problems have lead to a call for a more effective way of assessing programme effectiveness (Hrycaiko & Martin, 1996).

Consequently, an idiographic approach has been adopted from clinical psychology and introduced into the sport psychology literature, originally by authors such as Zaichowsky in the early 1980's. Following numerous calls for its adoption, and

the potential benefits of the methodology (Smith, 1988; Bryan, 1987), the idiographic approach has been recently employed with relative success in sport psychology. The following chapter provides an introduction and overview of the single-case design and methodologies, and reviews the emerging literature that has examined the impact of various MST programmes upon psychological performance. The latter section of the chapter examines the research conducted into the MST technique identified as employed by the elite performers in chapter seven, mental imagery, its conceptualisation, subsequent development, and research conducted investigating its role in enhancing sporting performance.

An Idiographic Approach: The Single-Case Design

In the last decade or so sport psychology researchers have called for the examination of alternative methods of inquiry within the discipline (Bryan, 1987; Heyman, 1987; Martens, 1987; Smith, 1988; Wollman, 1986). The underlying rationale for this request was cemented in the need for professional practitioners to adopt a more idiographic or individual perspective to consultancy, as opposed to an approach embracing one of nomothetic or group-based methods. Underpinning this request was a lack of compatibility between research methodologies employed by academic sport psychologists compared with the demands of the applied practitioners (Martens, 1987). One approach suggested as an effective method for assessing the efficacy of interventions in applied settings is that of the single-case design (SCD; Zaichowsky, 1980; Bryan, 1987; Smith, 1988). As Zaichowsky (1980) noted some 20 years ago:

“Single-case experimental designs, if used to study appropriate problems, hold considerable promise for future research in sport psychology.” (p.178).

Finally, a further reinforcement for the adoption of an idiographic approach lay with the existing equivocal research findings in the area of implementation and effectiveness of mental skills (Greenspan & Feltz, 1989).

The idiographic approach focuses upon observation of the variation in the individual athlete's own performance, with particular emphasis on assessing changes, however small, in individual performance. This notion is one ideally suited to elite sporting performance, as often small increases in performance (i.e., behaviour) discern success or failure. The single-case design is quite similar to the group design evident in the majority of psychological studies. Both approaches compare performance or behaviour under different conditions (Barlow & Hersen, 1984). Under a nomothetic approach, groups are presented with different experimental conditions with subsequent behaviours compared between groups by means of statistical analysis techniques designed specifically for the particular method of inquiry. With an idiographic perspective, single-case designs monitor individual's behaviour prior to, and after, the implementation of one or more experimental conditions. The monitoring phase is thus deemed the 'baseline' or 'A' phase, and the implementation the 'intervention' or 'B' phase (Bryan, 1987). By employing this methodology, the participant is deemed to act as his/her own control during the baseline period prior to change in the experimental condition. A typical scientific intervention would therefore involve replication of the A and B phases to confirm treatment effects of the intervention. A subsequent experiment would produce what is termed as a conventional A-B-A-B design.

A further addition to the basic A-B-A-B design is an approach that is widely employed in sport psychology SCD research, the multiple baseline design. This constitutes separate A-B designs in which the duration of baseline period is varied in

order that the researcher can control for events that may correlate with the introduction of the treatment variables. As Zaichowsky (1980) notes:

‘This (*multiple baseline*) design seems particularly suited for sport psychology research because it effectively deals with the ethical and ‘carry-over’ problems encountered by withdrawal designs.’ (p.177).

The multiple baseline deals with the consequential problems faced by the applied practitioner of convincing coach and athlete of the need to withdraw the proposed performance-enhancing treatment for the benefits of the scientific study design. Finally, it may also be noted that carry-over effects may be prominent in treatments such as imagery and relaxation. Participants could quite conceivably perform the treatments themselves, even though they may be requested to refrain from using the treatment. Barlow and Hersen (1984) describe three forms of multiple baseline design; across behaviours, across settings and across participants. In a ‘multiple baseline across behaviours’ design the independent (treatment) variable is applied sequentially to separate and ideally, targets independent behaviours within a single participant. For example, a psychologist may wish to investigate the impact of mental imagery upon two forms of target behaviours of an athlete (e.g., arousal and attention). Multiple baseline across settings designs involve a specific treatment variable (e.g., mental imagery) applied sequentially to a single participant for a single behaviour, but under different settings or situations (e.g., training versus practice). Finally, with a multiple baseline across participants design the treatment variable is applied to different participants for the same problem, with the treatment being introduced sequentially after longer and longer baseline phases. If a change in behaviour occurs immediately after treatment therefore, it can be implied with confidence that it is the independent variable and not the passage over time or some other factor which caused the observed change. This

design is particularly pertinent to applied sport psychology where the practitioner cannot immediately begin an intervention, or may have to wait until they are presented with a particular problem with an athlete's behaviour with which to intervene with the relevant intervention.

Barlow and Hersen (1984) identified five main problems with group design perspectives in clinical psychotherapy. With specific reference to sport psychology, several features which make single-case designs 'user friendly' in applied practice, in comparison with group designs, have been proposed (Bryan, 1987; Martin & Hrycaiko, 1983; Hrycaiko & Martin, 1996; Wollman, 1986; Zaichowsky, 1980). First, single-case designs focus on repeated measurement of an athlete's performance across several participants and/or competitions, and therefore provide potentially valuable information on individual variation in performance. Group designs, with an emphasis on average performance, do not focus on the average performance of individual athletes over time. Second, because experiments typically include three to five participants, a researcher requires only a few participants with the same performance problem in order to evaluate an intervention. For group designs, the difficulty lies with the researcher locating the same performance problem from different groups and samples. Third, all SCD participants receive the intervention at one time or another; there is reduced resistance from coaches or athletes in having to establish a no-treatment control group. Fourth, SCD rely on replication logic as opposed to sampling logic of the group design approach (Smith, 1988). Subsequently, they are not hampered by some of the assumptions required of group designs. Group designs assume the dependant variable is distributed in the population in some fashion (i.e., randomly) and that the samples are randomly selected from that population. Contrasting this perspective, applied sport psychology researchers rarely assess population distributions, with random samples

being non-existent. Finally, SCD place an emphasis on social validation - assessment of how the participants or significant others themselves feel about the methods employed and the results obtained, i.e., the efficacy of the monitored intervention.

Various methods can be employed when assessing the impact of change in an experimental condition. These include, traditional methods, such as visual inspection of data, together with more objective trend estimation and statistical procedures. This particular aspect of the SCD, in the past, has been perceived as a limitation in the employment of single-case designs. As mentioned earlier, the dominant technique employed has been via a set of criteria relating to the characteristics of the data discernible through visual appraisal. Criticism has been directed towards this method as it relies too heavily upon the subjective interpretations of the researcher, and appears a relatively insensitive method for evaluating intervention efficacy (Jones, Vaught, & Weinrott, 1975). Potential problems may lie with variability in data line effectiveness (Kazdin, 1984), and specifically, serial dependency, which may result in subsequent problems with visual appraisal and restrict the application of statistics to determine performance changes (Shambrook & Bull, 1996). Furthermore, it has been argued that this technique may be open to the influence of the statistical characteristics of the data (Kratowill, 1978). The problem may, therefore, result from the data being auto-correlated whereby future or past points can be predicted from existing points due to the high level of dependence in the data. This problem is the most commonly cited as to why conventional statistical procedures cannot be undertaken upon the data within or across phases of experimentation. Equally, the interrelationship with the data may lead to over or under estimations of levels of behaviour and hence lead to incorrect conclusions being drawn (Gottman, 1981). Visual inspection results often vary from

person-to-person and results will often contradict those obtained from statistical analysis such as the split middle technique (Gottman & Glass, 1978).

In response, Hrycaiko and Martin (1996) provide five guidelines for analyses through visual appraisal, standardised in order for determining whether a treatment has had a consistent effect. First, the last few data points of the baseline should be stable or in a direction opposite to that predicted for the effects of treatment. Second, one has greater confidence that an effect has been observed the more times that it is replicated. Third, one has greater confidence that an effect has been observed when there are few overlapping data points between adjacent baseline and treatment phases. The fourth guideline is that one has greater confidence that an effect has been observed if the effect is large. Judgement concerning the size of effect relate to both scientific assessment (i.e., the level of performance during baseline compared to intervention) and to clinical assessment (i.e., aspects of social validity). With respect to the aspects of social validity it is important to note that an improvement of a few percentage points may seem small to an experimenter, however, with regard to an international competitor, a few percentage points may be the difference between making the national team and setting a national record. The issues in SCD, therefore, in applied sport psychology, relate more to clinical as opposed to statistical significance. Often what is statistically significant bears little relationship to what is clinically or practically significant (Zaichowsky, 1980). It would appear sensible, therefore, that analysis should require a combination of both visual and statistical procedures. However, it has been suggested by some authors (i.e., Kazdin, 1982) that the social validation of an intervention may be more salient than demonstrating a statistical effect. This process determines whether participants themselves can confirm that the intervention had an impact on their behaviour. Such measures can be implemented through employment of social validation questionnaires,

and post-intervention interviews, to provide more in-depth responses, in order to establish intervention effectiveness. Alternative approaches in sport psychology have employed data sources to confirm social validity. Ming and Martin (1996) for example, in an intervention study with ice skaters, asked local coaches to confirm if the performance increases in skating ability observed in the experiment would be considered significant in competition terms.

Researchers urge a number of methodological considerations, when considering the implementation of single-case designs. These considerations include obtaining stable baselines of behaviour, gathering reliable data, and utilising an appropriate data analysis technique (Bryan, 1987). In addition researchers are urged to consider acknowledgement of more established potential threats to internal validity (Kratochwill, 1978) and how much single-case designs can control these threats. Such threats include history, maturation, testing, instrumentation, multiple intervention interference, instability, and change in unit composition, reactive interventions and non-retractable interventions. Provision is also advocated for potential threats to external validity (Kratochwill, 1978; Kazdin, 1982). These may emanate from sources including independent variable description and multiple intervention inference. Further external validity threats may arise from potential Hawthorne effects, novelty and disruptive effects, experimenter effects, pre-test sensitisation, post-test sensitisation, interaction of history and treatment effects, measurement of dependant variables, interaction of time measurement and intervention effects, and referent generality.

Psychological Interventions from an Idiographic Perspective

The growth in popularity of single-case designs in social and educational psychology has seen sport psychology researchers attempt to utilise such methods in

relation to testing the efficacy of various individual and combined mental skill packages (Kendall et al., 1990; McKenzie & Liskevych, 1983; Woloko et al., 1993; Hamilton & Fremouw, 1985; Heyman, 1987; Koop & Martin, 1983; Shambrook, Bull, & Douglas, 1994). Shambrook and Bull (1996) employed a multiple baseline design across individuals to investigate the efficacy of imagery training in relation to basketball free throw performance in four female collegiate basketball performers. Whilst only one of the performers demonstrated a consistent improvement after commencing the imagery training, questionnaire results and mental training diaries indicated a positive reception of the imagery training routine.

A study by Hanton and Jones (1999b) examined the effects of a multi-modal intervention package upon four competitive swimmers debilitated by anxiety, employing a staggered multiple baseline design over ten competitive races. Pre-intervention, all participants reported debilitating symptoms of competitive anxiety. Subsequent post-intervention assessment revealed all of the three remaining participants reported facilitative interpretations. Performance improvements were also evident for the swimmers.

The influence of self-talk on the performance of tennis volleying skill of five female participants was observed employing a multiple baseline design (Landin & Herbert, 1999). Following intervention, four of the five players displayed immediate positive changes in skill performance. Subjective visual inspection revealed performance skill improvements were supported by quantitative analysis of four data points, indicating significant differences between pre and post-intervention scores. Further, qualitative analysis revealed players reporting increased confidence following intervention. Explanations for success of the intervention were provided due to the effect of self-talk upon attentional focus and promotion of movement patterns. A further

study by Patrick and Hrycaiko (1998) employing a single-case multiple baseline across individuals design, examined the effects of a mental training package on the performance of a 1600m run of four participants (three triathletes and one elite runner). The package consisted of relaxation, imagery, self-talk, and goal setting. The results demonstrated that the mental training package was effective in improving the running performance of the participants that received the intervention. No differentiation, however, was made as to which particular treatment was most effective.

Swain and Jones (1995) examined the effects of a goal-setting intervention upon selected basketball skills over the course of a competitive season (eight games pre and eight games post-intervention), via the employment of a multiple baseline, single participant design with baseline observations on performance components (e.g., turnovers, rebounds). At the mid season break, players selected one aspect of their play that they felt would benefit from improvement. A goal setting programme was designed based on the goal attainment scaling procedure recommended by Smith (1988). Performance components were then assessed for the next eight games, as they had been in the pre-intervention phase. Following the intervention, three of the four participants showed consistent improvements in the targeted areas of performance. There were no outcome changes in the performance components not targeted by the participants.

Ming and Martin (1996) investigated single-participant evaluation of a self-talk package for improving figure skating performance. The study addressed previous research that has shown a severe limitation in the methodologies employed, ranging from a lack of procedural and inter-observer reliability, and follow-up assessment procedures to assess the impact of the interventions employed. A self-talk package was employed to improve performance of compulsory figures by pre-novice and novice-level figure skaters. The study included ongoing objective behavioural assessment

across practices of the figure skating performance as well as the extent to which the skaters actually utilised the self-talk. A multi-element design, with the multiple baseline replications across four participants, demonstrated that improvements were due to the treatment. Self-report follow-ups at one year indicated that the participants continued to utilise the self-talk during practices. They also believed that the intervention enhanced their test or competitive performance.

Mental Imagery

The value of mental imagery as a performance enhancing technique is well recognised by athletes, coaches and sport psychologists (Hall, 1995). Various authors have identified the ability to employ and control mental imagery as one of the characteristics of peak performance (Williams & Krane, 1988; 1992; Orlick & Partington, 1988; Bull, Albinson, & Shambrook, 1996), and as one of the psychological skills that distinguishes successful athletes from less successful athletes (Mahoney & Avenier, 1987; Meyers et al., 1979; Highlen & Bennett, 1985; Mahoney, Gabriel, & Perkins, 1987). Mental imagery has been reported for use in a wide range of modalities, including both motivational and cognitive situations by athletes (cf. Hall, 1995). Furthermore, athletes are encouraged to employ mental imagery to aid and facilitate in the learning of skills, whilst the technique is a central tenet for sport psychologists in the implementation of psychological skill training programmes.

The study of mental imagery and the ability to visualise performance has been afforded considerable attention in sport psychology. In accordance with this attention, both in applied practice and research, psychologists have employed various definitions and conceptualisations, possessing common and individual properties, in order to describe the construct.

“Those quasi sensory and quasi perceptual experiences of which we are self-consciously aware and which exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts.”

(Richardson, 1969; p.2-3).

Over 200 published studies have investigated the relationship between mental imagery and sport performance. Collectively, these studies have observed that imagery of a particular sport skill can improve physical performance of that skill (Feltz & Landers, 1983; Driskell, Copper, & Moran, 1994). In addition, imagery has been employed to influence performance via a number of other specific variables, including enhancing motivation and self-confidence (Rushall, 1988), coping with injury and pain (Rotella, 1984), regulating arousal (Harris & Harris, 1984) and managing stress and anxiety (Orlick, 1990). Despite research directed towards manipulation of the aforementioned variables, little or no attempt has been undertaken to investigate the effectiveness of these interventions. Rather, the emphasis has been directed towards the learning and performance of motor skills (Martin, Morritz, & Hall, 1999). Causality for the adoption of this approach has been blamed upon the narrow focus of existing imagery theories (Murphy, 1990).

Theories of Imagery

Four theoretical approaches have been generated in the motor domain to explain the effect of imagery upon motor performance. One of the earliest explanations was provided by Psychoneuromuscular Theory (Jacobson, 1930). The theory describes the mechanisms by which imagery facilitates motor learning and performance through ‘vivid imagined events that produce innervation in muscles similar to that produced by the actual physical execution of the movement’ (Martin et al., 1999; p.246). Mental

imagery is implied to strengthen the 'muscle memory' (Vealey & Walter, 1994) for a task by having the muscles fire in the correct sequence for a movement, without actually executing the movement.

A second approach emergent from the motor domain is Symbolic Learning Theory (Sackett, 1934). The theory posits that imagery functions as a cognitive coding system to help athletes acquire or understand the 'mental blueprints' they produce during the execution of the process for movement patterns (Vealey & Walter, 1993). Imagery is proposed to strengthen the mental blueprint, enabling the movements to become more familiar and potentially automatic to the individual. A third explanation proposed is Lang's (1977; 1979) Psychophysiological Information Processing Theory. The model assumes an image to be a functionally organised, finite set of propositions stored by the brain (Murphy & Jowdy, 1992; p.238). Further, the nature of the image consists of two main statements; stimulus propositions, which describe the content of the scenario to be imagined, and response propositions, statements that describe the imager's responses to that scenario. The image is also purported to contain a motor program for the imager on how to respond to the image. The key assumption of the model proposes that the image is more than a mere picture in the brain. There is in fact a physiological response to accompany the image. A final theoretical explanation is provided by Ashen's Triple-Code Theory (1984). The theory specifies three essential components of imagery; the image itself, the somatic response, and a third component ignored by other theoretical approaches, the meaning of the image.

A further development to comprehend imagery has been provided through the work of Paivio (1985) and his analytic framework for imagery effects. Here, it is posited that imagery impacts upon motor behaviour through the cognitive and motivational response systems. Employing this systematic framework, research has examined the

effects of imagery upon psychological constructs including self-confidence, competitive anxiety and intrinsic motivation (Martin & Hall, 1995; Moritz, Hall, Martin, & Vadocz, 1996; Vadocz, Hall, & Moritz, 1997). Despite Paivio's framework furthering the development of the understanding of imagery use in sport, the original conceptualisation has received several criticisms (Martin et al., 1999). First, research has observed that athletes employ more types of imagery than Paivio's framework allows (Hall et al., 1998; White & Hardy, 1998). Furthermore, the model does not account for situational or personal factors that can determine the nature of imagery utilised by an athlete and the subsequent effects of the imagery (Salmon, Hall, & Haslam, 1994). Finally, the perspective provides few predictions regarding the specific types of images that lead to specific cognitive and motivational changes in athletes. As Martin et al., (1999) state:

“because of these limitations, the framework is restricted in its ability to predict the best imagery strategy for attaining a particular outcome (e.g., skill acquisition, increased confidence, decreased arousal) in a particular sport situation (e.g., training, competition).” (p.247).

A Conceptual Framework: An Applied Model of Imagery in Sport

In response to the limitations of existing imagery conceptualisations and theoretical perspectives an applied model of imagery has recently been developed to further the understanding of the topic area. The model (figure 8.1), proposed by Martin et al., (1999), focuses upon the mode of imagery employed by the athlete as a determinant of cognitive, affective, and behavioural outcomes. This aspect of the model is underpinned by the knowledge that different types of images are related to different types of outcome (Paivio, 1985; Suinn, 1996). The model further incorporates two theories of imagery, Lang's (1977; 1979) Bioinformational Theory and Ashen's (1984) Triple Code Model of imagery. Ashen relates the fact that every image has particular

relevance and personal meaning to the individual. Consequently, the same images may have different effects on different people, eliciting subsequent varied reactions amongst athletes. In addition to producing cognitive reactions, imagery also elicits physiological and emotional reactions (Bandura, 1986), a central tenet of Lang's Bioinformational Theory. Therefore, vivid imagery activates information about stimulus characteristics of the imagined situation and response propositions (physiological and overt behavioural responses) to the imagined situation. Despite sport psychologists incorporating the physiological and emotional reactions into athletes imagery and examining the subsequent benefits (Orlick, 1986; Rushall, 1988; Suinn, 1972; 1986), little research has reported the benefits of including response propositions into athletes' imagery scripts (Bakker, Boschker, & Chung, 1996; Murphy et al., 1988).

In attempting to address these recommendations, very little empirical research has supported this belief (Woolfolk, Murphy, Gottesfield, & Aiken, 1985; Woolfolk, Parish, & Murphy, 1985). More recently, however, research has begun to describe and identify other functions of imagery that athletes utilise to achieve different types of outcomes (Hall et al., 1998; Hall, Rodgers, & Barr, 1990; McIntyre & Moran, 1996; White & Hardy, 1998). This research has led to the development of a subsequent taxonomy to classify the different types of imagery employed by athletes. Constructed using Paivio's (1985) model of imagery effects, Hall and his colleagues subsequently verified this taxonomy in a series of empirical studies within the sport domain (Hall et al., 1998). The classification identified five distinct imagery types:

- *Motivational-Specific (MS)*: Imagery that represents specific goals and goal oriented behaviours, such as imagining oneself winning an event, standing on a podium receiving a medal, and being congratulated by other athletes for a good performance.

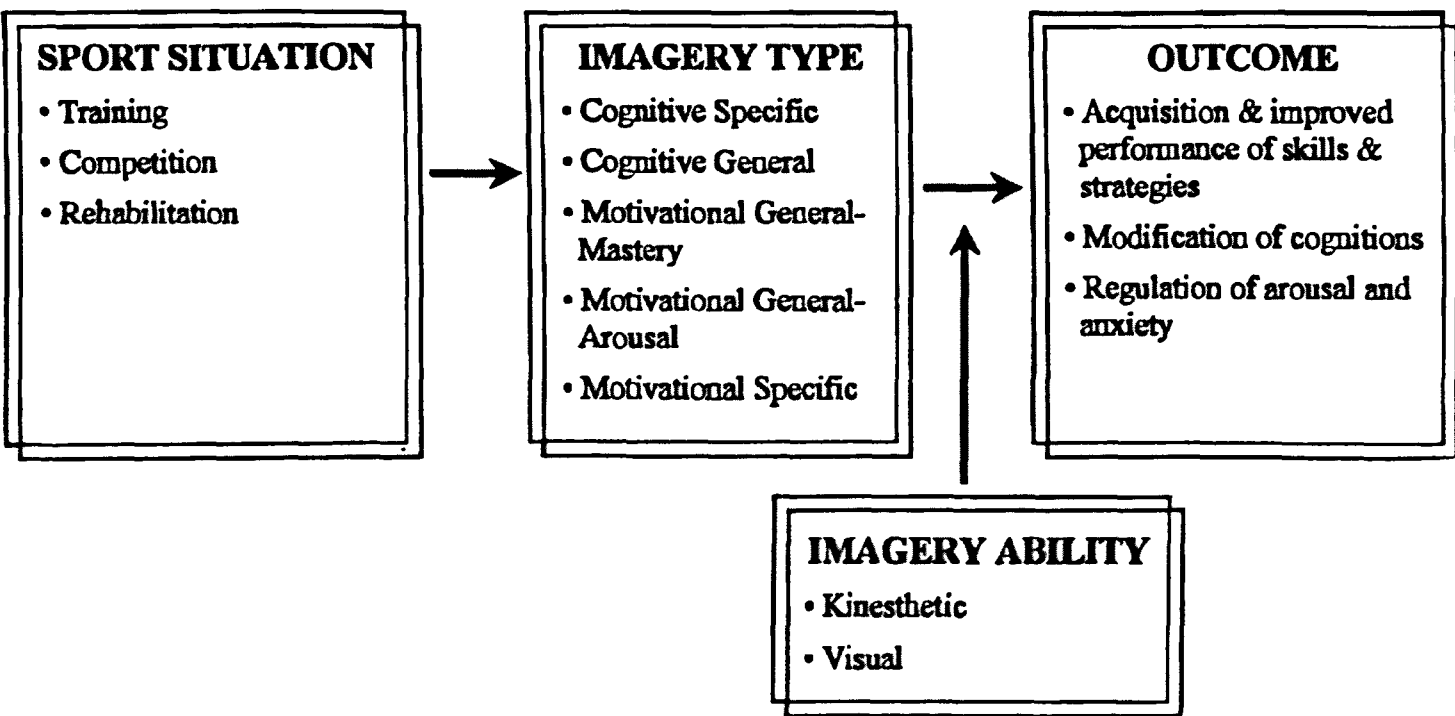


Figure 8.1: An applied model of imagery in sport (Martin et al., 1999).

- *Motivational General-Mastery (MG-M)*: Imagery that represents effective coping and mastery of challenging situations, such as imagining being mentally tough, confident, and focused during sport competition.
- *Motivation General-Arousal (MG-A)*: Imagery that represents feelings of relaxation, stress, arousal and anxiety in conjunction with sport competitions.
- *Cognitive Specific (CS)*: Imagery of specific sports skills such as penalty shots in hockey or double axles in figure skating.
- *Cognitive General (CG)*: Imagery of the strategies related to a competitive event, such as imagining the use of full court pressure in basketball or a baseline game in tennis.

The five types are considered to be functionally orthogonal, yet, athletes may possibly be able to experience two or more types of imagery simultaneously (Martin et al., 1999). A subsequent questionnaire has also been developed to describe the imagery functions. The Sport Imagery Questionnaire (SIQ; Hall et al., 1998) measures the extent to which the five images are employed. The five factor structure of the SIQ has been supported in preliminary validation studies (Hall et al., 1998) which have demonstrated adequate internal consistency and construct validity, together with low to moderate inter-scale correlations and relative independence between the types of imagery.

When examining the existing imagery literature under these conceptualisations, the majority of research is observed to have investigated the employment of cognitive specific (i.e., imagery of skills) imagery as a technique for enhancing the learning and performance of motor skills. The general consensus is that the imagery of motor skills facilitates learning, acquisition and performance of these skills (Driskell et al., 1994;

Feltz & Landers, 1983). This finding has been observed across a wide range of sports skills including both fine and gross motor skill tasks.

A further outcome observed has been that of influencing athletes' cognitions and respective thoughts and beliefs (Murphy, 1994; Suinn, 1996). Changes in thoughts and beliefs are contingent upon the athlete's interpretation of imagery, which in turn is contingent upon the combination of personal, behavioural, and environmental factors unique to the individual. Consequently, if an athlete interprets an image positively, it can have corresponding positive effects upon self-efficacy, motivation and anxiety. Conversely, a negative interpretation would imply a detrimental effect upon such affective states.

In spite of these predictions relatively equivocal findings have been produced when assessing the effects of imagery upon self-efficacy and self-confidence. Martin et al., (1999) have implied these observations may be due to the utilisation of cognitive specific imagery for an outcome that is best controlled by images of a motivation general-mastery (MG-M) mode.

“Researchers have failed to find a consistent relationship between imagery use and self-efficacy because study participants did not always use an imagery strategy conducive to enhancing self-efficacy.” (p.252).

Further, for imagery to have any beneficial effects, the content of imagery must reflect the intended outcome (Dennis, 1985). Research employing MG-M imagery can be seen to have had positive effects upon efficacy exceptions (Feltz & Reissinger, 1990), self-efficacy (Cohen, 1992) and with particular respect to self-confidence (Callow et al., 1998). Empirical findings have also been supported by professional practice observations (Orlick, 1990; Suinn, 1996).

Mental Imagery and the Regulation of Arousal and Competitive Anxiety

The employment of imagery to regulate arousal is based upon the premise of Lang's Bioinformational Theory (1977; 1979). Here it is predicted that certain images elicit changes in one's physiological arousal. The theory suggests athletes should employ images associated with stress, anxiety and excitement (i.e., MG-A imagery) to increase levels of arousal (Martin et al., 1999). Anecdotal reports examining 'psych up' strategies of athletes suggest this is exactly what they do (White & Hardy, 1998; Caudill, Weinberg, & Jackson, 1983). Further, empirical support has also observed indicators of arousal, such as heart rate, to increase when athletes employ MG-A imagery (Hecker & Kaczor, 1988).

Interestingly, however, studies examining the effects of cognitive specific imagery upon arousal have observed no effects (Anshel & Wrisberg, 1993; Weinberg, Seabourne, & Jackson, 1981). These findings may be due to the fact that "CS imagery lacks the stimulus characteristics and response propositions required to increase arousal" (Martin et al., p.253). Research has also been provided to support the use of MG-A imagery by athletes to psych themselves down or to reduce arousal levels. (Cancio, 1991; Hall et al., 1998; Orlick, 1990; White & Hardy, 1998). However, whilst these initial findings indicate promise, the concepts have yet to be tested empirically.

A further outcome examined by researchers has been the impact of imagery on the control of competitive anxiety. Research investigating the utilisation of CS-imagery (Terry, Coakley, & Karageorghis, 1995; Weinberg et al., 1981) or MG-M strategies (Carter & Kelly, 1997) has been unable to discern between control and experimental groups. Vadocz et al., (1997) were similarly unable to predict precompetition state anxiety in a linear regression model with the use of CS and MG-M imagery. Employment of MG-A imagery did, however, account for a significant variance in

athletes' self-reported anxiety. Therefore, whilst relatively strong support for the anxiolytic effects of MG-A imagery exist, investigations have tended to examine a combined package, with other cognitive behavioural strategies such as the use of stress inoculation training (SIT; Meichenbaum, 1985) and the subsequent supporting research (Kerr & Leith, 1993; Mace & Carroll, 1985; Mace et al., 1987). Collectively, this research would appear to support the notion that changes in competitive state anxiety levels are related to the type of imagery strategy employed. Despite the relative support for the use of MG-A imagery in stress reduction, the exact role and treatment effect is yet to be established.

“... further research is needed to tease apart the effects of imagery per se from the effects of the aspects of multi-component intervention..... One drawback of multi-component interventions is their length, it would be valuable to know the role anxiety plays in the treatment effects.... interventions could then be streamlined to include only the most effective treatment components. It is likely athletes would adhere more to abbreviated version than full-blown versions.”

(Martin et al. 1999; p.255).

From the review of literature it is evident that the impact of mental imagery upon regulation of preperformance states has received scant attention. Furthermore, relatively few studies examining the impact of imagery have employed an idiographic approach to the study. The chapter has also highlighted the applicability to applied sport psychology of the adoption of such an approach to the study of mental skills training, in assisting investigators with the assessment of the efficacy of psychological interventions. It would seem appropriate, therefore, that in attempting to measure the efficacy of the impact of a psychological skill, such as mental imagery, upon a variable such as preperformance mental readiness, a single-case design method should be adopted.

CHAPTER NINE**The Influence of Imagery upon Enhancement of Preperformance Mental States in Male Rugby Union Players**

In the investigation of the enhancement of preperformance mental states the thesis has observed the use of task-specific imagery in elite rugby union players. A lack of research addressing the direct impact of CS-imagery upon preperformance affective states, and subsequent attempts to control activation has been identified. Further, there is a need to investigate the effectiveness of strategies within potential populations that will require such interventions i.e., potential elite performers. Therefore, the purpose of the present study was to investigate the efficacy of a CS-imagery programme in influencing the level of preperformance mental readiness in sub-elite rugby union players.

Methodology

Participants

Participants for the study were selected from a squad of 25 players from a British male collegiate rugby union team competing in the national collegiate championships. The team was rated amongst the top four nationally over the past decade in collegiate competition.

Selection of participants suitable for the intervention was established via a four-step procedure. First, at the pre-season stage, performers were administered an adapted rugby version of the performance profile (Hodge & McKenzie, 1998). Second, employing standard performance profile procedures (Butler & Hardy, 1992) participants were asked to identify the psychological factors perceived to be representative of the ideal performer in their particular position, and rate themselves on those factors

accordingly. Subsequently, participants were then asked to indicate an aspect of their psychological preparation and performance they felt specifically needed working on and improving. Third, from the completed profiles, participants were selected based upon criteria that required performers who identified problems with achieving appropriate levels of preperformance psychological readiness. Fourth, subsequent follow-up one to one interviews were conducted with the participants to further identify and clarify the nature of the area they wished to develop.

Five participants were identified as suitable for the intervention and were subsequently invited to participate in the study. All participants agreed, and provided their informed consent (appendix E). Over the duration of the study, however, one member was forced to withdraw due to receiving a long-term injury that prevented active participation in the sport. The four remaining participants were aged between 21-24 yrs. ($M=21.5$; $SD=2.05$) and were regular starters on the team throughout the course of the competitive season. All participants had limited exposure to mental skills training. They had also received no formal sport psychology education or intervention work.

Experimental Design

A single-case multiple-baseline-across-individuals design (Barlow & Hersen, 1984; Martin & Peter, 1996) was employed to assess the effect of the imagery intervention upon preperformance affective states. Single-case designs are now firmly established in sport psychology and have been previously described in the literature (Bryan, 1987; Shambrook & Bull, 1995; Hrycaiko & Martin, 1996).

Participants were observed in baseline and intervention phases. The intervention, a mental imagery package was introduced when the dependent variable was deemed

stable (relatively consistent over time) or demonstrated a trend in the opposite direction of the change anticipated when introducing treatment to each individual (Kazdin, 1992). A sequential introduction of the intervention occurred until all participants received the experimental treatment.

Dependent Variables

Data were collected from performers directly following competition in national collegiate matches. Following each performance, a rating scale was administered to measure the level of desired preperformance psychological state achieved by the performer. This was measured on a simple Likert scale of 1-10. The range of the scale measured from 1 'Not at all' to 10 'Desired mental state achieved.'

To establish further baseline data, participants were requested to complete two questionnaires, the Preperformance Feelings Scale (see part II of the thesis) and the Sport Imagery Questionnaire (Hall et al., 1998) to assess preperformance mental states and imagery use respectively. These were administered and completed by the participants at three phases during the study. First, on identification of appropriate participants for selection, second prior to intervention, and finally, following the intervention phase.

The Pre-Performance Feelings Scale (PPFS)

The PPFS is a trait measure, developed in chapter four (appendix D), that consists of 40 adjectives that describe how sports performers usually 'feel' directly prior to competing. The list is based on measures of 'feelings' taken from the affective lexicon (Clore, Ortony, & Foss, 1987), used to describe affective experiences, together with existing sport mood state measurement scales (e.g., POMS, McNair, Lorr, &

Dropleman, 1971). The scale consists of eight sub-scales (four negative and four positive) each of five adjectives that describe common feelings for that sub-scale. The eight sub-scales are mental preparation, anger, distress, confidence, joy, competitive anxiety, and positive perceptions of physical state and negative perceptions of physical state. Initial validity and reliability measures in chapter four demonstrated the PPFS to be a good indicator of pre-performance affective states.

Each item on the scale has an intensity and direction component. For intensity, participants were asked to rate the extent to which they experienced the feeling on a scale of '1' "Not at All" to '7' "Extremely So". Thus, possible sub-scale scores ranged from 5 to 35. On the 'direction' scale, participants were asked to rate the extent to which they experienced the intensity of each symptom as usually either facilitative or debilitating to their subsequent performance. The response scale ranged from -3 ('very debilitating') to +3 ('very facilitative'). Thus, the direction scores on each sub-scale ranged from -27 to +27. Preliminary reliability and validity measures were reported in phase two of chapter four.

Sport Imagery Questionnaire (SIQ)

The SIQ (appendix I) is based upon a conceptual taxonomy of imagery (Hall et al., 1998) and measures five types of imagery use, Motivation Specific (MS): Imagery that represents specific goals and goal oriented behaviours, such as imagining oneself winning an event, standing on a podium receiving a medal, and being congratulated by other athletes for a good performance. Motivational General-Mastery (MG-M): Imagery that represents effective coping and mastery of challenging situations, such as imagining being mentally tough, confident, and focused during sport competition. Motivation General-Arousal (MG-A): Imagery that represents feelings of relaxation, stress, arousal

and anxiety in conjunction with sport competitions. Cognitive Specific (CS): Imagery of specific sports skills such as penalty shots in hockey or double axels in figure skating. Cognitive General (CG): Imagery of the strategies related to a competitive event, such as imagining the use of full court pressure in basketball or a baseline game in tennis.

The scale comprises thirty items that contain statements relating to the various types of imagery employed. Items are scored on a 7 point likert scale, ranging from 1 “Rarely” to 7 “Often”. Therefore, a higher score reflects greater imagery use. Each sub-scale contains six items. Mean sub-scale scores are calculated for each participant by summing the item scores for each sub-scale and dividing by the number of items in the sub-scale.

The five factor structure of the SIQ has been supported in preliminary validation studies (Hall et al., 1998) which have demonstrated adequate internal consistency (alpha coefficients $>.70$) and construct validity, together with low to moderate inter-scale correlations ($-.45$ to $.32$) and relative independence between the types of imagery use conducted in the scale.

Treatment

The intervention was administered individually to each participant, and was based upon the recommendations for implementing a mental imagery intervention programme (Vealey & Walter, 1992; Bull, Albinson, & Shambrook, 1996; Hodge & McKenzie, 1998). The procedure consisted of a standard introductory education session delivered to the participant by the sport psychologist. This was followed by the development of a specific imagery session tailored towards one that the participants would employ in the intervention.

Participants were encouraged to make the image as specific and personal as possible in order to facilitate adherence to the intervention (Bull, 1991). The image developed contained various stimulus propositions and response preparations to fully involve the participant in the emotional process (Lang, 1977; 1979). In developing the specific image, an individualised imagery script was devised and put onto audiotape. To maximise the imagery effect participants were recommended to practise the imagery session for at least five or more minutes a day.

The intervention was administered by the researcher, a nationally accredited sport and exercise psychologist with the British Association of Sport and Exercise Science (BASES), who had over 20 years experience of playing and coaching rugby union. A mental skills training diary was also given to each participant to monitor and evaluate the amount of imagery training employed and adherence to design recommendations (Shambrook & Bull, 1996). To ensure treatment was consistently applied (i.e., procedural reliability), a behavioural checklist was employed to ensure standardisation and consistent treatment.

Treatment of Data

Scientific assessment of treatment affects

Assessment of data occurred in three phases. First, procedural reliability measurements were taken to ensure the intervention had been employed evenly across participants. Second, the data were graphed and visually inspected to determine whether a substantial effect had occurred. When examining the effects of a treatment upon the dependent variable, greater confidence can be assured when the following conditions are satisfied (Martin & Pear, 1996): The number of times the effect is replicated within and across participants; the fewer the number of overlapping data points between

baseline and intervention phases; the sooner the effect is observed following intervention; the larger the effect compared to the baseline.

Clinical assessment of treatment affects (social validity measures)

After completing the study, each participant was requested to anonymously complete a social validation questionnaire (appendix J). The scale contained four questions (Swain & Jones, 1995) to establish the effectiveness of the intervention; a) how important to you is improvement on the selected component? b) Do you consider any changes in the component that have occurred to be significant? c) Has the procedure proved acceptable to you? d) Has the procedure proved useful to you? Responses on the scale provided ranged from 1 "Not at all" to 10 "Very much so". To glean additional information, open-ended questions were also provided to invite participants to explain underlying reasons for the relative success or failure of the intervention. In addition, two of the coaches from the team were presented with the results of the study, and asked to comment upon whether they perceived the intervention to be effective, and the perceived usefulness to the team of such interventions.

Results

Intervention Effects

The mental skills training diaries for each of the participants revealed that the imagery training had been employed regularly after the implementation of the intervention. All of the participants reported that the journal reflected accurately the amount of planned cognitive specific imagery training undertaken. Furthermore, several of the participants reported carrying out more training than the initial recommendations. Procedural reliability measures confirmed that the intervention had been applied

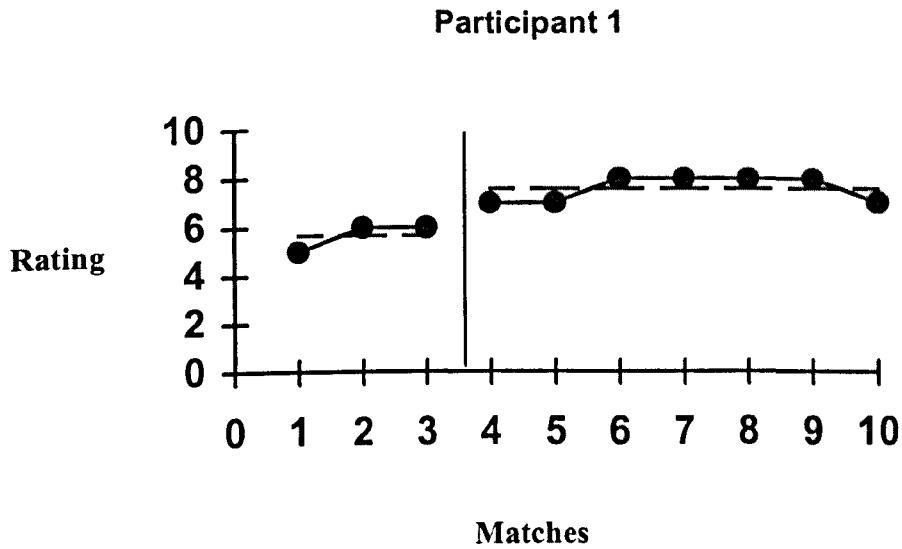


Figure 9.1: Desired outcome performance scores across participants. Solid lines indicate staggered implementation of imagery intervention. Dashed lines represent mean scores for performance pre and post-intervention.

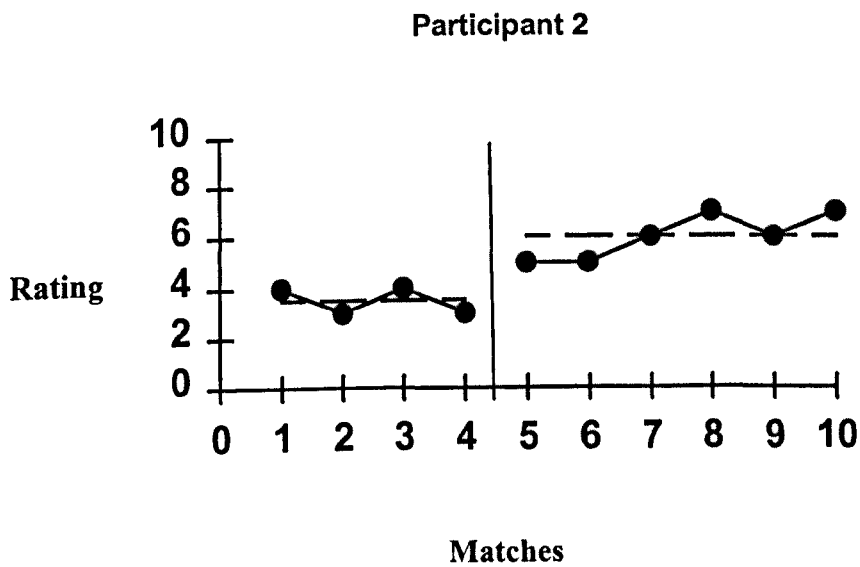


Figure 9.1 contd.: Desired outcome performance scores across participants. Solid lines indicate staggered implementation of imagery intervention. Dashed lines represent mean scores for performance pre and post-intervention.

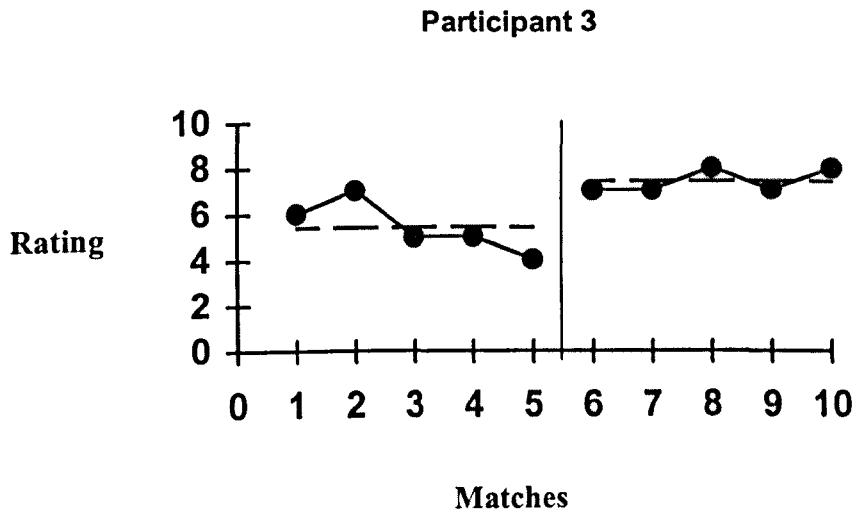


Figure 9.1 contd.: Desired outcome performance scores across participants. Solid lines indicate staggered implementation of imagery intervention. Dashed lines represent mean scores for performance pre and post-intervention.

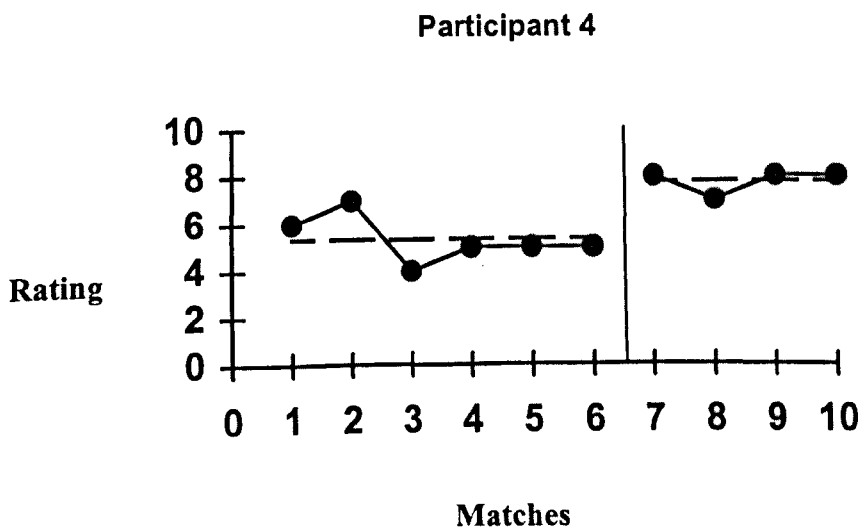


Figure 9.1 contd.: Desired outcome performance scores across participants. Solid lines indicate staggered implementation of imagery intervention. Dashed lines represent mean scores for performance pre and post-intervention.

consistently across participants'. The intervention effect upon each participant's perceived achievement of preperformance mental readiness is shown graphically in figure 9.1. Average scores at baseline and intervention are presented in table 9.1. PPFS and SIQ measures are presented in table 9.2 and table 9.3 respectively. For all four participants the rating of desired preperformance mental readiness increased during the intervention phase. Mean achievement desired outcome data prior to, and following, intervention revealed an increase in mean scores from 4.98 (SD=.49) prior to intervention to 7.18 (SD=.39) after the intervention. No considerable differences were observed within PPFS and SIQ scores at the beginning of the experiment and directly prior to intervention. However, PPFS scores prior to and following the intervention revealed, on average, a relative increase in mental preparation, self-confidence and positive perceptions of physical states sub-scales, and a corresponding reduction in the competitive anxiety sub-scale. Mean SIQ sub-scale scores showed an increase across constructs in both the use of cognitive specific and motivational general-arousal imagery.

Participant one displayed an immediate effect after intervention. Employing visual inspection criteria, the level was significantly different compared to that of the baseline. On average, baseline scores were 5.67 (SD=.23) compared to 7.57 (SD=.50). In spite of the data trend being positive during the baseline phase, following the intervention, there were no overlapping data points observed. Participant two also displayed an immediate effect after intervention. The level was significantly different to that of the baseline. Average baseline scores were 3.50 (SD=.67) compared to 6.00 (SD=.30) in the intervention. Although a variable baseline was established, following intervention, as with participant one, no data points were observed to overlap. Participant three showed an increase in score after the intervention, although several

overlapping data points were observed. A stable baseline was difficult to establish, therefore, a decision was made to intervene on a downward trend on the baseline. In this way any positive effects of the intervention would be revealed by a reverse in the baseline trend (Barlow & Hersen, 1984). Overall, average scores were higher in the intervention phases than the baseline. Mean scores were 5.40 (SD=.97) compared to 7.40 (SD=.44) in the intervention phase. A stable baseline was established with participant four after six matches. Participant four showed an immediate increase in score after intervention. There was only one overlapping data point, with average scores in the baseline 5.33 (SD= .30) compared to 7.75 (SD=.58) in the intervention.

Social Validity Measures

The results of the post-intervention questionnaires revealed that overall the performers were happy with the effects of the intervention (table 9.4). Specifically, mean values were high for perceptions of importance of the intervention, perceptions of significant changes, acceptabilities and usefulness of the procedure.

Open-ended responses asked respondents to describe the perceived function of the impact of the mental imagery upon preperformance mental readiness. Main responses described the interventions as 'warming the muscles up', 'getting focused and switched on' 'sharpening the mind' 'helps you to tune into the pace of the game' and 'warms you up mentally and physically to play'. To extend the social validation of the study, the two coaches of the squad from which the participants represented, were invited to provide responses on the intervention and study findings. Both coaches indicated it was important to achieve an ideal preperformance mental state prior to performing. Subsequent consistent performance was also identified as difficult to achieve if performers failed to establish correct levels of physical, mental and technical

Table 9.1:
Means and standard deviation for subjective ratings of preperformance desired outcomes during baseline and intervention phases

Participant	Outcome Ratings	
	Baseline	Intervention
1	5.67 (.23)	7.57 (.50)
2	3.50 (.67)	6.00 (.30)
3	5.40 (.97)	7.40 (.44)
4	5.33 (.30)	7.75 (.58)

Table 9.2:
Means and standard deviation for PPFS scores at pre-baseline, pre-intervention and post intervention phases

Subscale	Time Period		
	Pre-Baseline	Pre-Intervention	Post Intervention
Mental preparation	19.25 (3.50)	19.25 (2.98)	23.50 (3.15)
Distress	10.75 (.95)	10.75 (1.25)	10.75 (.72)
Joy	10.25 (.57)	11 (4.16)	10.50 (2.84)
Anger	5.50 (3.09)	5.50 (1.00)	5.25 (2.89)
Competitive anxiety	15.25 (3.11)	14.75 (4.11)	12 (4.08)
Confidence	17.75 (4.2)	17.75 (1.7)	22 (3.14)
Positive perceptions of physical state	19.5 (2.08)	19.5 (2.64)	23 (2.05)
Negative perceptions of physical state	12.75 (2.98)	15.25 (3.3)	8 (3.12)

Table 9.3:
Means and standard deviation for SIQ scores at pre-baseline, pre-intervention and post intervention phases

Subscale	Time Period		
	Pre-Baseline	Pre-Intervention	Post Intervention
Motivation-specific (MS)	2.31 (.43)	2.45 (.09)	3.1 (.76)
Motivational general-mastery (MG-M)	1.54 (.65)	1.54 (.04)	2.98 (.54)
Motivation general-arousal (MG-A)	2.23 (.88)	2.23 (.62)	5.12 (.60)
Cognitive specific (CS)	3.4 (.22)	3.56 (.21)	6 (.55)
Cognitive general (CG)	3.01 (.36)	2.84 (.98)	4.23 (.53)

Table 9.4:
Post intervention responses to measure intervention effectiveness

Question	<i>M</i>	<i>SD</i>
Intervention effectiveness	7.75	.96
Importance of desired states	9.25	.96
Usefulness of the intervention	8.50	.50
Level of satisfaction with the intervention package	7.75	.58

preparation prior to competition. Responses regarding the effectiveness of the results in achieving mental readiness confirmed that the improvements were perceived as significant. Collectively, these results suggest that cognitive specific mental imagery can be an effective intervention for enhancement of sub-elite rugby union player's preperformance mental states.

Section Discussion

The present study demonstrated across all four participants that a treatment effect was observed after the intervention package was administered. Therefore, preperformance mental readiness was enhanced when cognitive specific imagery was employed prior to performing in rugby union. In addition, responses to a sport-specific measure of preperformance mental states constructed and validated in chapter four, the PFFS, revealed across the participants, a rise in perceived experiences of mental preparation, self-confidence and positive perceptions of preperformance physical activation. Equally, a reduction in negative perceptions of physical states, and perceived levels of competitive anxiety experienced were also reported. Scientific assessment of data was supported by clinical measures that reported the participants believed the intervention to be useful and effective and had a direct impact upon the dependant variable. The value of the intervention was further supported by the positive comments from the coaches of the participants regarding the desired effectiveness of achievement of ideal preperformance states.

The study provides full support for utilising single-case designs when assessing the effectiveness of an intervention within applied sport psychology (Wollman, 1986). Although previous research has examined the impact of mental imagery upon performance involving physical behaviours (Driskell, Moran, & Copper, 1994), little

research has examined the specific impact upon regulation of preperformance affective states and mental readiness for competition. Existing studies attempting to regulate arousal and anxiety have employed multi-modal intervention packages (i.e., Hanton & Jones, 1999). Where research has attempted to regulate arousal and anxiety, equivocal findings have been reported, although, anecdotal research has provided support for the impact of mental imagery upon arousal and anxiety (White & Hardy, 1998).

A mediating factor proposed as determining the effectiveness of imagery has been the type of imagery use (Hall et al., 1995). Employing a five-factor taxonomy of imagery use, Hall et al., (1995) proposed motivational-general arousal imagery, i.e., imagery representative of feelings of relaxation, stress, arousal and anxiety in conjunction with sport competitions, would have greater effects upon regulation of anxiety and arousal compared to other imagery types. A frequently researched type of imagery, cognitive specific (CS-imagery), or imagery of specific sports skills, has been observed to have little or no impact upon regulation of factors such as arousal. Martin et al., (1999) proposed this lack of effect was due to the fact that CS-imagery lacked the appropriate stimulus characteristics and response propositions required to facilitate the necessary increases in arousal.

Contrary to these proposals, the study in chapter seven identified the use of what may be classified as cognitive specific imagery, by elite international rugby union players, in the preperformance period, to achieve mental readiness and appropriate activation states prior to performance. The current study has further supported these findings by observing the efficacy of the use of such task-specific imagery, in an intervention package, upon preperformance mental readiness and activation states in a population of sub-elite rugby union players. Possible reasons as to why the current CS-imagery intervention was effective compared to previous attempts, may be due to the

fact that the meaning of the image was important to the participants in the current study. A central tenet of Ashen's (1984) Triple Code Model of imagery maintains that every image has particular relevance and personal meaning to the individual. Consequently, the same images can have different effects upon different people, eliciting subsequent varied reactions amongst athletes. In addition to cognitive reactions, imagery also elicits physiological and emotional reactions (Bandura, 1986). In the current study, participants were asked to imagine themselves performing key roles and aspects of their performance. Therefore, attempting to make the image as specific, meaningful and individual to the participant as possible, may provide the necessary stimulus for the image to achieve its' objective.

A central tenet of Lang's (1977; 1979) Bioinformational Theory focuses upon physical and emotional reactions of the whole experience. Vivid imagery is proposed to activate information about the stimulus characteristics of the imagined situation and response propositions (physiological and overt behavioural responses) to the imagined situation. Despite the fact that sport psychologists have been incorporating the physiological, and emotional reactions into athletes' imagery, with the subsequent benefits (Orlick, 1986; Rushall, 1988; Suinn, 1972; 1986), very little research has reported the benefits of including response propositions in athletes' imagery scripts (Baker, Boschker, & Chung, 1996; Murphy et al., 1988). In the current study, the participants were provided with individualised imagery scripts that required them to focus on the various physical and emotional aspects of their performance. A lack of support for the influence of CS-imagery may, therefore, previously have been due to the absence of the necessary stimulus propositions.

A further explanation for the previous equivocal findings may be attributed to the nature of the desired outcome. Specifically, the task of achieving mental readiness

involves the employment of one or more types of imagery, as classified by Hall et al.'s, (1995) framework. Asking performers to imagine focusing themselves upon performing one of their task-specific skills in the forthcoming match, and associate closely with the subsequent movements and associated feelings, may potentially be inducing use of both motivation general-arousal (MG-A) and cognitive specific (CS) imagery. This interesting proposal is partially supported by the data from the SIQ scores. Clear differences were reported pre and post-intervention, with regard to the type of imagery use. Average utilisation of motivation general-arousal (MG-A) and cognitive specific (CS) imagery rose considerably from the beginning of the baseline to the end of the intervention phase.

In the current study, therefore, it could be implied that two possible types of imagery use were responsible for the increased outcome of preperformance mental readiness. In the context of the type of imagery use, future research may wish to consider separating the different imagery types and examining their potential individual impact upon subsequent outcomes. In the present study, however, attempting to withhold or manipulate specific types of imagery in relation to the task of achieving mental readiness may be unethical, with regard to the performance situation, and the subsequent potential detrimental effects the participants may have suffered. Further, the findings of the study indicate that the employment of one type of image alone (i.e., motivation general-arousal) may not be sufficient to achieve the desired effect when attempting to regulate preperformance affective states.

Potential theoretical explanations for the exact mechanism of the impact of imagery upon mental readiness and arousal are best described as tentative. The follow-up social validity measures invited participants to comment upon their perceived mechanisms for the impact of the intervention. From the responses, key themes emerged

that perceived the use of such imagery as a means of 'mental warm up'. A theoretical explanation from Lang's (1977; 1979) Bioinformational Theory may be able to explain these potential proposals. Vivid imagery is believed to activate information about stimulus characteristics of the imagined situation, and response propositions can activate physiological and overt behavioural responses. Therefore, imagining performing the skill, together with the associated physiological and emotional symptoms may activate the physiological and psychological response systems. It appears therefore, that the intervention may have helped to act as a 'mental warm up', to accompany the physical warm up, as part of the overall preperformance routine. Again, the previous lack of effectiveness of CS-imagery may have been due to the fact that it was employed in the context of more general arousal-related outcomes. Here it was directed towards achieving a specific activation state, employing specific images and responses.

A secondary effect of the intervention was to build confidence and reduce levels of anxiety. This was reported in the differences in average PPFS scores before and after the intervention. Indeed, the follow-up questionnaires supported the findings with participants commenting that achieving mental readiness helped them to 'feel more focused', and subsequently 'more confident' about their forthcoming performance. Equivocal findings have been produced when assessing the effects of imagery upon self-efficacy and self-confidence. Martin et al., (1999) have attributed this to the use of cognitive specific imagery for an outcome that is best controlled by those of motivation general mastery imagery (MG-M).

"Researchers have failed to find a consistent relationship between imagery use and self-efficacy because study participants did not always use an imagery strategy conducive to enhancing self-efficacy." (p.252).

Further, for imagery to have beneficial effects, the content of the image must reflect the intended outcome (Dennis, 1985). Research employing MG-M imagery has been observed to have positive effects upon efficacy expectations (Feltz & Reissinger, 1990), self-efficacy (Cohen, 1992) and with particular respect to self-confidence (Callow et al., 1998). Empirical findings have also been supported by professional practice observations (Orlick, 1990; Suinn, 1996). However, the mechanism by which imagery facilitates performance in this manner is as yet unknown.

Chapter seven reported the employment of cognitive specific imagery in elite rugby union players to maintain and build confidence through the rehearsal of their match related roles and tasks. This was perceived to act as a form of initial performance accomplishment. The rehearsal of role specific skills, therefore, appears to act as a means of building confidence, in that the performer has already achieved successful performance of the skills in their mind when they go out to compete. Equally, it may also constitute a form of vicarious experience (Bandura, 1977) to reinforce beliefs and perceptions of confidence. Self-confidence has also been reported as a mediator of competitive anxiety (Jones, Swain, & Hanton, 1994). Further, studies in chapters five and seven identified the presence of self-confidence and an overall positive preperformance affective state, together with the existence of competitive anxiety symptoms. Therefore, it would seem probable in the current study, that the increased confidence experienced by the feelings of mental readiness, reduced any potential concerns or anxieties surrounding abilities and perceptions of confidence for forthcoming performance. It is also probable, that the increase in feelings of confidence surrounding preparation for competition, may have enabled the participants to view any anxiety symptoms experienced in a favourable or positive manner (Hanton & Jones, 1999).

The present study has established that cognitive specific mental imagery, through employment of a focus upon forthcoming match-related tasks and skills, and associated feelings, can be utilised to facilitate sub-elite male rugby union player's mental preparation for competition. Specifically, employment of the intervention has led to the enhancement of mental readiness, with increases in levels of feelings of mental preparation for performance, and self-confidence reported, together with a reduction in symptoms associated with competitive anxiety symptoms. The implications for these findings, together with the others established in the thesis, will be presented in the final section.

**PART FIVE: SYNTHESIS, LIMITATIONS AND
FUTURE DIRECTIONS**

<p style="text-align: center;">CHAPTER TEN</p> <p style="text-align: center;">CONCLUDING DISCUSSION</p>

The overall aim of the thesis was to advance the understanding of the role of the precompetitive psychological experience of elite sports performers. One of the primary objectives was to establish the content of the preperformance affective state. This was achieved, initially, by examining the relationship between cognitive directional perceptions of competitive anxiety symptoms and the nature of the affective response experienced in competitive sports performers. Following this, a sport-specific scale was developed to further examine the relationship between the variables. A second objective of the thesis was to investigate performers' perceptions of ideal and non-ideal precompetitive mental states. Therefore, cognitive, emotional and behavioural states deemed characteristic of perceived ideal mental preparation for performance was established in a sample of elite rugby union players. A further aim was to identify the various psychological strategies necessary to facilitate such mental states. Consequently, in establishing specific psychological strategies, a final objective was to quantify the efficacy of such a skill in achieving an improved preperformance state within a sample of sub-elite rugby union players. Collectively, therefore, the thesis has investigated the identification and enhancement of precompetitive mental states in competitive male rugby union players.

The final part of the thesis comprises three phases. First, the findings are discussed in relation to the identification and enhancement of the nature of the preperformance affective experience. The second section discusses the resultant practical implications for the applied sport psychologist, gleaned from the findings of the thesis. The final section then examines potential limitations within the studies

conducted in the thesis, and highlights future directions for investigation that arise as a consequence of this current line of research.

One of the primary underlying motives in undertaking this line of investigation was the informed belief that researchers were missing a large part of the psychological picture by ignoring the positive experiences of the challenge associated with mentally preparing for performance. Therefore, the initial phase of the thesis, chapters three, four, and five, were primarily concerned with the identification of the nature of the preperformance mental state experienced by competitive sports performers. It was established that, in having symptoms associated with precompetitive anxiety that facilitate performance, an overall positive affective state is experienced. Within this positive affective state, feelings exist associated with mental and physical preparation for competition. Furthermore, performers who view competitive anxiety symptoms as negative and debilitating to forthcoming performance experience greater levels of negative affect. Such affect was observed to be accompanied by greater levels of negative feeling states and significantly lower levels of feelings associated with mental and physical readiness for competition.

Potential explanations for the co-existence of competitive anxiety symptoms and an overall positive affective state may originate with the nature of coping resources employed by the performer. Jones (1995) proposed a control model of debilitating and facilitating anxiety to explain the notion of cognitive interpretations of competitive anxiety symptoms. Incorporating a model of control (Carver & Scheier, 1988), Jones purports that the interaction of the performers' individual difference variables and his/her ability to control the stressor (sporting situation), with regard to expectancies of ability to cope and maintain goal attainment, determines whether athletes will interpret anxiety symptoms experienced as either debilitating or facilitative to performance.

Performers who maintain favourable expectations, with regard to ability to cope and goal attainment, are proposed to perceive competitive anxiety symptoms as facilitating for performance. Likewise, those performers who experience negative expectancies with regard to coping abilities and goal attainment, will experience competitive anxiety symptoms as debilitating to performance. The model of control, specifically with regard to the affective consequences of how the performer copes with the competitive stressor, could therefore explain the findings of the thesis in relation to the concept of facilitating anxiety and positive affective states. Potentially, a natural consequence of an athlete perceiving he/she has the necessary resources to deal with the forthcoming stressor (i.e., impending match) will lead to favourable goal expectations, and subsequent overall experiences of positive affect prior to performance. Conversely, a perceived lack of coping resources and unfavourable expectations regarding goal attainment will lead to debilitating interpretations of competitive anxiety symptoms, and subsequent negative affective consequences.

A further variable mediating the nature of the overall affective response described by the control model may be the mode of coping strategy employed. Coping strategies are commonly divided into Problem and Emotion Focused Coping (PFC and EFC; Lazarus & Folkman, 1984). Crocker and Graham (1995) have examined the affective response experienced as a function of the coping strategy employed. The authors observed that athletes who employed PFC strategies experienced higher levels of positive affect, compared to athletes employing EFC strategies, who experienced greater levels of negative affect. In the context of the thesis, it may be that facilitators of anxiety symptoms are able to maintain an overall positive affective state through adoption of such problem-focused coping strategies. Debilitators of competitive anxiety symptoms, however, may employ less effective emotion-focused coping strategies,

resulting in negative consequences for the overall preperformance affective state experienced.

The exact mechanism by which a problem-focused coping strategy influences the affective response has yet to be explained. A potential solution may come from Processing Efficiency Theory (Eysenck, 1984; Eysenck & Calvo, 1992). The theory purports that anxiety inhibits an athlete's performance through a reduction in working memory capacity, due to task irrelevant cognitive activity or worry, which subsequently impairs the processing efficiency of the individual. However, the theory argues that the reduction in effective working memory capacity can be countered by an increase in the level of effort and motivation invested by the athlete. Therefore, whilst processing efficiency is impaired, performance effectiveness can be maintained, or, even possibly enhanced under conditions of high anxiety symptoms. This may, however, be at the expense of utilising a greater proportion of the available resources. Further examination of the nature of the coping strategies employed suggests that PFC strategies are characteristic of cognitive/behavioural ploys to reduce or eliminate sources of stress. These may constitute a form of planning, problem solving, and perhaps most importantly, increased effort. Therefore, through employment of such a PFC strategy, aimed at increasing effort and concentration, the performer may be able to maintain favourable perceptions of competitive anxiety symptoms whilst experiencing a state of preperformance mental readiness.

Despite the wealth of literature investigating directional perceptions of competitive anxiety symptoms the concept has received criticism (Burton & Naylor, 1997; Burton, 1998). Continuing the points raised by Jones (1995), the notion of 'facilitating' or 'positive' anxiety has recently stimulated a debate amongst researchers (Burton & Naylor, 1997; Hardy, 1997; 1998). This debate concerns whether the

existence of high levels of cognitive anxiety can be perceived as facilitating to performance (Hardy, 1997), or, in line with Lazarus' (1991) model of emotion, that positive expectations of goal achievement and coping lead to positive emotions such as 'challenge' or 'excitement', beneficial for performance and not representative of facilitative anxiety (Burton & Naylor, 1997). Hanton and Jones (in press) add:

“although there are commonalities of opinion within the recent debate, essentially researchers either accept that a ‘positive anxiety’ state for performance exists or reject this in favour of another affective state previously labelled as ‘anxiety’.”

(p.13).

The findings of chapters three and five established the co-existence of competitive anxiety symptoms and positive affective states. Adopting Burton's (1998) stance, it could be inferred that such facilitating interpretations of anxiety symptoms may actually be mislabelled and representative of positive emotional states. Chapter three observed strong correlations between direction of anxiety symptoms and positive affect. Strong positive correlations in chapter five were also identified between direction of competitive anxiety symptoms and positive feeling states, including, mental preparation for competition, perceptions of physical preparation for competition, and levels of self-confidence. These findings could imply that facilitating interpretations of anxiety symptoms and the positive affective subscales assessed were potentially one and the same.

Despite the findings, Burton's argument is unsubstantiated on several accounts. First, on a statistical basis the findings of the correlations imply potential relationships and not causality (Tabachnick & Fidell, 1996). Strong associations between directional interpretations of anxiety symptoms and positive affective states would naturally be assumed if they formed part of an overall positive affective state experienced by the

performer. Second, to adopt an approach that posits performers cannot view or experience competitive anxiety symptoms as positive or facilitative to performance, is to ignore existing contrary observations. Qualitative research findings conducted with elite athletes regarding precompetition experiences and mental preparation for performance have identified the presence of anxiety as an important factor (Jones & Hardy, 1990). Support for the co-existence of anxiety and positive affect is provided in chapter seven, within a sample of elite international rugby union players. When questioned regarding the experience of symptoms associated with competitive anxiety, performers reported such a state as necessary and facilitating to forthcoming performance. The rationale provided for this belief, purported that the presence of symptoms associated with competitive anxiety constituted part of the individual performer's mental preparation routine. In addition, anecdotal evidence also exists describing peak performance under conditions of extreme duress and anxiety (Hardy, 1998).

Finally, and perhaps most crucially, the foundation of Burton's (1998) argument against facilitating interpretations of anxiety states is underpinned by Lazarus' (1991) model of stress. However, the model is perhaps too simplistic to comprehensively explain the psychology of the preperformance affective experience. Essentially, the model posits that when an individual perceives a stressor as threatening, and a lack of coping resources are present, anxiety symptoms and negative emotions result. Conversely, when the stressor is perceived as challenging, in accompaniment with the necessary coping resources, more positive affective states develop. What the model does not account for, however, is the nature and employment of appropriate coping strategies by performers to deal with the resultant affective states. The model fails to view the production of emotional states as part of the bigger, more dynamic, picture of

how performers cope with the psychological experience of elite level sporting competition.

In response Hardy et al., (1996) have proposed an integrated model of coping in sport. The working model incorporates many of the properties of Lazarus's (1991) model, including primary and secondary appraisal of the environmental demands and potential stressors, together with the subsequent psychophysiological stress state that results in psychological arousal and activation of an individual. However, the working model is more dynamic in that it describes the psychological response to the stress appraisal process, subsequent coping strategies employed, together with the specific coping outcomes and how these feedback into the stress appraisals of the environmental demands. Essentially, in relation to the production of anxiety symptoms, it may be that the performers experience the environmental stressor of competition as a challenge, which invokes a level of concern regarding forthcoming performance, and subsequent experiences of symptoms associated with competitive anxiety. A problem focused coping strategy will lead to performers viewing competitive anxiety experienced as necessary to 'rise to the challenge', or as identified by the elite performers in chapter seven, necessary for 'preparing the mind and body to compete'. Subsequently, this experience is viewed as facilitating by the performer. Burton's argument, that states if a performer views the stressor as a threat, they become nervous and not be able to cope, experiencing negative emotions, or, if the stressor is viewed as a challenge, and performers perceive they can cope they subsequently experience positive emotions, is perhaps too simplistic for the dynamics of the sporting arena.

Further, dissatisfaction has also been expressed at the presumption within the approach, that positive emotions will always lead to positive consequences, and negative emotions to negative performance consequences (Hardy, 1998). Existing

evidence examining the content of preperformance affective experiences has highlighted the presence of typical negative emotions (i.e., anger) that performers may view as necessary for competition (Mellalieu, Hanton, & Jones, 2000). In chapter five feeling 'angry' and 'aggressive' were amongst several affective labels that commonly arose in the identification of performer's appropriate preperformance feeling state.

Whilst Burton's (1998) proposal questioning the notion of facilitating perceptions of anxiety may be inaccurate, what he may be correct in assuming, supported by the findings of the current thesis, is the limitation of the current conceptualisation of competitive anxiety (Martens et al., 1990), as outlined in chapter two, and its subsequent measurement instrument, the CSAI-2. Indications of the durability of conceptual dimensions often tend to occur with the psychometric strength of the measurement instrument employed. Despite its relatively long career, the CSAI-2 possesses inherent conceptual and statistical limitations. Mostly, these surround the notion of the established three-factor structure. Several researchers have produced findings to question the three factor structure of the scale (Sewell, Bartram, & Nesti; 1997; Lane & Terry; 1997). Lane et al., (1999) have also identified several methodological flaws in the original construction of the CSAI-2 scale. Employing rigorous confirmatory factor analysis techniques, the authors observed a major limitation with the cognitive anxiety scale to assess its particular aspect of the competitive anxiety response.

Further, in the original conception of the three factor structure of the CSAI-2, it is interesting that the final dimension to emerge from the construction, in addition to cognitive and somatic anxiety, was eventually labelled as self-confidence, and included in the final CSAI-2 scale. Whilst self-confidence has been observed to be a key component of preparation for competition (Jones et al., 1994) it is quite possible that the

nature of the structure developed by the original authors of the CSAI-2 scale was, potentially, a more positive aspect of the competitive anxiety experience, rather than a global dimension of self-confidence. Finally, and most crucially, limitations with the CSAI-2 scale are proposed to be due to inaccuracies in the wording of the scale, which may lead to subsequent misinterpretations of anxiety symptoms by the performers. As Burton (1998) states:

“Anecdotal evidence suggests that preparatory worry or concern (i.e., CSAI-2 uses the term *concern* in its’ cognitive subscale) is often interpreted in a challenge way and facilitates subsequent performance. However, worry during competition when coping options are more limited is much more likely to be to be interpreted as anxiety that is debilitating to performance.” (p.142).

This observation was confirmed by Lane et al., (1999) who found conceptual problems with the validity of the CSAI-2 scale with regard to the phrasing of the word ‘concerned’ as opposed to ‘worried’. Correspondingly, several of the items contained in the somatic anxiety subscale are symptomatic of positive interpretations of physiological arousal symptoms (i.e., ‘*my heart is racing*’). This is in direct contrast to the common definition of somatic anxiety that is associated with negative perceptions of one’s physiological state. Experience of somatic anxiety or negative perceptions of one’s physiological state may, therefore, be contingent upon individual differences within performers, relating to the level of physiological arousal required for achievement of one’s respective activation state. Under the current measurement of competitive anxiety, up to a certain level of activation, individuals may perceive their somatic anxiety symptoms experienced as facilitating to forthcoming performance. However, over certain levels, this experience may be perceived as debilitating. Therefore, rather than label the dimension as a negatively implied somatic anxiety, a more ambivalent label, such as ‘perceptions of the level of physiological arousal

symptoms experienced', may be more appropriate. Perceptions of physiological arousal symptoms as facilitating/debilitating in relation to performance may then be viewed as contingent upon the level of activation state required for the nature of the sport or task (Hanton, Jones, & Mullen, 1999). The adoption of such a conceptualisation of the role of activation and arousal would therefore more appropriately adhere to an understanding of the anxiety-performance relationship implied by Catastrophe Theory (Hardy, 1991). Adopting this proposed concept to such a theory, moderate levels of cognitive anxiety, accompanied by increases in physiological arousal may be perceived as positive interpretations of one's physiological state, and performance will be maintained. However, as soon as levels of physiological arousal become too high, in association with high levels of cognitive anxiety symptoms experienced, performance decrement will occur and subsequent debilitating interpretations of activation state are experienced (i.e., somatic anxiety or negative perceptions of one's physiological state).

Collectively, these criticisms imply a lack of conceptual and factorial validity with the CSAI-2 scale to adequately assess the precompetitive anxiety response. The criticisms are supported by several of the findings in the current thesis. First, chapters three, four and five identified strong correlations between the CSAI-2 scale and positive subscales of the PANAS and PPFS questionnaires respectively. Therefore, somatic anxiety direction correlated with the positive perceptions of physical state subscale of the PPFS, and the positive affect scale of the PANAS. Second, the interview data elicited in chapter seven indicated that many of the performers interviewed, who interpreted competitive anxiety as positive for performance, experienced such symptoms as a form of 'excitement nerves'. Further, this experience was viewed as preparing the performers physically and mentally to compete. Indeed, many of the performers differentiated the experience of 'excitement nerves' from what was

perceived as 'worry nerves'. These findings would appear to support the distinction between the experience of 'preparatory' anxiety for performance, that which enables the performer to achieve a necessary activation state for performance, in comparison to 'in event' or 'worry' anxiety associated with debilitating cognitions of performance failure (Burton, 1998). The thesis has, within the identification of ideal preperformance affective states, established the limitations of the CSAI-2 to accurately measure the precompetitive experience of anxiety. The need for a reconceptualisation of the competitive anxiety construct in addressing the psychology of the preperformance affective experience has also been identified.

In addition to supporting previous investigations regarding the ideal preperformance mental states of elite performers, the findings of chapter seven provide an extension to existing literature, by the examination of elite team performers' perceptions of the precompetitive experience. A key factor emergent as mediator upon the preperformance mental state of the individual performer was the role of perceived team mental readiness. Specifically, individuals perceptions of team collective readiness and feelings of team cohesion were perceived as symptomatic of ideal preperformance mental states. Inappropriate preperformance mental states were further characterised by a perceived lack of appropriate team atmosphere, accompanied by a perceived lack of collective focus by fellow team members.

Scant research exists investigating the role and precise mechanisms by which perceptions of team readiness impact upon individual mental states and preparation for performance. A potential explanation that emerged in chapter seven, was the individual's level of belief in the teams' readiness to perform, or level of perceived confidence in the ability of the team. The notion of level of belief in fellow team members bears a strong association with collective efficacy (Bandura, 1997). Collective

efficacy, the groups shared belief to succeed in a given task (i.e., forthcoming match outcome), is purported to influence performance through the same mechanisms as self-efficacy beliefs. Therefore, collective efficacy influences performance through activity and goal selection, allocation of effort, persistence, the manner in which performances are explained (attributional processes), and in anxiety and affective responses (Bandura, 1997). An initial study by Greenlees, Nunn, Graydon, and Maynard (1999) examining the relationship between collective efficacy and precompetitive affect in collegiate and county rugby teams observed beliefs in collective efficacy of individuals to be related to precompetitive positive affect and experiences of competitive state anxiety. The findings of chapter seven would seem to provide support, from a qualitative perspective, for these initial quantitative observations. Potentially, therefore, high experiences of collective efficacy and confidence in the teams' ability to perform may lead to positive expectancies regarding goal attainment, and increased effort, and persistence, resulting in subsequent affective states associated with appropriate mental readiness for performance. Conversely, a lack of collective belief in the teams' ability to perform and level of mental readiness towards the forthcoming event, may, lead to a lack of efficacy beliefs with regard to goal attainment. Consequently this may lead to a lack of persistence, effort and subsequent experiences of negative affect and associated inappropriate mental states.

The development of applied sport psychology as an established profession still lies in a stage of what earlier researchers have termed 'accountability' (Smith, 1989). In order to maintain its strength as a viable support service in professional sport, the various methods and tools employed within the discipline have undergone close scrutiny. Consequently, a primary focus within sport psychology research over the last decade has been to assess the efficacy of such applied interventions upon athletes'

performance. In light of the need to survey and assess the impact of the sport psychologists' work, the fourth part of the thesis was concerned with the enhancement of preperformance mental states. Having identified the nature of the ideal preperformance mental state in the initial stages of the thesis, the latter stage had two primary objectives. First to identify the specific psychological skills employed by elite rugby union players to achieve appropriate preperformance mental states. Second, to measure the efficacy of one of the identified techniques in achieving an appropriate preperformance state in a population of sub-elite rugby union players.

Chapter seven investigated the utilisation of psychological skills to facilitate ideal preperformance mental states in a sample of elite rugby union players. The findings observed that appropriate mental and physical readiness was facilitated by a number of cognitive and behavioural strategies. Prevalent amongst the cognitive strategies was the employment of mental imagery in a variety of modalities. One of the most common strategies employed to facilitate mental readiness was that of mental rehearsal of task-specific roles. This mental imagery strategy, focusing on task-specific roles in the preperformance period, was then subsequently employed as an intervention in chapter nine to assess its effectiveness in achieving ideal preperformance states within sub-elite collegiate rugby union players. Across the participants, a clinically significant effect was achieved in levels of perceived mental readiness. In addition, following employment of the task-specific mental imagery intervention, increases in feelings associated with mental preparation for performance and self-confidence were experienced, whilst feelings of reported competitive anxiety symptoms were reduced.

The employment of psychological skills by elite athletes across sports has been observed by numerous researchers (e.g., Scanlan, Ravizza, & Stein, 1989; Gould, Jackson, & Finch, 1993). However, few have attempted to investigate the mental skills

employed within the context of a team sport. Particularly, with specific reference to the potential impact of the team upon individual mental preparation. The findings of chapter seven are unique in that they provide a new perspective on the mediating impact of the team upon individual mental preparation for performance. The performers reported the employment of encouragement from significant others (i.e., coach, captain, other players) to increase their mental readiness for competition. This encouragement constituted external verbal cues, such as 'motivating' words or 'pep talks' to achieve appropriate levels of activation. Whilst these findings are as yet unexplained, it may be that the employment of significant others to achieve mental readiness, may comprise a form of confidence enhancement. Employment of verbal persuasion strategies by significant others, may increase individual levels of emotional arousal, thereby creating subsequent ideal activation states and raising levels of confidence.

The employment of mental skills strategies to 'psych up or psych down' in order to achieve appropriate activation states has been examined by a number of researchers (Caudill et al., 1983; Shelton & Mahoney, 1978; Weinberg et al., 1980; 1981). Findings have observed multi-modal strategies employed, constituting various forms of imagery, self-talk, attention control and arousal manipulation. Further, studies have examined the mechanism underlying the potential impact of mental skills upon performance (Hardy et al., 1996). Subsequently, Hardy et al., (1996) have concluded 'imagery based strategies appear to be a highly effective means of generating an appropriate activation state' (p.129). The employment of mental imagery as a means to generate an appropriate preperformance mental state, as identified in chapter seven, would appear to substantiate this claim.

The comprehension of the impact of such mental imagery upon various identified psychological outcomes has been greatly enhanced by the work of Hall et al.

(1998), with the development of a taxonomy of imagery types, and a subsequent proposed model of imagery use and outcomes (Martin et al., 1999). In addressing the generation of moods and outcomes, the model proposes that images associated with stress, anxiety and excitement, motivation general-arousal imagery, leads to subsequent achievement of appropriate levels of activation states. Imagery of skills, or cognitive specific imagery is proposed to be suited for the learning and performance of sport skills. Research examining these specific uses and outcomes has supported the model for the employment of both cognitive specific and motivation general-arousal imagery, and their respective outcomes (Martin et al., 1999). However, studies employing cognitive specific imagery, aimed at achieving mood related outcomes have proved relatively unsuccessful or insignificant (Anshel & Wrisberg, 1993; Weinberg et al., 1981). In direct contrast to such findings, chapter seven reported the use of task, or cognitive specific imagery (images of performing task or game-specific related roles) to facilitate appropriate preperformance mental states. Further, task-specific imagery was employed to achieve mental readiness in a sample of rugby union players in chapter nine. These findings directly contradict previous research and predictions of the model surrounding imagery use and outcomes. The findings also highlight the relatively simplistic nature of the classification of imagery uses and outcomes proposed by the model.

Possible explanations as to why the CS intervention was effective compared to previous research, may be due to the nature and importance of the image employed by the participants in the research. Ashen's (1984) Triple Code Model of imagery maintains that every image has particular relevance and personal meaning to the individual. Consequently, similar images can have different effects upon different people, and elicit subsequent varied reactions amongst athletes. In addition to

developing cognitive reactions, imagery also elicits physiological and emotional reactions (Bandura, 1986). Attempting to make the image as specific, meaningful and individual to the participant as possible, may provide the necessary stimulus for the image to achieve its objective. Further Lang's (1977; 1979) Bioinformational Theory focuses upon physical and emotional reactions. Vivid imagery is proposed to activate information about the stimulus characteristics of the imagined situation and response propositions (physiological and overt behavioural responses) to the imagined situation. Despite sport psychologists incorporating the physiological and emotional reactions into athletes' imagery and the subsequent benefits of doing this (Orlick, 1986; Rushall, 1988; Suinn, 1972; 1986), very little research has reported the benefits of including response propositions in athletes' imagery scripts (Baker, Boschker, & Chung, 1996; Murphy et al., 1988). Subsequently, a lack of support for the influence of CS imagery may previously have been due to the absence of the necessary stimulus propositions to evoke such a desired outcome.

Further problems with the mode of imagery type employed and the subsequent equivocal findings may be attributed to the nature of the desired outcome. Specifically, the task of achieving mental readiness involves the employment of one or more form of imagery type, as classified by Hall et al.'s., (1995) framework. Inviting performers to imagine focusing themselves upon performing a skill in the forthcoming match, and associate closely with the movement and feelings, may actually be inducing employment of both motivation general-arousal and cognitive specific imagery. Intuitively, it would be assumed that athletes do not solely employ one imagery type for achievement of a specific outcome. The image itself may be employed to achieve multiple outcomes and desired effects.

Another explanation for the findings in chapter nine may come from the examination of the production of the activation state itself. Some researchers have rejected the notion of a single unitary arousal system, which mediates the effects of different environmental stressors upon performance (Hockey & Hamilton, 1983). Attempts to globally 'psych up' or 'psych down' and influence general arousal levels may, therefore, be too 'heavy handed', and lead to a subsequent loss in both the detrimental and potential benefits from achievement of specific levels of arousal. Hardy et al., (1996) suggest Hockey and Hamilton's (1983) theory of activation that implies performers develop task-specific strategies which will facilitate activation states, e.g., mental rehearsal of the task to be performed. Research evidence also supports these suggestions regarding the relationship between mental practice and activation states (e.g., Ainscoe & Hardy, 1987; Hall & Schmid, 1992).

"It could therefore be argued, on both empirical and theoretical grounds, that the successful mental rehearsal of a given skill should provide a most efficient means of establishing an appropriate activation pattern prior to performance."
(Hardy et al., 1996; p.122).

Such observations would appear to provide a plausible explanation for the findings of chapters seven and nine in relation to the employment and subsequent impact of task-specific imagery upon preperformance mental states.

Whilst the current thesis has established the importance of maintaining an overall positive affective state in achieving mental readiness for competition, and identified the employment of mental imagery in achieving such an outcome, it has not examined the underlying mechanism by which ideal precompetitive mental states are implied to lead to successful performance. The applied sport psychologist places great emphasis upon appropriate mental preparation for performance and achievement of the

ideal performance state. Despite little direct empirical work examining the potential impact of affective states upon performance, anecdotal evidence describes the relationship between inappropriate mental states and poor performance (Silva & Hardy, 1986). However, the importance of achieving this psychological frame of mind has not firmly been established. Chapter seven invited elite performers to provide their opinion as to whether they perceived achieving appropriate preperformance mental states to be important for forthcoming competition. They were requested to explain the potential mechanism by which such variables influence performance. The responses produced themes indicating that achieving an ideal preperformance state was viewed as a prerequisite for achieving peak performance. If an ideal preperformance mental state was achieved it was perceived that peak performance could ensue, contingent upon other established factors (i.e., the efforts of the opposition). However, if an ideal preperformance affective state was not achieved, then it was viewed that there was no possibility of performing well. Collectively, the findings provide further support, with specific reference to the achievement of an optimal recipe of affective states, for the importance of assessment and intervention to achieve mental readiness for competition.

Practical Implications

As a consequence of the research findings that have emerged from the thesis, several practical recommendations can be derived for the applied sport psychologist in relation to the identification and enhancement of preperformance affective states in competitive athletes. With regard to the identification of preperformance mental states, recommendations can be provided relating to the comprehension of the performer's affective experience prior to competition, and how the applied practitioner can facilitate the relationship between competitive anxiety and affect in the preperformance period.

Recommendations are also provided for the psychologist, specifically working with individual performers from team sports to enhance team and individual mental readiness for performance. Finally, implications are discussed with respect to intervention for specific enhancement of preperformance mental states. Specifically, implications for interventions employing task-specific imagery and the nature and timing of the mental skill are provided.

In identifying the appropriate preperformance mental state, this thesis has established the overall experience of a positive affective state by the competitive athlete. The necessity of the performer achieving an appropriate mental state prior to competition has also been identified as a prerequisite for consistent performance. Consequently, when working with the performers, the psychologist should be cognisant of the importance of the athlete maintaining a positive affective mental state prior to performing. From an educational perspective, with reference to younger performers, the findings highlight the importance of placing an emphasis on a positive outlook and hence enjoyment of the overall experience of sporting competition, and within this, positive responses associated with the experience of preparing to perform.

The thesis has also provided practical recommendations for the assessment of performers' precompetitive psychological experience. As chapter three identified, current measurement scales are ineffective at assessing the comprehensive range of experiences a performer encounters in the precompetition period. Consequently, the applied practitioner needs to adopt broader screening tools, such as the instrument designed in chapter four, the PPFS. Instruments are required that are sport-specific in nature, and can more comprehensively assess the performer's psychological experience, enabling the psychologist to more accurately, and successfully, intervene with the performer.

The initial thrust for the undertaking of the thesis was derived from first hand experience of the potential debilitating impact of the effects of competitive anxiety. Indeed, failure to cope with the potentially damaging competitive anxiety symptoms is a common inhibitor to successful performance. Therefore, recommendations are presented with specific reference to how the applied practitioner can effectively manage the relationship between competitive anxiety and affect.

Traditionally, intervention methods for dealing with high competitive anxiety intensity symptoms are based upon the tenets of the matching hypothesis (Davidson & Schwartz, 1978). The hypothesis purports that in order to reduce specific or general experiences of cognitive or somatic anxiety, respective general or specific, cognitive or somatic interventions should be applied. A performer who experiences specific physical tension in his/her legs prior to performing would therefore benefit from a specific progressive muscular relaxation technique, as opposed to a more general cognitive based meditational relaxation approach. Applying this perspective to a performer's directional perceptions of anxiety intensity symptoms, several studies (i.e., Maynard et al., 1995a; 1995b) have successfully employed relaxation techniques to reduce anxiety levels. Consequently, more facilitative perceptions of anxiety symptoms have been observed as an outcome of the application of such techniques. One problem with this approach is that reducing the intensity of the competitive anxiety experienced may have a potential knock on effect of decreasing the performer's activation state, and subsequent mental and physical readiness for competition. Indeed, it may not be possible, or necessarily appropriate, to reduce such symptoms, via stress management techniques, in certain sports due to the relative high levels of activation states required (Hanton & Jones, 1999b). Further, the findings of chapter five and chapter seven provide evidence for the existence of symptoms associated with competitive anxiety in

conjunction with intense activation states. Potential interventions may be more appropriate, therefore, at altering the individuals perceptions of competitive anxiety symptoms experienced, from facilitative to debilitating, as opposed to attempting to reduce the actual intensity of the symptoms.

Recommendations for restructuring interpretations of anxiety symptoms can be made with reference to Jones' (1995) control model of debilitating and facilitating anxiety. Hence, the psychologist should attempt to provide the performers with the necessary skills to view that they have the resources to cope with the environmental stressor of impending competition. Attempts should be instigated to enable the performer to maintain favourable perceptions of his/her ability to achieve the goal of successful performance. This may be achieved through selection of an appropriate form of cognitive restructuring technique. Chapter seven identified that elite performers view their preperformance anxiety symptoms as preparatory for performance in the achievement of mental and physical readiness. Potential strategies at achieving such an outcome should suggest to the performer to restructure his/her experience of anxiety symptoms, from one of worry or anxiety regarding performance, towards one of viewing the activation state created by the symptoms as necessary to prepare the mind and body for the physical and mental demands of the forthcoming competition.

The sport psychologist may also wish to employ strategies encouraging the athlete to maintain an overall positive affective state in the face of competitive anxiety, by influencing the nature of the coping strategies. Athletes who presently employ emotion-focused coping strategies that result in negative affective consequences, should be encouraged to adopt a more problem-focused coping approach. Such strategies emphasise the elimination of sources of stress through problem solving and planning. A particular problem-focused strategy, pertinent to preperformance affective experiences,

may be to encourage athletes to increase their effort produced in order to maintain facilitating perceptions of anxiety symptoms. This recommendation is underpinned by the tenets of Processing Efficiency Theory (Eysenck & Calvo, 1992) that posit successful performance can be maintained in the face of competitive anxiety symptoms, provided the performer increases his/her level of effort. Athletes should therefore be educated that if they experience inappropriate precompetitive affective states associated with competitive anxiety symptoms, they can increase effort to maintain performance, or restructure cognitions to maintain appropriate levels of activation, whilst remaining in a focused frame of mind.

Finally, the findings of chapters five and seven highlighted that facilitators of competitive anxiety symptoms experience greater levels of self-confidence, which potentially contribute to mediating against debilitating perceptions of competitive anxiety (Jones et al., 1994). The psychologist should direct attention to encourage the athlete to employ strategies focused upon enhancing and maintaining levels of self-confidence prior to performing. Potential multi-modal interventions, including the employment of self-talk and mental rehearsal, aimed at reinforcing ability and past performance, may serve as useful catalysts to maintain and enhance self-confidence.

One of the major findings of chapter seven was the contribution of the team and significant others in the influence of an individual mental preparation for competition. The findings observed that perceptions of team readiness and strong feelings of team association, through levels of team cohesion and collective efficacy, influenced the individual's experience of affective states. Further, the influence of the behaviour of fellow team members and significant others served to act as a catalyst in stimulating achievement of appropriate activation states (i.e., through the use of verbal persuasion strategies). These findings hold several practical implications for working with an

individual performer from a team sport. Primarily, from an educational perspective, the coach, players and significant others present and participating in the preparation for performance ritual, need to be cognisant of the potential impact their behaviour can have upon fellow members of the team and support staff. Specific emphasis should be placed upon educating individuals of the personal responsibility needed to be taken for their actions, and the requirement of developing a caring climate, whereby performers are conscious of ensuring not just personal preparation for competition, but the need to ensure fellow team members are also correctly prepared, both mentally and physically.

From a direct intervention perspective, the psychologist should be encouraged to implement more traditional psychological strategies focused upon maximising levels of team cohesion and collective efficacy within the squad. Various exercises aimed at fostering communication and developing common goals and beliefs towards the team, and the team's ability (Carron & Hausenblaus, 1998), may prove extremely beneficial in eliminating any potential problems associated with inappropriate team preparation. Given the potential impact of the team upon the individual, consideration may also be given to creating the correct atmosphere in the changing room prior to performing. The psychologist may wish to work with the squad, coaching and support staff to build a common programme of preparation for performance that caters for all individuals and team needs and is approved by the whole squad. Further, team strategies could be elicited from meetings to employ when an inappropriate atmosphere or team preparation had taken place. Initiation of such strategies could be delegated to senior players, coaches and support staff members, identified as potential observers of the team's preparation. Further, protagonists within the squad could be identified to act as catalysts to instigate strategies, such as increasing the intensity of the physical warm up, or

employing verbal strategies, to enhance activation states and achieve appropriate levels of team and individual preparation for performance.

Further observations from chapter seven help to provide an understanding of the temporal patterning of team and individual preparation for performance. Set patterns emerged for the teams' organisational, technical and physical preparation for performance. Team meetings were held to discuss tactics, team warm-ups to ensure physical activation, followed by technical rehearsal of match related roles. No structured set time of mental rehearsal of match related roles were evident from the cross-case analysis though. Indeed, the lack of this particular facet of preparation appears to be evident across many professional team sports. A key time period identified when many of the performers utilised their mental rehearsal was on returning to the changing room, following completion of technical and physical preparation, directly prior to waiting to be called to go onto the field for kick off. Whilst many performers mentally rehearse in this period on an impromptu basis, it may be wise for the psychologist to encourage this time to be labelled as the structured mental rehearsal time or 'mental warm up' as part of the team's overall preparation routine.

The time to event paradigm constructed in chapter seven identified that in addition to performers experiencing set recipes of emotions and anxiety (Hanin, 1997), distinct temporal patterning of cognitive, emotional and behavioural variables also occurred. Psychologists need to carefully select when, and on what level (i.e., cognitive, affective) their respective intervention is aimed towards helping the performer control their psychological state. Clearly, employing a cognitive based strategy directly prior to commencement of the match, may not be as effective when the performer is experiencing an intense emotional state. Equally, 'psych up' strategies aimed at mood/emotional enhancement (Thayer 1978; Orlick 1986), implemented earlier in the

build up to the match, may be less effective than more appropriate cognitive based focusing interventions.

The findings of the latter parts of the thesis have produced evidence to show that elite rugby union payers utilise task-specific mental imagery to achieve appropriate levels of mental readiness. Further, the employment of task-specific mental imagery can be provided to enhance preperformance mental states in a population of sub-elite rugby union players. From an applied perspective, these findings raise several implications. First, sport psychologists, in addition to recommending the employment of mental imagery for skill rehearsal, should encourage athletes to utilise this technique as part of their preperformance routine, with a view to using these skills to enhance psychological outcomes, such as regulation of activation states, competitive anxiety and self-confidence (cf. Hardy et al., 1996; Martin et al., 1999). Specifically, performers should be encouraged to 'mentally warm up', in addition to traditional physical preparation techniques, to prepare themselves mentally, as well as physically, for subsequent performance. In specific relation to these findings, performers in sports which require high levels of physical activation, such as a contact sport like rugby union, should also be encouraged to place an emphasis upon the physical aspects of the game when employing mental imagery within their preperformance routine. This may help to enhance physical activation, in addition to facilitating appropriate mental preparation and associated affective states.

When implementing mental skills programmes designed to enhance preperformance psychological preparation, the practitioner should place an emphasis upon athletes selecting images that are deemed most meaningful to them, and most relevant to their forthcoming performance. Further, the nature of the image should contain the necessary response stimuli directly related to the individual's specific

upcoming tasks to be performed in the competition (Bakker et al., 1996). The psychologist should be encouraged, when implementing a mental imagery training programme, to include consideration towards the relevant presentation of the imagery training, whether included on audio tapes or imagery scripts, or through verbal instruction. The use of sport-specific performance profiles (Hodge & McKenzie, 1998) to elicit the exact roles and expectations of the performer, as employed in chapter nine, will also assist the psychologist to determine an appropriate form and structure of intervention.

Chapter nine also highlighted the problems faced by the psychologist when attempting to implement mental skill programmes during the competitive season, i.e., whereby time is a constraint to both psychologist and performer. The findings observed that shorter mental skill training periods may be just as effective in developing the necessary mental imagery ability in order to enhance preperformance mental states (i.e., during the competitive season), as opposed to traditional longer mental skill programmes employed across the pre-season phase. Whilst this implication in no way attempts to recommend the shortening of the foundation phase of the learning of mental skills, potentially, the psychologist may be able to gain a beneficial impact from an intervention despite a relatively shorter education and training phase of an MST programme.

Finally, based upon the learning experiences regarding the development of performance routines and proposed coaching recommendations (appendix G), the thesis highlighted the lack of formal structured MST training in the sport of rugby union in the Northern Hemisphere. Comprehensive MST programmes are already evident in the stronger Southern Hemisphere nations (Hodge & McKenzie, 1998). Furthermore, the current development of existing mental skills was found to be established through more

traditional trial and error learning experiences, contingent upon the significant impact of the coach/other players. Formal integrated coach/sport psychology education programmes may therefore facilitate the development and employment of MST in rugby union in the northern hemisphere.

Thesis Limitations and Recommendations for Future Research

Whilst this thesis has contributed further knowledge to the understanding of the identification and enhancement of the experience of the preperformance period the findings possess several limitations. These lie both with the identification and enhancement of preperformance affective states. In acknowledging these constraints the following section addresses further research that is required as a consequence of the findings and the current limitations of the thesis.

In the area of identification of preperformance affective states caution must be addressed in relation to the measurement instruments employed to assess such constructs. Chapter three and chapter four identified problems with an existing measure of preperformance affect, and developed a more sport-specific measure for the purpose of measurement. Whilst validation procedures have shown the PPFS scale to be a valid and reliable measure of preperformance affect, research is required to test the scale across a wider sample of the sporting population. The current validation procedures were employed across a range of high performance competitive college athletes drawn from both team and individual sports. Extended validation research may wish to consider specific samples, including younger and older athletic populations. Further consistency measures, such as test-retest reliability are also required to examine the strength of the psychometric properties of the scale. In addition to comparison across populations, the examination of preperformance mental states employing the PPFS

requires investigation as a function of both person and situation variables, including sport type and gender, in order to tease out potential discrepancies within and across specific groups.

A further extension of the measurement of precompetitive affective states may be the adoption of a more idiographic approach, such as Hanin's (1997) Individual Zones of Optimal Functioning (IZOF) concept. Here, the precise recipe of an individual's preperformance emotional state could be identified by the employment of the PPFS. From an applied perspective this approach is very appealing. However, as a potential research tool the technique is very nihilistic in that no inter-subject comparisons are permissible. Further, the precise nature of the scale for rating the experiencing of the intensity of each emotion is obsolete, rendering potential statistical analysis meaningless. Finally, Hanin's approach blatantly avoids any attempt to acknowledge conceptual distinctions between affective structures such as mood and emotion (Gauvin & Spence, 1998). Indeed, many of the labels employed in Hanin's research are far drawn from any emotional definition or concept.

The lack of conceptual clarity surrounding affect, mood and emotion is a problematic feature of existing affect research in sport psychology. In the current thesis, in order to avoid potential confusion, the emphasis was placed upon identifying how performers felt in terms of preperformance affect (Clore, Ortony, & Foss, 1987). It was acknowledged that whilst feeling states are not moods or emotions, they are representative of an affective state from which such an emotional state may emanate (Gauvin & Rejeski, 1993). Importantly, the decision was taken to examine the concept of feeling states as this incorporated the performer's perceptions of his/her physical state. Affect research has, overall, ignored how performers perceive and rate their body symptoms, potentially a vital component of the sporting experience. Future research

may, therefore, need to consider investigating the precise nature and content of feeling states, experienced by the performer, within the affective structure of the preperformance period.

With regard to the measurement of the performer's precompetitive affective responses, it must be remembered that the initial studies of the thesis examined the performers in the context of their trait responses. This was decided at the outset of the research process, in order to avoid potential disparities that may have been exhibited in the collection of data. Competitive anxiety research has acknowledged the differential temporal patterning nature of anxiety sub-components (Jones & Cale, 1989). Similar differential effects have been observed across broader affective states (Prapavessis & Grove, 1994). Chapter seven identified temporal patterning effects in psychological states across the precompetition experience, highlighting the potential problems in assessing state responses. In order to avoid potential difficulties in establishing consistent time periods to employ state assessments, performers were requested to indicate how they 'usually felt' directly prior to performance. Acknowledging the comparison of state-trait measures (Albrecht & Feltz, 1988; Vealey, 1986) the assumption was then made that how performers usually felt prior to competing would be an adequate representation of predispositions to experience precompetitive affect states. Asking respondents to recall how they usually feel, away from the competitive environment however, may bring its own limitations. Recalling the whole range and intensity of emotional feelings and responses may be more difficult in retrospect for performers. However, research does exist supporting the predictive validity of employing retrospective recall procedures (Annesi, 1997; Harger & Raglin, 1994). Future work, clearly needs to examine the positive affective precompetitive experience

in the context of state responses, in order to further determine the nature and production and temporal patterning effects of such psychological experiences in the 'time to event'.

The findings from chapter seven provide an initial insight into the temporal patterning experiences in the 'time to event', and the subsequent psychological skills employed across that period. Whilst these findings are useful in the context of rugby union players, future investigations need to employ research across different sporting populations in order to investigate whether these findings are unique to rugby union. In addition, chapter six employed a qualitative analysis of the temporal patterning experience. A more precise quantitative approach is required to identify specific temporal patterning effects and relationships amongst precompetitive affective states. Employing statistical analysis procedures may provide a more precise understanding of the behaviour of the proposed variables, and enable researchers to accurately discern and tease out the potential effects of emotions such as self-confidence, previously identified as mediating a positive outlook towards forthcoming competitive performance (Jones et al., 1994). Such a quantitative approach could also be adopted with respect to examination of perceptions of competitive anxiety symptoms. Here, the precise interaction of emotions, moods and feelings required to maintain favourable perceptions of competitive anxiety states requires further identification and investigation.

A further area to explore, would be whether those performers who maintain facilitating symptoms associated with competitive anxiety, and an overall positive affective states, possess characteristic traits that distinguish them from their debilitating counterparts. Peak performance research has identified one of the primary differentials between successful and less successful performers as the ability to perceive competitive anxiety symptoms as facilitating to competition (Mahoney & Avener, 1987; Mahoney et

al., 1987; Swain & Jones, 1995). Potentially, a trait could exist that distinguishes successful from less successful performers with regard to experience of symptoms associated with competitive anxiety. The nature of the coping skills employed may provide an explanation as to how performers deal with the environmental stressor of competition. One factor mediating whether the performer views such a stressor as a challenge or threat (Lazarus & Folkman, 1984) may be a generic trait such as psychological hardiness (Kobasa, 1979). Hardiness is employed to describe people with a tendency to view stressful or challenging situations in a positive manner. Subsequent affective responses to stress, as a consequence of hardiness, are associated with pleasurable emotions such as eagerness, exhilaration and excitement. Whilst little research has examined the concept of hardiness in sport (Goss, 1994), intuitively, a global 'champion' trait that mentally differentiates winners from losers, is a very appealing concept, and worthy of further investigation.

In the examination of the psychological experience of the precompetition period this thesis has questioned the existing conceptualisation and subsequent measurement of the construct of competitive anxiety (Martens et al., 1990). The thesis highlighted the co-existence of facilitating interpretations of competitive anxiety symptoms within the experience of an overall positive affective state. Further, within chapter seven, the exact nature of this anxiety experienced by performers was identified as far different from existing conceptualisations of the construct. Specifically, a distinction was made between nerves that were viewed as part of the preparation for performance and anxiety that was seen as detrimental and debilitating to performance. The notion of preparatory anxiety (Burton, 1998) is something that current conceptualisations of anxiety do not account for. The present concept of competitive anxiety was established to measure a form of 'performance' anxiety. Its original conceptualisation was never intended to be

developed as a construct which performers viewed as facilitating for competition. Indeed, it is already acknowledged that a state of precompetitive anxiety perceived as facilitating to performance is unlikely to represent competitive anxiety, but some other positive emotional state (Jones, 1995).

Further problems with competitive anxiety under its current conceptualisation, highlighted by the thesis, are the similarity between symptoms associated with somatic anxiety and the experience of physiological arousal. Indeed, as mentioned earlier in the discussion, how the performers view their physical activation states, rather than facilitating or debilitating interpretations of somatic anxiety, may be more important in understanding appropriate preperformance activation states. Future research may therefore wish to consider this association and examine the notion of facilitating and debilitating interpretations of physiological activation states. Essentially, therefore, performers are viewing symptoms associated with competitive anxiety as facilitating, because they are experiencing a positive form of preperformance activation that is viewed as necessary for competition.

In acknowledging the current methodological and conceptual limitations of the competitive anxiety measurement instrument, the next progression in anxiety research is surely a reconceptualisation of the construct itself. Clearly a large task, but one with which researchers are now methodologically better equipped. However, in describing this construct, due care and attention must be given to key variables previously ignored, including perceptions of physical feeling states experienced. The questionnaire designed in the thesis, the PPFS, was constructed to assess the broad range of feelings states experienced prior to performance. It may be, however, that a specific anxiety or preperformance activation questionnaire is required to tap the elements that contribute to the performers activation for competition.

In establishing a suitable measurement instrument, the role of specific key emotions such as self-confidence, require further investigation. In the current thesis, higher levels of self-confidence were established for facilitators compared to debilitators of competitive anxiety. Indeed, the possession and maintenance of high levels of self-confidence is recognised as a key factor in the enhancement of favourable performance states (Hardy et al., 1996). The exact mechanism by which confidence protects against the debilitating effects of competitive anxiety is as of yet unexplained. One perspective may be to examine the relationship between self-confidence and the production of the coping responses. By examining theoretical approaches such as Jones' (1995) control model of anxiety, Eysenck and Calvos' (1992) Processing Efficiency Theory, in conjunction with Hardy et al.'s, (1996) proposed working model of coping, such relationships may be identified. Integrating these approaches, a possible mechanism could be the influence at the secondary appraisal stage of coping. Here, the confident performer views that he/she possesses the necessary resources to cope and deal with the stressor of upcoming competition. Subsequent processes then instigate a positive coping mechanism, via increased effort and resources to the stressor, resulting in problem-focused coping and positive affective experiences.

Whilst the thesis has examined the role of competitive anxiety and the preperformance period in order to provide a manageable framework to study, further research into the preperformance period may wish to go beyond merely examining unitary emotions or affective states and take a broader, more comprehensive, approach to the precompetition period. Such an approach may encompass the notion of 'preparation for performance' through achievement of appropriate activation states. Through the examination of how appropriate activation states are achieved, researchers will be encompassing traditional emphases which have examined arousal based

'psyching up' and 'psyching down' strategies, but, in addition, incorporate a wider base of psychological preparation strategies and subsequent activation states achieved. Research into optimal mental preparation strategies and experiences of elite performers has adopted a largely qualitative approach (e.g., Scanlan et al., 1988). However, little work has attempted a more scientific approach, examining specific variables in controlled lab-based settings. In-depth retrospective interviews may establish relationships, but potential mechanisms and mediating variables underlying preperformance activation states cannot be specifically proposed, manipulated and examined within such contexts.

The fourth part of the thesis investigated the enhancement of preperformance mental states. The overall findings supported the utilisation of task-specific mental imagery in enhancing preperformance mental states in collegiate rugby union players. Whilst these findings hold several practical implications, with regard to the use of task-specific imagery, they are not without their limitations. First, it must be remembered that the efficacy of the impact of task-specific imagery was only replicated across a sample of sub-elite rugby union players. The use of task-specific imagery to achieve appropriate levels of activation states may solely be a mental skill specific to performers who require relatively high levels of mental and physical activation for contact sports, such as rugby union. Indeed, for sports where less physical activation is required, task-specific imagery may be utilised for different outcomes. This may possibly take the form of a confidence building role, as identified by some of the performers in chapter seven. Future work needs to examine the role of mental skills in achieving appropriate levels of preperformance activation states across a broader sample of athletes. Whilst strong anecdotal evidence exists with athletes and coaches for the use of strategies to 'psych up' and 'psych down', very little empirical research exists detailing the precise

nature of the skill employed, the subsequent impact of the desired feature of the activation states, together with any potential personal and situational mediating variables.

Methodologically, the final study is limited in its ability to measure the persistence in employment of the intervention following the completion of the experiment. No follow-up measures of imagery use were made following the completion of the study for several reasons. First, the season finished relatively early for the squad, so no measure for preperformance affect could be established as there were no further matches from which to glean data. Second, potential follow up measures of preperformance affect amongst participants in the subsequent competitive season could not be measured due to the time constraints placed upon the study, and the changing team dynamics of collegiate rugby (i.e., several of the participants were final year students and would not be competing in collegiate rugby the following academic year).

Conceptually, one of the main limitations in chapter nine is its exploratory nature. Having identified ideal preperformance states and mental skills employed to facilitate such states, the final study of the thesis merely investigated whether the mental skill of task-specific imagery was effective. Whilst the imagery intervention was successful in enhancing precompetitive mental readiness, the exact mechanisms of the intervention effectiveness could not be established. The findings merely highlight the lack of overall agreement and understanding of mental imagery in the current sport psychology climate. The precise nature of the imagery content and its effect on enhancing or reducing activation states require more investigation. Direct examination and comparison of the relationship between theoretical perspectives of imagery, including Lang's (1977) Bioinformational Theory and Ashen's (1984) Triple Code

Model, and their impact upon models of activation, proposed by researchers such as Hockey and Hamilton (1983) and Humphreys and Revelle (1984) require investigation.

The intervention employed in chapter nine encompassed two types of imagery use. This merely highlights the inadequacy and limitations of the current theory to explain imagery use in competitive sport. On a conceptual basis, future research needs to address the role of the relative meaning of the image to the individual, its impact upon the effectiveness of the imagery use, and the subsequent adherence to mental skill development. Furthermore, the distinction between the exact nature of the image employed, and its subsequent effects require examination. In chapter nine, what could be described as cognitive specific imagery was observed to be effective in enhancing activation states and achieving mental readiness. Increased levels of self-confidence and reduced feelings of competitive anxiety were also experienced by performers. Prospective studies need to somehow manipulate the nature of the image employed and the type of outcome desired. Whilst this is inherently impractical for an applied setting, a more experimental laboratory-based approach may prove more fruitful in advancing the understanding of the nature and effect of mental imagery.

The role of specific mental skills, such as imagery, how the skill is employed, and its potential effect on performance also requires quantification. Martin et al., (1999) have emphasised the need to examine the temporal patterning effects of the different types of imagery in the period leading up to competition. Temporal patterning analysis in chapter seven revealed an increasing intensity in match related cognitions or thoughts, associated with images of performing skills and roles in forthcoming performance, as the time to event draws nearer. Therefore, researchers need to examine the interaction between the uses of match-specific thoughts (Jones, 1991) and images created with respect to forthcoming performance. Further lines of investigation are

required into the nature of implementation, and integration, of mental skills in relation to the specific temporal patterning effects of affective states.

A further methodological limitation of chapter nine was the employment of retrospective recall methods to determine the level of preperformance mental state experienced by the participant. Equivocal methodological concerns still exist regarding the efficacy of asking performers to comment upon their affective states post performance (Woodman et al., 1987). Here problems are thought to exist due to the potential influence of post-event attributional bias (Harger & Raglin, 1994). Future work may therefore wish to consider the development of brief measures of preperformance affect in similar fashion to psychometric measures of competitive anxiety, such as the Mental Readiness Form (Krane, 1994). Attention must be given, however, to the psychometric strength of such brief adopted measures, with regard to their sensitivity to detect subtle changes in the intensity and combination of affective experiences identified in the thesis as characteristic of appropriate and inappropriate mental preparation for performance.

On a practical basis, the length of imagery intervention in chapter nine did not follow traditional procedures. Therefore, the practice and learning of the intervention was not implemented over a long period of time. This quandary is one often faced by the applied practitioner, frequently required to intervene with clients during the competitive season. The practicality of establishing a block four week period to solely build the foundation skill is, whilst deemed ideal, impractical in the world of professional sport. Researchers need to 'get real' and design studies that mirror real life consultancy scenarios, enhancing ecological validity. Therefore, amongst other potential areas for development, researchers may wish to consider the impact of intervention

programmes of different length and intensity, across, before and within competitive seasons with various sporting populations.

A further limitation to the findings of chapter nine is the fact that no measures of match performance were taken. Such measurement may have enabled the researcher to assess whether the increase in participants' readiness for competition had a resultant effect on match performance. Whilst various researchers have proposed links between preperformance mental states and upon performance (Silva & Hardy, 1986; Boutcher, 1990) very little empirical work has investigated the area. Chapter seven provided some initial findings, by requesting participants to provide a potential rationale, or lack of rationale, for the importance of achieving mental readiness prior to performance. The results pointed towards the achievement of ideal preperformance mental states as a prerequisite for subsequent individual performance, in the face of other potential mediating factors. The value of assessing performance measures, and the subsequent underlying mechanisms, is therefore a rich areas for potential research.

Consequently, perhaps the most important theoretical perspective requiring examination, is the relationship between preperformance mental states and subsequent performance. Employing a more comprehensive, thorough approach to the exact nature and means by which various 'psych up' strategies exert their influence upon performance requires examination. Specifically, the desire to examine how forthcoming performance is mediated by changes in affective states and levels of activation warrants investigation. Researchers clearly need to identify the exact means by which mental states influence forthcoming performance before attempting to regulate such variables. Once a potential relationship has been established and understood, existing techniques, such as Individual Zones of Optimal Functioning (IZOF; Hanin, 1986) could be adopted to investigate optimal preperformance mental readiness. The impact of psychological

skill interventions, such as mental imagery could then be employed to determine whether the notion of being in the 'zone' or getting into the 'zone' can be achieved and the resultant impact upon performance assessed (Annesi, 1998).

A potential overall model employed to provide a conceptual framework for the examination of these future research suggestions is provided by Gould and Damarjian's (1996) proposed model of psychological preparation for peak performance. The model is an eclectic approach to comprehensively encompass the potential factors that impact upon an individual performer's preparation for performance. The model constitutes the fundamental foundation attributes, including personality dispositions and orientations, together with the psychological skills and coping strategies employed to achieve and maintain the ideal performance state. The physical, social, psychological and organisational environment in which the athlete trains and performs encompasses these foundation attributes. By adopting such a comprehensive model and viewing the psychology of the performer as a dynamic process rather than the examination of separate variables, the researcher and applied practitioner may be able to better comprehend the psychology of the individual performer's preparation for competition.

In embracing such a comprehensive model of peak performance, researchers need to adopt appropriate methodological choices for the examination of the various specific aspects of the model (Martens, 1987; Dewar & Horn, 1992). The current thesis adopted a multi-method approach to the identification and enhancement of preperformance affective states (Hardy et al., 1996). This eclectic approach was undertaken to provide a strong overall examination of the research areas, avoiding any potential weakness allied to the sole employment of one unitary methodology. In future, it may be that the examination of the specific mediating factors upon the appropriate level of a performer's activation state requires a quantitative statistical approach to

determine potential relationships and associations. Equally, establishing the precise nature of the perceived effect of a mental skill intervention to influence this desired level of activation state, may require the adoption of a richer qualitative perspective. Future research, therefore, needs to be cognisant of the most appropriate method suitable to best answer the question being proposed in the unifying model (Hardy et al., 1996).

The current climate of sport psychology has seen researchers adopt a more ecological approach, compromising internal for external validity, in an attempt to move out of the lab and into the field (Martens, 1979) and establish the efficacy of household techniques within the profession (Smith, 1988). Alternative methodologies are now widely embraced in order to understand the sports performer as a whole, human being, rather than human machine (Martens, 1987). Given the current state of understanding within the discipline, researchers appear now to know 'it works' but don't appear to know 'why it works'. Current alternative methodologies have, therefore, helped to establish that 'it works'. However, a more cautious return to the laboratory setting, armed with the newly acquired understanding of the performer in the field setting, may be required in order to help researchers establish 'why it works.'

In conclusion, this thesis has increased the understanding of the competitive athlete's experience of the precompetitive period. First, evidence has been provided that the overall precompetitive affective response experienced is a positive one. Second, the existence of symptoms associated with facilitating interpretations of competitive anxiety has been observed within this overall positive affective state. The thesis has also established the influence of significant others upon an individuals mental preparation for competition in a team sport. The employment of task-specific imagery in an elite level team sport to achieve appropriate preperformance mental states has further been

identified. Finally, evidence was provided for the impact of a task-specific imagery strategy in enhancing appropriate mental readiness for performance in sub-elite rugby union players.

The overall result of this research process has been to facilitate a greater understanding of the affective experiences of competitive athletes prior to performing and the impact of the mental skills they employ in order to facilitate and enhance these appropriate mental states.

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APPENDICES

APPENDIX A.

QUESTIONNAIRE TITLE SHEET

CHELTENHAM
&
GLOUCESTER
College of Higher Education

LEISURE & SPORT RESEARCH UNIT

On the following pages are three questionnaires that relate to how sports performers usually feel prior to competing in sport.

Please complete them as honestly as possible.

Remember there are no right or wrong answers and your responses are strictly confidential.

Thank You Very Much

AGE: _____

SEX (M/F): _____

SPORT/ EVENT: _____

YEARS IN COMPETITIVE SPORT: _____

HIGHEST REPRESENTATIVE LEVEL ACHIEVED:

JUNIOR: _____

SENIOR: _____

APPENDIX B.

MODIFIED COMPETITIVE TRAIT ANXIETY INVENTORY-2

The effects of highly competitive sports can be powerful and very different among athletes. The inventory you are about to complete measures how you generally feel prior to competition. Please complete the inventory as honestly as you can. Sometimes athletes feel they should not admit to any nervousness, anxiety or worry they experience before competition because this is undesirable. Actually, these feelings are quite common, and to help us understand them we want you to share your feelings with us candidly. If you are worried about the competition or have butterflies or other feelings that you know are signs of anxiety, please indicate these feelings accurately on the inventory. Equally, if you feel calm and relaxed, indicate as accurately as you can. Your answers will not be shared with anyone. We will be looking only at group responses.

Directions: Any number of statements that athletes have used to describe their feelings before competition are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you generally feel directly prior to competition. There are no right or wrong answers. Do not spend too much time on any one statement, but choose the answer which describes your feelings *in general* before competing. When you have this thought/feeling, do you regard it as negative (debilitative) or positive (facilitative) in relation to your upcoming performance on this task? N.B. If you have scored '1' (Not at all) on the first scale, then respond in relation to that feeling, e.g. if you responded 'Not at all' to question 4, then you would respond on this scale as if you had no self-doubts.

	Not At All	Somewhat	Moderately So	Very Much So	Very Negative (i.e. debilitative)				Very Positive (i.e. facilitative)			
1. I am concerned about this task	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
2. I feel nervous	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
3. I feel at ease	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
4. I have self-doubts	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
5. I feel jittery	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
6. I feel comfortable	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
7. I am concerned that I may not do as well in this task as I could	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
8. My body feels tense	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
9. I am self confident	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
10. I am concerned about failing	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
11. I feel tense in my stomach	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
12. I feel secure	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
13. I am concerned about choking under pressure	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
14. My body feels relaxed	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
15. I'm confident I can meet the challenge	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
16. I am concerned about performing poorly	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
17. My heart is racing	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
18. I'm confident about performing well	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
19. I'm concerned about reaching my goal	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
20. I feel my stomach sinking	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
21. I feel mentally relaxed	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
22. I'm concerned that others will be disappointed with my performance	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
23. My hands are clammy	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
24. I'm confident because I can mentally picture myself reaching my goal	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
25. I am concerned I won't be able to concentrate	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
26. My body feels tight	1	2	3	4	-3	-2	-1	0	+1	+2	+3	
27. I'm confident of coming through under pressure	1	2	3	4	-3	-2	-1	0	+1	+2	+3	

APPENDIX C.

THE POSITIVE AND NEGATIVE AFFECT SCALE

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer in the space next to that word. Indicate to what extent you generally feel this way, that is how you feel on average. Use the following scale to record your answers.

1	2	3	4	5
very slightly or not at all	a little	moderately	quite a bit	extremely

interested	----	irritable	----
distressed	----	alert	----
excited	----	ashamed	----
upset	----	inspired	----
strong	----	nervous	----
guilty	----	determined	----
scared	----	attentive	----
hostile	----	jittery	----
enthusiastic	----	active	----
proud	----	afraid	----

APPENDIX D.

THE PREPERFORMANCE FEELINGS SCALE

PREPERFORMANCE FEELINGS SCALE

INSTRUCTIONS

- Listed overleaf are 40 words that sports performers use to describe how they feel directly prior to competition.
- Please take your time over the scale, read each word, and circle the appropriate number which corresponds to the extent to which you *usually* experience that feeling *directly prior* to competing (i.e., from '1' 'Not at All' to '7' 'Extremely').
- Once you have done this, please indicate the extent to which how you regard that feeling is negative or positive to your forthcoming performance. (i.e., from '-3' 'Very Negative' to '+3' 'Very Positive').

All responses will be treated with complete confidence and anonymity

Thank You Very Much

	Not At All	A Little	Somewhat So	Moderately So	Very Much So	Quite A Bit	Extremely		Very Negative (i.e. debilitating)			Unimportant			Very Positive (i.e. facilitative)		
	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Competitive	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Depressed	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Angry	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Happy	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Competent	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Tired	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Energetic	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Tense	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Pissed off	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Excited	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Sad	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Worried	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Lazy	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Confident	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Psyched-up	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Active	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Afraid	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Dejected	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Worn Out	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Successful	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		

	Not At All	A Little	Somewhat So	Moderately So	Very Much So	Quite A Bit	Extremely		Very Negative (i.e. debilitating)			Unimportant			Very Positive (i.e. facilitative)		
Focused	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Alert	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Aggressive	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Cheerful	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Disappointed	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Lethargic	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Ready	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Nervous	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Proud	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Powerful	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Agitated	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
In Control	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Upset	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Weary	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Relaxed	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Anxious	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Ecstatic	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Calm	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Frustrated	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		
Dominant	1	2	3	4	5	6	7		-3	-2	-1	0	+1	+2	+3		

APPENDIX E.

INTERVIEW GUIDE, SCHEDULE & CONSENT FORM

Interview Guide

With the game of rugby in the professional era, coaches are increasingly seeking consistent performance from their players, in both games and training. This involves many factors, for example, thorough physical conditioning, correct diet, sufficient rest prior to matches. The area I am interested in looking at is how rugby players ‘get in the right frame of mind’ before playing. My research is aimed at helping rugby players to ‘switch on’ and get into the correct frame of mind in order to help them improve performance. To do this I am interested in investigating how elite professional players achieve this ideal psychological state and mentally prepare themselves to play. The interview will therefore be about how high performance rugby players such as yourself go about getting into the correct frame of mind before playing.

Instructions

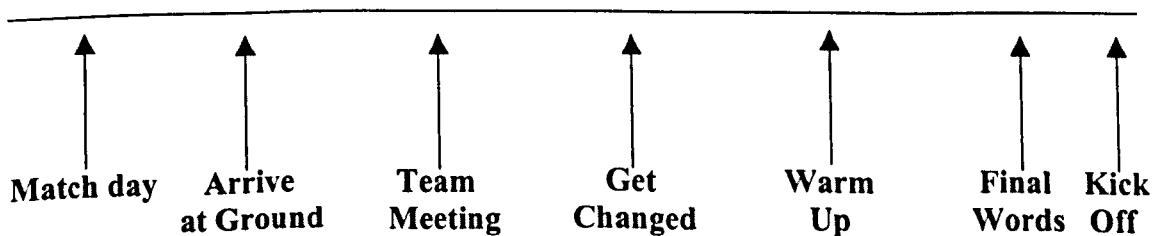
When you come to the interview I would like you to be prepared to talk about the build up you and your team go through before kick off. I’m interested in your thoughts, feelings, habits and routines that you experience before you play, and how you think they affect your match performance. Also, I’m interested in your views and personal experiences regarding your preparation to play, and your frame of mind before kick off. Specifically, I’d like you to talk about the following areas:

- Team and individual build up to kick off on match days.
- Pre-match routines (mental and physical).
- Recent good and bad personal performances and your state of mind prior to playing these matches.
- Mental preparation strategies used prior to kick off.
- Coaching recommendations for younger players regarding achieving the correct frame of mind.

When I talk about your psychological states I am referring to:

Thoughts, feelings, emotions and behaviours that you experience in the time period directly before you go out to play on the field in competitive matches. This may be in the dressing room or out on the field during the warm up. Examples of such feelings may include those of excitement, apprehension, enjoyment, anxiety, aggression, etc.

You may find the diagram below helpful in organising your thoughts about match days, your preparation before kick off, and when and how your mental preparation begins.



Please fill in the following questions and bring them with you to the interview.

Thanks very much.

Name:.....

D.O.B:..... Playing Position (s):.....

Club:.....

Previous

Clubs:.....

Are you: Full Time? / Part Time? / Amateur? **(Delete where appropriate)**

Playing Experience

How long have you been playing -

Rugby:yr(s)

1st Class Rugby:yr(s)

Senior International Rugby:yr(s)

Playing Achievements

Representative Honours:

.....
.....
.....
.....

Club Honours:

.....
.....
.....

Other Playing Achievements:

.....
.....
.....



CONSENT FORM

Title of Project: _____

Name of Researcher: _____

Please initial box

- 1. I confirm that I have read and understand the information for the above study.....
- 2. I understand that my participation is voluntary and that I am free to withdraw at any time.....
- 3. I agree to take part in the above study.....

Name of participant

Date

Signature

Researcher

Date

Signature

1 for participant; 1 for researcher.

1. INTRODUCTION

Ok....., Thanks for agreeing to be interviewed today.

- Psychology of pre-match mental preparation/Junior level international.
- Psychological experience that international players go through before the start of the match.
- Aim - how you prepare mentally for matches and what mental states you experience prior to kick off.
- Interviews - use the information to provide help for younger players and their mental preparation.
- Tape the interview for use with my research/Add any comments or changes if you wish.
- Copy of the interview- make any changes/Strictest confidence and responses in complete anonymity.

Using the time line as a guide I'd like to ask you about the build up to kick off for the team on match days. Talk me through a typical build up to kick off for the team on match day?

- How does this change if you are playing home or away?
- What other factors do you believe affect team preparation? *i.e., cup, league.*
- When do you 'switch on' for the game? *When does personal preparation begin?*

2. TYPICAL PREPERFORMANCE ROUTINE

Ok, Now I want to focus on your personal preparation for matches. By this I mean when you begin to 'switch on' and become focused on preparing to play.

- Describe to me your typical routine when you 'switch on' for games before kick off?
- Physical preparation? Mental preparation?

3. IDEAL/NON IDEAL PERFORMANCE STATES

Now I want to ask you about your mental state before kick off and how this may affect your performance. Think about the last time when you thought you played really well?

- What game was it? Describe it? Why do you think you played well?
- Physical preparation and Mental preparation?
- What was your mental state? *Thoughts/feelings/physical/behaviour experienced?*
- Overall negative or positive state of mind?
- What do you think contributed to this state? *Team/coaches/venues/opposition/family injury.*
- Nervous? In what ways? Effect of being nervous? Good or bad?
- Did feeling in control of the situation affect the way you felt?
- How much did the way you felt (*i.e., mental state*) help you to play well in the upcoming match?

In contrast to that I want you to think about a time when you thought you didn't play very well?

- What game was it? Describe it? Why do you think you played badly?
- Physical preparation and Mental preparation?
- What was your mental state? *Thoughts/feelings/physical/behaviour experienced?*
- Overall negative or positive state of mind?
- What do you think contributed to this state? *Team/coaches/venues/opposition/family injury.*
- Nervous? In what ways? Effect of being nervous? Good or bad?
- Did feeling in control of the situation affect the way you felt?
- How much did the way you felt (i.e., mental state) help you to play well in the upcoming match?

4. STRATEGIES EMPLOYED TO FACILITATE IDEAL MENTAL STATES

Now I'd like to ask about your mental preparation for matches.

- To what extent do you believe it is important to get yourself into the right frame of mind before playing?
- How do you get yourself into the right frame of mind before playing? *techniques/strategies?*
- What routines do you find work best/don't work?
- How did you develop this routines/strategies?

Now I'm interested in when you are in the wrong frame of mind before you play and how you go about correcting them and getting yourself into the right frame?

- Describe to me an instance where you can recall this has happened?
- How is your performance affected if you can't get into the right frame of mind? *What happens to you?*
- To what extent do you think this was important? *why?*

5. RECOMMENDATIONS FOR COACHES/YOUNGER PLAYERS

Finally, I'd like to you to imagine I was a younger player coming to you and asking for advice about how to improve my mental preparation for matches.

- What recommendations would you give to me about mental preparation for playing?
- Which of those factors do you consider most important for younger players to focus on?
- In what ways do you believe this is the most important reason?

6. CLOSURE

- Anything we haven't discussed?/further points - add/comment/change?
- Strictest confidence and complete anonymity - make any changes to the recording.
- Thank you very much for your time and good luck with the rest of the season.

APPENDIX F.
INTERVIEW TRANSCRIPTS

Interviewee: P1.
Date: 20/05/99.
Time: 11:30am.
Venue: Cardiff RFC.

SM - Ok P1, thanks for agreeing to be interviewed today.

P1 - No probs.

SM - The interview today is based around my area of interest in the psychology of pre-match mental preparation. As you know, I have played junior international level and I am really interested in the psychological experience that international players such as yourself go through before the start of the match.

P1 - Ok, sounds good to me.

SM - My aim of the chat today is to find out how you prepare mentally for matches and what mental states you experience prior to kick off. Basically, I hope to use the interviews and the information I get to provide help for younger players and their mental preparation for matches. If it's ok with you I am going to tape the interview for use with my research and you can add any comments or changes if you wish, and when you want.

P1 - Yeah sure.

SM - Finally, you can have a copy of the interview transcript and make any changes if you wish. The interview will be in the strictest confidence and responses will have complete anonymity.

P1 - Fine, fire away.

SM - Right then, using the time line as a guide, I'd like to ask you about the build up to kick off for the team on match days. Talk me through a typical build up to kick off for the team on match day?

P1 - Well, I will have a lie in on the morning of the game, get up around 10:00am, maybe have some breakfast and cereal, and just relax in the house, maybe watch whatever is on the box and just take it easy. Then I will spend the rest of the morning relaxing and building up to getting ready to go to the ground. If it's a home game then I can leave the house later and we have to be at the club for around 1:00pm. If it's an away game we probably meet an hour or two before that depending on where the match is. If it's really far then we will have an overnight stay in a hotel and travel to the ground for 1:00pm. Whatever we do away we try to do at home. So when we are on the road we aim to get to the ground together for about 1:00pm.

SM - So before you leave the house, on the morning of the match, what are you thinking about? What are you feeling?

P1 - Just trying to stay as relaxed as possible really, not getting too wound up or nervous or anything like that. Starting to think about the match a little bit. In fact you think about the match all week. That starts on the first training session of the week when you start working towards who you are going to be playing against on the Saturday. You don't think about it much early in the week, but as the game gets closer, and as soon as I know I have been selected then I start to get a lot more thoughts about the match and who I am going to be playing.

SM - Are they worries or concerns?

P1 - No not nerves or anything like that, just images of who I am going to be playing against and thoughts like 'Hey I've got a game tomorrow or the day after'. It's not negative or anything it's just you beginning to look forward to playing. That's why you play because you love it and you get paid for it, now anyway (laughs). That feeling just builds and builds up to the day of the game. It goes away a bit in the morning, because you know that you are going to be playing soon, so you don't want to think about the game too much because you can be too eager and get psyched up to early. In the week you know that you have another day to go, but on the morning it's very easy to wish the game to start early and get over excited.

SM - So what do you do to stay relaxed?

P1 - Just watch television or play on the playstation, read the papers that sort of thing. I clean my boots in the morning and make sure that my kit bag is packed and everything is in order, so I haven't left anything else out. Just a relaxing morning as possible. I used to try and do the same thing the day before, but with training sessions most of the days that really doesn't happen, so I try to have a good night on the Friday and have a relaxing morning on the Saturday. Town and shopping with the missus and all those things is not on the cards! (laughs) No (pauses) but I do try to be as relaxed as possible and not think about the match too much, I don't think about what I am going to do, my job or anything, that comes later I just look forward to going to the ground and the overall feeling of playing a game.

SM - In what ways does this change for internationals?

P1 - The internationals have bigger and longer build ups which are more intense and start earlier, you also have things like the media and team meetings all the time. You tend to be stuck in hotel bedrooms a lot more so you really have to stop yourself from getting bored or fed up with your surroundings. We are normally quite busy though, so it's nice to have some rest and relaxation time.

SM - What about specifically on the morning of the match?

P1 - The match is more in your face earlier. You have team meetings in the morning and the build up starts soon after breakfast, so you are thinking about the game and chatting about tactics and stuff a lot earlier than club matches. The psych up begins earlier.

SM - So does the way you feel in this period differ from club matches?

P1 - Er (pauses) no, not really because we are all professionals now and you have to be prepared for every game. Internationals are obviously a step up but the occasion just takes you and lifts you, you don't need psyching. So no, I don't feel different feelings, thinking about the match and looking forward to playing start a bit earlier and are more intense, everything is more intense with internationals.

SM - So your preparation is pretty similar?

P1 - Yeah, everything is pretty similar. I mean the travel and that sort of business is different because you are in a hotel for internationals which are never far from the ground, so the coach ride is a bit more intense compared to club games.

SM - Tell me about that?

P1 - Well it's funny really because for club games people are quite jovial and light hearted at the start of the journey and everyone is doing their own things or in groups talking, reading or listening to music. But as the bus gets near the ground and we get off it's all-serious and we are professionals with jobs to do. Professional rugby is my job, and we have to act accordingly. That is our big ethic at Cardiff. But for international games the coach

journeys are shorter and by that time in the day we will have had the team meeting, so everyone will be on the bus, everything is very quiet and everyone is in themselves just getting ready for what's about to happen.

SM - So your preparation doesn't change if you are playing home or away?

P1 - No, I think I've said this already, but we try and keep things the same, home or away, at the club, so that we have our routine that we are used. Things like traffic jams can fuck things up but that's part of the job. It doesn't happen that often either so you have to deal with it.

SM - Ok, so that's up to arriving at the ground, from there....?

P1 - From there we will go to the changing rooms, I'll have a look at the programme, see who is playing.

SM - Why do you do that?

P1 - I don't know really (pauses), I suppose it just helps you get a picture of who you are going to be playing against and what you are going to have to do against your opposite number. It's just something I have always done. When you first start playing it's great to see your name in the programme, nowadays I suppose it's just to take up a bit of time between getting to the ground and the team meeting. People read the programme and have a laugh if there is a player profile in there or something funny that has been written. Everything is light hearted at that stage. Some of the players will go and pass a ball about on the pitch. I like to have a wander around to see what the conditions are like. If we are at home I just check things like the wind and the sun. Playing prop I don't really have to worry about things like that but I always check them. If we are away I will spend a bit more time walking the pitch look for crucial areas where we could have important scrums. Sometimes there may be muddy patches with not much grip so you have to be prepared for them when it comes to the game. About 1:30pm we have a team meeting.

SM - Tell me a little more about the team meeting, what goes on?

P1 - The meeting, at home, is upstairs in the clubhouse, if we are away then we may have it in the changing room or the hotel before we get on the bus. They tend to be very similar in their format, but the content is obviously different from week to week. The coaches will say words, R. will say some words and J. will always say something. They just talk about what we have worked on training, whether it's a style of play or defensive patterns we have been working on. These are just reinforced. We are reminded of our roles and what is expected of us. Sometimes L. will pick us out individually and he tells us what he wants from us, other times he will talk about units, or just backs and forwards. It's not a shouting at us team meeting, that normally occurs in the changing room. Sometimes we get shouted at if it is a really important match, or we had a poor game the last match. But it is generally tactics, the opposition and what we are going to do to them. We may watch a feel good video with aspects of our good plays this year, with music over the top, or we may watch a big hits video. We have a white board and we talk through moves and plays. Just reminders of what we are aiming for as units (pauses) and as a team.

SM - So what are you feeling when you come out of the meeting at around what 2:00pm?

P1 - Yeah about 2:00pm. (pauses) you feel.. (pauses) you feel together, all thinking about the game and as you say switched on, that's a good way to describe it. Before, everyone is a little focused but we are all still relaxing and there may be a bit of laughter and joking. A little bit nervous I guess because we all want to, well I want to get on with the preparation and get into the warm up and the game. Once I get out of the meeting I am thinking only about the match and getting myself ready to play, and what I am going to do in the game.

SM - So how would you contrast the two in terms of emotions?

P1 - Before it's definitely a little bit nerves, well apprehension I would say, anticipation. After the meeting it's a mixture of building excitement and concentration.

SM - So out of the team meeting and then where?

P1 - After the team meeting it will be about 2:00pm and it's over to change, get my kit on, get a rub down from the physio and get my hands strapped. We normally start going out on warm up about 2:15pm. We all have to be out by 2:25pm, that's when the team warm up begins. Some players go out earlier, some go out right on the time. I like to go out early and do some laps and have a stretch and do some reaction drills together with some striding and more stretching. Then we go into the team warm up. That will be laps of the pitch with balls, some grids and passing, some contact work on the pads, more strides, building up to full pace sprints. Then we will split up into backs and forwards and work on lineouts, the backs will run through some moves. If everything is good and the weather is fine we will go through a team run. We finish with some more stretching and reaction drills, just to get us sharp. After that it's in for about 2:45pm, we all go in and prepare for the kick off.

SM - What are you thinking and feeling during the warm up?

P1 - I try and stay focused on the warm up and relaxed. I just keep channelling my energy towards getting my muscles warm and stretched. I don't get over aggressive, in fact that aggression and psyching up comes just before kick off. In the warm up I am very controlled and concentrating on warming up. I don't really think about anything, just doing the drills properly and making sure that the lifts in the line outs are good and I am passing and catching the ball well, just getting a feel for the ball, the pitch and the conditions so that I feel comfortable.

SM - So when do you 'switch on' for the game?

P1 - Well it starts during the team meeting and builds during the warm up and when we go back into the changing room, It's not until about five minutes to go that I become totally focused and psyched to play. Before that I am just building up, concentrating on preparing myself and looking forward to getting to the match.

SM - Ok, lets look at that ten minute period before the kick off when you get into the changing room. What are you doing and what is going on?

P1 - After the warm up we go back into the changing room and do our final preparation, last piss, any extra strapping or rub downs or sorting kit out. There is a bit of hustling and bustling as everyone on the dressing room is moving around doing their preparation. Then L. or one of the coaches will give us a talk and then R. will talk, then we get on our feet and then we are out on the pitch for the kick off.

SM - So is it quiet or noisy in this ten-minute phase?

P1 - Uhm (pauses) it's quiet (pauses) it's both really, when we first come in and everyone sits down and it's quiet no one is talking then suddenly after the coaches talk every gets fired up, some of the senior players are talking, and some are shouting and people start to move and the place becomes active. Then when we are on our feet before we go out, everyone is very vocal.

SM - What are they saying?

P1 - Just reinforcing that we have to be up for the game, making sure we are psyched up, we know our jobs and that we are up for the challenge. There is lots of swearing and shouting, people making each other aware that we have a game coming up and that we need to be ready. Everyone is making sure everyone else is up for it.

SM - Do you do any shouting?

P1 - No (laughs) not that I am aware of, I save that for the pitch. The shouting just adds to it all, it just adds to the melting pot of the team atmosphere and psyching up process.

SM - So what is going through your mind in that ten minutes before the kick off?

P1 - Not much really, not much ever (laughs), but seriously, as soon as we get in from the warm up I like to sit down and relax and begin to build my focus. So I sit down and have a quiet few minutes, I think a lot of the players do that, it's the calm before the storm really, a few quiet minutes where you contemplate what you are going to do out on the pitch and what lies ahead of you. I like to have some deep breaths, shut my eyes and do a bit of seeing myself doing my jobs on the pitch, I go through my roles, hits in the scrum and lifting in the line out.

SM - How clear are the images? Can you see yourself and the opposition?

P1 - Yeah it's quite clear, I see myself making the hit in the scrum or lifting my jumper in the line out. The opposition is there but they are just there and you can't really tell them from each other or see any kit.

SM - Are you inside your own body or watching yourself on video?

P1 - I'm inside (pauses)..... inside myself, yeah, doing the movements, making the hit and lifts. I find it very useful because it helps me remind myself that I can do my job well and that I know, well it's a like a mini warm up in itself, one last check before the kick off to make sure your head knows what it is going to do out on the field.

SM - So you are visualising yourself and what else?

P1 - Visualising yeah and.. just going through my jobs, telling myself that I am going to have a good game today. Telling myself I have had a good week, thinking about how good my preparation has been and how fit and strong I am. Sometimes you can get the odd doubt in your mind in that quiet period, because you just want to get out on the field and you know you have to wait a bit longer, and if you are not careful your mind can wonder and that's when the doubts can creep in, things like 'Have I done enough training? Am I going to be all right in the scrum today?'. Not massive thoughts, but the odd one can creep in. So to deal with that I do my visualising and I go back to all my training and use that to tell myself I'm good enough. It's not often it happens, but when I was younger it happened a lot more and it used to make me a bit nervous before kick off and spoil my game a bit on the pitch for a while.

SM - How did it spoil your game?

P1 - I would go out on the pitch having already played the match in my head, perhaps convinced myself that I wasn't as good as my opposite number. So I would start the match on the back foot and uncomfortable and unsure of myself. That has gone now though as I have had more experience and training.

SM - So that's your quiet few minutes, what are you feeling once everyone is on their feet just before kick off?

P1 - Well after those moments of quiet, the coaches will say some words and then they leave, that is the trigger and everyone is up on their feet after that. The skipper will give us one of his pep talks and everyone is jumping up and down or talking to themselves and each other. Lots of shouting and encouragement.

SM - So how are you feeling at this point?

P1 - Just excitement really, just wanting to get out there and play. You know all the waiting is over and you just want to go and do the business.

SM - Is it any different for internationals?

P1 - Everything is amplified a thousand times, your emotions, the noise, the excitement and the eagerness. Just more (pauses) more intense. The butterflies are a lot bigger as well.

SM - You also mentioned earlier a little bit about sometimes having concerns and worries, would you say you get nervous then?

P1 - Well the doubts and stuff, they don't occur very often, and they aren't that massive or anything. The butterflies I get more often. But it's not like I get sick like some players do. It's more a tingling in my stomach, just my body telling me I've got a game on my hands. I think it's the fight or flight thing. So the tingling is just my body's way of telling me I am going to fight! (laughs). But I don't really see that as being nervous. Nerves are having jelly or heavy legs and being a physical wreck. Worrying yourself stupid and not being able to concentrate. I don't get that.

SM - So do you think being nervous is a good or bad thing?

P1 - I think what I experience, if you can call them nerves, the body tingling and butterflies if you like to call it that, are good because it's preparing you to play. Making you aware that you have to be focused and ready to play. Those kinds of nerves, they are good for you. Being a wreck, being sick and worrying yourself stupid, that isn't good for you, that can only use up your energy. Saying that though Jenks gets to be sick before every match and he doesn't do too bad. But I think with him it's not nerves it's his body and all the excitement. He doesn't get nervous in that sense after all the games he's played in and won.

SM - So being slightly physically nervous is a good thing for you?

P1 - Yeah, but I don't know if I would call it nerves, more match preparation or something like that. A lot of people talk about nerves but it's more the excitement and anticipation of the game. A lot of people, like myself experience, you only, well I only get nervous if I don't think I am good enough to play in a match or I am worried about my opposition. That happened a little when I was very young but it doesn't now. At the top level in the professional game, everyone is looking for consistent performance.

SM - You've talked me through the typical build up for you and the team together, is there any other time when the preparation is markedly different?

P1 - No not really (pauses) I suppose friendly matches and non-league games have different preparation.

SM - What do you mean by that?

P1 - Well games like the Barbarians. The preparation is nowhere near as detailed. It is a lot more relaxed and lighthearted, less serious. The players are joking and laughing before kick off. It's on the pitch then that everyone gets it together. As opposed to before we go out. But those are only friendly matches with nothing on them. The rest of the games are professional and we are getting paid, so we have to be serious.

SM - Ok, we have talked about your preparation before matches, now I want to ask you about your performance in games. Specifically when you thought you have played really well, or on the other side when you feel you have played not so well.

P1 - Ok.

SM - So to start off with, can you recall the last time you played really well.

P1 - The last time I played really well, I guess it was (pauses) against (pauses) well that's quite hard to think off really. I mean I can't really recall having played really well or played really badly, had a shocker you know.

SM - Ok, so for you what is a good performance?

P1 - The basics really, doing my job in the set pieces and contributing to the loose play. For props a good game I suppose is screwing your opposite man. Yeah that's about it, if I do all those well then that for me is a satisfactory performance. Any more than that is really a bonus. But those things are the minimum that I expect to do week in week out.

SM - So can you describe to me how it feels when you are playing well?

P1 - You feel good. Very good (pauses). Compared to bad games the clock is a lot faster, I mean you can run all day, you never get tired. You make some important plays in the game. It's a feeling of invincibility and energy I guess. You are very confident in the game. Everything you do comes off, it's a sixth sense where you just know what to do and everything that you do in the match just works.

SM - Can you give me an example?

P1 - Something like taking a pop off a ruck and making the gain line or finding a gap, or even just making a cover tackle. There are lots of things. It's not just individual, there are times when the whole pack are playing well, and the scrums are good, the line outs are clean and we are carrying the ball well up front. At times like that you feel like a strong unit. So there is a lot of excitement and sense of unity when the game is going well. It's like a well-oiled machine! (laughs sarcastically).

SM - Ok, now in contrast to good performance, what about when things aren't going well. What happens then?

P1 - Ah, well it can be described like the feeling of getting out of the wrong side of the bed in the morning. The opposite of the best performances. So you are up against in the scrum for whatever reason, because there is not enough weight coming through or because they have got the shove on you. That can be very frustrating because you may be shoving your nuts off but the other boys in the pack my not being giving their best, but you can end up getting screwed. That's the worst thing for me, is getting screwed by my opposite number. I get a lot of shit about my scrummaging from the critics because of my weight, but I take that on the chin. My scrummaging is fine, I can hold my own. I know that I can get up from the scrum and beat my man to the breakdown every time. But when chips are down, you get out from scrums and your legs feel heavy and like lead. There's no gas in the tank. It is hard to get everything going. Often you get a run of mistakes and that makes things worse.

SM - So you talk about feeling frustrated and tired and heavy legged, anything else?

P1 - Just out of touch, or out of tune with the game I guess.

SM - So you have your good and bad games...?

P1 - Yeah.

SM - What I want to know is whether your preparation is any different before good and bad performances, and whether you feel any different?

P1 - Uhh (pauses).... No not really I don't think so. I mean I try and keep my preparation as consistent as possible. Get a routine established and stick to it. So not much really differs. Sometimes you can go into games feeling physically tired because of a heavy training period or intense period of matches. Other times you can go in there feeling mentally not quite there and it takes a while to get into the game. But even though you are not quite there in terms of feeling 100%, once you get into the game then you can actually have a good match, and you think 'I played all right, despite the fact I felt tired and stiff before the match'. But I see what you are getting at and I think when I have been totally focused and spot on, my performance has been a lot more consistent, than the occasions when I haven't perhaps quite been there. How motivated you are also plays a big part. It's not I don't want to play matches, don't get me wrong I love the game, but there are times when you really have to dig deep to get yourself up and psyched to play. In the past I have had games, where for whatever reason, tired, or carry an injury, or perhaps the last game before an international. That I have had problems with my motivation. Those are the type of games that you just want to get over and done with, get it out of the way. Funnily enough they are the games that last the longest because you are aware of the clock all the time.

SM - So when you have matches like that, and you have problems getting up for it, how do you get yourself motivated?

P1 - You have to be professional. You keep a focus on doing your job as good as you can. You must concentrate on being part of the unit and part of the team. Although I find once I get into the games you can't but help getting involved and then you forget about what you were thinking before and you start playing and enjoying the match.

SM - So would you say there is a link between how you feel before you play and your performance on the pitch?

P1 - What, if you feel bad you play bad?

SM - Yeah.

P1 - I think you need to be fully prepared and focused to play. Whether or not you will play really well after that depends on so many conflicting factors. The opportunities for runs and tackles may not come your way. But you will be giving yourself the best possible opportunity to allow yourself to play to your maximum. On the other hand if you aren't fully prepared or your head isn't right. Whether that's because you are carrying an injury, you had a fight with your wife on the morning of the match, which has happened before (laughs). Then you are reducing the chances of you playing well and producing your best form. So I guess the two are linked to a certain extent. The thing about this game though is that you can go out to play a match cold, spend the first twenty minutes in cloud cuckoo land and then something will happen, you wake up and then you are switched on. If you are fully focused then there is less risk of that happening. If you are out of it for the first quarter then the game could be lost by then.

SM - So there is a link there, but it is contingent upon a lot of factors?

P1 - Yeah, the opposition has a big say in things, plus how the rest of the boys are playing.

SM - You talk about how the rest of the boys are playing, what about the crowd, how much does the crowd effect the way you feel?

P1 - Because we are professional we should be able to play in any conditions with any crowd, with any referee, but it is a lot harder than it seems. Playing a home international is an awesome experience in terms of the atmosphere that is created. The crowd just blow it all up and make the atmosphere stronger.

SM - Is that a good or a bad thing?

P1 - Very definitely a good thing, the pride and the passion it brings is awesome.

SM - What about away crowds?

P1 - They don't really bother me. I try and use them to my advantage. To turn what they are saying and the noise they are making to my advantage. Turn the anger and hate they give you into positive aggression, to increase your adrenaline and motivation. I use it to boost my psych up, just like I do the home crowd. It is quite hard to do sometimes when you are playing somewhere like Stade Francais and you can't hear yourself think and the crowd are going wild.

SM - It didn't happen this year though!

P1 - No it didn't thankfully. That was an awesome day, a great night as well. (laughs).

SM - Save it for your autobiography!

P1 - Yeah.

SM - You also mentioned that your performances rest a lot on the other members of the team. How much of an influence do they have on your preparation before kick off. Can their mood affect your preparation?

P1 - Sometimes if the dressing room doesn't have the atmosphere it normally does, then that can make me think 'Something's up here, the atmosphere is not the same, everyone seems a bit 'flat'. That can be worrying.

SM - When you say worrying, in what way?

P1 - It makes you think about whether they are going to be up for the match. If one or two are quieter than normal then perhaps that is not so bad. If a lot of players are quiet then if a group of the lads aren't up for it can have an impact on performance.

SM - In what way

P1 - Sometimes there can be games where everything is a bit flat and lethargic. Players are leaving things to each other and there are players not with it, and we are in second gear. Everyone expects everyone else to do things (pause) well it needs one of the boys, like E. or J. just to get everyone riled up and moving again. Its funny really because it's really hard to do, but that's all it takes, someone to make big hit or have a big run and it wakes the whole team up.

SM - So how would you describe the dressing room when there is no atmosphere and what is going on? What are people doing or not doing?

P1 - Because of the amount of time we spend training and playing together, you get to know each players behaviour really well before matches. You know that some will be chatty, you know that some are really quiet and like to sit in the corner. Other players are on their feet talking non-stop and giving out encouragement to everyone, whether we want it or not. Some players are doing lots of stretching and jumping up and down on their feet. That is the atmosphere, and you notice when people are not doing or saying the usual things. With us the changing room is quiet, no one is saying anything and the senior boys are quiet. They are the ones J. or R., who recognise that there is no atmosphere and they pick it up.

SM - So has a flat dressing room lead to bad team performance?

P1 - Well not poor performances, but we have gone out there and started badly because we haven't been together. You have to hit the ground running at this level. You can't afford to get caught cold. You have to be prepared. When the changing room is there it is a great sense of team spirit and you know that the boys are cooking and we are going to have one hell of a game. Other times it's not there, the togetherness and the unit and that causes problems. If we haven't got it together then we have lost the games, because we haven't been able to get ourselves going.

SM - Ok, that's great P1, we have just about covered everything I'd just like to finish with you getting your coaching tracksuit on.

P1 - Ok.

SM - I'd like to you to imagine I was a younger player coming to you and asking for advice about how to improve my mental preparation for matches. Specifically, how to get psyched up and into the right frame of mind before I played.

P1 - Ok, so I am giving advice to a young prop forward?

SM - Yeah, that's right. What recommendations in your capacity as coach and an ex-player, would you give to me about mental preparation for playing?

P1 - Well (pauses)... the key thing in my view is to get a routine established. So I would advise the player to take a look at his current preparation for matches and examine what it is that he does before he plays. Say like we have talked about from the morning of the match to the kick off. Look at his diet and what he eats and drinks on the day of the match, what he does in the morning and what he does in the time before he has to get to the ground. Once you arrive at the ground and go through the changing and team preparation everything is really set and organised, but it may be that he doesn't have a set routine on the morning and so is wasting energy sitting playing the match in his head or he is just out doing things and not really giving enough respect to the fact he is playing later on the afternoon. So I would get him to establish a routine for that period of the preparation. The I would ask him to get a routine on his warm up and changing. Does he listen to a Walkman in between waiting to go out to warm up? Is he thinking about the game to himself, or is he chatting away and laughing and joking? Is he not really focused in on his job? A lot of the boys listen to music in the changing room, I personally don't. But if we have a long journey on the coach I find that helps to take my mind off thinking about the game too much. So I would say to him to make a list of what it is that is expected of him in the match. Then to sit down and go through his roles, just go through what he is going to do. For a prop that is going to focus on the getting the hit right in the scrum and making sure he lifts his man ok in the line out. That really is his fundamental role, so that should be his focus. If he gets nervous or is worried about playing because it is his first season, then perhaps he needs his confidence boosting. A few words from the coach or the rest of the front row.... that's important to have a good relationship with the rest of the front row. So if he is the youngest the other two need to bring him along and look after him. Encourage him and convince he can cope with

anything. You don't get worried or nervous or anything like that if you know you can rely on your team mates and you trust them to look after you and they have the confidence in you to look after them. That's when you get good team and good performances. If anyone does make a mistake then the others will work hard for each other to cover it up.

SM - You have mentioned a lot of things there. Out of all the advice, which of those factors do you consider most important for younger players to focus on?

P1 - Just keeping focused on your jobs in the match. Thinking and visualising in your head what it is you are going to do in the game. Making sure you are prepared. If he goes through all his jobs and makes sure he knows what he is doing and is comfortable with the scrummaging then that will give him the confidence. But establishing a routine with that, getting into a habit of doing the same thing regular, finding the right level of focus that's really the trick. That will come with experience though.

SM - How did you develop these routines / strategies?

P1 - Through experience and practice. No one really coached me or told me I should sit and have a few quiet minutes to go through my roles. It just sort of developed. You try things, some work, some don't. I think what a lot of people forget is that by the time you are twenty seven you have been playing rugby for over twenty years, maybe competitively and at international of some form for over ten years. You play over thirty games a season, so in a career that is lot of games to develop your routine and an understanding of when your body's right, and not right. For me my routine has developed. As the level of competition has increased so has my preparation, both physical and mental. It has to. Being professional you are paid to deliver consistent performance on a Saturday week in week out, so you have to break down every aspect of performance and cover that in training sessions. Whether that may be weights, speed work or mental preparation before the match. It all needs to be professional and consistent.

SM - So do you do a lot of practice of your mental preparation skills?

P1 - No, not really, you just learn through experience how to relax yourself and concentrate and focus. How to keep your mind occupied on the game, not letting worries or negative thoughts come in. You experience them first time round in your career and then you learn from it and learn how to deal with it. I guess some players have problems and that's when guys like you come to help! (laughs).

SM - You have mentioned that you use imagery and you visualize your forthcoming performance, as one example where did you learn to do that?

P1 - I wasn't really aware of it consciously, it's just something I have always done, it has worked for me so I have stuck with it. I didn't really think of it as a skill or the technical name imagery, I have just always done it. It's the same with relaxation, you know ever since I was little and you watch sports like the Olympics on the TV, and you see weight lifters getting focused before a lift, taking deep breaths and closing their eyes. I guess I watched sports like that and tried that to keep relaxed, do what they were doing. But I have never been really conscious of it all. This interview has really made me think about it a lot.

SM - So the skills have developed?

P1 - Yeah, learning to relax for example is something you do after a hard bout of exercise. You have to get your breath back and get as much oxygen in your lungs to help you recover. So taking deep breaths is just what you do to recover. The better you become the quicker you recover and the more relaxed you feel. So if you do get a bit of a tingle before the match you just try the breathing to help you relax.

SM - Ok, I think we have covered a lot there. Is there anything that we have talked about that you would like to further comment on or change? Are there any further points you feel you wish to add to?

P1 - Ahh (pauses) well (pauses) I think that pretty much describes how I prepare for matches and the frame of mind I get into. What I think is extremely important is that the younger players realise that international rugby is not just about having the physique and the technical skill, it's more than that. Players have to realise that to make it to the top they need to be prepared to fight for everything out there. It is really a battle, and you have got to be prepared to put your body on the line all the time. That's why I think a lot of promising younger players don't make it because of the fact that they have not got the guts or toughness to cope with the step up on and (pauses) off the field really, because the pressure, you know, both physical and mental is immense. When you are on the pitch it is dog eat dog, especially in the front row. You have to go into every match prepared to dominate your opposite number, and dominate in every sense of the word. I learnt that very early on in my international career. In club rugby I was very mobile and got around the park with a high rate. After the initial step up I found there was very little time for being mobile and you really had to concentrate and doing the hard stuff for the majority of the matches, the battle up front. Then you may get the odd chance to get the ball in your hands but that was considerably less than I had done for the club. So younger players need to prepare themselves mentally not just for the increase in pace but the increase in toughness and fight really.

SM - So there is a lot more to it than just increases in skills and physical fitness?

P1 - Yeah a lot more, more fight and more dog. That is probably the hardest thing to prepare for but it comes with experience and eventually you can deal with it and it becomes natural. It's all about the massive increase in intensity in all areas of the game, but that's what it's all about.

SM - There is some really good advice there is there any more to add?

P1 - No, that's about it I think.

SM - P2 that's great, just to remind you that the interview is in the strictest confidence and complete anonymity. You can have a copy of the script and make any changes to the recording if you want.

P1 - I'm sure everything is fine

SM - Thank you very much for your time and good luck with the rest of the season.

P1 - Thanks and good luck with the work (laughs).

Interviewee: P2.
Date: 15/04/99.
Time: 10:00am.
Venue: Swansea RFC.

SM - Ok P2, thanks for agreeing to be interviewed today. The interview is based around my area of interest in the psychology of pre-match mental preparation. As you know, I have played junior level international rugby and I am really interested in the psychological experience that international players such as yourself go through before the start of the match. My purpose of the interview is to find out how you prepare mentally for matches and what mental states you experience prior to kick off. I hope to use the interviews and the information I get to provide help for younger players and their mental preparation for matches. If it's ok with you I am going to tape the interview for use with my research and you can add any comments or changes if you wish, and when you want.

P2 - Yeah sure

SM - Finally, you can have a copy of the interview transcript and make any changes if you wish. The interview will be in the strictest confidence and responses will have complete anonymity.

P2 - Sure.

SM - Ok, I want to start off by asking you to use the time line as a guide. Talk me through your routine on the typical day of the match, from getting up in the morning right through to kick off?

P2 - I will probably wake up about ten to half past, have a good lie in, just switch the television on and chill out, watch TV. Then I will get up and start my sort of fuelling up. Which is probably cereal, all my vitamins and what have you. Cereal and then I like to have ... I eat rice pudding because I find it hard to eat on match days. So it's the easiest thing I find to eat. Then I leave it for half an hour then, then I'll try and watch TV, cartoons or whatever, just not thinking about the game really.

SM - Do you want to think about the game at that stage?

P2 - I don't no, not really, because I don't want to release any sort of nervous energy type thing. If I do I'll start thinking about it and I will get a little bit anxious. If that happens I switch myself off then. I get my food down, so it's mainly so I can eat really. So then half an hour later I will have beans on toast or scrambled egg or whatever and er, and then I start getting my kit together, which is a routine type thing, just to help my get just to help me get to the game, knowing that I am going to the game to play rugby, get my boots together, check everything. While I am doing that I am fuelling up. Plenty of carbohydrates and water and then I leave for the ground. I do my little checklist before I go there. Work from head to toe. Gumshield, shoulder pads, boots, and then I know I haven't forgotten anything, so I am off to the ground. I always get there sort of twenty minutes before everyone else. Say if we have to be there at 1:00pm, I will be there at 12:30pm. As will a couple of other players, G. Jenkins, and the like. I like to walk the pitch then.

SM - So this is as soon as you get there?

P2 - I like to get out on the pitch with the ball in my hand. Erm, have a look around and see what the pitch is like. Have a look at what the weather conditions are like. As I go around the pitch I like to visualise. Just putting yourself in positions on the field where you know you are going to be needed. Specially, say on the kick off line, or on the twenty-two doing a line out, or whatever. Just nothing too heavy, just seeing, feeling and thinking what it is going to be like. Then I go back into the changing room. I get myself kitted on, mentally prepared, see the other players, chat with them. Then we have our team meeting then at about an hour before the game. Just listen to what the coaches has got to say so that everyone else is feeling the same, then we are warming up then. I never feel the best warming up.

SM - So after the team meeting what then?

P2 - After the team meeting we go out and warm up in about fifteen minutes. Sometimes I listen to a Walkman, listen to music you know.

SM - Tell me about the warm up?

P2 - Sometimes it's quite intense, which I mean I find can give you too much of a rush straight away. You feel a bit of a come down, when you are straight into it. So, often I like to get out five or ten minutes before the start of the proper warm up and do my individual stuff to get the heart rate going. I then feel I can get into it a lot better. A lot of the boys seem to think it's the same, you know that it's a bit vigorous. After the warm up we do a few line outs, the forwards and the backs split up, we will do that and as soon as we are feeling good we will get in and huddle up. Then we will say a few words, a few pointers that we want to take out onto the pitch. We go inside and do our own final little preparation, vaseline or whatever. Then we huddle up a few minutes before we go out. There are a few words from key players and I like to do a bit of talking then some of the other players like to be quiet, each to their own really then.

SM - So that's the summary of your build up. For you personally when do you start switching on for the game?

P2 - Sort of mid morning, after I have got the food down me really. When I am fuelling up thinking about the game. Thinking about what frame of mind I am in, both physically and mentally that I am in. Just knowing that I am going to be in for a tough game.

SM - So at that stage in the build up what are you actually feeling?

P2 - In the morning I am excited, more a bit nervous about my own performance. Am I going to be as ... play as well as I did last week? Am I going to be able to get the performance, knowing what I want to do? Hoping that I am going to get the opportunities to do well.

SM - Do these thoughts and feelings carry through when you get to the ground?

P2 - When I get to the ground I always feel better. I always feel better when I get to the ground and start seeing the players, because it's great when we are playing at home especially, it gives you a big boost because you know you are going to a good crowd. When I see the players it's always a big confidence booster. You know you are playing with quality players.

SM - So what happens when you play away?

P2 - Well not much difference really. Our preparation, and mine is pretty much similar. I tend to do a similar thing. I just try not to break my routine. I mean staying overnight doesn't bother me or anything like that.

SM - Ok, so you are at the ground now, you are a bit more relaxed because your teammates are around. What are you feeling then?

P2 - I am quite excited when I get the ground. I am looking forward to the game then. Most of my apprehension has gone out of the window by then. I am just real positive thinking then. Looking forward to what I am going to be doing and looking forward to getting out there, just wanting to go out and play.

SM - Have you got any set routine before the warm up?

P2 -Yeah, I sort of.. I always put my shirt on last. It's nothing major though, no major superstitions though.

SM - At this time before the warm up, what is going on with the rest of the boys?

P2 - Not a lot really. There isn't much noise really. There are so many different characters. There are some that like to be left alone. The ones that like to be left alone generally have a Walkman on. So you are generally not bothering them too much if you are talking to them. Some like to laugh and joke but I mean it's not constructive to other people so that soon stops. Everyone is pretty focused from that period on.

SM - If we go back to the team meeting, describe that to me?

P2 - It's pretty similar every time. The boss will sit down with us, when we are semi ready then, kit wise. He just says his piece then and he talks for about fifteen minutes.

SM - That's in the changing room?

P2 - Yeah in the changing room. We used to do it out.. we used to do it in the room in the club first, but it tended to get lost when we get outside there, so we moved it to the changing room closer to the game so everyone as they were preparing in their own mind, that was.. it wasn't as though people were switched off and then having to switch back on again. It seems to work a bit better.

SM - Tell me about the bosses talk?

P2 - He uhm, if it needs, if people need to be threatened or whatever then you know you've got to do this and you've got to do that. It will be a mixture of two really. He will be giving us a bollocking in one moment, then he will be praising us in the next, building us up, putting doubts in, but trying to get everyone excited as well. He tells us what he wants to see from us really. Not too much on the opposition, just basically concentrates on the team and eh, what we are going to do.

SM - So describe to me how you feel when you come out of the team talk?

P2 - Good, really switched on. The coach is a very good motivator. I do respect him as well. He is a very good guy to listen to. He knows what he is on about. Everyone comes out very focused, I feel myself, focused and confident.

SM - About when exactly are you totally switched on and ready to go?

P2 - About three quarters of an hour before kick off I am really in tune. I am really excited and looking forward to the game. I feel a bit more aggression welling up as well at this point.

SM - Ok, talk me though a typical warm up?

P2 - For the warm up we do form drills, jog up and down the pitch, ball handling, we do six or seven of them. Then we will have a stretch, go into grids, another stretch then maybe a little bit of contact and then split up into units, backs and forwards. We then go though our unit work, stretching all the time.

SM - So, what is going though your mind when you are doing the warm up, what are you thinking and feeling?

P2 - Just getting the body right really, just feeling loose and stretched off. I really just think about what I am going to be doing. Going though my jobs. I still feel excited. Sometimes I may feel a bit stiff in the warm up. If you feel a bit stiff or tight or something you just concentrate on that to get it looser and get a good stretch on it, so I suppose you are not thinking about other things. However you know the work has been done by then. That you are basically switched on three-quarters of an hour before. So that's mainly why I do it. So that nothing is going to upset you. So that you are in the right frame of mind, even if you have got to do something else, you haven't got to pull yourself back up you have already done That three quarters of an hour before. You know in your mind what you are going to be doing and you are confident you have done the preparation.

SM - Describe to me this feeling of being switched on and focused?

P2 - Being confident in what your role is in the game. Being confident in your ability, and your physicality. Confidence mainly is being switched for me. Focused.

SM - What are you thinking?

P2 - No other thoughts apart form winning the game and performing well, and keeping my concentration up.

SM - Ok so team talk is over, you have gone out to warm up, you are back in and you have ten minutes to go. What are you doing then?

P2 - Just little habits that you go through really. Checking everything is feeling right, getting your vase (vaseline) on, and your are getting your head together

SM - What are you thinking about?

P2 - Nothing really, I tend to concentrate on other players. 'Cos my job is done then. I always feel good by then. I try to rally up the other players just to make sure they are up there. Just to make sure the boys in the, pack, the second row and the back row, the people who are going to be lifting me, or supporting me or whatever. Just make sure they are switched on.

SM - How do you do that?

P2 - Just a few key words, a few key phrases that they, they are going to need to do in that game. Just keep them up and focus them in.

SM - Would you say there are differences in the dressing room. Say for example when it feels flat?

P2 - Yeah, you can notice when it is flat. There are people who are a bit lethargic or whatever. People aren't sort of bouncing up and down.

SM - Does that make a difference to you?

P2 - Yeah it always does. I think if people are looking forward to the game it picks you up a bit. The opposite can happen as well I guess. You can get a feeling and then you yourself can get into that lethargic mode. Like it is just going to happen, you tend then to go out there and think that it is just going to happen. Instead of you going out there with the notion that you are going to make it happen.

SM - Have you very noticed a flat atmosphere in the dressing room and performance on the pitch?

P2 - Yeah definitely. The last time it happened was against Sale, when we played up at Sale. As soon as we got the ground there was people chatting to friends in all the corridors of the changing rooms. Because we had not been there before I think we were all split up in small dressing rooms. There were two dressing rooms. People weren't sort of.. as switched on. It was quite a relaxed atmosphere so there was a bit of laughing and joking going on there. The coach then left it to see how it would go and we didn't switch on until the second half of the match. By that time we were 25 points down. Then we sort of got it together in bits and bobs but you know we weren't all together. One was playing well, the others weren't.

SM - So how would you describe the atmosphere five to ten minutes before kick off?

P2 - It was a bit sort of rushed in trying to get everyone together and you know people didn't look focused. By the end it was a bit late then.

SM - How were you feeling at that time?

P2 - Yeah, I didn't feel right. You notice it and you just think 'This isn't right'. This isn't like what we normally do'. The normal thing in my head that everyone was ready actually wasn't happening.

SM - Would you say this affected you in any way?

P2 - I was feeling a bit sort of apprehensive about how the boys were going to cope with it out on the field. Having seen that everyone wasn't in a normal frame of mind. You know I was a bit worried about how it was going to go out on the pitch.

SM - How did the game go?

P2 - We didn't play very well. We weren't concentrating, people weren't concentrating on where they were on the pitch. It continued in patches in the second half. We got together in a sense that we started to do what we wanted to do. It was only in patches though. We were lapsing in and out of concentration.

SM - Has this happened often the flat dressing room and poor performance?

P2 - Yeah it has happened, but sometimes it doesn't matter if the dressing room is a little flat. If you are playing a shit team or something you may not need to be as focused. But if you are playing a top-level game, you can almost guarantee that the opposition will be up there, switched on, especially if they are at home. I think if you are playing away from home you have to be especially switched on.

SM - Do you think you and the team can regain this focus when you get on the field?

P2 - You can get it back to a certain degree. You can get it back to a certain amount. Damage limitation more than anything. You can get everyone in. As long as you can have a good chat to everyone and everyone responds to you, or everyone responds to the captain and then sort of switches on then you know people get annoyed with the fact that we aren't say focused in the first half and you can then put a good performance in. But you are playing catch up rugby. In adversity then sometimes it can work, but generally no it is very difficult to regain focus once you are out on the field.

SM - So building on what you have talked about loss of focus and difficulty in performing. Do you think there is a link between the mood you are in before you play and your actual performance?

P2 - Yeah definitely yeah. There is a certain percentage of players that can be completely relaxed before kick off. You know they can be laughing and joking five minutes before kick off, but it all depends on there position and who they are.

SM - What about you personally?

P2 - I need.. well, especially in my position, I need to be completely switched on physically and mentally because you get hurt otherwise or you won't make an impact in the right area. So you have to go out there with an aggressive attitude that you are going to go out there and dominate your opposite number, your opposite second row. So you get a feeling from them and they get a feeling from you in the first five / ten minutes how you are going to do. So that is a sort of a battle you have to win straight away.

SM - Has it very happened to you when you have been switched on for a game?

P2 - Yeah there have been games where you feel that you have an easier day ahead of you. You don't go out there with the same aggression and then someone can sort of get a nudge on you and give you a bit of a slamming or whatever and then you think 'Fuckin hell' you know and then you have to try and wind yourself up during the game, which isn't the ideal time at all.

SM - When that has happened, how do you get yourself back into the right frame. How do you wind yourself up?

P2 - I have a fight! (laughs).

SM - Is that something you genuinely do?

P2 - You look for a big hit or something just to help you see a little bit of red mist. Just to get your adrenaline going. You think 'Right come on now I'm up for it'. You look for something like a tackle or a ruck, or something that you can that you can make an impact with.

SM - What about before the game. You know you are not switched on. What do you do to get yourself switched on?

P2 - Smelling salts! (laughs). I like to be there three quarters of an hour before. Minimum, half an hour would be the absolute minimum I would be wanting to get switched on to get right for the game.

SM - So what happens if that doesn't happen?

P2 - Smelling salts. Uhm.. (pauses)... Sometimes I tend to listen to other players. Sometimes you can just switch off from what players are saying. Other times you can tune in to them. You look to player so of experience to say a word or whatever to say a phrase a key phrase. Something that can make you think 'Right ok' and you can take note of that.

SM - Who would that come from?

P2 - Ah you've got people like G. and S.. Players who talk a bit and who are experienced. They also know me, we have played together long enough, they can see if I am not quite switched on and or the coach even.

SM - What about if you saw players that weren't switched on. What would you do?

P2 - A similar thing really. Just say you know a few threatening words and a few encouraging words. You know like 'He's going to be fuckin gunning for you today; or you know 'You're the man, you're the best player in Wales and you show him that'.

SM - How can you tell players aren't switched on?

P2 - You can just tell. Body language. Reading everybody, knowing them. You know peoples routines, you have seen when they have been switched on and played well before, and just compared it to the present. Maybe just sitting down or generally walking around looking a bit lethargic. People you can see in their eyes if they are worked up or not. Generally front five, pack wise they have got to be pretty worked up when they are going out there. Not overworked, sort of going too far psyched up or over aroused. You have got to be pretty aroused though.

SM - Describe worked up to me?

P2 - Sweating a bit, breathing quite heavy, nervous behaviour.

SM - Staying with nerves. Would you say you get nervous in that ten to fifteen minutes before a match?

P2 - No, I get more nervous in the mornings. When I can't eat. Normally before kick off the nerves have gone and I am looking forward to playing. You are feeling so many other things, uhm I enjoy the build up. I enjoy the half-hour before kick off. You are in a good atmosphere with a good group of boys who are basically your mates. You are going out there to play rugby with your mates.

SM - How does this preparation change if you are on international duty?

P2 - We've been lucky this year with the set up in that there is a really good bunch of boys. There is a lot of Swansea and Ponty players in the squad. The reason we have done so well is because we have got on well together and with each other, we are all good mates, and we have had a good social crack as well. So we have had good relationships all round. As a result we have all been looking out for each other. We know that if one of you does something people will be looking out for you.

SM - Is it the same kind of atmosphere as the club then?

P2 - Yeah it's very similar and that's why we have done well this year. It's been a very good atmosphere. The feeling you get is that people are going to give one hundred and fifty percent no matter what because they are playing for their country. So you don't have to worry about other people there. You just have to concentrate on getting yourself in the right frame of mind and not getting too psyched up. You just try to get your body and mind in the right frame of mind. Sure you get a few nerves before the game, on a similar thing to playing for the club, but I have enjoyed it more than anything. I find it easier in some ways on international days.

SM - Why would you say that is?

P2 - Just the fact that everyone is wearing the red jersey and you know that everyone is going to give their all. No one is going to play under par. Sometimes when you come back to play for Swansea after an international, then you perhaps feel a little jaded before the match. This can happen to a lot of the boys who have played internationals, it can affect the team then if your best players aren't as psyched as they should be for a game. Mentally it's a step down. You are always fine-tuning your preparations. Sometimes something will work well or doesn't work so you change it for the next time.

SM - Lets go back to the period when you switch yourself on for the match, say three quarters of an hour before kick off. What do you do to switch yourself on and get focused?

P2 - Uhm, usually before the team meeting, there I have my Walkman on and I clean my boots. I always clean my boots when I get to the ground. So do a lot of people in fact. Other people have Walkmans on as well. You are then sort of buzzing off that thinking well your doing the same thing as I am. Music helps a lot and you can give you a hand, it can give you a bit of a buzz, help you focus and concentrate and get into the rhythm of you preparation. So you get that adrenaline going and you are thinking about past performances again good things that you have done and again you know things if you get the ball you are going to be doing in the match. Visualisation is the main thing that I do really together with listening to the music.

SM - When you visualise, how do you see yourself? Are you in your body or are you watching yourself on TV?

P2 - Yeah, you are in your body doing it. You have got a vision in your head and you can feel your body getting used to things, going through the tackles and hits, where your limbs are going to be in the match. You can go though areas of the pitch and what sort of line outs you are going to do and where. That's also part of when I walk the pitch. When I am in the club cleaning my boots and listening to the tape it's more building my confidence, you know building myself up again reliving what I have done well in the past.

SM - Do you use different tapes?

P2 - No it's usually the same one. Usually dance music. I have always listened to dance music really. It's the same couple of songs really. I only listen to it for ten to fifteen minutes. That gets me focused, it helps me to build my confidence as I said before.

SM - Ok, so that is leading up to that team meeting what types of things do you do after the meeting?

P2 - After the team meeting its just concentrating on getting the body right then really. Getting everything stretched and loose. I don't really think about much really. Once I've done these things, the Walkman and the visualisation stuff they are in the bank really and then it's time for me to concentrate on getting my body right. I've done the going through the pitch areas, the calls and what have you. Visualisation, get excited, boots and stuff. Now get the body right and then do a bit of talking there.

SM - So that last five minutes?

P2 - It's saying the right things basically. To yourself and to each other and to other people and just loads of key words.

SM - Give me some examples?

P2 - Ah it varies from game to game. Just eh, it depends who we are playing and what you are trying to emphasise things that the coach has said and what we have worked on all through the week. Maybe we have identified that we want to ruck lower or something and you are telling yourself and thinking about going low, down by your knees, and blasting over the rucks.

SM - So you think about your targets and goals?

P2 - We normally get goals for the match. You know four or five key things for us to focus on. The coach will have set us that during the build up and in the team meeting.

SM - Right, now I want you to think about the last few minutes before the match when you are all in the changing room together. Describe to me what is going on and what you are feeling?

P2 - It's just getting the aggression right then. I tend to bash my head a bit and get ready for the knocks and you know bang the shoulders and run a bit, getting the aggression right really.

SM - Can you describe the feeling?

P2 - It's like getting ready for battle really isn't it? Just know that you are either going to be hurt or hurt some other person. Excited really I guess, I am quite relaxed by then because I know everything is done and that I am in the right frame of mind and the body is ready. Just feeling quite aggressive and confident.

SM - What are the rest of the guys doing at that point?

P2 - Everyone is doing their own little thing by then. You generally leave people to do their own little thing. We are all in a circle then. We have a big squeeze and hug like thing, we are always together. It's the last thing we do before we go out.

SM - What are you feeling then?

P2 - Happy and confident, and just looking round, looking at all the great players and thinking 'fuckin hell' and how lucky you are to be there and to do yourself and the rest of the boys justice. Basically a lot of trust and a lot of good feelings for your mates. Responsibilities, trust and aggression.

SM - Is that the same when you move up to international level?

P2 - Yeah, it is really everything is just multiplied, the feelings, the aggression the excitement.

SM - What about the anthems?

P2 - Do only thing you do there is try not to get.. you know before kick off you are getting focused and aggressive but you try and stay a bit calmer before you sing the anthems. 'Cos that's enough really in terms of psyching up, that really gets you going.

SM - You've talked about how you have felt before your bad performances. What about when you have played well?

P2 - The best I have felt this season was when we played Northampton down here and I felt really light and I felt full of energy. I don't really understand why that was, but I have been feeling like that since then. I don't know what it was whether it was I got my diet right before the match, you know the rice pudding, and I have stuck with that ever since. I think getting warmed up nicely is important. You can get nervous energy and a shock to the system warm ups make your body tires and give you kind of a shock effect. So for me it's a case of getting prepared and getting my body right.

SM - So why would you say you thought you played well against Northampton?

P2 - I mean I had man of the match last Friday. It wasn't really that I had been doing anything different than I have been recently. For me recently, I have gone through all my set routines and I have got myself fuelled up nicely water wise I feel in control and happy, well prepared like, and I think I got all that right against Northampton.

SM - What about in the game then?

P2 - You do all your basics without even thinking. You know and fucking your opposition number up, taking his lineout ball or knocking him about on the pitch and doing a bit nicely ball in hand. Putting people away.

SM - Do you notice a difference when you have a bad game?

P2 - When I have good games compared to bad I feel heavy, not as sharp. That can often be down to your training and what you have been doing training wise and your diet and whatever that hasn't gone well. I think when you have played well the games do tend to go quit quickly and you are feeling sharp and everything. You don't want the game to end or if you are feeling really heavy you are looking all time. You do tend to notice a difference in your mental state when you are playing well and when you are not.

SM - Do you know why that is?

P2 - I think because when you are playing well you are enjoying it and you want to stay on there as long as you can really to do all the things that you want to do. All the good points and. But if you are not playing that well you think 'Ah fuck, I want this game to finish soon because I don't want to play it any more'. Touch wood that hasn't really happened that much too me for a long time.

SM - You have talked about his routine you have developed, listening to the Walkman and visualising your performance before the match. Where has this routine come from? Where have you developed it?

P2 - I think the physical things you get from your fitness adviser and your dietician, whatever. They will give you or tell you things that you could or should eat before a game or can eat. What will agree with you and what won't make you feel too heavy. So you listen to people like that. But I think it's more trial and error. Getting things right, uhm that suit you before a game. I haven't always listened to my Walkman before the game. Sometimes there are players who come into the team or can get a bit noisy before the game and if you think that you are listening to that rather than focusing on what you should be doing then you do it. However, if you feel like that there's not a problem and you can cope fine with it. I always have it in my bag so if I feel that it is a bit noisy in the changing rooms and I need it to focus then I do it. Normally I can get focused without it sometimes. If people are piping up too much I get my Walkman out and tune in.

SM - What about away matches, on the bus for example?

P2 - Uhm (pauses).. bus journeys aren't really that long in Wales wherever you play, so you don't really have too much time on them. I will listen to my Walkman or I'll read a bit. Something to keep my mind occupied. Not too much focus to lose my concentration. Always in the back of my mind I will be thinking about the job I have to do today. So as soon as you get to the ground you can go through your routine.

SM - So in the week before, in the build up to the match, are you thinking about the game?

P2 - Yeah it is really because you are training towards it. So it comes in stages. You are talking about the game from Tuesday onwards. But I don't go home and think about it. It may be mentioned on the news or I may talk to my girlfriend about it. But not too intense, you know, I find I tend to expend a lot of nervous energy thinking about it. You feel yourself getting uptight about it. That's when you get fatigued and you get tired and your head goes and you can't concentrate then. So I tend to try and focus in on it when I should be, in training, and then focus in on it on the day of the match when I need to.

SM - Has this occurred recently?

P2 - No, but I used to get really nervous. Well not nervous really more up for it. Right from when I would wake up on match day. I get to the ground feeling tired. Whereas there was no reason why I should be. You just get there feeling tired. Everything you do then tends to make you feel a bit more tired. The warm up makes it worse. You just feel so lethargic then.

SM - Can you recall that affecting your performance in the games?

P2 - Yeah because it makes me tired and lose concentration. At the beginning of the season especially, because I wanted to get back in the team. There was so much I needed. I needed to get into the Welsh team and there was so much pressure on me. Once you put pressure on yourself it's just becomes more and more and you become nervous. So I think it wasn't long before Christmas when I just said 'Ah fuck this' I am just going to go out there and go out there and play like I am having a game of rugby in the park with my mates. I didn't have any pressure on myself then and just went out and played. I tended to not put a great deal of pressure on myself. Just get switched on and enjoy it. That's how I deal with now. I just enjoy it. I don't put any pressure on myself I just tend to switch on. Mainly physically more than anything. I just want to go out and enjoy the rugby really. You know I am in the Welsh squad and all that but I treat it as though I am playing for my local club. Which it is for me now, and I find it works. As soon as you start enjoying your rugby all external pressures come off and you want to go out there and play.

SM - Do you find professionalism has changed your outlook or attitude at all?

P2 - Uhm, no not really I don't think. There is pressure to get results I suppose. But they are no greater than if we weren't getting paid. Like Swansea have always had a reputation for being a good club and that is pressure enough. They have such high standards anyway that it would mean the same now as it did five years ago. The money really doesn't mean one little bit.

SM - Ok, now I want you to put your coaching hat on. If I came to you as a younger second row, who was inexperienced and had problems getting in the right frame of mind before kick off. What sort of advice could you give to get myself mentally prepared properly?

P2 - Just go through your key roles. Mainly just at lineouts and kick off. Focus in and visualise yourself doing them well. Remember the last time you did it well and how it felt, and the enjoyment that you got from that. Then remember the bits that you've done extra in a game. Say you have scored a try or you have made a good run or done a good tackle. Try and get that feeling again and visualise yourself doing that. So you have in your mind. I've done that I can do it again. Just, if you need less distractions then get yourself in a quiet corner or get a Walkman on or get something or do it in a toilet or whatever, you know just get somewhere quiet where you can focus in on that and not think about anything else. Once you have done that bit of visualisation and whatever then try and lock it in there and get your body right. You have got to be a physical frame of mind when you go out there. If you can get the first hit in or the first thing you do is big or strong or whatever then I think will set you up for the rest of the game.

SM - Out of all those things you have listed. Which would you say is the most important to focus on?

P2 - Visualise things that you have done in the past that are good and focus on those, including your key roles.

SM - Ok, a few little questions to finish off that I haven't mentioned already. I'm interested in what effect you think the crowd may have upon your preparation and your performance?

P2 - Yeah you do notice the crowd. I don't think it affects your preparation that much. I think if you have a really big crowd then that does help. If you are coming in from your warm up and the place is packed and you are thinking 'Phew, we've got to really turn it on today, because these are the punters, these are all the people who pay our wages' You want to go out there and show off basically. You want people to see how good you are playing and you want people to see how good you are. A lot of players are sort of exhibitionists and they want to go out there and show what they can do really. That's the sort of arousal levels they work on really. They don't go out there terrified of fucking up. They want to go out and play well. I mean for example the last international was awesome, when you know and can see your friends and family in the crowd. You want them to pat you on the back at the end of the game.

SM - How does it make you feel when you see the crowd, and your friends in the crowd.

P2 - Excited, really excited.

SM - What about playing away?

P2 - I mean if it doesn't put me off my game much. It's good for us if we are playing well because their crowd will be quiet and it's even better if the crowd are shouting at the referee or whatever as long as they aren't shouting because their team are doing well then that is ok. That can add to the problems if you are having trouble on the pitch. It can be a bit alien sometimes. So you have just got to blank the surroundings around the pitch and just focus on the pitch. The bigger the stadiums, like out in South Africa and stuff, you don't tend to notice it as much. It's just a wall of noise or whatever. You really don't notice it. It tends to be less personal when it's on bigger grounds. The test series in South Africa was one of my biggest games.

SM - What was your preparation for that like?

P2 - It was good. When you play internationals you have a lot more intense build up, but equally you get a lot more spare time on your own to prepare yourself. I have pretty much got my routine sorted. After playing in games like that were I played well I use that as a constant for my preparation. I gauge my individual match preparation against that, feelings etc. and then I take the necessary action, say I get my Walkman out for example. You do all the same things in the routine and you know where you should be and if not you know what to do.

SM - Do you see nervousness as a good thing or a bad thing?

P2 - It's something that's sort of warning your body that your going to be going, your gonna go into a lot of hard work. Your bodies being warned, it's warming the body and mind I think, that something is going to happen in the next few hours. I'm quite happy having slight nerves, I see it as positive, because that little bit of apprehension turns into excitement when I get to the ground and I see the boys.

SM - So how do you experience these feelings, in your head or in your body?

P2 - It's a physical thing really. I feel like I can't eat much in the mornings and my stomach tingles a little bit, and tightens up. It's not drastic though.

SM - Are control in everything before you play?

P2 -Yeah, I like to be in control definitely. Sometimes, perhaps when the dressing room is flat I think, things seem to go on around me and I don't seem to be involved. I think it is all happening around me and I don't feel part of it. There is something wrong then.

SM - Does that transfer itself to the games out on the pitch?

P2 - Yeah it does. There can be games where nothing is going right. You can be doing your job fine but everyone else is just messing up and you are getting stuffed. Nothing seems to go right no matter how hard you try, you just feel totally helpless and out of control.

SM - Ok, we have covered a lot of things there is there anything else you would like to add?

P2 - I think just find things that are working and if you are not enjoying it then ask yourself the reasons why not and adjust them, and then look at your preparation. If you are not happy going into training and into games then it's going to cause problems.

SM - So enjoyment then?

P2 - Yeah, there's things you need to address about your fitness or whatever then try and address them during the week so it will give you confidence. But do things that work, each to their own. Definitely, there are no set rules for preparation, you have to go out there and find your own personal thing. If you look around all the changing rooms there are so many different characters and so many different things that work for them. You look at someone like Arwel who can mess about before a game and then get switched on five minutes before a game. The you have someone else in his position like Neil Jenkins who is throwing up quarter of an hour before he plays. It's a very individual and personal thing.

SM - Do you notice any differences or trends between forwards and backs.

P2 - Yeah the forwards have to be more switched on because they have to bash people about and be more physical first off probably, whilst the backs have to think a little bit more about what they are doing.

SM - P2 that's great, we have covered a lot of information there, your match day routines, the teams pre-match behaviour and your good and bad performances. Is there anything else you feel you would like to add?

P2 - Yeah I forgot to mention it earlier, I think a lot of what you have been asking me about is to do with team spirit and the relationships between players and team mates. At Swansea we have got a good understanding with each other, we are mates off the field as well. That's a massive thing at Swansea, we all sort of really get on. The ones that don't get on, who don't get on with each other, don't last there. The ones who after the game don't mix with the players. When there shit hits the fan no one else is going to help, just the boys around you. The more you feel part of a team the more everyone gets on off the field. Then the more you look out of reach other. With Swansea we are all mates, we are close. We know how each other is going to react and what we are going to do on and off the pitch. The week before the game there's all sorts of physical preparation and organisation. The mental preparation for me starts on the match day. A lot of teams train too hard and leave their games on the training field let alone in the dressing room on the day of the game.

SM - Is there anything you feel we haven't discussed? Or any further points you would like to add to or comment upon or change?

P2 - I think you've got enough there!

SM - Just to add that the interview is in the strictest confidence and complete anonymity. You can have a copy of the transcript and make any changes to the recording if you wish.

P2 - I am sure everything is fine.

SM - Thank you very much for your time and good luck with the rest of the season.

Interviewee: P3.
 Venue: Swansea RFC.
 Date: 17/05/99.
 Time: 5:00pm.

SM - Ok P3, thanks for agreeing to be interviewed today.

P3 - No problem butt.

SM - My area of research interest is in the psychology of pre-match mental preparation. As you know I have played at junior level international. Therefore what I am interested in is the psychological experience that international players go through before the start of the match. The aim of the interview today is to find out how you prepare mentally for matches and what mental states you experience prior to kick off.

P3 - Sure

SM - The purpose of the interviews is to use the information to provide help for younger players and their mental preparation prior to kick off. If it is ok with you I am going to tape the interview for use with my research.

P3 - Yeah.

SM - Feel free to add any comments or make any changes if you wish whilst the interview is progressing. You will also be able to get a copy of the interview and can make any changes if you wish. Today's interview is in the strictest confidence and all the information discussed and responses are in complete anonymity.

P3 - Right, fire away.

SM - Using the time line as a guide I'd like to ask you about the build up to kick off for the team on match days. Talk me through a typical build up to kick off for the team on match day?

P3 - Well it is very similar, if not exactly the same as it is down on the paper there. (Points to time line schedule). Getting up in the morning, eating, chilling out. Then I drive to the ground.

SM - Would you say that is your normal routine?

P3 - Yeah, but we have swapped the team meeting and the change around though now. We have decided to get changed earlier now and have the team meeting in the changing room. We all get changed, and then the team meeting is an hour before. We get there an hour and a half, half-hour to get changed and then on the hour, half past one, it's always a half past one team meeting. Some boys turn up at like five to one and they know, they will get changed straight after the meeting. Most of the boys, I always turn up an hour and a half before and get changed, sitting there ready to go, and then in that half hour when people get changed, before we go out and warm up, I just sit there and do nothing. I just sit there and chill out, a little chat there to myself about the game.

SM - What's going through you mind there, are you thinking about anything?

P3 - Yeah, you set yourself little goals. Your basics are going to be good. You know your scrum, lineout, any new moves, uhm, just talk about things, the mental preparation, just running through things, visualising what you are going to do. Like getting together with Dean Thomas and sticking a big hit in.

SM - Tell me more about your visualising?

P3 - I look at the opposition, I will try and have a look at them. If I have never played against them before then I don't think about it too much. But if it's someone I know, like P. I think, P. s, big hitter, strong in the scrum, got to try and nullify him. I know he is good round the park, got to try and nullify him there, tackle him. I concentrate on more on Swansea, more on us. Make sure that we are going to do things well. Make sure that lineout, scrum, and what we are going to do off first phase is going to be right.

SM - Would you say you are inside your body when you visualise these things, are you watching yourself from the outside.

P3 - I'm watching it. I'm watching more I think. I don't really close my eyes and feel it. I tend to, just thinking to myself really, there I am, going through it all. Because I watch myself on the video quite a bit. So I tend to do what I see on the video really.

SM - So when would you say you switch on for matches. When are you totally focused to play?

P3 - When I really put the final touches on it is the warm up. We do like to get a bit physical in the warm up. I wake in the morning, the day before it's really there. That's when I do most of my thinking, the day before, after selection on a Thursday. Friday I usually have all day to myself and stuff just chilling out. Again it's a little bit of mental rehearsal again. Just relaxed stuff. Who is my opposition going to be, what have they done before, what have I seen of them before. My bit of background knowledge of who I am against.

SM - Is it worry or something else?

P3 - It's confidence most of the time. I know that I am very confident in my basics. Especially my scrummaging. So I always build on that. Right, destroy them in the scrum, then I am going to build on that, try and demoralise him, try and get a big tackle in. Make sure the line outs go well, uhm, yeah try and spoil their ball as well.

SM - So that's the day before?

P3 - Yeah, more on the day. It's more about what were going to do. The day before, and maybe the morning of the game is what they are about. Then from then on its 'Yeah what we are going to do'. I genuinely now try not to focus too much on the game in the morning. I try and just do little things. Just like pack my kit bag and stuff.

SM - Can you tell me why you try not to focus?

P3 - I think I get to het up for games in the mornings. I've done it before, and I've found me head just almost throbbing. Like woah, I've got to calm down a bit now. I find that on my way to the game I do a lot of my thinking. I don't mind the drive down to Swansea really. When you go from Cardiff to Swansea it's like a little journey and when you go away it's like a little journey, so that's when I do my thinking then. That's when I let myself get a little hot headed then, and that's when I get the sweats and stuff and then on the morning I try and stay a little more composed and relaxed. Not totally ignoring rugby. If there's stuff like the Super 12's on in the morning I'll sit down and watch that. But I purposely won't let myself get het up about

what's coming. I know I am focused about it, but I know what is too come, I know the het up, the stressed out bit and the aggressiveness is going to come, so I just put it off. So I think it simmers a bit then, I think it simmers inside me and then I just let it go then.

SM - So when do you let it go?

P3 - I let it go when I go out for the warm up. I'll hit a bag or something or yeah a bit of shouting, I'm not a big shouter in the changing rooms but in the warm up I like to get a bit physical, get yourself you know, get your head really switched on for it.

SM - Ok, talk me through a typical warm up?

P3 - The warm ups with Swansea are quite vigorous so you don't need to do much else on your own. It starts with a few laps to get the blood flowing, then we have some stretching, then we go into handling, together with more stretching. After that we do some pad work to get the contact heads on, then we split back and forwards. We go off and do our set pieces, then we finish off and get back inside. I might dip out and do some stretching if I feel a little tight. Most of the boys will do it for a spell. That's what is good about our warm up, it's vigorous but you can pull out and have a breather any time you want.

SM - So you've done your warm up and your back in the changing rooms with about ten minutes to kick off?

P3 - Yeah about five to ten minutes.

SM - Tell me about what's going on in the changing room at that time?

P3 - In the changing rooms, it's quiet, very quiet. Boys are doing their last final touches, whether it's a bit of strapping or stuff. Like my last thing is I never put my jersey on. That's always the last thing I do. Drill tops off and stuff, jersey over the head, get into a huddle, skipper does his bit, if any of the boys want to contribute. But it's not a chopsy thing. It's usually just one or two people talking, what were about and that sort of thing.

SM - Who would that be?

P3 - G., P., G. a little bit.

SM - Are you all sat down?

P3 - No we are in a huddle, really tight and close. We've got it off to perfection I think. Then it's all, straight out on the pitch then. I always try and go out third, I don't know why it is, it's one of my only superstitions. I always try and go out third. If I don't, it's not the end of the world for me but I will try and go out third person. I don't know why.

SM - So what is going through your mind in that last two minutes when you are in that huddle before you go out?

P3 - We tend to have a little huddle, most of the time just before kick off as well. Most of the time we get pulled together and it's just, I'd say it's not so focused just before kick off. It's just a 'Lets get em' kind off thing.

SM - Put a feeling or label on it for me?

P3 - Excitement, just bubbling, really really bubbling then. You are just really edgy, you know what I mean? It's just.. (pauses) it's not like uhm bad, it's positive, you know. It's not that you are not thinking straight, it's just you are not really thinking. It's just edgy, 'Come on lets get into this'. You want it to kick off now, 'Come on lets go, not in thirty seconds, lets go now.

SM - Is that for the whole five or ten minutes before when you get in from the warm up?

P3 - Yeah, I like listening to the senior players when we are in the huddle, but when we get out there I want to get going. I don't want any hanging about. I hate hanging about. I know it's not in a bad way. But what I don't like is you know, I don't want you to get the wrong impression. But you know when you have to do a minutes silence and stuff or even if there's a bit of a delay because sometimes the opposition has turned up late. Any sort of thing, you know, I'll give respects to anyone. Maybe lets do it half hour before kick off, or straight at then end. A soon as we are out there, I have got to get into it.

SM - So where do the anthems come into it?

P3 - Oh, that gets me going even more then. Bubbling again, really excited. Even more edgy then. I'm just twitchy like. I'd never go without the anthems because that gets me going again into a different dimension, into another plain. I honestly believe that you know like with New Zealand, and the Haka and all that stuff. Even at schoolboy level they do it. You know each school has got, each high school has got their own Haka. That would be fine if Welsh rugby was about that, that where you taken the feeling and excitement into another dimension somehow.

SM - So describe how you say you would feel just before kick off, before international matches and big games?

P3 - Before big games I get quite nervous. Only of recent have I started throwing up though. Yeah, I have never had it before. I had it before.. a little bit at the weekend, you know, Leicester, quite a big game and places up for the cup. The last big one we had at home as well.. ummm (pauses)... London Irish.. yeah against London Irish against P., I threw up before that game.

SM - Has this throwing up just started this season?

P3 - Yeah, just since the pressure has been getting there. It's got nothing to do with food, cos I have pretty much got into the groove of my little plan of eating early, early eating and all that stuff. I don't eat too late. It just comes and oooeerh (makes the noise of someone being sick) all the butterflies getting too me.

SM - How long before does this happen?

P3 - Not long before, just about five, maybe two or three minutes before we go out. Not long before, usually the last huddle. Just before we are about to go out. I've been sick a couple of times on the pitch, actually when you get out there. You know it's coming and you can feel it and then huuooph (sick noise) it's there. That never used to happen before though, never, never had anything like that before. Even at junior cups and stuff and that.

SM - Have you changed anything in your routine?

P3 - No, not really, I haven't changed anything. It's only on the big occasions. I noticed it and I've tried stopping it. If I try and stop it I have to calm my breathing down. If I start (demonstrates a deep breathing technique) - *breathes* - panting a bit more and breathing a bit regular and then it will be (gives short quick breaths) and then it will just come then, it just comes out. But once it's out, once it's sort of out, I will relax a bit more (demonstrates

a slow deep breath). It almost like an overflow. You overflow with excitement, let a bit of it out, and keep it topped. That's what its like in a weird sense. It's like putting a tin hat on it. You can let it go to much.

SM - What's your view on this?

P3 - I really don't know! It's nothing substantial coming, it's just like a little bit of fluid or something. I don't know it's coming half of the time, then all of a sudden its like a weeh (makes sick noise), and it's there like. But I've never ever had it before.

SM - So how do you see all this? Being nervous. Is it a good or a bad thing?

P3 - I think it's a good thing definitely. I think it's good to be a bit nervous. Not nervous as in not confident. I interpret the nervousness that I get as being excited, it's a physical excitement, not a 'Oh I'm not looking forward to this, I'm not very confident' (said in a whimperish voice) kind of thing that goes in the head.

SM - So that sort of thing in your head doesn't affect you?

P3 - No, I never let anything worry me. Even if I am playing against the best player in the world I will just try and focus on one of his weaknesses. For example, Christian Califano, I know one of his weaknesses, if he is on the back foot, he gets wound up, he stresses out, and he'll flip and be more likely to throw a punch. So if I keep the pressure on him. That's what we'll do in a game, keep the pressure on him, and he will be bound to go a little bit.

SM - So before a match that's what you will target, your opponents weaknesses?

P3 - Yeah, I'll never let myself get any feelings of (pauses) not confident? What's the word? Unconfident?

SM - Yeah, unconfident will do.

P3 - Never let it get to me in my head, I'll never let it happen.

SM - Do you get worries or concerns in your head? Has it ever happened?

P3 - I always nip them in the bud.

SM - How would you say you do that?

P3 - I tell myself, not physically shouting out loud. But I'll say to myself like 'Hey' you know. My safety net to me, like I said before is my scrummaging. If shit hits the wall. I know that's one thing that I'm solid at. I can tell myself, well he might be able to run around the pitch but when it comes to scrummaging he's gonna have a hard time with me. So I've always, so that's my baby, that's my solid thing that's my base for everything. I will always build off that. It will be right the scrums are going to be solid, the line outs are going to be good. I am going to aim to make X amount of tackles, ruck well, and that's.. it all starts from my scrummaging, I probably build upon the thing that I am most confident at and use that to keep me strong.

SM - What influence does the rest of the team have on your preparation for the match, when you are in the changing room?

P3 - Quite a bit. I'm not big on people fucking about. I hate people messing about and laughing. I thinks that's one of the reasons why we changed it, we put the get changed before hand, so the boys could have their bit for chit chat before. Within that hour then everyone shuts up. It's been said, if you want to have a laugh and joke then, great get it out of the way. You know then that if you mess around in the hour then you are going to get told by one of the senior boys. Like Arwel, Arwel's a great player but he likes to have a little chit chat and a chin wag, but he know he's got to get it over and done with then.

SM - So you like a bit of activity in the dressing room then?

P3 - A tense feeling. I don't like people messing about. A tense feeling, a confident tense feeling is nice. You know the sort of air of expectancy. It's something you can't hear but you can feel it. If the intensity is there and the buzz is there it's good. The other boys like S. and P., the senior boys, they pick up on it. If it's not there then 'What's the fuckin matter here?' you know, they'll instigate the change, they'll pick the atmosphere up.

SM - So you notice when it's flat in the dressing room?

P3 - Ah yeah you can feel it.

SM - Does that affect you at all?

P3 - Yeah, luckily I don't know how I would react if no one ever said, because it's only my first season with the club, I've grown in confidence with a lot of the boys. If one of the senior boys didn't feel what I was feeling, come kick off I'd feel obliged to say 'Come on, it's flat in here' and I would. But, it never usually comes to that and it is a professional outfit. The most professional club I have played at in fact.

SM - Ok, now I want to ask about good and bad performances you can recall. Firstly the bad performance. When was the last time you felt you didn't play very well and what reasons would you give for that bad performance?

P3 - I think the match up in Sale was a bit of a shocker for me.

SM - So why did you have a shocker?

P3 - Well for starters the whole team played shit, we were half asleep. I had a shocker because, well nothing really went right for me. It was one of those days. You give shit passes, you drop opportunities, the line outs are wobbling and you don't feel the in the game at all.

SM - What was your mental preparation like before the match?

P3 - Firstly, I don't always know that I am going to have a bad game, but sometimes it can be the luck of the bounce and all that, those cliches. But, I try not to let myself feel tired. Even if I have to go back to bed and have a nap late morning. Tiredness gets me because it means I'm more mentally tired sometimes. I hate doing, I don't like doing a lot on the Friday. I'm not being funny, but if there was a tiny bit of doubt in my mind before the Leicester game on the weekend because I'd had such a busy Friday. I thought 'fuck I gonna be knackered', and normally I do if I've had a busy day. Thankfully though I felt fresh on the day, cos I went to bed early, so I got my sleep in. I have to have a good nights sleep. That's the only reason I don't let my girlfriend sleep over. It's not so much the sex thing, but she's fidgety in bed. I don't go into that deep slumber. If I wake up in the morning still feeling tired, that does my confidence no good at all.

SM - Does that then have a knock on effect for your preparation?

P3 - I always make sure that my preparation is consistent but the only thing I can put down to having a bad game is physical and mental thing, it's the tiredness. Even if I am aching a bit but I still feel sharp up top. I still think it's going to go ok. It's when I'm physically and mentally tired that's when I have bad games. Some times you can get over that. It's motivation as well with the boys around you and motivating yourself. They've done it a couple of times, when we've had a hard week and you really have to look within and get yourself on the go.

SM - So would you say then there is a link between how you feel before you play and hope you actually perform?

P3 - Ah, yeah. I think preparation is a big thing. You know like Shane Howarth, he doesn't get out of bed on a Friday. He does nothing at all, total rest all day. I might do it myself this Friday, I thought about doing it myself, it's not gonna do me any harm.

SM - So what about in that twenty minutes half hour before kick off?

P3 - Yeah, I think that is important, I really like to feel 'whack' and really up for it. I like for someone to get a pad and give me a really good bump and something, it's almost making you feel a bit more aggressive, that little bit nasty.

SM - To be honest the better games I have had recently have been when the other players you are playing with are playing well and they are buzzing. You think 'Hey this is going good today, as a team we are playing well.' You feel a bit more confident then and that rubs off on your performance. The games where I am playing really well is almost like I am shouting to myself in my head. Stuff like 'Yeahhh, fucking come on' like 'Yeah, fucking run at me' and sometimes I say it in the game, like on Saturday I was shouting at Joel Stransky 'Run at me you c##' You say it because you are bubbling and enjoying the game. When you are bubbling and really excited. Sometimes, I'm not a chopsy person on the pitch, but sometimes it just comes, like if you have stuffed them in the scrum, you've rolled them backwards and they are lying on the floor, 'Get up ye c##' 'Get up will you and fuckin push harder'. I talk more on the pitch, and I talk when I am more confident. It's almost as though I am talking to myself sometimes, 'Yeah, your bouncing' and stuff like that.

SM - How do you feel physically?

P3 - Bullet proof. Yeah you stick a big hit on someone and you have stuck him on his ass, or like I say you have rolled them back in the scrum. It's not like big headed or anything, you just feel great, like 'I've given you my best shot there and you are on the floor' you know 'Get up and give me your best shot again'. That's what you feel. It's a thing also with the boys behind you like A. I feel so confident when he's playing and he's behind me. He just gives huge weight. You rub off on each other see. Like I know G. says to me, he says 'Fuck boys I get such a hard on when you boys get a push over try' He just says 'He just says when the forwards are on the front foot and I am running around the park I just feel great he says'. He says 'It gives me the biggest kick in the world when I see you boys scoring pushover tries I've seen him, you know us get up having pushed them over and turned round and gone 'Come on lads', he loves it just as much as us. A big hit rubs off on the rest of the players. If S. sticks a massive hit on someone, then he's pumped and everyone else gets geed up.

SM - So for you it's a feeling of bullet proof?

P3 - Yeah

SM - When you are playing well how does time go?

P3 - When I'm playing well I'm enjoying myself and time is flying by. When I'm not enjoying it, then it drags along. Everything flies and everything goes well.

SM - How much of an influence is the crowd upon you?

P3 - The crowd gives you a big lift during the match. For me the louder the better, home or away, it just fires you up more and more. It pumps your aggression and fuels your motivation. It's like the anthems really, just another top up to the psych up process. If there is no crowd there and you are feeling flat or lacking in motivation then that can further make the situation worse. But we are professional so it should not bother us. The crowd is more of an additional lift really, and not much of a hindrance if it isn't vocal.

SM - Right, now I want you to put your coaching hat on. It's time to do your impersonation of your legendary kiwi leader.

P3 - The mighty Henry! (laughs)

SM - The great saviour!

P3 - He makes such a difference to the atmosphere and feeling in the dressing room with the team. He is even more inspiring than Plum and the boys here at Swansea. His just inspires all the boys, and makes you feel so confident before you go out to play. He is also very good at putting you in your place and bringing you back down to earth. He builds us up before matches calling us the best in the world, and then he brings us back on our feet after in the sessions. So that we don't get to carried away and we don't get big headed and over confident. So that we go away and work just as hard.

SM - So the coach can make a big impact on the dressing room?

P3 - The coach has more of a big impact in the build up to the match. The training sessions during the week and the team talk on the morning of the game. He is the one who starts the preparation and psyching up. In the dressing room before kick off, we are alone really and it is up to the players and the skipper to keep us there. G. is so good at all of that. He knows what buttons to press with the players and he says the right things. He has also given a lot of the responsibility to us. We are the boys who do the playing and he lets us have the power and the decision making. But he is an awesome guy.

SM - Ok, so back to your coaching advice. Imagine I was a younger player coming to see you and I was having problems getting mentally prepared just before kick off for matches. What advice could you give to me on how to prepare?

P3 - Well the only advice I could give is to do what I do. He needs to talk to other experienced players to find out what they do but I would advise him to get focused on having a good warm up and to go through his goals and targets for the match. Just to go through in his mind what he is going to do in the game. Visualising him doing all his jobs, doing everything well so he feels confident about how he is going to perform. If he gets nervous about the match, then he needs to go over his job and how good he is at doing it. Just pick the best aspect of his game, say his scrummaging, and keep going back to that. Knowing that the scrum is his base say, and no matter what else happens no one is going to shift him in the scrum. He can build on the rest of his game then. (pauses) Get a routine sorted as well so he is doing it week in week out and it becomes second nature to him. Just work out what works best for him.

SM - Out of all of those pieces of advice, which would you consider the most important? and why?

P3 - Having one... or maybe more aspects of your game that you are solid with. So you know matter who you are playing against or what happens to you then you have always got your strength to rely on. That helps to maintain your confidence before the match and through the game if things aren't going well. If you are having a bad game you can focus on your strength and help it to regain your composure.

SM - So confidence is the key?

P3 - Confidence is a big factor. If you believe in your strengths then it makes you bullet proof to any adversity that may come your way in the match, or over the season if you have dips in form.

SM - So where did your routine come from? Where you taught it?

P3 - My own personal preparation routine?

SM - Yeah, where did it come from?

P3 - It has just developed over the years. (pauses) I have played a lot of rugby and tried lots of different things and you find what is right and good for and what isn't and doesn't work. As the level of competition gets higher and the pressure increases you find with each step up the preparation is more intense and so you have to cope with it. No one really came up and told me I should do this or that, some teams you play in have intensive warm ups whilst others are very relaxed. You also pick bits of older players when you are younger and take the best of what you want.

SM - Well P4, I think that we have covered everything, the routine you and the team go through before kick off on the day of the match, how you feel before the kick off. We have also covered how you feel during good and bad games and the advice you would give to younger players on how to mentally prepare for matches. Is there anything you feel we haven't discussed that you would like to bring up? Any further points that you would like to add or comment upon or change?

P3 - No, (pauses) not really I think I have got most of it out.

SM - Well it just leaves it for me to add that the whole interviews has been in the strictest confidence with complete anonymity. You can have a copy of the transcript and make any changes to the recording you wish.

P3 - I'm sure it will be fine.

SM - Well, thank you very much for your time and good luck with the rest of the season.

P3 - Cheers Steve.

Interviewee: P4
 Venue: Northampton
 Date: 29/03/99
 Time: 9:00pm

SM - Ok P4 thanks for agreeing to be interviewed today.

P4 - No problems matey.

SM - As you know my area of interest is in the psychology of pre-match preparation. Specifically, I am interested how professional players such as yourself go about preparing mentally for matches. So the aim of the interview today is to focus on how you prepare mentally for matches. If it's ok with you I am going to tape the interview and you will be able to have a copy of the transcript and can make any changes you wish to the script.

P4 - Ok.

SM - The interview will be conducted with complete confidentiality and anonymity and if you wish to make any changes or add comments as we go along then feel free to do so. I hope to use the information that you and other interviews provide to assist younger players in their mental preparation for matches.

P4 - Sounds good to me.

SM - Ok, using the time line as a guide can you describe to me your build up to kick off on match day?

P4 - I'd say personally I still get up at the same time, eat breakfast, I still have a bowl of cornflakes or something sugary. I drink a lot of coffee, I don't know why every day I drink a lot of coffee. I try and relax early in the morning and not worry too much about the whole game. In fact I do my level best to occupy the morning, (pauses). Obviously as it progresses, packing up my bag. Getting my number ones together, and then you obviously start thinking about the game. It's a lot harder. Especially if it's an important match, then forget about ignoring the game then it's three, that's the whole focus point of the day that's all you are thinking about. For me things I'm thinking about is my jobs, line outs, bossing the scrummage, they are the things that are really important that I have to do. They are things that I have to bring to the game. Uhm, so I'm sat around the place, thinking about the line outs, thinking about ... I try and bring back all the Austin¹ stuff about visualising yourself throwing. I used to have a lot of problems with that. Whatever I tried to visualise, I'd always visualise myself fucking it up and hitting the fella in the stomach. And I tried and tried and tried to sort it out and you know break it down. Couldn't do it at all. But gradually, I think we as I've got more experienced and a little bit older, I don't get now quite as wound up and butterflies as I used to. And now I find it a lot easier to visualise properly. So that occupies my morning. I always leave early for the ground. I always get there early. If we have a 3:00pm kick off we'd have to be there for 1:00pm, 1:15pm. So I'll be there eat 1:00pm, into my changing room. I have my changing room peg. It's funny because even if you set up the shirts the wrong way round. Players always shift their shirts to their pegs, and I get the programme and sit down and read through the programme. Again just to try and occupy time. Uhm (pauses) talk about, when the players come in, talk about other things is kept to a minimum. There might be what film you saw at the cinema the night before, but there's very little chat. People sit down quite quiet and keep it to themselves. A lot of them read the programme, then you sort of go out and walk the pitch. Again just to try and relax a bit, uhm.

SM - So walking the pitch is just for relaxation then?

P4 - No its for the conditions, see what it's like underfoot. See what the weather is like. Uhm, maybe talking about the lineout moves we've got any new things. Stuff that we are doing now in the season is not radically different to what we have done at the beginning, but the preparation through the week, the preparation for the match day has started on Monday. We've come here and we've gone through the video from the week before and talk about what's gone wrong. But straight from that when we've gone out onto the pitch. We are building for the next game, so we'll bring in little things here and there that we need to come. So as we've gone through the week these will become more and more important. So on the match day we will talk about new things that have happened. Some matches we have set calls for the first four line outs. So as long as not in your own twenty two metre line, or on their goal line it's set calls. So we'll go over that and talk about it. Players will tend to gravitate towards the units, tight five and what have you. So from there (pauses) we then go into the players where there is tea, coffee sort of drinks. We sit down there and Geech comes in and gives us talk. That's the pre-match talk which is maybe at 1:30pm. So that would then last for about half an hour, and in there he basically talks about things we've built up upon all week. Erm, the importance of the chaos things we use in the rucking drills, coming up through the middle. The new bullet ball where we place it quick and move. We joke about it being like 'Groundhog Day' because it's the same stuff you are hearing. But it is important that it gets reaffirmed and we know what we are building towards. He will talk for about maybe 10-15 minutes, highlighting stuff that we need to do, areas that we need to attack them, defence, then we split up into units, tight five, middle five, backs and then we talk specifically about our jobs. Which is the scrummaging and the line outs, and our rucking drills and defence and what not and the channels we have to fill in, basically what our roles are. It's the banging your head against the wall stuff. But sort of mentally thinking about it.

SM - So what are you feeling in this period when you are walking the pitch?

P4 - (Pauses) When you are sat at home, you know, that you've got to go to work this afternoon and you know that it is important and you know that you've got to win at all costs, uhm, never mind the rugby side of it, now especially now when we've got to play well today, we've got to stay in the top four, we've got to qualify for Europe. I've got to play well I've got to keep my job, and they are things you are thinking when you are at home. Once you get to the ground, once you're on the pitch, and once you see the fans the stand suddenly it's concrete, and then the it suddenly makes it real for you. And then you start thinking about it a lot more. You still want to stay relatively calm. It's important that you are up for it and motivated and ready to do well but you don't want to get too wound up and play the game too early. But, especially when we've gone in and had the meeting with Geech, then it's lifted from the meeting.. that's when any of the talk has gone and the only focus is on the afternoon.

SM - So it that when you switch on?

P4 - Yeah, that's then. As I've said, you have to think about your jobs in the morning. I mean Christ you are thinking about it the night before. You have to build up in the morning, but you don't want to get to wound up too early otherwise you just psych yourself out by the time of the game. It does gradually build up like I say once you are on the pitch it builds up, but, but once we have hit that meeting room then it's an unspoken word, that's it now, no more fucking round, we just go.

SM - So what is this switched on feeling for you?

P4 - It's the butterflies, I mean there's good butterflies and bad butterflies. It's not oh my god I'm gonna fail.. it's just I wanna play, that's it now, the adrenaline is going and you wanna play and you are thinking about the first, for me it's the first contact. It's the first lineout. Once I've hit that first lineout properly, once we've had the first hit on the scrum, once you know we've gone in there and hit somebody and hurt somebody for the first time. That's what we are building towards. So it's more excitement and adrenaline for me. Definitely the adrenaline.

¹ Austin Swain, sport psychologist to the England Senior Team (1994-1997)

SM - Ok, so that's the team meeting what happens next?

P4 - From there back to the changing rooms, and strapping and what not players that need it. We will go out at half past. So we'll be back in the changing rooms for 1:00pm and the team warm up will start at half past so if you wanna get your kit on quick smart get out there and run around and do your own thing that's fine. If you wanna leisurely do it you will be out there at 1:30pm. That's when the physio is out and runs the warm up for us properly. Personally I don't tend to hang around too much I like to get my stuff on, get out and start doing a bit of a warm up and get a feel for it, get my hands on the ball. Run around, practice my lineout or whatever. I like to get out on the pitch for a bit of a jog around before we start the warm up.

SM - Is there a problem with the warm up then?

P4 - Oh no the warm up is plenty long enough, and is very intense. You know it gets you blowing. I just to like to get out there. Staying in the one room can be a bit claustrophobic for me. Whilst you are in there getting changed we've then got the coaches going round and maybe giving the individuals slight prep talks. What they need to focus on, obviously there is the studs check and what not, which sort of occupies a bit of time.

SM - So what's going on in this time period?

P4 - People are talking. The sort of your key people like T. and D., and P. and what not. They are talking, uhm just randomly calling things about what we have got to focus on, don't leave it in here, it's important to win, that sort of morale type boosting stuff. You are thinking about your job, listening to what they are saying. I mean obviously you are occupying yourself, getting yourself physically prepared, physically dressed and strapped up and what not. But, it's not as patently obviously what you are thinking about the game but it's all building.

SM - Ok, so talk me through the team warm up.

P4 - It's very similar every time. Jog, jog around a bit, some drills, loosen up run for six minutes, into the stretching. From stretching some quick handling drills. The handling drills then come in very close and it's contact on the handling drills. From there we then go and practice the chaos ball, passing the ball out of contact, and from there the team will face up against the pads and do some big contact hits, then we split. Forwards practice some line outs very quickly, back inside, the backs do their thing and then they go inside. We get back in, very quickly tracksuits off, vases up, tape up, into the showers for the last forward hug, bag heads together, what are we gonna do, back in for the final team talk from the captain. Everybody's sort of standing up. Big team hug. The team hug thing, we have one of them before we start the warm up, we talk about what we are going to do. Big team hug just before we go out. We get the call, five minutes, two minutes, standing up, not jogging on the spot and shouting one to ten stuff any more. You know it's what's gonna happen, people firing things out where necessary. Then onto the pitch.

SM - Ok, so lets focus on that ten minute period after you have come in from the warm up and directly before kick off.

P4 - Now your blowing, you got a sweat on and you've got muddy. You've got the playing feeling without the aches and pains.

SM - Does the extent to which how well the warm up go affect how you feel towards the game?

P4 - Uhm (pauses) for me personally, obviously when we've split and we've gone to the line outs and I've hit my jumpers perfectly and everything has gone great then I'm in and come on lets go. If however I've not hit my jumpers in the warm up then the first lineout in the game becomes an even bigger focal point for me. (pauses) I so admire the goal kickers, standing there and to a lesser extent I have that when I'm throwing in..... because everybody is watching. If I throw it well.. great, if I don't then ahh (makes gesture of frustration, holding head in hands). I feel if I don't do well I feel as though I have let the side down, let people down. So, I've come in and they've gone really well then I'm up and I am ready to go. If not then I'm trying to think, 'Put to one side, put it aside, it will be fine when you get out there. Don't worry, concentrate.'

SM - So what are you feeling at this time?

P4 - I, we (pauses), I actually pray to myself. I pray a few times, go though them. Erm, I've always done that. I always pray a few times, think about it, concentrate, I go quite quiet. I am not a very vocal chant thing. I think about my jobs again. Lineout calls, dominating the scrummages is important that I do that, get everybody working around. Thinking about defence and the big tackles.

SM - Do you always go in with these targets?

P4 - Always, always think about the same things. I invariably get the two props together and we bind up, manly type 'grrrr', rugby talk, think about scrummaging.

SM - How about your behaviour?

P4 - I come in, put vaseline on my ears and I will sit down and sort of do my praying thing quite quietly. Then I sort of stand up, and not so much jog on the spot, but I keep moving up and down, and that's when we find the props and we squeeze and from that it's quite quickly that we.. the backs come in and we form up as a team.

SM - So what are you feeling just before you go out?

P4 - (pauses).. Winning, winning. Not letting my mates down. I know it's silly but you spend so much time together. It's like Deanse, Colin Deans² said today, it's like a family. You spend so much time together, there is so much camaraderie and what not. When they say look at the people around you. You want it for them as well. You are thinking about everybody, a team, the whole team performing well.

SM - How does that make you feel then when you are looking around at everybody?

P4 - Proud, very proud to be there. Excited, err desperate, desperate to do well. For everybody.

SM - So what part does nerves play?

P4 - A large part, you wouldn't be playing, if ever I wasn't nervous for a match then I would become worried that I didn't want it. I mean Christ, we are going out, (pauses) so much rests on it. I think when I was younger I had so much problems because I was so desperate to do well, and desperate not to let myself down. Then I'd worry and worry and then it would all come in on myself. I am so desperate to play well I'm thinking about. The nerves is you know 'I must do well, I must play well, I really wanna do this'.

SM - Do feel this physically at all?

P4 - My heart starts going, and I start sweating. I definitely feel the heart going.

² Forwards coach

SM - So would you say you see this as a good thing?

P4 - Like I say, if I wasn't nervous then I wouldn't be wanting to play. You have to be up for it. I mean physically because the nerves, it heightens your awareness, it heightens your speed of reaction, you know you want it when the nerves are going.

SM - Have you ever been too nervous?

P4 - Like I said when I was younger, especially when I was at Leicester when I was really young. Er, I'd worry too much and that was when I would start making a mess of my lineout and whatever. Characters around you when they start having a go at you when the line outs are going wrong. Then it sort of compounds and goes into a spiral, worse and worse 'cos that's all you can think about then. You are not thinking about oh I must hit my jumpers, oh Christ I know I'm gonna mess it up again. But I'm a lot better now.

SM - So how do you deal with that now?

P4 - I think I have more confidence in myself now. A lot more practice, if it goes wrong now, I'm cross with myself and disappointed, but focused that, 'Right I'll do it right this time'. I am confident, I know that we have practiced all week, and that I have thrown this throw that I am doing now hundreds and hundreds of times. So for me before the kick if now the nerves for me are nerves that we do well. It's excitement nerves, it's adrenaline nerves.

SM - What about the guys around you in the dressing room. Do you notice their behaviour?

P4 - Like I say some fellas like to be very vocal, and shout out what they are going to do and what everyone else is has got to do. Some other people will come and talk quietly. Others just sit down. It doesn't affect me. It doesn't bother me that some people shout out. I'll hear what they are saying, I won't stand there listening, I'm quite contented with what I am doing, and ready to join in with the team thing.

SM - So would you notice if things were out of character in the dressing room?

P4 - Yes it does, and that would affect me. You can feel when the team isn't responding well. I'm not sure how I am going to be able to put this into words but you know, from the warm up, if the urgency isn't there. If people, if balls have been spilled. If it's gone at half pace, if it's been lazy, laxadaisical. People aren't focused. Then when that comes back into the changing room. It's like a buzz, it's like a buzz that goes around the changing room. When everybody's in there and everybody is up for it, you feel it. Whether it's just the noise of people jogging on the spot, or you know, like I say when we grab the props, we grab each other and boom, bash together against one another (animates the movement). There's a big vibe that runs around the changing room. If people aren't saying the things, If T. or D. isn't up for it or some of the players are meandering. It's a similar thing in training. When we are out on the training pitch, you can tell you can feel the people that are coasting, and you can see them and but when you get into the changing room you can see the people that aren't up for it. It's probably most obvious when we get in that team huddle in their eyes. The people that are up for it, you can see the want in their eyes. If they are not up for a game you know five minutes before you've gone out that's when you start talking about 'Where's it gone boys?

SM - So how do that make you feel?

P4 - Uhm, cross, (pauses) it might affect my confidence in the team. I'd be worried that the player wasn't up for it, and hence forth was going to let us down. It wouldn't affect my preparation because that's pretty much down to me.

SM - So when the dressing room has been flat have you noticed a difference in performance?

P4 - Definitely yes, a lack of urgency. The lack of urgency in the warm up, and preparation in the changing rooms can go out onto the pitch. It doesn't fire and (pauses) if you'd seen the first team match against Newcastle on Saturday. The Saints were so up for it they just blew Newcastle away, and Newcastle didn't get back into it then because they were blitzed from the start. Because the game now has gone so fast and so physical if you are not up for it mentally, then the game will pass you by. It really kicks in that first five to ten minutes. If you are not in it then and you try to scrape it back afterwards, then you are on a huge uphill battle.

SM - Can you recall games when the opposite has happened to being up for it, say when the dressing room has been flat?

P4 - A lot of the matches this year, there has been a lot of discipline in the first team, and not being up for it hasn't really been a problem. Especially with your premiership matches. It's so important, it's so important that it's invariably the Cheltenham and Gloucester³ cup games, the RAF games, Oxford, Cambridge, Loughborough matches. Players not can't be bothered with, but are perceived not to be as important. Similarly in the Wanderers, like with this evening, and then you come a cropper.

SM - For you personally have you ever gone into matches not as focused as you should have been?

P4 - This season, when I played against Sale in the Cheltenham and Gloucester Cup, I was injured with my bad neck, I had no feeling in my arm. Couldn't genuinely feel anything. I had pins and needles in my elbow and my fingers. I wasn't fit to play. They knew I wasn't fit to play. I was in pain with my neck, couldn't feel my arm and I was worried because the physio said I shouldn't play. But there was nobody else so they said I had to play. Then I wasn't in the right frame of mind because physically I knew I was ready to play.

SM - So what was going through your mind in this ten minutes before kick off?

P4 - Uhm. I was trying to focus on my jobs and think about my jobs. In all honesty I was worried that I was going to hurt myself.

SM - How effective were you in dealing with these concerns?

P4 - In the build up, on the journey up there, it occupied my mind a lot. I mean I'm an avid reader most of the time, on the bus I just read constantly. So, I just try to absorb myself in that. When I actually got to the dressing room, changing room, physically it was hurting during the warm up, and I was trying to put it aside because if I knew that if I went into it and didn't try one hundred percent I would have been more likely to hurt myself than if I did try and go balls out. I was, genuinely, worried I was going to hurt myself more. I was also in a lot of pain. Because the pain was occupying my mind because I was just hurting just running.

SM - How did you play in the game?

P4 - Not particularly well. The team got stuffed so it sort of compounded the whole thing. But it's quite funny because in the first two to three minutes Jim Mallender ran at me in a tackle on my bad side. Absolutely crucified my shoulder and arm and I couldn't feel it for about five minutes, and then it sort of sorted itself out for five minutes. It must have just numbed it so I couldn't feel the pain!

SM - Ok, so personally you'd say you didn't play well in that game?

³ English League Cup

P4 - Physically I wasn't fit enough to play.

SM - So the injury stopped you from playing well?

P4 - I knew I had to do it no matter what. So I wouldn't pull out of anything that I would have otherwise. Just because I couldn't do things that normally I would have done. If anything it would have... when you talk about the nerves and has that.. that would have caused problems in my game more than anything.

SM - Ok, that's a bad performance. Tell me about a good performance this year?

P4 - I played well against Wasps and Richmond in the league. The line outs went really well, scrummaging went well. Made some big hits and got the ball in hand and had the chance to run with it, which obviously I love to do, it's part of my game and I've always enjoyed doing it more than anything. I felt that I had the balance. I've had my game criticised because I play to loose and too wide and those two games in particular I got a really good balance. I hit a lot of rucks, I cleared people out I made the big physical 'woer' (makes manly gesture) type things. But also I got my hands on the ball, ran, put people in space, scoring pass type things, everything went well. So I was quite pleased.

SM - So how was your mental state five to ten minutes before kick off?

P4 - No different from normal really. Like I say when we have the warm ups for the premiership matches and you have your full first team out, it's very regimented. Very little difference what so ever. It's only when you get different personnel coming in, changes in the team unfamiliar faces, you know.

SM - Ok, tell me a bit more about that?

P4 - When you get squad members playing, not regular choices, they don't seem as clued up. Well they can't be because they haven't played in the team for as long as the rest have. That makes the feel of the atmosphere strange. There is less of a buzz. It's not their fault really they can't help. But the atmosphere is definitely different.

SM - So in those games when you played well how did you feel?

P4 - I think you tend not to feel as tired. When it's going really, really shit and you are dogging it out all over the place. You really feel the work. But when the match, when you are on top of your game and everything is going well. You get another surge of energy coming through and your looking get involved in the game where you can. I suppose if I had to describe it when its going well. It's anticipation for getting involved in the game again. It's an eagerness and you are desperate to get involved and do something again. Pride that you've done something well. You know when you've hit somebody and put them on the floor. You know and feel when you've hit the jumper at the top of his jump and when you've just destroyed them in the scrums. You tend not to feel quite as tired any more.

SM - So what about when things aren't going right?

P4 - Then it becomes, it's a bind, when you are on the receiving end of a drumming. You want that full time. It can't come quick enough. Time goes a lot quicker when things are going your way.

SM - When things are or aren't going your way, how much do you feel in control of the situation in the match?

P4 - If I am throwing shit, I know it's my fault. I know that it's my fault that I am not hitting my jumper. There's that many intricate individual pieces that go together to make the whole puzzle that it's not necessary something that you have done that has made a mess of the move. It's not necessarily something that you have done that has ruined the scrummage. It can be a combination of things. It can be somebody else's fault. (pauses) You don't necessary feel in control if it goes wrong at all. I wouldn't say that that becomes consuming and 'oh my god what are we going to do?', and 'how can I help it?' You keep dogging at it. I mean there are games when sometimes everything you touch just falls apart. Last week in the Wanderers against Leicester. We were winning the ball from scrums. We were winning the ball from line outs. It was going out to the backs and were ending up fifteen metres behind from where we started from, and you just can't play winning rugby like that. It then becomes, we have a call, next 15s, next 30s. Lets forget what's just happened, we've got to sort it out we got to get it right, and we got to build on whatever we've done. No matter how good or bad we've got to build on what's happened. But, sixty minutes into the game you've been hoofing your way up field, you've driven a lineout up the field and you given it to the backs and suddenly your 20m back again. Whilst you are obviously not throwing knives. You are thinking what is going on, we are doing a job, we are giving you the ball and what's happening. That can become very disheartening.

SM - Ok, lets go back to your preparation for the match. When you are in the changing room, how do you switch yourself on for the match?

P4 - I tell myself that I deserve to be here, that I am good enough to be here. That I am.. that I can do it, there's nothing that's going to happen today that I am not ready for. I tell myself I have to do well. I must perform. Don't let myself down. Don't let anyone else down, I must perform. You see in this period here (points to ten minutes before kick off). There is very little time to on your own. Everything, the five minutes before everyone is together, there is movement there are no individuals, it's a team. All the stuff thinking about me as a person has gone on from the warm up, the team meeting the change, into the warm up, all that business is us as individuals bringing together for the job. This bit here (indicates to the diagram) from the final words to the kick off, were all in the changing room erm... maybe every now and then Tim will sit us down along the one wall. He'll stand and he will tell us what we are going to do, or else. That's when he will give us the big army captain hang 'em and flog 'em. That's the only time that we will sit down. Then there is no time to reflect, we are concentrating on what he has to say. Then it's on your feet and we are into the hug, and it's a big tight hug. People are talking. D., what he wants the forwards to do. G., what he's having the backs do. Anybody, we, Fatty Allen talks, Rugged says a lot of things as well, which are brought from rugby league. Quiet, not funny but, focusing which is good. Different players will come out with things which are on their mind and right you've got to do this, scrummaging, lineout, tackling with and it pulls, it brings everyone that's how we can tell if you are not focused, if you are not all focused, up for the game. Because everybody, it's a tight hug and everybody is looking into each others eyes and you.. all together for your mates. So everyone is pulling together for each other.

SM - Ok, so for you then, you switch on before then. Talk me though this process?

P4 - I do the visualisation. I do the visualisation for my lineout. That for me personally that's the most important thing. I suppose it's because of the problem I had when I was younger. Worrying about it. It's a focal point for me, that I think about getting them right. Erm and dominating the scrummage. I know sort of physically the tight head is the most important fella but, as a hooker it's really crucial that I get everyone tight, that I set the height. That everybody is in. And that I call the scrummage in. If I am lazy on that, or I don't get everybody in then the scrummage will fail. So in many respects that can be my fault. If I've not been.. done the preparation properly. It's my fault, so I will think about I will go though my mind erm ... hitting the opposition, hitting the machine. These things are just the core the feeling, the physical feeling of the hit, going in, pulling everybody in.

SM - Are you watching yourself performing the skill or are you actually there doing it yourself?

P4 - With the line outs.. I see the lineout, I am actually inside myself, throwing the ball watching the fella jump. With the scrummage..... erm (pauses) the scrummage I feel. I more physically think about the tight bind and bringing us down and the hit. And then I will probably maybe see us, watch us going in.

SM - How clear is this image then? Are the opposition involved? Can you see them?

P4 - This is interesting because whenever I get photos in the paper it's the front row. Just as we are about to go in for a hit in the scrum. Stuff in programmes is the front three. So that's what I'll see. I'll see us down, and me shouting and calling it in. With line outs I am actually inside myself. Watch the ball leave my hands, watching the jumper jump and catch the ball.

SM - Is this a clear image then? How much is it a picture and how much do you actually feel it?

P4 - Yeah. I try and feel my throw. I try to feel the throw. When I talk about the clarity of the picture. It's more the ball in his hands. That what I am concentrating on. Everything else is there but I am watching the ball go into his hands.

SM - And you are in control of the image?

P4 - I used to struggle with it. Now I am a lot better with it.

SM - What about other facets of play or your game?

P4 - I don't really think about watching myself doing the breaks for some reason. I don't know why I don't that any more because that's always been part of my game. I think, I try and concentrate on my positions at breakdowns. Guarding the close channels, channels one and two. Stopping people coming round the side, and hits there. I watch.. when I am visualising that I am actually looking at myself and the breakdown. I'm in the camera in the stand watching down the game.

SM - Does video analysis help in that respect?

P4 - I think that's probably why I look at it from that respect

SM - Ok, so what other things do you use to get yourself in the right frame of mind?

P4 - I don't talk, mouth to myself, you know. It's getting through the adrenaline, it's getting through the excitement, the anxiety, the nerves to a clarity of what I am going to do. That's what you are trying to get to. That, for me, is achieved by seeing myself going through it. I am obviously doing it for a reason, and the reason is that when I get on the pitch, I can actually physically do it. The nerves, seeing myself do it. The nerves then becomes genuine excitement to get out there, and you know I've done the physical and I've now seen it now I'm gonna do it. Then it's I'm gonna do it, we are gonna do it. I am gonna do the line outs, no problems at all.

SM - So do you believe there is a relationship between your frame of mind before you go out to play and what happens on the field?

P4 - Definitely, erm it's gonna take an exceptional player and an exceptionally talented player to turn up and stick his boots on and get out on the pitch and turn out a good performance. I mean there are really quality players in the league. Thankfully, that rarely occurs in the modern game. I mean at the highest level the guys have got everything. Not just physically out on the pitch, they also bring their experience. But they also bring their leadership qualities to the less experienced players in the dressing room. They are the ones who invariably try to bring everyone up to that level and it is up to a level to perform there. Erm.. the moves aren't a great deal more complicated out on the pitch. There is nothing particular more fancy or intricate about what we do it's just everybody is so much bigger and faster and your reaction time is so much shorter, that you've got to be mentally ready, physically prepared, to function out there. The whole mental thing before the kick off is to make sure, you see the boys know that physically they are prepared. Because we have put it in all through pre-season, all season and all especially this week prior, it's all been put in to bring it to that match. So that we've done everything we can. The mental stuff is the last important bit at the end. If you are not up for that, then you are throwing away everything that you've done.

SM - How big an influence do you think being in the right frame of mind is?

P4 - If you are overly anxious, and I can talk about this, then especially when it comes, for me, to the line outs. When it takes physical skill, delicacy to what I am trying to do to throw this ball where it's meant to be. If I am panicking that I am going to miss. If what I am going to throw is so crucial that, then instead of the relaxing and getting the rhythm of my throw. The physical thing that I can feel, I can visualise, I know if the rhythm has gone from there because I am that nervous, I am tense. Then the throw goes. Then like I said it snowballs. Because I fucked it up at the start with, I've missed the first one. Then when I come to the second one I've already done the one thing that I desperately didn't want to do. 'Oh Christ don't make me do it again', and then it's even worse. So you're overly anxious, similarly, desperately nervous, desperately worried to make a tackle, you come up offside. You are that nervous you don't think about it. It's is obtaining a very fine line between not really bothered and too much.

SM - Would you say you can achieve this state every time now?

P4 - I'd like to say that myself and everybody I know. We are all now that professional that every single time we are. There are times when it's harder to be up for a match. You know you go to some shitty dive places or it's pouring down or it's the middle of winter, it's absolutely bog underfoot and you just think 'I am not sure I want to do this'. It's harder to get up for a match then. Again they are the Friday night specials. Or the away trips to dog shit park. When it comes to the crunch matches there are no problems at all.

SM - Ok, so now I am interested as you as a coach. I want you to imagine that I am a young professional in the club, in your position that has come to you with problems getting into the right frame of mind before he plays. What advice would you give me?

P4 - I'd ask you what you wanted from rugby. I'd ask you why you wanted to come and play for Northampton, erm, rugby has been really really good to me, I've been all over the world, made lots of great friends and I am now earning a living from it. It's been very, very kind but it makes a lot of demands. Now if you are not physically and mentally prepared to put that in, I don't see there's anything a coach or any other significant person can bring to you. Go back to your little pond and be a big fish, a talented player. You know, at a lesser level. If you came to me as a player who was desperately keen and wanted to play for England and wanted to be the best thing ever. Then I would look at your physical attributes and we could look where to build. Obviously it is important for you to be physically prepared to play at this level. But if you don't have it mentally, then that is something that I don't see anyone can give to you. You've either got that or you haven't. A coach can take you to the track and make you do 100 sprints, and take you to the gym and get you throwing immense weights around the place. If on the Saturday you don't want to do it, or you can't be bothered. Or you think you are to good or what not then that's something then nobody else can give to you.

SM - So what about if this is my first season in the premiership and I'm only nineteen, and I am really worried about the opposition and my game.

P4 - I'd concentrate on the sessions throughout the week. It wouldn't just be a Saturday thing, I'd start in the week with you. I'd also speak to senior players and make sure that throughout the sessions in the week they were saying 'Great throw Steve, well done Steve, excellent work, well done there, excellent scrummaging' and they were constantly patting you on the back. So that Tim Rodber, former England captain, British Lion Pat Lam, former

Samoan captain, Garry Pagel former South African world cup winner. These people, who are big big names in the game are constantly saying to you what a great player you are. I'd be saying to you 'Do that excellent, patting you on the back' all the time giving little hints and stuff. So that throughout the week you have done and achieved everything that you know you needed. Everything that you are going to face on the Saturday with the scrummaging and with the line outs and around the park. All the other significant people have come to you and told you how good you are. You've done it and you have felt confident in it. I think that once you have actually physically done it on the training field and people have seen you do it, and have commented favourably that you have done it. Then you start thinking 'Oh well I have done, haven't I?' 'Oh smashing, excellent they've seen it they think I'm good, lovely'. Then when it comes to Saturday and you are nervous. Then I'd come back and say, you've done it all week. I'd make sure that the other players, they were saying to you, lots and lots of positive confirmation of how good you are and then just quietly remind you of where your meant to be and what your jobs are. So that once you've done it through the dry run and done it successfully, and people have said how well you have done it successfully. Once you've gone on the park, just in the back of your mind. When it comes up 'Oh my god I'm standing here and there's ten thousand people. Then it's 'I've already done this loads of times this week'. Just to balance it a little bit, just to realise nerves. Then like I said once you've thrown that ball and once he has caught it beautifully and passed it off the top, it's like 'He's done it again' and it's a hurdle that you step over.

SM - Ok, so what specific things to do or think?

P4 - Basically think about your job. What is your job? At the club we have assessment sheets to fill in before matches. Name, position, your five goals. Five goals that you have for the game. Mine are line out accuracy, dominate at scrum time, big hits, lines of running - good support, and defence on first channel. Line outs and scrummaging are always my one and two straight away. Then after the match we write our assessment of how we've done. Give ourselves a score out of ten, coach does an assessment on you. Gives his score out of ten. I'd say to you as a player, as a hooker, line outs, your job today is to make sure that we win all the ball in the line out and the scrummaging and think about that. Think to yourself picture the jumper catching it perfectly. It also helps when you've seen it on the videos in the week so you know what to look for.

SM - So if you had to pick one of those things, those pieces of advice. Which would be the most important?

P4 - The most important piece of advice would be believe in yourself and never give in.

SM - That's great P4, thanks. Just one last thing. I'd like you to think about the influence of the crowd. How much does it affect you or play a part for you?

P4 - The roar of the crowd when we come out at Franklin's gardens is quite a big lift because it's a big noise, we have got a very good following. Especially from that shed. Ehm (pauses) it can be very uplifting. Before the match when we jog around the pitch and do the warm up, they cheer and roar as we go past and its yeah, it is a lift. The flip side of it. Gloucester away when we got in front of the shed and they shout out 'Shitehouse' to Jon Sleighthome, 'You're a wanker' and stuff. You try not to laugh. It's funny some of the things they say. Actually during the game, the only time I come near the crowd is when I pick the ball up to throw in. Invariable I am that knackered that I don't really notice them, I'm thinking about my job. The only thing that distracts you really is when the other hooker or scrum half is sledging you. That you just shut out and focus on what you are going to do. What the crowd is doing behind you. When you score a try and the big roar, that's lifting, when, the crowd sees somebody being stamped on or punched and they shout out or scream, that's the only time it's rally a big thing.

SM - What about when you are away say and there is no or little crowd?

P4 - That's when the players have to make their own atmosphere and that can be harder. We get few hundred supporters following us, so for most matches we have a reasonable crowd. You have to create the atmosphere for yourself amongst the players we are playing for ourselves and each other, we you are playing for money, playing to keep your jobs. Playing to do the best you can.

SM - Ok, we've gone through a lot there is there anything else you want to add or talk about? Something we may have missed?

P4 - I'd say that winning becomes a habit and I saw this when I was at Leicester, and I saw this at Bath, and every time that Bath played, they were gonna win. You could ask any person 'Who are Bath playing today? Ah yeah, they will win.' If you actually look at the matches they play, they'd be into the seventy ninth, eightieth, the eighty second minute, they'd be down by two or three points and they'd still win, because, Bath win. That's it, Bath will win. And the players get that self-belief. It is self perpetuating. Once you believe in yourself, even when things start to go wrong it doesn't matter because and it comes though. Now that's something that we as a club at Northampton have suffered from. One week we'll beat Leicester at home and then following week we will lose to Sale or we will lose to West Hartlepool and we have had no consistency. This season we have got a lot better for it. But the winning habit, getting into the groove with it. That for me is a big thing. Like I said for a player self belief never give in. Even at this level, we will play brilliantly and then put a dog shit performance in and lose to a crap side and there is no excuse for it. The habit of winning, that belief is the difference. Even when your backs are against the wall. You are down by however many points. The referees going against you or whatever. We are league cup, European champions, whatever we are going to win. All of a sudden..... whereas the side, invariably when you lose, it will be through your game plan or your team becoming loose, and things not going quite right. As soon as we are a winning team, were are a great team, we win. Everybody, comes back together again. When we played Newcastle on Saturday, that is he best I have ever seen us play. Everything went well, even when a ball went to ground, somebody was there to scoop it up. Stuff that didn't go right was made right because they were playing so well. I guess it's a self belief, a team belief that it's going to come good. Now there's a difference between arrogance and strutting around the place and this arrogance self-belief thing. There's a very fine line I know. I don't know how to quantify it, I don't know how but you just see it in them. Belief in yourself and belief in the people around you in what you are doing. That's what we are trying to build at Northampton, this team belief this winning attitude.

SM - How has your preparation developed?

P4 - The visualisation that I got at college that is something that I have used a lot with my line outs, and thinking about the scrummaging and what not. The talking to myself is though my own sort of neurosis type thing. 'Must do well' 'I've got to do well'. In the past that has been a negative thing and I have gone over the top with it. Now maybe I am relaxed a bit more and I am chilled out and I am using it to better effect. I've always talked to myself. Whereas now we are thinking about we've got to win, we've got to get into Europe, because we have got to keep our jobs, getting the bonuses all that sort of stuff. For me it's personal pride. I hate playing badly, I hate letting myself down, I hate letting my friends down, I hate letting my mum and dad down. I always want to play well. I always wanted to be the best I can be, that in itself is pressure that has been enough to spur me on.

SM - Have you found that one thing works and another doesn't? Has it been experience?

P4 - I am like that with my food. When they mess us around with kick off times and we play at 7:00pm or 1:00pm and stuff, getting the right food in at the right time I can find to be difficult. Sometimes I have gone out and felt lethargic because I am tired. Sometimes I have gone out there and felt sick because I've eaten stuff and it's not gone down properly. It's a struggle sometimes in that respect to get the right balance in that respect. It's the same with my mental preparation. I guess it's just developed. It's important that you suck it and see, you get a chance to experience everything, and find out what works for you. When you get to this level people have been there for a while. They know what is what and they know what they want. I mean the younger lads that are coming through, get to see their heroes doing these things, and that's how they then model themselves and learn. They learn how conduct themselves. You find out what suits you. The five-ten minutes before kick off again you are part of a team and the team counts. But before hand if you wanna go and bang your head against the wall. I always remember watching that Audsley Lumbsden chap. He almost did a marathon before he started a game. His leg bounding drills, sprinting things, it was tiring to watch. But that was what he wanted to do, he was left to do it. You know, whatever you want. Some people are really relaxed and laid back. I mean Dean Richards was, he'd never go out and warm up before the match.

He would just sit in the dressing room with his socks down. If he could he'd have a pint and a fag, he was that sort of relaxed with himself. But it was fine, because when he got there, everything worked for him. But when the team was up that five minutes before he would be up with the team.

SM - That's great. Is there anything else you would like to add or change or comment upon?

P4 - Nope

SM - A copy of the transcript will be available and you will be able to make any changes if you so wish. Once again I wish to emphasise that the interview has been in completed confidentiality and with anonymity. Is that all ok with you?

P4 - Sure.

SM - Thanks very much and good luck with the rest of the season.

Interviewee: P5.
 Date: 30/03/99.
 Venue: Northampton - Home of interviewee.
 Time: 5:00pm.

SM - Thanks for agreeing to be interviewed today P5. The aim of the interview is to find out how you mentally prepare for matches. As you know I have played junior international rugby and my area of interest is in the psychology of pre-match preparation that international players such as yourself go through.

P5 - Right.

SM - From the interview today I hope to gain information that can be used to help younger players with their mental preparation for matches. All the interview today will be taped and is in complete confidence and total anonymity. Feel free to make any changes or add comments as we go through the interview. Also, once the interview is written up you will be able have a copy and make any changes to the transcript if you wish.

P5 - Ok.

SM - So, to start off with I want you to have a look at the time line schedule for match days. Using that as a guide, talk me through your build up to kick off on match day?

P5 - The build up in the week has probably been quite intense, and sort of building up to a particular game. So that is all the technical stuff out of the way. Then on the day preparation is more sort of getting yourself in the right frame of mind. Uhm.... pre match preparation, in the morning I sort of tend to go though so much as a routine, but you know I try and relax myself a bit and not try and think about the game too much.

SM - When would you say you start thinking about the game?

P5 - You target certain teams during the week, so definitely when you train on the Monday your training is starting to go to certain teams. So you are thinking about who you are playing against. How they are going to play it. More of the technical stuff goes during the week sort of thing. Then towards the end of it, then you sort of try and get yourself up for that game. So I've got a routine in the morning where I just sort of try and relax and watch a bit of TV, have my breakfast then I sort of uhm, clean your boots and stuff like that. Then you are starting to think more about the match you get your kit ready. Then you are starting to get into the swing of things. Usually if it's a 3:00pm kick off I start getting ready about 11:30am 11am 'ish. So then you are starting to focus in on, you know not particularly on any details, but just sort of getting yourself prepared for the game. So you are just sort of switching on. It's not a big mental preparation thing, but you are just starting to get into it. So that is just a bit of a routine I get into. The you get down to the club then, and all the other players are there. We usually meet at 1:00pm to be down there for 1:15pm. Before I go down to the club I usually have something to eat as well, some bananas and sandwiches and stuff. So we get down to the club and everybody is quite relaxed, a little bit of nerves may be just starting to show. The concentration is starting to build up as well. I usually get down there grab a programme, get that all out of the way, go and have a look at the pitch. See what the pitch is like. Then you are thinking then, sometimes the pitch,.... obviously the pitch determine how the game is going to be played. So you are thinking to yourself 'Yeah ok it's wet conditions, maybe they will play a kicking game'. If it's dry then obviously we are going to play a running game. You start to think about those things in your mind. That's probably about 1:30pm. Then with Northampton we have a meeting where all the players sort of get together and er... Geech will start talking tactics, just go through the game plan. Then you are concentrating on the job that you have got to do. He's kind of psyching us up in a way, it's all building up it, getting more intense. Everybody's quiet and concentrating. You start to get a bit nervous then. You can here the crowd, you're under the stand, you can here the crowd start to come in. Sometimes that can be a bit disruptive, but you've got to just focus. Then at Northampton what we have been doing lately in the meetings is splitting into units, front five, middle five, and back five. So the back five will get together and talk. What we need to do in the game, so that is focusing yourself again.

SM - So what is going through your mind at that stage?

P5 - Just your job, what you've got to do. You don't wanna, one of the things we've built on this year is you don't want to let people beside you down. You know, you are playing for each other. So that is quite important with regarding to playing to the best of your abilities. I guess that at that stage I'm quite nervous. I'm not the most nervous person, but yeah are sort of a bit nervous, quite excited about the prospect of getting out there. When you are building up to big matches, you wanna get out there and you want that first whistle to go sort of thing. You are feeling 'I just want to get out there and get on with it.'

SM - When you talk about being nervous, is that a physical or a mental thing?

P5 - I'm more physical nerves. I am always sort of tapping my feet, nervous energy really. Not sort of mental nerves like worrying or anything.

SM - So what next then?

P5 - Once we have had the team talk and the unit splits, then we will go to the changing room, walk past the opposition's dressing room into our changing room. We just get changed than and do a bit of stretching and still focusing. I think at that stage I sort of try and not think about the match as much. I kind of, we have done all the preparation, I'm pretty much psyched up for. You've then got to go and warm up, so then I just sort of get changed, taking us up to about 2:00-2:10pm. You are still a bit nervous and you want to get out there and start warming up. So I usually get out there and I like to have a nice long warm up. When you are warming up then you are tending not to focus as much on the match. You are focusing on your warm up that's why I go out there and do an individual thing before we actually do the team warm up. I do a bit of stretching, a bit of running and a bit of kicking. Which is more specific to my position.

SM - Is a set routine you go through?

P5 - More or less. Not quite set. I don't go out there and do exactly the same thing. It will be.. I'll get out there before everyone else does there will be a few other guys out there. Go through a two to three min run, a bit more stretching, then go through some faster shorter sharp sprints. By that time the rest of the guys are usually out there, so we go through the team warm up. The team warm up then sort of more focuses you on what you are going to be doing and getting to that next step, to be aggressive and sort of getting into the game. So we will go through more or less a set routine. Another run, stretch, we do shuttles across the pitch with the ball, so you get used to the ball in hand, get comfortable. Again you are not thinking more about the game, what exactly you are going to be doing. You are just getting yourself, the body and mind into match preparation.

SM - Do you notice the crowd at all at that stage of the preparation?

P5 - You tend to try and shut it out but yeah, I mean you are not focusing as much when you are playing. When you are playing you tend not to notice it, hardly at all during the warm up, I don't. you are not quite there yet and yeah you tend to notice people clapping you when you go past. But that's just in the background. It doesn't really bother me I just get on with it.

SM - So that's the team warm up over, what happens next?

P5 - Probably back in the changing rooms there is about 15 minutes to go. Some of the guys then will say out and do some more individual stuff, say kicking. But I will usually go straight into the changing room as I have done that before. Get in the changing room then and maybe do a bit more stretching. Take your tracksuit off, you are in your kit and the rest of the guys are coming in. Basically then it's getting myself psyched up for the game. Getting ready for the physical confrontation.

SM - Lets look at that ten to fifteen minute period before the kick off. What do you do to get yourself ready to play?

P5 - I mean it's already been building up. Mentally it's there on the morning of the game but you try not to let affect you that early. Probably I am more or less switched on for the game before I get into the changing room. Even though it has not been specifically, I think the most focusing point is when we go and have the team meeting with the coach, who is telling you what you are going to do. I think you switch on from that point. From then it drops a bit when you go out and to the warm up, picks it up at the end of the warm up. Then you come back into the changing rooms and it's basically psyching yourself up. I don't go through any routines or anything to psyche myself up. You are sort of listening to other players and what they say. That's what encourages you. You know what they tend to say. I'm not one of these players that will really say anything, but I will take on board what your captain Tim Rodber is saying so and so.. we need to do this.. we need to do that. So that gets me going. It just makes me want to go out there and perform more, and perform to my, the best that I can.

SM - So what is going on in the dressing room in this period?

P5 - I'll probably do some stretching, people are jostling about. It's all quite busy and people are getting tape on. We are all in sort of the same area nobody is going off. People start talking to you, you need to do this and you need to do that, just to get you focused. People are encouraging you and each other. One of the guys Donnie McKinnon always shakes your hand, so he like goes through a routine. He will always come round and shake your hand, so you know he is coming round. Everyone is just encouraging each other. You do that because you know it sort of helps you. People come up and say 'Have a good game, play well'. Then there is about five minutes to go. The referee and the touch judge will come and say 'Five minutes to go'. We will usually huddle round, you will have the captain getting you psyched up. It's not tactical, it's pure psychological reasoning. Just making sure everyone is up there. Up that extra stuff so everyone is 100%, firing on all cylinders when you go out there.

SM - So what is going through your mind then with five minutes to go?

P5 - Just thinking about what I am going to do. How I am going to make an impact on the game. A lot of the time we have these sheets before we play. And we will have made goals. You know what you want to do in that game. A lot of mine, I will always put work rate. That is quite important to me. That's one of the things I will be thinking about. You have to get yourself in the game early, you have to get round, you've got to be working. It's things I've got to be doing in the game that I am focusing on.

SM - What about your feelings?

P5 - I wouldn't say nervous. It's difficult. It's just the intensity of it all. You just feel like you want to get there and get on with it. Not nervous, maybe excited. It's more anxious to get out there, and it's not really not calm. I try to calm myself down. So I look sort of sort of reasonably clam, more controlled. Inside you are really up for it. That's how you need to be. You need to be pushing yourself all the time. It's like difficult to put an emotion label to it. There's a lot of emotions in there. I think nerves might be in the back there somewhere but you are just focused on the game and you want to get out there. I think the excitement of it all just tends to overrule the anxious. In the team meeting you get a bit of nervousness, on edge and this tends to P. off and the adrenaline kind of takes over before you go out.

SM - How much does confidence play a part?

P5 - The majority of the time I go out there I feel confident. I feel (pauses) basically that stems from where I have got myself this year. I feel confident in myself. It's not really to do with the preparation that I've done, it's beforehand. It's not the preparation I've done on the day. I don't think anything will influence me.. if I have gone through the week and I am not feeling very good, then maybe my confidence is down a bit. You'll have done something about it during the week. I don't think the lead up to the match really influences my confidence at all. Confidence can vary depending on the sessions you have had in the week a little. Maybe even on your last performance. Actually playing, when you are actually playing, sometimes then your confidence, if you are not playing well, you can get worried about your game.

SM - Have you ever been nervous before matches?

P5 - Yeah, but the nerves tend to come before though. I kind of.. it's there when I try and relax in the morning, if I get interrupted in the morning or anything, if I get upset in the morning. Living with the girlfriend and stuff like that. If she is sort of under my feet I get a bit irritated. So I just need to relax in the morning, the nerves are there, they progress a bit until the meeting, and then after that you sort of the adrenaline takes over and the nerves will drop way. I think I get nervous in the morning because it's an outside influence on what you want to be doing. You don't want hassles in the morning because you don't want to do anything extra. You just want to get on with your preparation for the game. Be in control of everything.

SM - So if you are not in control?

P5 - It makes me a bit irritable, a bit frustrated. If something like that happens you have to push it to the back of your mind.

SM - Does playing away differ for you personally compared to playing at home?

P5 - Well, again it's the routine. Playing at home, you've got your routine. So you try and get into your routine when you are playing away. Sometimes you will playing away and you will be staying overnight. Sometimes you will be travelling, and I am not the best traveller. I don't like travelling because your legs tend to get heavy if you go on the bus for an hour and a half. So if I do travel I try and warm up more than I would do. Mentally I don't think... is probably slightly different because it's different surroundings, but I try and keep it similar. I think the coaching staff try and keep it similar, emulate what we do at match days when we are at home. I suppose different,.... a different environment, different changing rooms can make a difference. If you are in a smaller changing room it can get a bit frustrating. Sale tends to be quite a small changing room. You are sort of under peoples feet. If that does happen I try and get out there, get through it. So that might affect your preparation and stretching and stuff if you are rushing through things a bit more. You can be maybe not as focused. You try and put that to the back of your mind.

SM - So for you travelling is not the ideal scenario?

P5 - No, not the ideal. It's different when you actually stay away. Because I think you are not travelling you are already there. So that's more like beginning at home. That has tended to be the case with the Scottish side. Although playing in the evenings with Scotland, whereas I relax in the mornings with the club, I tend to relax all day. So that I do the same as I do at home.

SM - You talk about travelling with Scotland. How does the dressing room environment differ compared to your club?

P5 - No major differences really. There are differences between individuals and how they actually prepare themselves and the more influential people like the coaches and the captains and stuff like that. They all try and get players mentally and physically prepared. So that differs slightly. But having Ian McGeechan, it's sort of similar to the Scottish stuff anyway. So the playing stuff and the mental preparation, the talks are similar. Getting you all focused on what you are going to do. It does tend to differ in that it will be more intense because you are together for five days beforehand. So you are

all together in the hotel, so you have more meetings and.... but counteracting that I will try and go into my room and relax a bit more. I think we've got it right at the moment, maybe bordering on too many. My way of dealing with it is getting away from it all and relaxing in my room.

SM - So what about the dressing room five to ten minutes before kick off?

P5 - Again you get round and it's quite frantic and everyone is sort of fussing around reassuring players, they sort of come up to you and say we are going to do this we are going to do that. Again we will get round in a circle and they will fire you up for the games, it's quite similar really.

SM - Does your approach differ?

P5 - Maybe, a bit more relaxed for Scotland. I don't know why. Maybe it has been the build up in the week. It's been a bit more relaxing than normal.

SM - How well do you know the Scottish players?

P5 - Reasonably well now. But not at first. But I have just fitted in quite well and they are a good bunch of lads to get on with. I can't really put my finger on why I do feel more relaxed. I guess 'cos it's a similar atmosphere to the club.

SM - Do ever notice when the atmosphere is not present in the dressing room?

P5 - Yeah, I think you can if it's a lot different. If there is a small difference I won't pick it up. Some players you can see it in, if they are not concentrating. Or sometimes some players who will normally be quiet, and then suddenly they are talking a lot. So you can see that their preparation is different. So then you are thinking well are they switched in as much as they usually are. I think it would have to be a big difference for me to say it's flat. Because this year all the build ups have been pretty similar. You know even though when we've gone out and not played particularly well, I don't think the build up has been drastically different. Maybe during the week.

SM - Have you noticed when the dressing rooms have been flat?

P5 - Uhm, if you drop down to a second team game. Then it tends to be not as fired up. People aren't as worried and don't tend to be as switched on. There is not as much on the match. It's not a league game, there isn't a big crowd. It's difficult for yourself then to get fired up. You know I think as a professional player you have got to go out there and you have got to motivate yourself and work harder, get fired up yourself. Rather than rely on other people to try and help you along. Because they tend not to be as switched, that's for sure.

SM - Ok, lets focus on that ten minute period before kick. What do you think, say or do to get yourself ready to play?

P5 - Again you are just sort of focusing on what you are going to do. I've probably said it already, but you know the goals. Other than that it's just stripped off, a bit more stretches. I tend to be standing up and stretching. I give words of encouragement to individuals. Sometimes I will go away with the back three and we will say, we need to do this. So I am going through my goals for the game in my head and maybe encouraging other guys, 'Come on yeah, you need to work today' 'We need to concentrate' 'Lets cut out the handling errors' 'No mistakes' and 'Lets concentrate on the first ten minutes'.

SM - Do you go through your moves in the game before you play?

P5 - Yeah you do. In certain areas, I go through catching the high balls. Erm..... taking the ball into the contact. You put your self into positions, maybe breaking through tackles or trying to go around somebody. It's going through your mind at the same time that you are going through your goal setting. So in that period of coming in from the warm up. Trying to relax and just think what you are going to be doing mentally rehearse what you want to do out there.

SM - How clear are these images?

P5 - Reasonably clear. Sometimes you know you feel yourself going, right, and going for a high ball and catching it. Sometimes you think 'oh yeah, what if I drop it?' Then suddenly you will go, 'no don't think of anything negative, just think of the positives and it will be Ok'. Then you just rehearse it again. Sometimes you will get negative visions, so to speak, as making mistakes. But you just sort of catch yourself, think positively.

SM - Do you see yourself in your body or are you watching yourself like on TV?

P5 - That's interesting. I suppose maybe just visualising myself. Actually looking at myself catching it. Sometimes I will just be thinking of the ball coming towards me or making a tackle. Or sometimes, I think I do a bit of both. Visualising myself actually making the hits. For me it's just seeing it, mentally rehearsing it.

SM - Are the opposition involved?

P5 - It depends what you are doing. If it's tackling or something like that then you are visualising yourself tackling. Maybe it's been a good tackle that you have done before. Visualising that again or something in the past that you have done well. So maybe it will involve other players. If for example it's catching a high ball then other players don't tends to be involved. So you are concentrating on yourself.

SM - Do you visualise the team you are playing against?

P5 - No I don't tend to do that really. I just I don't think it motivates me particularly who I am playing against as in the team. That doesn't particularly push me on. Maybe if you are playing against a particular person that is supposed to be very good. The maybe you just try and raise it slightly. I try and get switched on for everyone I play. Sometimes you have to be concentrating harder against guys you don't know because you don't how good they are or sometimes whereas I've maybe switched off a bit in the past. Now you can't afford to do that.

SM - Tell me a bit more about when you've switched off?

P5 - It's probably all through experience, I've just got past that now. You just think well I don't who he is.. you think you are in for an easy game. You tend to switch off then, not be as focused and become over relaxed. Then when you play against them they do something good against you and you are not prepared. I mean this is probably going back a few years now. With the game being professional now, you tend to get into a routine more. I just remember I've done it a few times, and I've gained the experience not to do it again. It's probably likely though when you are playing against sides maybe for the first team against Cambridge. You don't know the guys you are playing against. With the league you know the guys you are playing with. Against the RAF and teams like that. Sometimes you will get a lot of ball and you will be switched on and things will be fine. Sometimes you are just off the pace slightly 'cos your thinking 'Well how good is he anyway?'

SM - So what is your state of mind then?

P5 - I think probably more, too relaxed. I think that it is a good thing that you are relaxed and concentrating. But then your concentration goes down because you are relaxing too much. So just things get away from then on the pitch. You feel you are chasing the game and stuff.

SM - So do believe there is a link between that last five minutes before the game and how you actually perform?

P5 - It might do because saying that. You can link the two because the preparation wouldn't as been as good for those games because they are not as important. The emphasis isn't on as much, maybe the mental preparation hasn't been as good. So you go out there and you are not as focused. That is probably something to do with it. In general I think it's important to be as focused and up for a game as you can be. All that can change after the kick off. 'Cos you will be up for it and everything and then suddenly you they will play for ten minutes with the ball and some players heads will drop. Whereas I am trying to get back into it. Some guys won't and sometimes that affects you. You think everyone has lost interest here. Your mental attitude after the kick off can change depending on the game. But the build up to it has to be as good as possible for me to try and get the best results when I am playing. It can happen straight after the kick off. I think one thing that I will do before the kick off is visualising the kick off. Maybe when I am just running out onto the pitch. Sometimes I will go out there, because I am playing on the right wing they will tend to kick my way. Sometimes if they kick deep it can come to you or you can be looking to run off players. So you tend to visualise it going up and see where you are running or if it's a good kick and we are in deep we tend to box kick. So you visualise the box kick going up going up and you getting underneath that. So it's just the first scenario of what is going to happen. You tend to visualise that as soon as you go out there. So you are focused for what can happen.

SM - What sort of factors would stop you from being focused in that ten minutes before kick off?

P5 - Probably individuals around you. If they are focused it will rub off on me and I will tend to get more focused. If they are not then you find that you start struggling a bit. You think it doesn't quite feel right. It feels a bit relaxed. It doesn't feel right, you are struggling.

SM - Has that happened recently?

P5 - There might be times where you can feel it slightly but it picks up when you get into the huddle, everybody's very close and you are playing for each other. It can be quite infectual. If they are having a laugh or a bit of a giggle, which doesn't really happen with the leagues, but can happen with the other games. It tends to make you unfocused.

SM - How does the opposition change your approach to matches?

P5 - I used to make a note of not looking at who I was playing. This is going back a while a go. I would make a habit of not looking in the programme to see who I was playing against. So it wouldn't influence my thinking or whatever. But, you as you get more professional then have to realise that players have weakness and strengths maybe that you can turn to your advantage, maybe prey on their weakness and shut their strengths down. If you know a lot about a player you have to try and exploit that.

SM - What was your reasoning behind not reading the programmes then?

P5 - Because I think that you can tend to go off your game if you think right I don't know him. Or yeah that's so and so. The mental preparation then is affected, I think you won't be up for it more because you just try and get into the same frame of mind. You aren't up for it any more because of who you are playing against. Rather than just getting up for the big names or whatever.

SM - There is a difference in your preparation for the internationals and the opposition you face?

P5 - They have a bit more meaning. When we did play against Wales I was really up for it. I played quite well, because It had a lot of meaning to me to it. There was a lot of passion out there. It was no problem for me to get up for that game. That was probably easy mental preparation in trying to get yourself up for other games, because that meant a bit more I suppose. Against Wales I wanted to prove a point really. It could have gone that I was playing for that team. But they sort of ignored me, whether through playing in England or whatever. So it was just to prove a point. So just because what that meant to me it was easier to get psyched up for that game.

SM - Can you ever recall a build up to a game when you have been in the wrong frame of mind?

P5 - It has happened, and you go out there and maybe you play. When you get to the club then obviously it starts but maybe you are catching up on yourself, because you haven't had that preparation in the morning that you usually do. Maybe something has distracted you or put you off your normal routine. So then you sort of try and catch with it and build yourself up. You just try and go though your normal routine. Although you may be slightly down on it I guess. Maybe that will affect your match performance, but I would only say in that first ten or so minutes. After that you should be able to build yourself up again.

SM - So where have these strategies come from that you use to get yourself in the right frame of mind?

P5 - Uhm, I think you do it sub-consciously. I mean visualising stuff. You wouldn't really, you sort of get told about it in sport in college and stuff. You are aware of it, but you have been doing it already. Then you use it more to your advantage because you know about it. Just from experience. I suppose bits and bobs that you pick up. Through experience you'll have picked it up and you think well that works for me. Like the targets and stuff like that, that has been introduced by the club or whatever. To give team and individual targets. I've picked up on that and carried that on. Even if I don't do a sheet. I sort of do it myself anyway. Before we had the sheets last season, I still used to set my self targets before kick off, but not as much. Probably wider goals, not as focused and specific. Things like go out an have a good game or whatever. But not specific things in the game.

SM - Are you happy with it at the moment?

P5 - Yeah, but again I would be happy for me to be even more psyched up for a match. So I am not going to say that it can't improve any more if can, I find bits and bobs that will help I will use them.

SM - Ok, I want you to imagine I am a younger player coming to you as a coach. I have problems getting into the right frame of mind before I play. What advice could you give me?

P5 - You've got to base it own your own experiences, but it may not necessarily work for the individual. Maybe go away and try visualisation and try setting your targets. Take on board what other guys are saying to you. Whatever works best for you will tend to pick up those things. Go away and try your routine in the morning where you are relaxing. Then build up and build up focusing more and more on what you are going to be doing in the game and areas of the game that you want to do well in. Give yourself targets. Then as you are warming up, keep visualising that. Try and get yourself mentally up for the game. Get physically right to go out there and play, still thinking in the back of your mind what you are going to be doing. I'd probably go on what I'd do. The tell them at the end that if that helps you then take it way and use it.

SM - What about if I was low in confidence?

P5 - The area that they weren't confident in. Maybe to visualise that and go though it correctly. If it was you weren't confident in the tackle area. Then you would visualise yourself tackling. That would get your confidence up. I think that needs to be done before the day. I think you need to be mentally prepared before the actual day of the game. So during the week visualise it, practice. If you are doing it and you are doing it correctly then your confidence will build. Back to myself now. I wasn't particularly confident under the high ball. So what I did was in the training sessions. I get one of

the coaches to stick a load of high balls up to me, your confidence will come. I did week after week and now it's not a problem. That together with mentally rehearsing it. You can really apply it that to any part of the game.

SM - I want you now to think of when you felt you played really well and when you felt you didn't play so well. Describe to me when you last felt you played really well?

P5 - I'm pretty critical so I don't there is always even if I don't play well. This season I have been pretty consistent so...(pauses). Newcastle away, we lost 35-45 and I didn't think I played very well, I was quite heavy in the legs and I didn't feel quite sharp enough. That was probably more physical than mental preparation. Maybe it was because the travelling up the day before. I just come off and thought we lost, I didn't play particularly well. I missed a couple of tackles, I should have done this a bit better. We played well as a team last Saturday again against Newcastle. We played well as a team. Individually I thought I played I go into it eventually. I thought the first ten minutes I was more nervous than usual. I don't think my preparation was any different. It might have been something to do with the fact that we had lost there league games on the trot and. So we needed the win. So I felt a bit more nervous than I normally do going into the game. So then in the first ten minutes I put a pass out and it went to the floor. It was only just a margin of error but it was there, and I was feeling a bit jittery. But then when I got into the game, I did a few good things, I forgot about being nervous and got on with the game and played really well.

SM - When you mentioned being nervous was that about winning the game?

P5 - That was in the back of my mind yeah because that was a big game and we had to win it. Newcastle are always a difficult side to play. I think it was just that we'd had a talk off Keith Barwell ⁴ on the Wednesday, saying that there was a lot running on the game. All the games leading up were must win games. I didn't feel that in the build up to the game but as soon as I got there I just felt as nervous, thinking back to that maybe that was the reason. Another bad game was Sale away in the league. I didn't play particularly well. I ended up getting sin binned. Which is unusual for me. I played badly because I wasn't as focused. I'm not sure if some of the things that happened were in my control. We lost the ball, I came up flat because we lost it. So the scrum half just ran it well, chipped over behind me so I am running back, the wingers run with me, we get to the ball at the same time and he gets the bounce into his hands and you just start thinking 'oh it's not going my way' and 'it's not going to be my day.' The guy scored again through a missed tackle. I was then thinking 'he's got two tries against me already' that sort of thing. Just again feeling as the game went on not feeling particularly confident. The build up hadn't been particularly good. As I said before maybe the Sale dressing room, maybe that was a factor. Having said that though a week later we went up there in the cup and I played really well. I just addressed my mental preparation and I knew what to expect and I was more prepared. In that first game I got sin binned more out of frustration. Your confidence tends to go down when things like that happen, and when your confidence goes, you don't tend to play well.

SM - Describe to me how you feel when you play well?

P5 - I'd say when you are playing well you feel more relaxed and you tend to be not thinking about things, not as cluttered in your mind. You are just going through it and you tend to be working hard and you are not thinking about things. I think when you start playing badly, then you start to focus on negative things. You just get into bad habits. You think 'Ah this is going against me' You start getting yourself down and it sort of builds up. Unless you can sort of break that, which sometimes you can do. You can just go out and do something well. Sometimes in the game you will have a bad five minutes. In certain games though, you just keep going you just keep snowballing and then it's a nightmare.

SM - So how would you discern between the two - good and bad?

P5 - You probably feel more tired when you are playing badly. It's more mental though when you are having a bad game you might not feel as good and then that starts playing on you and then you start focusing on that. With me my legs get heavy and I don't feel as though I can run that much, as much as I have been doing. Then you start focusing on that. It's a snowball, focusing on the bad things.

SM - How do you alleviate the bad feelings?

P5 - Again you have just got to think positive things. Right my next tackle, one of the things we have been doing at the club is focusing on the next thirty seconds you focus on that. So in the next thirty seconds you are focusing on something good to do to make up for the bad thing you did. If you manage to do that then you sort of break it and then you can get back into the game. I like it, it brings your concentration onto something positive away from the negative thoughts that you are having. I also notice that if you are playing badly then the game tends to drag. You can feel that its going on because you are not playing well. The games you play well in tend to go a lot quicker because you are not focusing on negative things you are focusing on what you are supposed to be doing. If you are playing badly you just want to get off the pitch, get it over and done with.

SM - Ok, we have covered a lot of things there. Is there anything else that you want to add?

P5 - I mean just saying what works well for you, you have got to use that to your advantage. Hopefully I can improve on my mental preparation and things like this will help me do that. Because you tend to think more about why you do certain things. This will probably help in my own mental preparation. Also I think there are so many external influence on how you play in the game. But, I think at the same time you still have to be the best you can be. Otherwise if you are not mentally prepared in the first place then you are going to go out there and not play well. So there are outside factors after the kick off. But you know you have to be in the best frame of mind.

SM - That is really great. Just finally I want to emphasise that the interview and all the information is in the strictest confidence and complete anonymity, you can change or add anything you like when I have the interview transcribed.

P5 - Ok.

SM - Thanks very much P5.

P5 - Cheers

⁴ Owner of the club

Interviewee: P6
 Venue: Swansea - Home of interviewee
 Time: 2:00pm
 Date: 30/04/99

SM - Ok P6, Thanks for agreeing to be interviewed today.

P6 - Not a problem at all Steve.

SM - My area of research is in the psychology of pre-match mental preparation. I have played at junior level international myself, and I am interested in the psychological experience that international players such as yourself go through before the start of the match. The aim of the interview today is therefore to find out how you prepare mentally for matches and what mental states you experience prior to kick off. The information I get from the interview I hope to use to assist younger players in their mental preparation for matches.

P6 - Right.

SM - If it's ok with you I am going to tape the interview for use with my research. At any point during the interview feel free to add any comments or make any changes if you wish. The interview itself will be in the strictest confidence with total anonymity.

P6 - Sure.

SM - Ok then, using the time line as a guide, I'd like to ask you about the build up to kick off for the team on match days. Talk me through a typical build up to kick off for the team on match day?

P6 - Well luckily for me I don't live too far away from the ground. So I like to have a lie in bed on the morning of the match. I'll get up around 9:00am maybe 9:30am. Just relax in the house for the morning. Get food and fluids into my system. I like to have as relaxing a morning as possible. I might go for a walk along the beach or into town, just for an hour or so to relax really. We have to be at the club for a 1:00pm meeting. I like to get there on time, but before that I pack my bag, do my rituals, like clean my boots and pack my kit, check I have everything, and then double check again. Then I walk down to the ground about quarter to one. I like to walk because it gives me time to get my head together and start organising thoughts in my head, getting prepared for the match.

SM - So you get to the ground...?

P6 - I get to the ground for 1:00pm. We have a talk and walk around the pitch for a bit, just chat and get rid of a bit of the tension you have had in the morning. It's good because you spend a lot of time together as a squad so it is like your second family. So when they are not around it's not as relaxing. When you get together there is a great feeling of security. Once we have had a walk on the pitch we head into the changing rooms, start to get changed, take some drinks and we have a team meeting at 1:30pm. After the team meeting we finish getting changed and we go out to warm up. The warm up is about twenty minutes, we head back in for ten or so minutes, have a team talk, last words and then a big huddle and onto the field. Much as you have here on the paper.

SM - How do you find the preparation if you are playing away as opposed to home?

P6 - We keep the preparation as similar as possible, having the meeting as close to 1:30pm as possible, so all other arrangements are aimed at being as similar to our home routine as possible. For me if we are away everything starts a little bit earlier, from getting out of bed, to having a walk and walking to the ground. Sometimes if we are further away we will go up the night or day before on the coach and stay overnight.

SM - How do you find the overnight stays with regards to your preparation?

P6 - It doesn't bother me at all. Coming from SA⁵ I am used to long trips and flights and hotels. It's something you have to deal with as a professional international player. I just adjust to it. Get myself a book to read take plenty of CD's to listen to. It can get boring and eat you up. But all the lads normally have their own ways of killing time, cards, videos, golf and all sorts I can't really mention (laughs).

SM - How does the preparation differ for internationals?

P6 - The build up is longer and all the emotions are stronger, the build up is just more contained and heavier. Times a club match by ten and you are getting close. The crowd comes onto play then as well.

SM - Tell me a bit more about the crowd?

P6 - The crowds for internationals are phenomenal. You get such a lift for the matches. It makes you stronger, faster, fitter and tougher when they are behind you.

SM - And for away matches?

P6 - For away matches we still get support and you still use that to lift you. But with away games you have to close the crowd out and shut them off totally. There is a good crowd here at Swansea. They give us a lift.

SM - So how much of a difference does the crowd make in the match?

P6 - It just gives you a lift. Makes you work harder and more motivated, more determined. It can put pressure on the opposition if the crowd are on your side. On the opposite side, when a crowd are on your backs and giving the opposition a lift it makes it harder.

SM - What other factors do you believe affect team preparation? When has your preparation differed?

P6 - The only time our preparation differs really is when we have friendly matches, or less important matches, you know like mid week games. That's when the preparation is a bit more relaxed, a lot of the time the rest of the squad gets a run out, so you don't really have the same atmosphere or feel to the whole preparation.

SM - Why do you think that is?

P6 - Just because you have a load of guys who won't have played together much before, or will not be sure of each other, both on and off the field. We have a really good atmosphere in the squad everyone gets on really well. But I have played in sides where the people coming in for friendly matches, or

⁵ Plays for a Super 12 team

even league or cup games are just not as good as the players they are replacing. It's not their fault, but they can't replace the guys on or off the field, that's when the atmosphere changes.

SM - So what's the difference in the dressing rooms when there is and there isn't an atmosphere then?

P6 - You just know, you can see it in players. You can look around the dressing room and tell who is switched on and who isn't.

SM - So what do you do if it's flat?

P6 - You find the international players, the most professional and experienced, they have to be switched on for every game. They keep a look out for the rest of the younger, less experienced members of the squad. They will say things to pick the rest of the guys up. If I see someone I know and I know his head is not together I will have a word with him. Often it doesn't take much just a look and a nod or some words of encouragement.

SM - What like?

P6 - Ahh (pauses) just something like 'Are you up for this?' 'We're going off to day aren't we?' Things that get the players to snap out of it, or make sure they have their heads on.

SM - Do you find that works?

P6 - Yeah, it does, sometimes just a couple of the boys shouting to themselves is enough and it starts everyone else off and the atmosphere is there.

SM - Does this lack of atmosphere translate itself onto the pitch?

P6 - Yeah it can do. There have been games where it has been flat in the changing room and we have gone out there and no one has been able to get it together, as a team we have been pulling in all the wrong directions and have had a good bashing for the first ten or fifteen minutes

SM - Ok, we will come back to team performances. Now I want to focus on your personal preparation for matches, and the thoughts and feelings before the match. Firstly, on the morning of the match, what is going through your mind, what are you feeling?

P6 - On the morning I am trying to stay as relaxed as possible. That means not thinking about the game too early. I let some of my thoughts about the match come in, just to give me little bit of focus. But it has been building for a while, since selection and increasing since then. You let it build in the week to keep your motivation. But on the day you have to keep control of it, and not let your energy get release too early. So for me it's a feeling of relaxation and calmness, but with a slight building of excitement.. well I guess it's a little bit of edge, a bit of tension.

SM - So from there?

P6 - I walk to the ground and that's when I start to feel a bit of the tension, I know I have a game that day and my mind starts to warm up, the excitement starts to build.

SM - So you talk about tension, what do you mean by that?

P6 - By tension I mean a feeling of increased awareness, increased sharpness and alertness, a slight tension in your body, your head. and things like your stomach, a slight tingling. It's like you know something special is going to happen, that you are going to do what you have been waiting for all week. So I guess it's a feeling of anticipation tension.

SM - So from there?

P6 - Then to the ground and talk to the players, there is an increase in the tension or excitement. I think awareness is a good word. It's then that you realise that you have a game to play and the butterflies start to go a little.

SM - So what are you thinking at this stage?

P6 - Not much really I am just talking to the rest of the lads, when we walk the pitch I may start to think about a little about where I am going to be on the pitch in the match, but not too much. When we all meet up it's just general chit chat and laughter, a bit of nervous laughter I guess, we are talking just to kill a bit of time. The talk isn't really game related. Some of the boys are there, switched on already, but most are still casual. The rugby talk and seriousness begins after the team talk.

SM - So it's a relaxed feeling then?

P6 - Yeah, it's a relaxed feeling, again the apprehension builds because you know you're about to embark on your serious preparation. So the talk and the laughter is almost a break from the tension and the build up.

SM - So then, so then it's the team meeting?

P6 - Yeah, the team meeting is when everyone gets focused and Plum pulls us all together. That's when the excitement and all the passion builds, the motivation becomes strong and the emotions start to come out.

SM - What kinds of emotions?

P6 - Just excitement, and more apprehension, a little tension and feeling of on edge, the tingling in your stomach and the buzz in your head.

SM - So what is the team talk like?

P6 - Plum just focuses on touching the nerves in us. He finds the right words to say that hit everyone in the head and make us motivated. It may be a little dig at one aspect of our play or it may be a praise us on how well we have played, he picks out individuals and praises and criticises them. It is good because we are a close squad and when Plum tells you something you listen.

SM - Contrast how you feel before and after the team talk?

P6 - How do I feel? Well it's more the team, you feel part of the team when you come out of the talk, you all have one goal, one aim and that is to beat the opposition. Before when you go into the team room you have that tingling but you don't feel unified. When you come out the tingling is stronger but you feel more of a team.

SM - So when would you say you get 'switched on' for the game after the warm up?

P6 - Yeah, when I get in from the warm up I sit down and get myself totally focused. It's about ten minutes before kick off. I have warmed my body up and then it's over to the mind. It's funny because you spend twenty odd minutes warming your body up, but so little time on the mind, but five minutes is fine for me.

SM - Describe to me your typical routine when you 'switch on' for games

P6 - I find myself a corner, make sure all my strapping is done, and I have had a rub down, been to the toilet, and everything is done. So I sit down, close my eyes and take some time to mentally rehearse my jobs that I want to do out on the field.

SM - Tell me a bit more about the mental rehearsal?

P6 - I see myself doing my jobs against the team we are going to be playing against. I am inside my body, I am making hits, taking pops and going through moves. The contact stuff I can feel in my body as well, my shoulders, my arms, what it is like to break the line and what it feels like to bury someone into the floor.

SM - Are you inside your body for all these jobs?

P6 - Eh.. (pauses) no.... come to think of it I am inside my body for the hits, but the team moves say a miss one loop or hitting Tiger coming into the line, they are outside body views, like on the video. I don't tend to feel those either, more the contact I aim to feel.

SM - Do you know why that is?

P6 - I think that the video stuff is just to organise how things will run in my mind, and out on the field, giving you an idea of the space and timing. The contact is just really getting your body warmed up and psyched up.

SM - So how clear are the images and the opposition?

P6 - The opposition are not totally clear, it's not as though I can see the faces of the players distinctly. But I am aware of the colour of the shirts and bodies, more so in the moves than the contact. But I only do the rehearsal for a few minutes, just to make sure I am confident that I have been through it one more time.

SM - So after you have got yourself totally focused what then?

P6 - The there are a few minutes to go, everything starts kicking off all the boys are taking and the excitement goes off. You just want to get out there and play. All the nerves start to go and you feel strong and part of the team.

SM - So what is everyone else doing?

P6 - Well there is quiet in the room for a few minutes and then as I described everything comes alive and the whole team is bubbling, on their feet, shouting and moving.

SM - So then?

P6 - Then, then (pauses) we all get on our feet and get into a big huddle. G. or P. are talking, getting everyone up for it, in the zone and all that.

SM - How does it make you feel with all your mates in the huddle?

P6 - It's a feeling of unity, like I described when you come out of the team meeting, you just feel strong and you have complete trust in the rest of the team, you feel pride, trust and respect for everyone. You know you can rely on everyone else to do their job. Not only the guys you go to work with but they are your mates as well. When I play in SA, and even with the national team, there isn't that unit, that feeling of togetherness, like no one is going to beat us. It's very hard to create, very hard.

SM - So from there...?

P6 - It's out on the field, we have a big hug, big squeeze, the ref. gives us the call and we are out.

SM - So how are you feeling then?

P6 - Awesome feeling, just strong, high excitement and enjoyment, just glad to be there and able to play. You are highly motivated and ready to do anything, you have that little bit of edge but you know that will go very soon.

SM - So would you say you get nervous before you play?

P6 - I find that, especially with all the experienced players around you, that before a game sure you get nervous, you get nervous when you are doing your preparation in the build up to the match. You can feel your butterflies and all that. Once you get in the warm and in the changing room and you are with all your mates, that's when the nerves go. Everyone gets switched, for the jobs they have to do. Not just to play but to play well. That's the thing about Swansea it's such a proud club that everyone wants to play well for themselves and the club.

SM - Do you see nervousness as a good or a bad thing?

P6 - I think that you need a little bit of nerves before you play. Not worrying yourself stupid, or biting your nails or pissing and being a wreck or any off that stuff. You need to be thinking about the game, you need to be feeling that little bit of buzz.

SM - So how would you rate the preparation compared to other clubs and teams you have played with?

P6 - The preparation here is excellent. They have got the players as the first priority at the club. There is a great atmosphere here, a great feeling of togetherness, a great team spirit that has been created and that is what wins you championship and cups. Plum has been a large influence on that. Ideally at international level you are trying to create a club atmosphere, one of closeness, but that is hard to do with time constraints and everything.

SM - You have already described to me the team meetings and the coach. How much of an influence is the coach upon you, how much psychology do they use?

P6 - The boss is into his mental rehearsal and his mental attitude yeah, he says the right things at the right time. He has been a major influence at this club. He is hard but fair. He is a players man. He has respect, and he gives respect. He doesn't keep anything from you, he tells it like it is, when it's good and when it's bad. A typical Bok! (laughs).

SM - Ok, now I am interested times when you feel you have played well and not so well, your good and bad games. Firstly I want to ask you about bad performances. When was the last time you felt you had a bad game?

P6 - My last bad game, well (pauses) that's quite a tough one. I wouldn't say that I have played really badly in a while, (pauses), no not really at all.

SM - So what about bad performances in general. How would you classify a bad performance?

P6 - I would say a bad performance is not doing my job. Not contributing to the game. Letting the rest of the team down.

SM - Tell me a bit more about your job?

P6 - When I am playing in the centre my job is to carry the ball forward, to make gaps and break the gain line in attack, to put the boys outside me into space and make sure they get good delivery. In defence it is to make sure nothing, nothing goes past or through me. In the middle of the park me and T. or me and G. have to seal the midfield off. Nothing gets past us at all.

SM - Is that all?

P6 - Also my job entails making sure we clear our lines in defence and that we maintain possession in the midfield.

SM - So a good game for you..?

P6 - A good match for me is doing all those things consistently, making the gain line, ball retention and tackle count. Especially if I have made some big hits and big carries across the game line.

SM - So you are not a goal hanger?

P6 - A what?

SM - A goal hanger, try grabber?

P6 - No I let the pretty boys outside me like R. and T. My job is up and down the midfield. Tries are good but and a bonus but that isn't part of my job. If I come off the park and I have scored a try then it's like 'Great, I got on the score sheet today' but the main thing is that I do the basics, get my job done. If I do my job then that contributes most to the rest of the team winning and playing well. It doesn't matter who scores the tries, it's the people who make them that count. The try score is the lucky one who gets his name in the paper, but everyone know he wouldn't have got there without the rest of the team.

SM - Ok, lets turn things around now, what is a bad game or performance for you?

P6 - The opposite of a good game! (laughs)

SM - Which is..?

P6 - Not doing my job, I know if I have had a bad game, I will have missed tackles, lost the ball in contact or dropped passes or fucked up putting the boys away. Just letting the team down, making bad decisions or perhaps being too greedy and not letting the ball go when I should have. Some days you can have real awful matches where no matter how hard you try nothing seems to go well, no matter what you do everything fucks up.

SM - How does it feel when things are going well compared to when things are going so well?

P6 - When things are going well, you are making the pop, you are making the gap, making the tackle you are reading the situation. When things aren't going your way then the tackles aren't being made, you are missing the pop and the pass isn't going to hand. Something doesn't feel quite right.

SM - Put a feeling on the good and bad games for me?

P6 - When things are going your way you are on auto pilot, automatic, everything is smooth and you read the game. You feel good. You have energy, power, full of it. It's quite hard to describe, but it's a total in the zone, yeah, it's... you know you are in the zone and everything feels as though it will go right for you. Everything you try goes off. It's a good feeling.

SM - So how does it feel in bad games?

P6 - For bad matches it doesn't feel right. You feel uncomfortable, not in tune, not in step. Your focus is too wide and you are not in the zone, compared to when performance is good. For me this doesn't happen in the whole game. I will have a spell where I don't feel with it or my focus, concentration is lost, perhaps that's then you think too much and over analyse. If I am on the field and I am aware that I am thinking too much I know I need to blank my mind and focus on performance, say the next play or the next tackle. It's funny though, because you can be in the middle of a match with people hairing around and knocking shit out of each other, and you are there in the middle of it all, ghosting around, not involved not totally focused.

SM - Ok, now I want to ask you about your mental state before kick off and how this may affect your performance. How much do you feel the way you felt (i.e., mental state) helped you to play well in the upcoming match

P6 - Well, because we are professional players these days we are looking at consistent performance. That means commitment to training and preparation for playing. So I feel I have got my preparation routine pretty well sussed after all these years. So it's a case of making sure you are sufficiently motivated or switched on as you call it. So with that in mind the way I feel before hand tends to be very similarly. Yes, if I am in the wrong frame of mind then that has affected my performance. Perhaps not throughout the whole match (pauses) because there are other factors that can impact (pauses) but... but certainly the first fifteen - twenty minutes. If you go out there not motivated and not feeling right then you are not in the game, you can be off the pace and out of touch. It's especially bad if a lot of the players go out like that because the game is won and lost in the first twenty minutes. The first quarter is when you establish your dominance. It's match in itself, if you lose that the other team will get the upper hand, and you are after then, playing catch up rugby.

SM - So what would cause you or other members of the team not to be in the right frame of mind?

P6 - Lots of things really, you can be injured, carry an injury or coming back from injury and that can be playing on your mind, stopping you from giving two hundred percent. It could as much on the game be that you are playing in an easy match, or like has happened to me, you play a club match of the back of an international, or big game, then you have to go back to the club and play against a team and there is no motivation. Despite being professional it is very hard to keep your motivation and focus up for every game. You do have, you will have peaks and troughs. You may have had a hard period of games, and feel tired, that will affect how you feel. You also may have had a hard training week, and then you feel tired and your motivation is not there and it is hard to get yourself ready.

SM - So your performance has suffered when you have felt like this?

P6 - They have yeah. I have gone out there, and at least for the first quarter my head has not been in it. Sometimes I have got it back. Other times I have ghosted in and out of matches for the whole game. That's when you missed gaps and tackles and misread vital signals in the game.

SM - Describe to me how you feel when your mind isn't right?

P6 - It's not that it isn't right, it's that you perhaps aren't as motivated for whatever reasons. So you may feel flat, tired, sluggish, things like that.

SM - Ok.

P6 - As I have said, if you have had a good build up to the match and a hard training week then that can prepare you very much for the match. It's the times when perhaps you haven't had a good build up, not many good sessions or perhaps things haven't been what they should. That's when you can be in the wrong frame of mind.

SM - Now I'm interested in when you are in the wrong frame of mind before you play and how you go about correcting them and getting yourself into the right frame? Can you recall to me an instance where this has happened?

P6 - Yeah it has happened in the past. You get to the ground feeling or tired or not really up for the match. You go through all the emotions in the warm up.

SM - So how have you gone about getting your head right again?

P6 - You really have to try and feed of the other guys in the team. You have to tune into their energy and their motivation to play. Listen and focus on what they are saying the words of motivation they are using in the changing room. Sometimes I feel tired getting to games, but I get into the warm up and that switches me and I feel Ok and ready to play after that, so that is all I need. Other times it may not be until three minutes before kick off that the rest of the guys pick you up and you are there.

SM - What happens if the other guys aren't motivated?

P6 - That's when you get the lack of atmosphere we talked about and we get a bad start. Other times I have not been able to get my head together until I have been out on the pitch. Then you have to pick a big hit, or do something to try and get you into the match. You have to do something to make an impact, make a name for your self to jump start you into playing. But then you are relying on the opportunities of others. Some games it won't let you get involved. But I must emphasise this doesn't happen often one or two times if most, and more when I was younger and learning. Nowadays everyone is professional and it is their job to get themselves ready to play.

SM - Would you say that there is a link before how you feel before you play and your actual performance?

P6 - I think there are outside factors such as other pressures and stuff that can affect how you feel before a match, other things that can upset you. But the preparation thing is not just on the day of the game, it is in the whole build up. It's how you prepare for the match. You know when you have a big game on the Saturday, on the Monday you start to prepare yourself, both physically through training and mentally getting your mind right. On the Monday and Tuesday things are starting to go through your mind about how you are going to play, so things are starting to build from then. It all leads up to the match on the Saturday from me, the intensity builds and the game occupies my mind more. You can't, for me personally, just switch on ten minutes before, it's all about the build up, then mental preparation over the week.

SM - Ok, now it is time to put your coaching hat on. I want you to imagine you are the coach of a team and you have a younger player coming to you who plays in the same position. What would you say to a younger player who has problems getting focused before they played? What recommendations would you give to him about mental preparation for playing?

P6 - For me, no one really told me how to get right for a match, I had to learn and find out for myself. So I think it's a case of letting them develop things by themselves.

SM - So where did your routine come from?

P6 - As I said it just developed really. Growing up playing in SA it's a very powerful based game and everything is explosive and focused around aggression and contact. So the warm ups and pre match stuff I encountered when I was younger was very heavy and physical and all out. (pauses) Didn't find that at all helpful it getting me focused, sure I could run through a brick wall after it but it didn't really help when I was trying to out people in gaps and read and direct the game. So I guess through trial and error you find your happy medium your best routine. That's what I have got and I am very happy with mine at the moment.

SM - So advice?

P6 - Advice, yeah (pauses). Everyone's routine is individual. So the player has to develop their own personal routine, whatever they decide upon. I would just sit down and chat to the guy, ask him what it is he has problems with.. Christ.. there is a whole host of things that could be going through his mind. It could be his warm up, he may be carrying an injury and that may bother him before he plays, he just may be getting nervous because he has not played at the level before. It could be a lot of things.

SM - So what if it was nerves?

P6 - If it was nerves, then you have to talk to them and tell them that nerves are just part of getting ready to play. Nerves are a natural thing, everyone gets them. It's not the nerves that affect your game it's whether your let them affect you or not. As I said it's good to be concerned about the game, some nerves show you care and are you for it. So you have to get it into their heads that the nerves are just part of the game and they need to accept them and use them to focus.

SM - So how could a younger player focus?

P6 - Pick a few aspects of their game and focus on those, establish a routine that they go through before each game, so that they do all the things on the routine and then they know that they have done as much, or all their preparation as they can and they are totally prepared. Thinking about your job will keep you focused on the match and take your worries off the opposition or whatever. It is helpful to picture and feel themselves doing their jobs on the pitch. Grab a few quiet minutes in the changing room before the match and visualise, visualize them doing their job. By seeing themselves doing and feeling themselves doing their jobs it should make them more confident about playing against the opposition and being able to cope with the opposition.

SM - Which of those factors do you consider most important for younger players to focus on?

P6 - They are all important really. I guess the most important is the fact that nerves are part of preparation to play and the key is not eliminating, because you can't do that, but to understand them and deal with them.

SM - In what ways do you believe this is the most important reason?

P6 - To a certain degree everyone is affected by nerves in some way. Either they experience nerves or excitement in some form so they need to be able to cope with it and learn to deal with it. If it goes on and on then younger players can get a complex about it and I think eventually it would get to them and they would be going on the pitch a nervous wreck all of the time.

SM - Yeah, nerves can be a big problem in professional sport. P6, we have covered a lot of ground there.

P6 - We sure have! (laughs).

SM - We have covered the build up you and the team go through before matches. We have looked at good and bad performances, how you feel before you play and dealt with some advice for younger players.

P6 - Yep

SM - Is there anything that feel we haven't discussed? Or any further points that you would like to add to or comment upon or change?

P6 - No I don't think so.

SM - It just leaves me to add that the interview has been in the strictest confidence and with complete anonymity. I intend to make a copy of the interview and you will be able to have a copy of the transcript and make any changes or additions if you wish. Thank you very much for your time and good luck with the rest of the season and the Super twelve.

P6 - Cheers

Interviewee: P7
 Venue: Swansea RFC
 Time: 5:30pm
 Date: 20/05/99

SM - Ok P7, thanks for agreeing to be interviewed today. As you know I have played rugby at junior international level. What I am interested in my research is the psychology of pre-match preparation of international rugby players such as yourself. Specifically, I am interested in your mental preparation before you go out and play matches. I hope to use the information from the interview today to help younger players and their mental preparation for matches. If it's ok with you I am going to tape the interview for research purposes. The interview will be conducted in complete confidentiality and anonymity. If at any point you wish to add any comments or change anything you have said then feel free.

P7 - Sure, fine.

SM - Ok, P7, using the time line as a guide, talk me through a typical build up for you and the team on the day of the match up to kick off.

P7 - I get up when I wake up on Saturday morning or on the morning of whatever day the match is on. I won't get up too early, just when I feel like getting up. So if I lie in, I lie in or if I am up early then I get up early. I will have some food, some breakfast, cereal or what have you, first thing. Then just potter around in the house. Before I go to the ground I will have some more food, beans on toast or something. All the time taking on fluids. Then I will drive to the ground if it's a home match. If we are away the coach will pick me up on the way, but most of the times I drive to St. Helens even if we are away so that the team travels together. Obviously the time I leave the house changes depending on where we are playing. For home games I leave about 12:15pm because it's not far too the ground I like to get there early. Once I get to the ground we all have to be there for 1:00pm. The team meeting starts at 1:30pm. The meeting takes place in the dressing room. Most people are half changed or fully changes by then, we used to get our team meetings in the board room at the club but a lot of the boys, myself included felt that we were getting to excited at 1:00pm and taking it out into the changing room and losing it by the time we had the warm up.

SM - Why was that?

P7 - Basically because when people are changing some of the boys, like Arwel are still pretty relaxed and having a chit chat and a laugh. So we were having the serious team talk and going into the changing room and half the boys would be pissing about and wot not. This way it works out better. So we get the talking and chit chat out of the way, which you do need really, because when all the boys get together they..... it's natural to have a chat and stuff. So by having the team talk in the dressing room when we are changed, allows us to get the talking out of the way. Then we have the team meeting and that gets everyone focused for the game.

SM - Does that change if you are home or away?

P7 - No, we try to have the team meeting at 1:30pm in the dressing room even if we are away. We aim to get to the ground, wherever we are playing for 1:00pm. That allow us time to walk around, get the journey out of our legs, get changes and be ready for the team meeting. We try and get the warm up, the whole routine in fact as consistent as possible, the same from week to week. That means we can't blame a shit performance on a crap warm up or build up to the game! (laughs).

SM - So after the team meeting what comes next?

P7 - After the team talk it is about 1:50pm, so we finished getting changed, doing the usual things like strapping and rub downs. We then go out for the warm up. The team warm up starts at about 2:15pm. Then we are back in for about fifteen - twenty minutes to go to kick off.

SM - Talk me through the warm up?

P7 - It's pretty standard really, from week to week. We have worked together to sort out a warm up that everyone, well most of the team are happy with. Most of us will be out there ready to go before the team warm up starts. I like to get out there early and have a loosen up, stretch off anything that may feel a little stiff form the journey or anything like that. I like to get a feel for the pitch, for the conditions, you know?

SM - What is your reasoning for that?

P7 - Getting a feeling for the conditions, the wind, the rain, the sun, the pitch. Getting your body used to the conditions. Is it a muddy or a hard pitch? you know, things like that that could throw you off your guard during the match if you haven't already taken them into account.

SM - So describe to me the warm up?

P7 - The warm up begins with some laps of the pitch, some handling drills, then contact work on the pads. We will do some sprints, then off to do some spotting (indicates throwing in at the lineout). Pretty simple stuff really, but by the end we have really built the intensity of the warm up. So that you have a sweat when you have finished and you feel loose and ready to go.

SM - So what then?

P7 - Then it's back to the changing room for the final preparation. You get any strapping, rubs or toilet visits out of the way. Then we sit down in the changing room, Plum gives us his last talk.

SM - How long is this to kick off?

P7 - About ten minutes.

SM - So after Plums talk...?

P7 - After the bosses talk we are on our own, we get into a big huddle, have a big squeeze, S. and some of the senior boys will be saying their stuff and then we are out on the field.

SM - So when would you say you 'switch on' for matches

P7 - Not really until the end of the warm up really. I'm more of a relaxed player, I tend to really think about the game. I don't think about the match really until I come in after the warm up. Obviously I do think about it prior to that, but finish the warm up, and then that's when I get my head on really.

SM - Ok, so lets go back to the morning of the match. What are you feeling, what is going through mind?

P7 - I tend to do my usual thing. Just do what I do every day. Get out the house, potch about, bits and bobs. Not really think about the game really, try and keep myself occupied.

SM - Does it cross your mind at all?

P7 - You obviously think about it. I discuss it with my parents or the boys or whoever like. As in psych up wise I don't really focus on it much.

SM -What about for important games?

P7 - For important games it's slightly different. Take Saturdays much for example⁶. To be honest with you, I've been thinking about the game all week, since I've know I am going to be playing. I am going to be playing against an old team mate of mine. I have been tossing and turning in bed a bit. It's quite unusual for myself.

SM - So would you say you have been worrying about the match?

P7 - No I am not worried about it. I am not really that much of a worrier. I enjoy going out and performing and I enjoy everything associated with the game, no I wouldn't say I worry, I am just thinking about the game. You know just running through plays and scrums in my mind.

SM - So you see yourself playing?

P7 - Yeah, I see myself playing, also knowing what I am going to do in certain situations and positions, what not to do. You rehearse moves, and lifting the cup obviously! (laughs).

SM - So on the mornings of the game you are pretty relaxed?

P7 - I am really, because otherwise if you think about the game too soon you waste a lot of energy, nervous energy like.

SM - Ok, so what then?

P7 - Once I get into the ground it's off to the changing room, there's a bit of banter. It's still pretty relaxed really, which ever game it is, and we have had lots of big games this year, we try and keep everything low key until the team meeting.

SM - When does that start?

P7 - The team meeting is after we get changed in the dressing room. After the team meeting it's time to get into your routine for the match. There is no laugh or joking, everyone gets clued in and stars to switch on. A lot of the players are clued in a lot before, there a number of people in the Swansea squad who are just relaxed. Myself, I mosy on by and then clue in after the warm up

SM - So you become fully switched on then?

P7 - For me my preparation and switching on fully is the ten minutes before. The real preparation starts on the Wednesday before and you are subconsciously building it from there.

SM - Tell me a bit more about that?

P7 - Well as I said before, the game starts in the week, or thinking about it does. As soon as you know you are involved, it all begins to build up. Just thoughts about the match build up and build up towards the weekend. Not like worries, just thoughts and little tingles that increase and increase to the day of the match. So all the hard work physical and mental starts in the week.

SM - So for you, you start to be totally focused after the warm up?

P7 - Yeah after the warm up, do your spotters, have a little say or whatever, and then I come in and have a quiet five minutes to myself.

SM - So what's going through your mind in that quiet five minutes?

P7 - You are just preparing yourself physically and mentally. Even though you have done the warm up and you are more or less physically prepared, you are still not quite there, mentally you have to put yourself in the right frame of mind to go out there and do the job.

SM - So describe your mental preparation to me then?

P7 - It's the hate game really, isn't it? You just want to get in there and you just want to kill people. It's just the first big hit, the first big tackle the first big ruck, the first scrum, you are thinking about it. You know what you are doing, the moves, you are sitting there going through the moves in your mind. I am sat there clam just building myself up inside.

SM - So you are talking to yourself?

P7 - No, I am not a ranter or a raver, I just sit there quiet in the corner. Just gather my own thoughts.

SM - Ok, tell me a bit more about your visualisation?

P7 - I don't really try visualise myself against the team I am playing against. I don't believe in it, it's what you do on the day and if you do it to your best ability, not worrying about other people and what they are going to do.

SM - This visualisation, are you seeing yourself doing things or are you inside your body?

P7 - I'm in my body doing it. I don't really do the out of body experience watch yourself doing it. I like to be myself, see myself doing the hits and the tackles and actually feel the hits as well.

SM - Is it just the contact stuff?

P7 - Yeah, it is really. The hits in the scrum and making tackles. Getting the body ready for the contact that it is going to face. As well as seeing it I feel it where it would be as if I was making the hit in the scrum or whatever.

⁶ Welsh Cup Final

SM - So your reasoning for that is.....?

P7 - Get my body ready really, nice and simple, do the warm up on the pitch, and keep it ticking over in the changing room by seeing yourself doing hits. Nothing spectacular as I said.

SM - So when you come in from the warm up, that ten minutes before kick off that's when you switch on?

P7 - Yeah, that's when the game really starts to go through my head. I mean subconsciously I am thinking about the game, its there and all that, but it's only really after the warm up that I start to think about it and get focused. You know what is going to happen that day, you know you have a game of rugby, and you know what you have to do. I just sit there and go through my jobs for the game, what I am going to have to do for the team.

SM - Describe how you are feeling at that time period?

P7 - I do get the tendency to be nervous, 'Am I fit enough? Am I this? am I that? Am I good enough?' But then about three seconds before kick off. When I am actually on the pitch, just waiting for the ball to be kicked. That's the only time I get doubts in my mind, when you're actually waiting for the kick off, stood there, waiting for the ball to be received.

SM - So what about before that?

P7 - Before that it's all excited, looking forward to play. I'm not a ranter and raver, I don't jump up and down and go head butting walls and all that. I'm just more controlled, I sit down and think to myself 'I've got a job to do'. I don't go around wasting energy in the dressing room, I like to stay calm and relaxed. As soon as we are out on the pitch we are going to be playing against players who are physically and mentally hard, so I need all the energy I can get.

SM - So what's going on behaviour wise before you go out on the pitch.

P7 - two or three minute before we go out to play, we tend to get together in a huddle, everyone is listening in. All focused together with the captain saying a few words, everyone is talking and shouting, I'll sit down for a second or two, get out of it, and then we are on our feet, last huddle together, all squeeze together and then we get the referees knock, and we are out. I like to be the one out last.

SM - Why do you stay out of it, all the talking and stuff?

P7 - I can't handle people talking and shouting, it disrupts my concentration. I like to sit down and shut everyone else off.

SM - Are there others doing the same thing?

P7 - Probably about two people, Matt the winger and C. Everyone else is moving round, jumping up and down stretching and talking, we are just stay there quiet. I just like to sit there and switch off from it all.

SM - What are you doing to switch off from the noise?

P7 - Just going through my job really, thinking about my roles, like what I said about earlier.

SM - Do you notice when there is or isn't a buzz in the changing room?

P7 - Oh yeah, this season like has been brilliant, we have had really good feelings in the dressing room. We have had good training sessions that have been intense, they carry through into match days. You often know in the warm up whether the feel is there or not, or the Thursday before, that's when you feel it.

SM - So do you ever get the opposite, when the dressing room is flat?

P7 - Yeah, we do, it was like that last Saturday. It was quite flat last Saturday because it was like an anti-climax really, the one match before the big game.

SM - So what's the difference in the dressing rooms when it is and isn't buzzing then?

P7 - It's just the excitement of everything really. People being excited. When you get excited you are on top of it and you are bubbling, and everybody gets it off each other. I suppose it's the general awe really.

SM - So what are the rest of the team doing behaviour wise?

P7 - Everybody is talking, everyone is allowed to have their say as well. It's quite an open floor, which is good. It's not like 'I'm the fucking boss so listen to me'. It's like if you have got something to say then you say it.

SM - So what do you do if it's flat?

P7 - If it's flat someone will say something, try and get the rest of the boys focused together. We are lucky here at Swansea at the moment because we have got quite a few older heads, who know how to get people switched on.

SM - How do you mean?

P7 - Someone like G. is a good example, he is at the ground first, waiting for everyone else to turn up, he will be there at 11:30am and kick off isn't until three! He will be there walking up and down talking to himself and talking to everyone else, making sure they are in the right frame of mind, making sure they are up for it like he is.

SM - Do you find that helpful?

P7 - As the game gets closer and closer I start listening to him more and more and yeah I guess it is helpful, you have got someone who you know is experienced and has done the business before and has no fear. It reinforces your confidence when he talks and says these positive things. The problem is he says the same things from about 12:00 onwards!

SM - So you are sitting there quietly and you are gathering your thoughts for the match. What happens next?

P7 - Yeah as you say, I am sitting there quietly, getting my mind right and then it's on my feet stand up into the huddle and then lets go for it. Look at the boys, see if they are up for it or not and then switch on.

SM - How does it make you feel with all your mates in the huddle?

P7 - Ah it's great. It's my first season down here and it's really just a big family. You are just proud to be playing in the same team, paying for each other and the whole squad really. You know that nobody to your left or to your right will let you down. You know and vice versa. It's a big thing, unity, for us.

SM - Would you say that has a big impact on you and your frame of mind?

P7 - It makes such a big difference to know you can rely on your team mates. You know that if you go into a situation and make a mistake then somebody will be there, one of the rest of the guys to be there to back you up. You miss a tackle and somebody will come across and make that tackle for you. Once you get in that huddle like, is like, 'Come on lets get it on, we're there now, we are here to win, not make up the numbers'. You are looking forward to it. Looking forward to the physical confrontation.

SM - So how would you rate the preparation?

P7 - The preparation here is great, the team talk and everything. The warm up is just right, not too hard, if it is too hard then you can just sit parts of it out. If you want to do more then you can do more, it's not regimented.

SM - Do you see nervousness as a good or a bad thing?

P7 - I think you have got to be a little apprehensive, not nervous, not worry or anything like that in your head, but be expectant, you know, be prepared to expect the unexpected. Not cocky or arrogant or anything like that, if you are cocky or arrogant that's when you tend to go out and get your ass kicked really. For me nerves aren't really nerves they are the physical tingle that you get before you play, you know the slight butterflies, not nerves, I think that's good for you, that's just your body getting ready for the contact and stuff.

SM - So for you it's just your body getting ready to play?

P7 - It is basically yeah. You have to be warmed up to play. You need the adrenaline for the contact. Your body needs to be ready. I think the increase in adrenaline gives you the tingle in your body, not nervous just making you ready to play. Perhaps some less experienced players may see it as nerves, I don't know. When I was younger I did see that as nerves, but as you play more matches you understand the feeling is with you all the time and it is part of rugby, and all sport I guess.

SM - Ok, now I want to ask you about bad performances, times when your mind hasn't been right. Does this happen often?

P7 - Yeah it has happened, especially after big games like internationals or stuff like that. After playing such big games it's very hard to pick yourself up again for the next week. You know you have hit a peak a week before, then you come down, and then you have to pick yourself back up for the club game. International week, build up for a week and a half before, play international Saturday, and on the Monday then you have to come back to your club, on the Monday then you're playing, like for us it was like, no disrespect to any of the clubs but some local Welsh clubs. It's slightly different to playing England at home or Scotland away. You know especially after the five nations when you are playing a lot of games on the road.

SM - So what is the frame of mind when you are not there?

P7 - From a personal point if view it's not really the wrong frame of mind, I have been up really for two or three games this year. For me I suppose it's not being totally focused. It's your mind wandering and thinking about something else. Perhaps not wanting to play as much as you should be. You also don't tend to feel as sharp in the warm up.

SM - So bearing in mind good and bad performances. Would you say that there is a link before how you feel before you play and your actual performance?

P7 - Oh definitely. You can't turn up ten minutes before kick off and go and play a professional rugby match, you know, without doing any stretching or physical warm up. If you did try and do that then it is very likely you will pull a muscle or do yourself some serious damage. Also there is no way you would be in the game for at least 15 minutes until your body had got warmed up. It's the same sort of thing with your mind. It's very hard just to step onto a pitch and start playing with no mental or physical preparation. You have to be prepared for what is coming. If you are not aggressive if you haven't got the hate, especially at prop. Then you are going to be wandering through the match. That is when you will get a smack in the head or pick up an injury. So yeah. If you go out on the pitch not quite there then it is hard to get your focus back. Even so it takes at least ten minutes and the game can be lost by then.

SM - How does it feel when you are playing well compared to not so well?

P7 - Everything just races along. You don't feel the physical pain at all, mentally you feel great, on top of the world, you feel fresh, and you don't feel tired. You can't wait for everything to come, you know get the scrums in, and get the line outs in. (pauses) but then you have a bad game and you are watching the clock, you are asking how long is left. Time is a lot slower, you know when you are enjoying yourself then time flies. When you are struggling time tends to drag.

SM - How much of an influence is the coach upon you, how much psychology do they use?

P7 - Plum is into his mental rehearsal and his mental attitude.

SM - So he is a big influence?

P7 - He's a big influence, he brings the rough edge to the side, his background and stuff. Like in team talks, he knows what to say to individuals.

SM - Tell me a bit more?

P7 - He knows how to press the right buttons, light the guys up and get them up. Just saying personal direct words to them about their performance, maybe motivational stuff, or even technical advice. Every individual is different. A good coach knows his players well and knows what makes them tick.

SM - Ok, now I want you to put your coaching hat on now. Imagine you are a coach of a team, and you have to give some advice. What would you say to a younger player who had come to you with problems getting focused before they played?

P7 - You have got to get to know the player first. Get to know the individual and find out what makes them tick. As with being a good coach, you need to understand the guys you are working with, what makes them tick.

SM - So if you knew the player what advice would you give?

P7 - Really to focus on his job, what he has to do in the game. What his basic wage earner is. What is expected to do week in week out. If he doesn't know what is expected of him, he should do really because that is the coaches duty to makes sure all the players know what is expected of them. So get to know what your job is. The think about what you do well, then use that as the main part of your preparation. So the build up in the week should make sure you practice and are happy with your roles, think about doing them well, on the day of the match warm up well, do a bit of seeing yourself performing the jobs, then make sure they are in your mind. Don't worry about winning or scoring or anything like that. Just focus on your roles.

SM - Out of those pieces of advice that you have mentioned. Is there anyone in particular that you would say is the most important piece?

P7 - The most important is know your jobs and make sure you practice them and are good enough to make you confident about your ability so you don't worry about the opposition when you play.

SM - So that is the most important?

P7 - Yeah, know your roles, keep going back to them through out the week, practice them so that you are confident whatever happens out on the field, that at least you will be able to do your job.

SM - We have nearly got to the end of the interview. Just a couple of questions to finish off. Specifically, I want to ask you about the international preparation. What is the difference between club and international level in terms of the preparation?

P7 - There is a step, uhm there is a step in preparation. It's tends to be focused on the Monday before the game on the Saturday and then it is rammed down your throat from the Monday. For me personally I like to stay away from it until the Thursdays perhaps before the international. Obviously clued in all week, get the hard work done on the Monday and Tuesday, where you use your mental toughness, cos that's where the hard work is put in. Then ease off until the end of the week, you ease off as you get more and more into preparing for the game. Then come the game, you are boiling to get out there.

SM - How does it differ for the club atmosphere?

P7 - You still trust every player, because obviously they re the best in Wales that you are playing with. So it is a similar sort of thing at the club, you have to have faith and trust in each other. The step up on the fields is more physical and mental. Just the pace of the game. I wouldn't say it is any quicker pace wise, you just have to react quicker. You know you have to make a tackle there and get up and make another tackle straight away. Everything is more focused.

SM - So what are the players doing in that ten minutes before kick off?

P7 - The majority of players are controlled. There is none of this banging your heads against the wall. There are some people sitting down and quiet whilst there are others full of energy and jumping around, shouting and balling.

SM - How does the anthem affect things?

P7 - It affects mew more when I am in the stand watching or on the TV. When you are singing you feel so proud and full of energy and commitment. But when you are singing it watch your hair stands on end because you want to be there playing more then anything else.

P7 - The only time I don't like is that wait before the kick off, when you are out on the field. That's when all the doubts come flooding in. You know 'Am I fit enough, have I done everything right am I going to survive today?' It's the longest wait all day. You just want to get on with it straight away.

SM - **P7**, there is a lot of information there. Is there anything you feel we haven't covered or that you would like to add or provide further comment upon?

P7 - Nope, that's my lot!

SM - Well it just leaves me to say that when the interview is written up you will be able to get a copy and make any changes or comments if you wish, and that the current interview has been in total confidentiality and anonymity, and finally thank you very much for your time and good luck with the Cup final and the tour.

P7 - Cheers and thanks very much, good luck with the research!

Interviewee: P8
 Venue: Northampton - Home of interviewee
 Date: 30/03/99
 Time: 2:00pm

SM - Right then P8, thanks for agreeing to be interviewed today.

P8 - That's no problem at all.

SM - As you know I have played junior international rugby union and my area of research is in the psychology of pre-match preparation. Specifically, I am interested in how international professional players such as yourself go about preparing for matches, and how you get yourself into the correct frame of mind.

P8 - Right.

SM - The aim of today's interview is to provide information that can be used to help younger players with their mental preparation for matches. If it is ok with you I am going to tape our conversation today. You will be able to see a copy of the transcribed interview at a later date and you will be able to make any changes, if you so wish.

P8 - Sure matey.

SM - Lastly, the interview will be conducted in the strictest confidence and with complete anonymity. If at any time you feel as though you wish to add any comments or change anything then feel free.

P8 - Ok.

SM - Ok P8, using the pre-match time line as a guide I'd like you to talk me through the build up to kick off on match day for you and the team?

P8 - We tend to arrive, we are supposed to have a meeting and hour and half before kick off. So normally for a 3:00pm kick off. So that 1:30pm we turn up. I'm normally there sort of twenty past, quarter past, most people are, just come in, have a read of the programme. Maybe get a rub or something on my legs. Then we go into the meeting, which normally doesn't start until about quarter too. People go in at different items. I normally go in relatively early. Just sit and get a drink, A couple of biscuits or something and just. I guess I go quiet for a bit. I'll maybe chat to the lads about moves or just something to do with the game. Then the coach will come in, he speaks for about fifteen minutes. The majority is him talking. Sometimes we go into groups and talk ourselves. Then go and get changed, and then we out as a team about thirty minutes before kick off, about half past.

SM - Do you go out any earlier?

P8 - I tend to actually, 'cos I don't like faffing about because I am like that. I go in, I get my shoulder strapped, I get any strapping done and then I will be like getting changed quite quickly and I don't want to sit around, so I normally go about and have a jog about, kick a ball about maybe, have a quick stretch first, because we don't actually stretch for very long enough in the team warm up or I don't think we do anyway. Then about half past the rest of the people come out, we go for like a two or three minute run with the physio, and then do a bit of stretching, do a bit off of contact work, hitting bags, a few widths of the length, just doing handling drills and stuff. A few running drills and then, we split forwards and backs. They just go through a couple of spotters. We just go through the hands two or three times, then that's it, some people wander and hang around outside, I go straight back in. I don't like being sat around faffing. Go in and then, that's quarter of an hour ten minutes before kick off. Then that's when you start getting focused. You do your last things, last piss, do your boots, whatever, and people will be just saying the odd thing or whatever, and then five minutes, not even that two minutes before kick off, uhm, Tim will get everyone in. we normally all sit down and he will shout at us or talk to us. Sometimes he gets a bit irate and shouts. It's normally quick relaxed and self-motivating as opposed to him doing it. Then we normally get up and go into a huddle, say the last thing and then we are out.

SM - Under what circumstances, if any does this preparation differ at all?

P8 - Uhm, it's we try and keep it as similar as possible. When we are away obviously we try and get up the night before. But we try and get, if, we have the meeting at the hotel and try and get there an hour and a quarter before kick off, an hour before kick off say.

SM - Does that affect your preparation on any way?

P8 - I don't think, I think the club as a team, we used to. We never won away from home. But this year we have got a more professional attitude to it. We are actually playing better away then we have been at home. I think it's been the external factors, probably that did used to affect us. I've never felt different home or away really. It's always been pretty much the same really. I don't start getting worked up until fifteen-twenty minutes before kick off. So at that stage it is the same wherever you are. You are out, you are warming up you are in the changing rooms. It's always the same.

SM - You say you start getting worked up twenty minutes before kick off. Lets go back a stage. Have you got a set routine for this warm up?

P8 - I always do a lap of half the pitch, just to get the blood flowing. I actually before I go out, I always stretch my calves and roll my ankles because, otherwise my Achilles seize up and that just leaves, when I try and run I fall over. Which I have done before (laughs). I always give them a stretch, especially at our club because you come out onto the tunnel onto the halfway line. So I go straight across the halfway line, and then left or right depending on which side the rest of our team are. Half/three quarters of a lap, then have a stretch. I'll stretch my back off, stretch my hamstrings. I do that, the stretching, because that is what you are meant to do, the large muscles first. Yeah, but I suppose the half a lap is.. I wouldn't say a bit of a superstition, bit its something that I do.

SM - So what is going through your mind in the warm up?

P8 - Then I am not really focusing on the game as much. I maybe might look to see how many people are there or you know what the weather is like or things like that. I am not really focused at that stage. I would say my focusing starts once I get I the changing rooms after the warm up. Which is twenty minutes to go. I will come in, I'll get my gum shield. I'll tie me boots, I'll strip off and then I will tend to just sit on my own just by where I change, and just have a think really. I don't get particularly get wound up. I go quiet, other people might be jumping about and you know, having a jogging on the spot. But I tend to, I don't like to be on my feet for a long time before kick off. So I'll always try and find somewhere to sit and just go into myself a bit I suppose.

SM - Why would you say you do that?

P8 - I don't know I get tired. I don't think it is anything psychological. I honestly think that, it's like any time during the week, I don't like being on my feet. I just find that, I don't know I've got poor circulation. I go all dizzy and I tend to just sit down, I'll have a think, I'll you know, I'll start picturing the game, and start trying to picture a first hit or something. The I'll do a bit of jogging on the spot. Just take a few hits. There is a pillar in our

changing rooms, which I always give like two hits on each shoulder. Just to get, warm the muscles, going get them used to the hits. Just your general jogging on the spot, jumping up and down.

SM - So what is going through your mind at this time?

P8 - I just try and get other thoughts out of my mind. I must admit I tend to find myself all over the place sometimes, and just thinking about, I don't know anything and I just try sometimes to get them through my mind and get it out and just start, I don't really think about the game. But I just try and get my mind clear. So I don't have other thoughts coming through.

SM - What sort of other thoughts do you experience?

P8 - I don't know, eh... what I was doing last night, anything, it's literally, things sort of come and go, and I just try and get them and. I don't just try and stop them coming but I try and get the thoughts through my mind. Then when I feel ready, then I will sort of start the running, the physical stuff. Then I do get quite focused, I often find myself just sort of walking up and down the changing rooms. I would imagine that I have got quite a sharp stare on me. And then, I am quite, I won't say emotional, but I am quite highly strung by then I think.

SM - So how would you describe the feelings you are having

P8 - There's always nerves, eh, any game I still find that I get that little bit nervous. You just get a tingle. It's quite hard to describe, I just find, you just feel a tingle. It's probably a physical thing. I often find that my legs feel really heavy. I know it's not because they are tired. Often I am like 'Christ I need to get my legs going' I'd imagine that is the nerves, the excitement. I suppose I am just trying to get myself up for the first contact and get my mind really, really switched on.

SM - So you talk about 'heavy legs' Is there anything you specifically do to get rid of that?

P8 - I just try to stretch them. I often find that sort of an hour before kick off, so I might lie with my feet up for ten minutes, and try and get some of the lactic acid to drain out. I sometimes get a rub on them. Before kick off though I will try and stretch madly! To try and get them to loosen up.

SM - When you talk about getting focused, what do you mean?

P8 - I probably try and picture myself doing things that are weaknesses in my game. Picture myself doing them well.

SM - How clear are these pictures? Who is in the picture?

P8 - I'd say I am probably picturing myself from above, from a camera angle. I see myself doing these things well with other people there. The opposition I am playing that day is in there as well. The image is not particularly clear. It's probably more clear than a dream is, but it's not really sharp. I go through the weaknesses really and I picture myself doing things well, whatever it be. Getting a ball from a kick off and running the length and scoring or something like that you know. I'm sure one of these days it will happen because I have done it so many times.

SM - Do you do anything specific do get these thoughts into your mind?

P8 - I often find myself talking to myself. I am like 'Come on P8, come on, forget about it, just get your head together, come on' I am often telling myself that, even just before kick off, not so much because my head is there but you know I suppose the emotion builds up and like it gets stronger like 'Come on' (strong voice). I actually got told off by the coach because it wasn't constructive advice to shout to others, but I'm not actually shouting at anyone else I am saying it to myself. If I wanna do it I will do it. It's just part of getting me focused I guess, because I have a short attention span, I've known that since I was a kid, I've always been told that at school I had a short attention span. So maybe by doing that and talking to myself I just, I keep myself focused and I don't get anything that's, any adverse thoughts.

SM - Have you ever had games where you have not been in this right frame of mind and you would say you have had problems getting focused?

P8 - There have been games where I have not got as focused. Usually because the games are not as important, but in all honestly I have played just as well. That's for different reasons really. I can remember I played a Barbarians game down at Portsmouth I think against the Combined Services. It was like, ah Barbarians, yeah, didn't get worried just turned, played and played well. Whether it was because I was relaxed, or because I had in my mind - Barbarians rugby throw the ball around, and I guess I may not have been as tired as you would be playing league rugby because you can't afford to take the risks when you are playing league rugby compared to playing for the Barbarians. So I guess it was being more relaxed in my mind, with myself or with what I could try.

SM - Has this happened in other matches?

P8 - The Cheltenham and Gloucester game, where I came on off the pitch and played well. I was quite relaxed before hand. Saying that though I was told ten minutes before I was due to go on that I was on. I actually got myself quite worked up then. So it's probably because of the ease of the situation, as opposed to the mental state.

SM - Ok, lets go back and look at the nervous feeling you experience, the heavy legs, what is going through your mind then.

P8 - Most games that we play. Even the night before or on the morning, I often think 'Christ how are we going to win this game?' I often talk us down and the opposition up to myself. I don't feel I do it for any reason or I just feel that, sometimes I think like, Saturday I was like 'Christ we are never going to beat Newcastle'. But that's part of my make up, 'cos I am like that anyway.

SM - Where you thinking that in the ten minutes before the kick off?

P8 - No, by then you have got rid off all that. It is probably a long time to before kick off though that I will be worrying about the opposition. I guess that stops come the team meeting an hour and a half before kick off. I remember on Saturday, there were a couple of lads that I didn't know that I wasn't know that I was playing for Newcastle, and I was asking people, you know, 'what does he do?, what is he like?' After that I had forgotten. So you know I suppose I was weary of them, but I didn't go into the game thinking 'Oh Christ, this bloke is going to be really good'. I don't get overawed by players. Even when I was first coming into the professional game, I was like twenty one and playing against Carling, Guscott whatever. I always seemed to play quite well against them just because I didn't give them any extra respect. I used to, I still do I go out there and play my game, whoever I am playing against. So I am confident in my game. I must admit though I do talk myself down, but before hand, but before kick off and nice I am on the pitch I don't give anyone more respect than anyone else, because, I don't care who they are, I don't want them to be better than me. I don't want to be made a fool off by anyone. You can, If you don't play some bloke you have never heard off some respect. Then he could easily, if you are not, you could take your attention off him and then that's when people play well. So I, whoever it is, I go in the same point of view.

SM - So what role does confidence play in the build up to kick off?

P8 - I suppose I am trying to build my confidence up. Because as I say I often, I do talk myself up. I don't think I need to build myself up, but I think it's just part of the process that I am just sort of getting myself. Sometimes I go out and I think 'This guy is going to be better than me'. Which is probably what focuses me and drives me to play better because I want to play as well or better than that.

SM - So before you go out on the pitch, do you set yourself any targets or aims?

P8 - We actually have a targets sheet which we have every game. You get the sheet before the game and there is like a team target and you put your own targets down for the game and give yourself a mark after the game and put your own personal comments. Then you get a mark from the coach and comments from the coach. To be honest I usually fill them in after the game (laughs). My target is probably the same for each game, no mistakes, no missed tackles. That what I say to myself. If I don't miss a tackle, and if I don't make any handling mistakes and I maybe make a break, then I'll say I had a good game. That's my performance criteria. For me I think about my handling before I play. My handling, well my passing is not particularly good. Probably that's what I focus on most. Just passing the ball well. For me it's just general game related things I go through. I might, if there's something I am not sure about or I think there is something that someone else might not know, then I'll go and talk to them about it. I'll go through my head that I am completely happy with everything and I know what I am going to do.

SM - Ok, I want now to look at internationals. How does your preparation differ from the club games?

P8 - I suppose the team build up is always different because different teams have different plans. But personally I (pauses) probably not as focused as I am in club games. Just because I suppose I don't I almost don't put as much importance on those games as the club games. Maybe that's because I have been playing for Northampton for five years and that is my main motivation. It's almost as if the international games are a release from the pressure of club rugby. Which is probably completely the wrong way to go about it.

SM - How does the pre-match atmosphere in the changing room compare?

P8 - I think it's the same throughout the team. There is not the big bond between the A team and the full side. Mainly because of the amount of time you spend together. For the A team it's about two and a half days before each game. With the full side it's about ten times longer! Yeah you know the lads in the team, but you don't know them particularly well. It's not, you don't have the sort of die for each other attitude. So it's people relying on their ability, rather than on their emotions, affect how they play?

SM - So how do you feel before those games in the dressing room?

P8 - I've gone out in some games, especially the A games, very unfocused and de-motivated. I don't really know why. Well actually the reason was because every time we had an A game we had important club game the following week. I was more worried about getting myself through the game and staying injury free for the games in the following week. The full international is different though because you are playing for England and everything goes into overdrive emotions, you know everything. The atmosphere in the dressing room is quite tense. People know they are representing their country. The A games though are more relaxed. The atmosphere at the club is much different however. You don't want to let each other down. That's the big thing, your honesty to yourself and the rest of the team. More so this year because we are doing well or because that's why we are doing well. But we really would die for each other on the pitch at the moment. So in the changing rooms the emotions there, because you want your team mates to do well and you don't want to let them down.

SM - Ok, describe the feeling with the rest of the team?

P8 - It's very highly strung, it's... there's a lot of staring around at each other, looking people in the eye. It's almost like you are making a statement to each other that, you know, you are going to do it for them, and they are going to do it for you. There's not a lot of shouting or stuff like that, Tim will talk a lot, P. says a lot. D. will say his bit. Beyond that everyone will pipe up a little bit. Just say a couple of words. It's just general encouragement though.

SM - How do these contributors words affect you?

P8 - You tend to pay attention to it. Some of it might not affect me. I think if some of it may be what I may want to hear or see, you don't listen to it. It's more a case of it's all motivation. It gets you more and more as a team.

SM - Can you tell when the atmosphere is not there in the changing room?

P8 - Yeah, it's just quiet. Well when I say quiet. There is often a lot of people talking, but it's often not particularly constructive talk. Everyone just seems. You can visibly see people who are over relaxed. I mean it rarely happens. There are times when everything just feels a little flat, and doesn't seem quite right.

SM - Does that affect you in any way?

P8 - Not personally. Yeah I want to do things for the rest of the side. But I am more after my own personal pride. If I am honest to myself then I am relatively happy. So I tend to. I don't think I tend take a lot off other people or be affect by other people.

SM - Has the room been flat at all recently?

P8 - I remember when we played West Hartlepool away, and we turned up about two hours before kick off. Some stupid time. Really, really early. There was an inch of snow on the ground, which had started melting and then froze, so it was like ice, it was freezing freezing cold. We were in the smallest changing room in the world. And we were all sat there for three quarters of an hour, just reading a book or just generally thumb up your ass because there was literally nothing to do. So it was strange, because usually you are, when you get into the changing rooms, that is your focusing point. But with us it was so bloody early, that we just, no one could up, and I think that game we were all a bit quiet before hand.

SM - So how would an atmosphere like that affect the way the team plays?

P8 - I think it affects the way the team plays yeah. First ten minutes, maybe not for the whole game, but for the first ten minutes, which can often the game can be won and lost in the first ten minutes. If you are not right at the start then its going to take you that much time to get into a game.

SM - Has that happened to you at all?

P8 - A couple of games the season, yeah. When I lost my form. I think actually I'd go into a game, I don't know if was wrong in my mind. The first ten or twenty minutes just would just go by without me. Then I'd be lost to the rest of the game. I do find it important to get myself involved early. Which is how or I hope I've got myself out of this lack of form. By really going out hard at the start and getting myself involved, rather than letting myself ease into the game.

SM - Can you give me an example?

P8 - I gave Rob Andrew a cheap shot in the first five minutes yesterday. Just get after the ball, make a tackle, make a break, set up a good ball, just do something. As opposed to maybe thinking oh I should go over there because this might happen. I'd be like 'the balls there, I'm going to actually do something on the ball as opposed to go there and do something else after something else has happened'. That noticeably, I think that was my big problem, was that I was looking for, if this happens and that happens then I need to be there. But I've started trying to get myself involved straight away.

SM - So what would you put what you have described down to?

P8 - It's thinking too much. Being too analytical. But before I game I felt that I was getting myself up for the game. But it was, in hindsight when you look back at the game, Ah I used to get done then. But I don't think I was coming out on the pitch thinking 'this isn't going to happen, or this is, I'm in the wrong frame of mind'. I was trying too hard I guess, I was getting myself to focused, I don't know really.

SM - How much influence on the team does the coach have before kick off?

P8 - In the team meeting it varies. Sometimes he will say his piece and then let us go. Other times, he really.. he's very good at almost pulling on the heart strings and he can find things that really do motivate the players. Sometimes I come out of the team meetings thinking 'come on I want to do this now'. Although it varies, sometimes he will be like that other time's he won't.

SM - Is that a good thing?

P8 - It depends how you take it. I usually I'll get focused, but I won't build myself up too much. The I will maybe let it go down a bit. So that it's got me thinking maybe. I don't, I think if you really get yourself wound up it can be a bad thing. You know you can waste nervous energy and stuff like that. But if you channel it the right way, like I do it can be good.

SM - Have you ever gone into games in the wrong frame of mind and you have been able to change into the appropriate frame?

P8 - I think that's when I sit down and go quiet. A lot of times, my mind will be miles away. Usually I tend to be able to get myself there. Sometimes it might take a minute, sometimes it might take five minutes, as long as possible. Usually I seem to be able to get myself happy, I'm happy to go out and take the pitch.

SM - Going back to nervousness. How do you see it, negative or positive?

P8 - I think it's good. I think you need to have that slight edge. Because you need, I feel you need to be slightly tense to.. 'cos you know it's a high contact sport, if you are completely relaxed, then you know I think mentally when you get slightly nervous or tense. Then your whole body becomes a bit tighter, and purely for the contact coming up, you need, I feel you need to have a bit of tension in there.

SM - You talk about physical tension. What about mental tension in you mind?

P8 - I think it focuses, a little bit. Not a lot focuses your mind. That maybe when I find somewhere quiet, do my two minutes getting myself a bit tense and try and focus myself, because otherwise when you are totally relaxed, you are thinking about other things. Your mind is not on the game. So for me it's relaxed but focused at the same time. Relaxed with a degree of nervous tension.

SM - Where is this tension directed too?

P8 - I don't think it's directed towards anything really. It's just, I am trying to get myself into that sort of state.

SM - Ok, lets go back to this five to ten minutes before. Do you ever feel as if you are in control or out of control of things?

P8 - I usually feel in control. I don't really feel out of control.

SM - Ok, I need your advice now. Imagine I was a younger player coming to you as the coach. I had problems getting in the right frame of mind before I played. What advice could you give me?

P8 - I would find it hard to advise someone because it's different for each person. What may be good for me may not be good for them. I would probably say to someone just try and get other thoughts out of your mind before a game. If you need to sit down on your own and have think about it, then sit down on your own and have a think about it. If you feel you need to talk to people then talk to people. I think its really a case of just letting or doing that you rally want to do. I would be hard quite hard to say you need to do this an this because we are all different.

SM - Ok, what if I specifically had problems getting focused?

P8 - I would say find a quiet corner, and just have a real think about the game. I wouldn't say concentrate too much because I think you need to let it come yourself. Just to let thoughts come and go but to really start thinking about specific parts of the game. About what you are going to do. First five minutes, what you are going to do in the first five minutes, and just think about general rugby things and then start focusing them into what you really need out of the game.

SM - Out of all those. Pick one piece of advice that you would say is the most important?

P8 - Just be honest to yourself. If you are honest to yourself, then honesty, you think honestly, you play honestly, so you if you think honestly then you are on the way there.

SM - What about confidence?

P8 - I suppose just focus on the things that you are good at. And just try and let things that you are worried about, just leave them alone. By focusing on what you are good at you start bringing your confidence up again. Picturing yourself when you have done things well. and when you have done things against good players. Hopefully you will realise you are a better player. If I felt someone junior to me needed talking to then yeah, there is a young lad at the club who is coming up now. Who I think will be a very good player. I've sort of taken it upon myself, taken him under my wing a bit and I do talk to him. He was knocking on the door of a first team place a while back and I told him that and I told him to keep his head down, and keep working at it. If he was in the dressing room then I would re-assure him that he is good enough to play, and be where he is. Just hopefully allay any worries he has got. Just talk to him, keep him thinking.

SM - How much is training an influence upon your mental state before matches?

P8 - Don't think it really matters because the amount of times we have had a really bad session on the Thursday and played really well on the Saturday. Sometimes there is a real air of tension throughout the week, I remember before a game this season, people were on each others backs Tuesdays, Wednesdays Thursday. There was quite a bit of bickering going on. We went out and played, and we went out and won it well. That was probably the nervous tension, again getting people focused mentally. I don't think that the last session before a game ... it's important to get you thinking. To get

your game plan. I personally don't feel I get mentally prepared for the game on that last session. We had an extra session last Friday, which was just about a walk through. We would literally say we will have a scrum there and we will do a move, but it was three-quarter pace, and it would be literally one move, three quarter pace one break down and that would be it. I was chatting and giggling away, a couple of the people started having a go.. well not having a go, but like 'Come on fucking hell what are you doing?' I was like 'Well, it's in up there, in my head, I don't feel I need to be totally focused in this session.' You need that calm period before you start building yourself up, and it was all going in my head, and it was all confirming what I knew, but I feel I didn't need to be totally switched on.

SM - So once that last session has finished, how do you feel from then on?

P8 - I feel calm and relaxed, I forget about the game, probably until about 1:00pm on the Saturday. A lot of people go, you know, get focused on the game on the Friday. You know need a really good nights sleep Friday night, Saturday they are really tense. I'm just laid back, completely forget about it. I may go down the pub, if I have got some mates up. I go down the pub on a Friday, get a pint or something. I don't get wound up at all. It's my way of dealing with things. I don't want to get too wound up. I only feel I need to get myself going half hour before the game.

SM - How have things changed? Did you used to feel differently?

P8 - No, I suppose it's probably as a result of being in college, because I'd go down the union on a Friday night and have about ten pints. It's quite frightening actually because my first year at the club was my last at college. I'd be on a Friday night, on my second ever game I came home from the union about midnight with about six pints inside me! We even used to get pissed on a Wednesday and still train Tuesday and Thursday, now I can't do any thing at all. I'll feel ill all week.

SM - So this relaxed approach, where has it come from?

P8 - It's just that's how.. I think everyone looks for what is good for them. What rings their bell. That's what works for me.

SM - trail and error?

P8 - Probably yeah. I suppose when I was playing school, university rugby the pressure wasn't there as much. But you end up, you find out how you get yourself up for bigger games. I remember when I was only under seventeen I was playing a London schools game, probably my first one, and I remember going quiet then and everyone else saying 'Are you all right P8, are you sure you are all right?' I was like yeah. But I got myself really wound up then, but I have got myself calmed down. I've keep that quiet sort of period when I get myself focused. I've learnt to build myself up to a level that is.. that suits me.

SM - So no other influences?

P8 - Not that I can remember. I just remember as the way it's been. That's worked, it's been good for me so I have done it. I don't remember anyone saying to me this is how you do it, or anyone doing it like that and me thinking 'That's good'. I'm happy with my match preparation know.

SM - Ok, a few questions left. Best and worst performances. Think of a match where you feel you played really well.

P8 -Saturday against Newcastle

SM - Tell me why you thought it was your best performance?

P8 -Because the sun was out and the pitch was dry! (laughs) and I could actually run about. I was playing with confidence. I was.. it was just everything, well not everything 'cos I made mistakes, but things just went well. I got through a lot of work. I made a couple of breaks, I scored a try. I set up a try or two. Things went well.

SM - How did the game feel?

P8 - Mentally before the game I wasn't any different to how I would normally be. During the game. I felt good, very very good. Things felt right. Things were working for me. Tuigamala wasn't playing well. I felt confident throughout the whole game. I didn't think we were ever going to lose it. Things I was trying were working.

SM - How did you feel physically?

P8 - Knackered, although no more so than normal. There were times when I was hanging out my arse, but there were times when I felt I could have run a bit more. It just felt right. In fact when I am playing well it does feel right. I feel a sense of enjoyment, when things are going well they feel good.

SM - Ok, flip side of the coin now, what about your worst performance?

P8 - Probably one of the London Irish games. It was, the pitch was heavy, it was raining, pissing down with rain. I just couldn't get into whether game. I felt myself one tackle or one pass away from everything that happened. No matter what I did I couldn't get into it. At the time I didn't think anything of it. In hindsight, I was like that bloke made a tackle there and I wasn't there and didn't or couldn't get to that pass. At the time I just, I don't know, it just seemed to happen and get away from me. Without really realising the game had been and gone and I just never felt that I was part of it. It was only thinking back and I thought I was just always there was as tackle just there or there was a pass just there or he did that just there and I was just off it.

SM - Can you explain that?

P8 - No, I think it was just because I wasn't working hard enough. Whether or not because it was 'cos I was thinking 'Christ the pitch is heavy, I've got to, you know I won't last the game' I don't know. It just felt wrong. Compare that to on Saturday when we were lining up to receive a kick off. I picturing as I was saying, the kick off going to the flanker, who stood in front of me, me taking the ball of him, and running the length and scoring. Whereas against London Irish I would never of thought that. I would have thought 'He is going kick it to me and I am gong to probably drop it'. I suppose it is positive thoughts to negative thoughts. Whether it is because of my own personal state of mind or my state mind has happened as a result of the game not going well I don't now. So for me that first ten minutes of the game is the key. If I get myself involved and do some good things then I am on a high as it were and I can keep going for the rest of the game. Theoretically I am getting myself up ten minutes before hand for those first ten minutes. It's whether or not you actually translate the build up before hand into the ten minutes after the whistle. That is a big thing for me. If I do translate it and it works, then things will be good.

SM - So does the opposition affect performance?

P8 - I don't really think so. Even if the team is under the cosh. If we are really under it. If I can feel myself playing well, and I am aware of that and I can think I feel good. Equally if when we are winning games if the team is playing well I can play badly. So I don't particularly, I don't feel my game is greatly affected by other peoples play. I think that's the way I work outside rugby. I motivate myself I do things because I want to do them. My motivation comes from within. As long as I am honest to myself. It's like if I can look myself in the mirror when I go to bed then I am happy. If I don't do it then I am being honest to myself.

SM - Ok, we've covered a lot there. We have gone through your personal and the teams preparation for matches. how you feel before you play and your best and worst performances. Is there anything you would like to add or change?

P8 - Not really, before you came, I was thinking I don't feel I particularly get involved in the psychology of rugby. I get out and do a job. I did think that, I was almost trying to answer your questions before you asked them. I thought that the first ten minutes is the important thing for me. If you get yourself involved and do some good things, Then you can pretty much bet that I will go on for the rest if the game. If I am struggling for the first ten then it is hard for me to get myself back up for the rest of it. To an extent I don't think you can be totally unfocused and then turn it on. I would say that I could be at varying degrees of focus and then still, once I am on the pitch I am all right. But there has to be some sort of build up first. So the ten minutes is the key period. I'd say myself I am quite relaxed before kick off, a couple of minutes before I do get tense. It's more mental tenseness really, and just getting myself ready for what is going to happen. I don't tend to focus on one specific thing because that specific part of the game might not happen for twenty five minutes. I get my mind ready for anything, and for contact, because you know there is going to be contact. Just about the first thing you do know is that there is going to be contact.

SM - P8, that's great is there anything you would like to add?

P8 - Nope, that's your lot!

SM - Just to finish off by saying that the information today will be available for you to look at and change if you wish. The whole interview is in the strictest confidence and complete anonymity, and thanks very much and good luck with the rest of the season.

P8 - Cheers.

Interviewee: P9
 Date: 3/02/99.
 Time: 3:15 PM.
 Venue: Gloucester RFC.

SM - P9, thanks for agreeing to be interviewed today. I have played junior international rugby and my interest of research is the psychology of pre-match preparation. Particularly, I am interested in the mental preparation you and fellow internationals experience before you play. The aim of the interview is to provide information that can be used to help younger players with their pre-match preparation. If it's ok with you I am going to tape the interview for my research. You can have a copy of the transcript and make any changes or add further comments if you so wish.

P9 - Sure kiddo.

SM - Also, I want to add that the interview is in the strictest confidence and complete confidentiality will be respected. As the interview progresses if you want to add or change anything then feel free.

P9 - Sure.

SM - Ok, The first area I'd like to talk to you about is the build up to kick off on match day. Using the time line as a guide, talk me through a typical build up to match day for you.

P9 - Uhm, Yeah, Well obviously it's different if we are away from home, we'll stay in a hotel and we'll have a team meeting about 12:30pm, 1:00pm, it's depends how far away we are from the ground, which is what I consider the starting point - I don't want to play the game too early, if you've trained well all week and focused on that, then once you come to the Saturday then you can afford... I just put it out of my mind till Saturday.... uhm.. (pauses).. for me the whole emotional thing really starts I find just driving to the ground. That all comes back from when I was at Rugby and err I used to play for the Lions and I used to live about a two minute drive away, So for me the whole sort of thing was getting from the home to the ground. To me it's just the sort of five minutes preceding arriving here when I sort of think 'Got a game today, got to switch on.'

SM - How does that change when you are away then?

P9 - Well, again on the coach really, going to the ground (pauses).. when you are playing here it's different 'cos you've got your mates around you, but, we still try and be quite focused and blank every thing else out, there's not a lot of chat, not a lot of laughter, ummm.... and when I've been away with England, it's a little bit more tense, a little bit quieter and everybody's really focused. But here, because you know everybody here, the personalities and that, you know who needs a bit of laughter to get on edge, and you'll know those who are quiet.

SM - So when does this focusing start

P9 - Most people are quite chatty when we get here, if we are working on a 3:00pm kick off, we come here we meet at.. people are getting here at any time between 12:30pm and 1:00pm and then we'll have a meeting a 1:00pm. So I tend to try and arrive here spot on 1:00pm. Because I don't want to be hanging around here, you know, there's nothing to do really. If you're ready to go, you're ready to go. I think you know, go into the team meeting room, there's a little bit of laughter, a little bit of banter, but as soon as the meeting starts people are pretty much into it.

SM - Would you say you switch on in the team meeting then?

P9 - Yeah, I would say so, I would say the sort of excitement of the game is building up on the way to the ground, you switch off a little bit when you get here. As soon as you are in the meeting you knuckle down and focus in on what you are going to do.

SM - Do you consider any factors that would affect team preparation up to that point?

P9 - Yeah, well obviously a big problem for us is away games, personally, I don't have a problem with it. I don't feel that.... you've got more chance at winning at home, such is the nature of sport. But I don't go into an away game thinking 'Oh god!, we're playing away again, we can win' You know? I always go in thinking 'This is the one, we could turn this around'. But I don't think so, no, obviously you've got the coach trip to the ground, if you're playing in London you've got the traffic, you know we went to Richmond last year and we got to the ground about twenty minutes before kick off and that's obviously going to affect you, but, I think at the same time you've got to draw on that and think 'Fuck this, were gonna do something about it'.

SM - Ok, so for you personally, when does your preparation for the game begin, when do you 'Switch on'?

P9 - Uhhh, well we leave the meeting normally any time between sort of quarter past and half past, depending on how long the meeting is, get any strapping done, that you need to be done, and always go through the same routine pretty much before a game, normally, I'm flexible on the time, but normally it's about ten to two. I'm always pretty much the first one out, and I go out and I warm up and go through a kicking routine and this is what ermum what his name Chris was saying⁷, I didn't think I did anything, he said this was part of it. I warm up, stretch off and then when, were at home, I mean pretty much when were away as well, we have a guy who sort of helps me out with retrieving the balls and stuff.

SM - So you're saying is that you got a physical routine that you go through before every match?

P9 - I (pauses)..... it's varied this year, it's pretty similar. I go through the same stretching. I don't always warm up in the same way. I don't do.... sometimes I do one lap, sometimes I do two, sometimes I do it with someone else, sometimes I'll do it with someone else and we'll pass the ball. It's not exactly the same every time. But when it comes to stretching I go through the same routine for stretching. Exactly the same, every time, and then normally what I'd do, I've got my mate, this guy Dave and I'll just do some kicks along the try line, the posts, and if I feel I'm striking the ball well I'll do two, and if I'm not I'll have a couple more, with the intention really of keeping the ball you know (indicates with hands out of window to the touch lines of the pitch) when it lands as close to the try line as possible, it doesn't have to hit the posts.

SM - So why do you do that?

P9 - Mainly I do it for my kicking. I don't like to go.... I wouldn't like to have a kick straight away in the first couple of minutes or say from the first kick off when a penalty has been given away. I wouldn't like to have my first kick. I want to make sure I've had, I mean I have probably ten. I wanna make sure.

SM - So how does that make you feel?

⁷ A Sport Psychologist had had brief chats with a majority of players at the club at the middle of the previous season. No intervention work had taken place though

P9 - It varies, I mean sometimes what I find that if I am spot on straight away, I don't tend to kick well. Say my percentage is down on what it would be. If I have a sort of a funny start in the first couple of strikes aren't great then I warm up into it then I find normally my percentages are really sky high.

SM - Do you have any explanation for that?

P9 - No I don't, but what I don't think. I don't sort of think 'Oh my god'.... you know I mean I remember I went to London Irish a few weeks ago and my first two kicks hit the post and all the people watching were going 'oh yeah he must be shot.' It was a real windy day and I had kicked two out of five. I mean two of the kicks were pretty impossible, but I had a really good warm up, but I had a poor percentage that day. That was really down to the wind, that was nothing to do with how I was striking the ball. But you know again I was out on Saturday, brilliant, I was striking them well, I think I hit the post on the first kick, didn't hit it in the next couple, warmed up, I was pretty average. I'd go through the same routine then out on the pitch, two from the front, two from the right and two from the left, one from one on the right and one from wide on the left. I was pretty.... probably hit six or seven, didn't miss any of the simple ones, bit suspect from out wide, went into the game and hit five out of six, you know and just won the game.

SM - So would you say this routine has a big impact on your performance in the game?

P9 - Now I don't think it does no. It doesn't bother me one little bit. What it does is, you know I think particularly for me kicking a penalty, points, is an important part of the game still you can win or lose dependant upon your kick. As long as I know that I have prepared. I don't practice during the week, so for me it's my warm up and my practice. And have just found it works for me, my percentages are high. So I have no reason to stop. I am happy with my routine and so I stick to it. I then go out and do some restarts and some punting, and some passing..... and that's really just to make sure that, you know, which ever skill you perform the first time that it's..... you've had a few to warm up.

SM - So your routine is not for accuracy then?

P9 - No it's mainly just to get warmed up. I mean if I.. lets say take the restarts, If you know, I'm striking the ball well I'll stop. If I have a few 'iffys I'll make sure I finish on, I always like to finish on a good one. I think that's important.

SM - So would you continue with a few more kicks until you....?

P9 - Yeah, If I'm for example on the goal kicking what I do is two middle, two right, one wide right, one left, one wide left. So if the last one I do is from wide left and I miss then I always come back to the front of the sticks to do another one. Just to make sure I'm still focused, because when you are out wide you are trying to kick a little to hard. I just like to come back to the middle. Just go through the same drill. I know that if I've got one in front of the sticks I'm in a nice smooth routine. So again it comes out when I'm doing the restarts, I always make sure I finish on a good one, If do two or three good ones in a row, that'll do. It takes three it takes three, if it takes ten it takes ten.

SM - So how would you say you feel when you finish your routine?

P9 - I like to.....yeah. If I am striking the ball well I feel confident. I mean for me obviously if I am kicking out of hand, restarts and kicking at goal are the three crucial areas of the game for me sort of technically wise. So if I know I'm warmed up well and in the groove then that makes you more confident for the other parts of your game.

SM - You talk about being 'in the groove'. Describe this to me?

P9 - Yeah, there are days when you just can't imagine doing anything wrong, you know you can carry on kicking all day and everything would go straight between the middle. I have had a couple of days like that recently since Christmas. You know give me more penalties, it doesn't matter where they are. I mean we were at Leicester, and I banged the first three over from forty metres plus, and you know, you feel like you couldn't miss and then I had a massive gap between them and the last kick which was at the end of the game. Right from wide out on the right straight between the posts. And if I thought I'd have had four or five more kicks we'd have one the game because there was no way I was going to miss. But that just goes for the same with restarts. There are days when you are technically just sound, and the balls getting loads of height, your getting your drops perfect, and the same with punting your striking balls slick and that, your getting right to the meat of the ball, and it's spiralling. It's not one of those spirals that goes (describes flight of a ball with his arm) up and down, it's one of those spirals that goes 'schh' (makes noise and describes flight of ball with his arm).

SM - So. how do feel when you are in the groove?

P9 - A lot of people look at me and say he is a confidence player. But I don't think that is the case. I think that if you are technically skilled, you are going to get a high percentage of things right. I mean you're gonna make mistakes. You've got fifteen other guys trying to stop you, trying to make you make mistakes. And its going to happen. No, I don't know how it comes about. But I think, you start well, you start doing something well, and you keep getting opportunities, and of course if the opposition keep giving you those opportunities to keep doing it.

SM - So for you the first touch in the match is important?

P9 - Yeah, but you know can pick it up mid way. On Saturday I missed the first kick at goal. I didn't strike it badly. You know, I perhaps didn't follow through enough. On a normal day it would have gone straight through the middle, but the wind caught and dragged it to the right of the posts. But your thinking well... your not thinking this is going to be a bad day were gonna lose, the next could go straight through the middle and you are in the groove again.

SM - So a bad kick doesn't affect the next one?

P9 - No because I think over the course of a season or a career, particularly a season, you know if you are kicking well. Then your percentages are going to be there or thereabouts. if you have ten kicks at goal and you miss the first one, then you might get the next six. So it doesn't bother me at all. If I missed, I certainly wouldn't say I don't want to this one in front of the posts, lets kick to touch or tap and go or whatever.

SM - Ok, so you've talked about your physical routine you go through during the build up to the match. You then go into a team warm up?

P9 - Yeah, and then we go into the changing room to before kick off, about ten minutes before. We don't go through any set pattern. Obviously sometimes we may have a different captain, some people may be injured or not selected. So there's no sort of set routine. It's pretty similar.

SM - Ok, lets focus in on that period. What's going on in the changing room?

P9 - I mean the forwards always go off for a meeting in the showers, the backs.. get....it depends on the players, if there are a couple of vocal people in there then they will be the ones doing the talking. I suppose from my position perhaps I should be but I think I've done all the work we need. You know if you can't get up for playing you know.... I don't need to.

SM - Would you say the atmosphere differs in any way?

P9 - There are occasions when you can see a marked difference. There's a lot more aggression, but that's not necessarily to say we played any better. Yeah there are differences.

SM - How would you describe them?

P9 - I just think there's more aggression. I'm a little bit more... you know sort of if you had somebody who didn't know anyone looking in comparing one situation to another. He's a little bit more aggressive today he's a little bit more up for it. I wouldn't say that mirrors at all performance. I mean obviously for me personally with having the baby over the last few weeks you know, me and my missus have had a couple of barneys on the way to the ground. She'd say how did you play and I'd say you know I played a bit better 'cos you wound me up before hand, but there's nothing to prove that that's the case.

SM - So if there's a lit of chit chat in the dressing room, a lot of aggression from your team mates does that get you psyched up to play?

P9 - It does. But also, you know, I look at people who aren't normally like that and I think, why are they like that? And then they come off and you think 'You didn't play well today, you were well up for it before, you maybe left it in the changing room?' and you know he was talking a good game but couldn't put it into practice. It doesn't bother me, whether it's quiet, loud, you know 'cos each person, I don't know each individual like they wouldn't know me and I wouldn't expect. But you can see patterns in people, the personnel in the club. I think it's more odd when somebody does something out of character.

SM - Would you say this 'out of character behaviour' affects other members of the team?

P9 - Well If I notice it then other people must. I mean some people vary some people like it really quiet some people like it loud. The only thing I've got to compare it with is moving up level with the England A's and the full side it's (pause) the more people talking the higher you go, there's a sort of greater level of...you know it's almost like fifteen teams and you are dragging the best player from each side or the loudest and the most confident and that's the case. But also I think there is a comparison between a quiet person off the field and a quiet person in the changing room. I find that's the case, if you're quiet off the field you're gonna be quiet in the changing room. And I think it's ...suddenly that person starts becoming loud and you think he's a bit on edge, you know he's not like he should be and I've noticed that a couple of times and then analysed the game after and thought yeah perhaps he didn't have a good a game as he did normally.

SM - So you were aware of this occurring would you say anything to the person?

P9 - Yeah, if they were a good mate, they're all your mates, but if you knew somebody close just have a little chat and whatever, try to clam them down you know, put them at ease.

SM - Ok, lets focus on your preparation those last few minutes before kick off, how are you getting ready to play?

P9 - What do I do? Absolutely nothing, no I just (pauses).. I couldn't actually say for definite I think about anything you know you for me the start is when I get out here, I'm invariably or fifty percent I'm gonna have the first kick. So that for me is like the signal to go.

SM - What about your build up for last Saturdays match?⁸

P9 - Uhhh.. (pauses)...not really no we'd had a.. you know obviously we'd been missing T., S.'s been playing in the centre, you know playing out of position, so probably more focused, and obviously I think what goes through my head is pointers. Things you've worked on in training. I try and make sure I do well. We talked about, when we lost to them two weeks ago, we defended well but we didn't defend well as a team, and we had individuals flying up out of line and creating overlaps. Er and that was a thing for me to concentrate on that we moved up as a line. So that was one of the things that was going on in my head. The England.. I played for England A the week before, uhm... we had little meetings with the management the day before the game and they said this is what we are looking for you to do. So yeah they're looking for you to do everything else but this is one of the main things. So this is what I focused on. So I think that if people say this is an area of the game which you need to work on the I will try and concentrate on that and try and make sure I am competent if not you know excellent in a particular field.

SM - Ok, so you say you focus on how you are going to play in the upcoming game. How do you think about this do you see pictures and images? Or do you tell yourself what to do?

P9 - Uhm, I imagine a particular example, you know, what would you do there.

SM - Against the team you're gonna play against?

P9 - No, It's almost like just you running against make believe players, but they're actually sort of human form.

SM - How clear is this picture in your mind? Do you feel the contact?

P9 - No for me it's just seeing the space, you see the space, you see what you have to do. I'd say I run through things in my head quite a lot.

SM - Would you say this happens before the match?

P9 - All the time, all the time....you're constantly thinking, sometimes I have trouble sleeping at night there's so many things running through your head and you know you're lying there dreaming about the game, and just what went on.

SM - Would you say you are re-running games?

P9 - Yeah re-run games yeah and you imagine what games would be like differently if you'd done that or why did I ... you know what made me do that ...if I made the searing break, why did you do that. Or if you made a mistake, why did you do that? And for me it seems to work 'cos I am getting better all the time.

SM - So when you go through these pictures in your mind before kick off, would you say you see yourself being successful?

P9 - Yeah, I never see myself failing. You know, it's like when you think about something you did say you might do a little 22 drop out, chip over the top, you regain it and you get tackled and you lose the ball. Then you think 'I did the hard bit, the hard bit was doing a short drop out, you've regained the ball and the easy bit was not throwing the ball away'. So you try and you imagine yourself doing that properly and you score.

SM - So do you set yourself any targets or aims before kick off?

⁸ The team had played a won a very important quarter final cup match the Saturday previous.

P9 - No, not relay. I'm a firm believer in that one week you can play one team one way and you can play the same team the week after and play in a completely different manner, and you might play worse when you might win, where as.. we did it against Quins we play brilliant when we lost the game and we played appallingly when we beat them. I don't sort of go into a game and say I'm gonna play in a certain way. As long as you've got the technical skills to carry out whatsoever necessary If that means sticking over five penalties to win the game or if it means sticking the ball out wide every time to beta them out wide. I'm confident confident that I can react to what's going on. I mean there is a certain way I like to play, which I feel I would be more successful at. But if push comes to shove then you've got to take control, and even if it means that you're making a couple of errors for the good of the side then you've got to do that.

SM - Would you say then that there is an overall team aspect to your play?

P9 - Yeah, and I think in the modern game there's a lot that don't do that. You know they play for themselves and if they put their neck on the line and did something else then the team would do better. But then again at the same time they are making themselves look good.

SM - Ok, so staying with the focus on the last few minutes before kick off, describe to me how you normally feel?

P9 - Yeah, it's not a great deal, I mean for me it's quite a sort of... I can't wait to get out really. You know the sort of whole thing of coming back in the changing rooms for ten minutes. You know there is always an element of hanging around. You know you come back in, you have a pee and you have time to collect your thoughts and I just sort of...I take my boots off, pull my socks up again and put my boots back on again and make sure they're tight. But once we've done that you know, come together and had a little squeeze, or whatever we do. Then I'm quite happy for us just to go out there.

SM - So what would you prefer to do?

P9 - What I'd rather is warm up, come back in the changing rooms in, get yourself ready, get together have a couple of minutes and then get out. It's almost like were ready to play, lets go. Rather than this is the set time, this is where we are starting from.

SM - So how would you describe how you feel in that period?

P9 - Relaxed but excited, yeah probably both. Excitement to get out there and start playing, but not on edge. I mean in my position I don't think you can afford to be. If you're over excited then you probably won't give yourself time on a kick, or be a bit rushed up in defence an create an overlap somewhere. I think its just about being. having a hard edge, but being quite calm with it as well.

SM - Would you say you very get nervous at all?

P9 - I have been nervous yeah (pauses)... not recently though.

SM - Can you recall for me the last time you were nervous before a match?

P9 - I can tell one occasion when I was nervous in Argentina. But you know I think that was more to do with the lack of preparation than anything else on the England tour, you know, going out there and playing full back and then being thrust into playing fly half in the last match,....that was.... you know I was thinking 'I haven't done enough preparation, I don't enough of what were doing.' At full back you're a bit alienated and aloof to it all, you stand back and get involved when you want to and suddenly you're in the firing line. That was one occasion, I can't remember there being many others. I think most times you wanna get out there and show what you can do. Because there have been times when you think 'Christ, I'm not gonna get the opportunity to do that.' Particularly I think if you come on as sub. On the bench and you're thinking I'm not gonna be able to make an impact. The only thinking I'm gonna be able to do is sort fuck up really.

SM - So have you subbed a lot?

P9 - I've been a sub a couple of times. I haven't got on often. But I got on and played against Leicester at home and played really well, out here. But that was after about thirty minutes. So there was well over half a game left to go. So that was like a completely new start. I don't think there is anything worse in the half back position than having to come on and get to the speed of the game, and being cold and come straight in.

SM - So would you say you see being nervous as good or a bad thing?

P9 - I don't mind it. There's a few people here talked about bitchiness on the pitch and being on edge. I don't have a problem with that. If I see someone that's on edge then that's fine. It means they fuckin want it. You know the last thing you do is you want somebody who is ah okay we dropped a ball. Nobody means to make a mistake, but if several people are on edge it means they're hungry for it. You know it's stupid going on and on to somebody, but a little bit of a come on mate you can't afford to be doing that, a little bit of a re-focus. Which I fine works on me. Whether it works for everybody or not?

SM - Have there been time when you've been on edge before you've gone out to play?

P9 - Yeah there have been, but I think it's confidence in your ability. When I started playing this position, I probably did know what I was doing. Where as now I am fully confident I know exactly what I am doing an its all about imposing the game plan on the match really, and I feel I can, you know given a fair crack of the whip, do that in a game. If you've got no ball you can't, if I've got enough ball than I can do that. Where as before, perhaps the top level makes you edgy.

SM - So can you think of any times when being nervous affected your performance?

P9 - I can't think of occasions when I was nervous and I couldn't say whether I played well or not.

SM - Did you feel nervous before last Saturdays game?

P9 - You know if you got a few butterflies or whatever then that's good. It means that the match means something to you. If you're not nervous about something then it really means nothing to you.

SM - Do you notice nervousness in the changing room with the rest of the team?

P9 - Yeah I do with a lot of people. I've noticed on one or two occasions with one or two people and it's not very match and it's not three or four guys at a time. But I remember one, no I remember two people that's got like that.

SM - Would you say that has affected you?

P9 - No, it hasn't affected me. I couldn't say whether they always have a bad game. I just remember thinking afterwards 'yeah he was a bit off pace. Not his usual form.'

SM - So would you say you prepare yourself mentally for matches?

P9 - I didn't think I did. But I think the whole process of me warming up, I do. And I think I go over instances in my head and maybe that's a little bit of preparation. Just reliving things. Seeing how they would have worked out differently.

SM - So if you didn't have time to do your usual personal warm up routine. How would that affect your preparation. Say for example when you arrived late for the Richmond game?

P9 - Yeah, but we still had time for a warm up. What we said was... we still had time to go out and do ten minutes on our own, we'll do five minutes as a team and then we'll stay out. We didn't even go back in the changing rooms. You know 'cos they said they weren't moving the time of the match. I mean I still had sort of enough time to do everything, although it wasn't in as much detail as I would normally. But I can't recall having a shocker in any of the areas. I think the only occasion it would happen if they said 'You've got five or ten minutes to get changed and get out there.'

SM - Have you ever turned up for matches when you haven't been in the right frame of mind?

P9 - I've played a couple of games for United this year⁹. I played Wasps at dog shit park in Slough. You're thinking I didn't give any less effort. Defensively I was still spot on, and I tried my hardest. But er.. there were sort of occasions in the game when things happened and normally you'd bust your ass to try and rectify a problem somebody else had made or a fuck up somebody else had done. And in the United games I've done that. Not consistently throughout the game, you know I've tried hard to win us the game. You know things are just not going right and stuff like that, and no matter how well you do people are always gonna make fuck ups. But never for first team games.

SM - So would you say the way you feel mentally has an influence on the game?

P9 - No. 'cos I think I can come here. Ailly was born on the day of the game, on the Worcester match. You know it was 12:30 I left the hospital. I was in no frame of mind at all. I'd had no sleep. I came here and had a stormer.

SM - So how did you get yourself right for the game?

P9 - I just came here and I forgot about it. You know it was a case of coming here. I said what I've done this morning I've done, what I'll do when I go back there is fine. But for the next three or four hours just get into the game.

SM - Did this happen when you got out of the car? Walked into the club?

P9 - As soon as I walked out of the hospital. I was waiting for Catt to pick me up, I thought 'psscht' (makes gesture of hand passing over head) - gone. And to be honest I only thought about it a couple of times, during the whole of the time. I just forgot about it and I thought fine, what happens happens, there's nothing I can do about it now. Just get on and play. And it worked out quite well and I had a good game.

SM - Ok, so you see yourself as very effective in getting yourself into the correct frame of mind. Do you employ any specific techniques to help you with this process?

P9 - I went through a sort of period, prior to getting injured, I got injured in October, prior to getting injured I was go through a sort of a dodgy spell with line-kicking. Perhaps going for too much distance or not striking the ball well as a result of trying to go for too much, and I had with dear dearly departed Richard, about, you know we were talking about aspects of my game, and one of them was sort of concentration in as much that (pauses) you know a goal kicker needs concentration, and I'm very good at that, with this line kicking it was like something happened. With line kicking you are not kicking for a particular point you're kicking into nowhere. And I couldn't seem to get any level of consistency going. Strike or kicking to one side or kicking to the other, and we sort of put it down to this concentration. So we got together a little routine, that I do before every kick. I try to implement that now and I'm definitely more consistent. I'm still not achieving as much length on the kicks as I know I can, but percentage wise - a couple of the guy would say why don't you go for more distance, and I'm like, go for more distance and they don't go in you are going to be the first to know about it. I'd rather it goes a certain percentage of that distance in and you've got the guaranteed lineup.

SM - Could you elaborate a bit more on this concentration strategy?

P9 - Well basically it would only be on that. And it would be...obviously the referee would mark where the penalty is. I'd get the ball, I'd just feel for the teat of the ball. With a finger, no finger particular to make sure it's going to be the right way up. I take four steps back, just wipe obviously my kicking foot on the back of my socks - to make sure there is no mud on there. Just that sort of like preparation thing, and I look for an area looking to I'm kick it too. And it's sort of high. So I'm thinking I'm going to kick it further than I should. So (Gets up and points out of clubhouse window to corner of ground) I'd be looking at the Cotswold Premises (sign). So If I kicked it over there it would be well into touch.

SM - Does anything go through your mind during this time?

P9 - Yeah all I do is just focus on that. I've got the ball spiralling, my fots clean, and know I've taken four steps back, so I get the right amount into it. I go as I'd kick normally and then I just say 'smooth' as I kick the ball. And it's worked. I mean I've gone from sort off you know one kick I could kick sixty metres down and we'd have a lineup, and then I could kick twenty metres and the next time it wouldn't even go in. And I haven't missed touch for a long time. I say perhaps being a bit conservative, but, I'd rather be conservative and get every one in than be hit, miss or maybe. So that's worked for me and we talked through that with Richard, it was just to increase concentration I think. I didn't want to introduce it into too much of the game, 'cos I'm not that type of a player. But it has had an effect on my kicking actually. My kicking out of hand in the game has got a lot better. But you don't get time think about that when you're kicking.

SM - You talk about having a lot of confidence before you play, confidence in your ability to perform. Where do you think this came from - how did it develop?

P9 - A combination of a lot of things. A combination in knowing you can play the position, So that begins too.. that nervous regarding being able to play well erodes itself erm (pauses) but a lot of it stems from I think from my goal kicking. If you are confident in doing that and you know you're gonna score a lot of points. You sorta cement your position in the side on the back of that. It's still an impertinent part of the game. It's huge. So that, as long as that's going well and your confident. I've just learnt the position. I think I'm nowhere near there. But that for me is a confidence thing in itself. When I look at other people they've been playing this position all their life and their only, in the England set-up, just that fractionally better than I am to be playing in front of me. I can't believe there's a massive gap. So I'm thinking If I've been playing here and this is my third season. Can you imagine in two or three seasons time. I'll be thirty but, I'll have had five years more experience in that position. I'm pretty good now and I'm getting better. And that in itself is a confidence booster. You look at some of these other boys like Catt, there so up and down on a whole

SM - Have you always felt confident about your ability?

P9 - Only recently

⁹ Gloucester United is the club's second team

SM - What's contributed to that?

P9 - Well professionalism, more time to practice. I'd say on my kicking side, I don't practice a great deal, really. Mainly because I had a groin injury last year and it kept me off practicing. So I don't want to aggravate that really, so I don't do an awful lot. But I'm confident in my kicking, I'm confident in my passing and my defence is so much better, as is my decision making in the game. I think if you add it all together you know you're strong enough, you know you're quick enough, fit enough. Everything just gels together. It's developing as I practice.

SM - How does your confidence in your team mates affect how you feel about playing?

P9 - If you're used to playing with somebody outside you, say your centre, defensively or even in attack. If you know their game inside out, you know their strengths, what their weaknesses are. It makes a big difference if somebody else comes in who you don't know. Particularly at this level. If you move up a level it doesn't matter 'cos you know they got ability, you know there not gonna be poor. But certainly at this level yeah. You get people coming in who don't know what they're about, it just, I don't think it makes you nervous. What it does do is creates doubts in your mind, perhaps you do something that you don't normally do. Perhaps you try and force a pass because you think you've got to do something 'cos that guy isn't gonna do anything. He hasn't got the ability to break a match.

SM - Would you say it was because he may be not as good?

P9 - No, not necessarily it may be because you don't know him and you've not played with him. He doesn't know all the calls. You know you'll make a call and he'll say, you know, what's that, and if he doesn't know that he won't know this. It's not necessarily that they are not good players it's just you don't know how they play. Part of rugby is you know your team-mates around you and you know what they are going to do, and even if.. it's like reading a guy, like a full back if he knows what the outside centre is going to do. The he can make himself look hell of a player by picking the right line. If he drifts wide and the centres going short then he knows he's never gonna get a pass. Whereas if he knows the centre's drifting wide, and he goes wide, then he's got more chance of making himself look good. So I think that's part and parcel of it is knowing the people you play with.

SM - Ok that's great. Now I want you to imagine that you are giving advice to a younger player who has come to you because they have had problems getting focused before matches. They can't get into the right frame of mind and can't quite produce the goods on the field.

P9 - I'd make sure he'd prepared well. I think so much of it and you read about so much of it in sport is that if you are prepared well i.e., then you become confident in what you're doing, whether it's technical skills, or tactical, or you know just physically. If some young guy was worried about his tackling and weighed about twelve stone then I'd say to him, 'look what you've got to appreciate is that yeah ok for the next couple of weeks or couple of months you might still struggle but what you are doing you are going up the learning curve.' If you go and prepare i.e., get yourself in the gym or do some power weights or whatever. You know in six months time you are not gonna have a problem. And I think people tend to look too short term. They think this is my problem I've got to sort it out now, say for the next game and you can't do that. I think you've got to look long term and make sure you're planing right and if you get your planing right you'll be sound.

SM - Ok, so how would you relate that to this specific problem of the younger player not being able to get focused?

P9 - (Pauses) I can't think of anything specific to say, mainly 'cos I don't do anything myself. I mean the only example that I can give is to go through the routines that I do but in your own mind. Possibly rehearsing plays or moves, for example the kicking routine I do, kicking to touch. You know, find something good you can do and rehearse that. Every player, perhaps he can't get up for the game it may be he's a bit worried that you know who's not good enough to be playing at this level. Whatever level you play at, you must be good enough to play at it, So there must be something you do well. So maybe the key is to think about something you do well. Just, whether you sit yourself down on your own and do it or your doing it as the warm ups taking place and your more concentrated on that more than anything else. That may be the key. So focus on one aspect of your game. Say your a winger, you don't get a lot of ball during game. So you can't get up for this. It's pissing down with rain and you know your not gonna get any ball. Just imagine, maybe picture yourself down at the track where you go through a race with somebody else where you're fast off the blocks and you get into your form well and you finish well and you've got time to look around at the finish. Or imagine a game, it might have happened or it might not, where you skin your winger from twenty yards out and score in the corner. Maybe that's something. Maybe I do that, maybe I do.

SM - It sounds to me that you do rehearse your routine?

P9 - I do, when you talk about the short drop out, you've got the hooker and someone else marking you, you knock it between the two of them and them pick it up five yards away and they can't touch you. And you pick up. And I sort of go through that, so I know that when I come to the situation it will be like deja vu. You think 'Christ, I can remember those two people being there and this is what I do and this is what I do and were away'. So yeah I do probably.

SM - So your advice would be....?

P9 - Rehearse something that you are good at and really try and focus on that rather than. I think... It's obviously different if you can't get up for a match, as opposed to somebody being on edge about, maybe there's some part of their skills. Maybe a winger is real pacey but he is not sound defensively and you don't want dwell on what you are not good at you wanna try and focus on what you are, and that will give you more confidence.

SM - So if a player was not up for a match, what then?

P9 - You'd have to try and talk to him. Give them some objectives for the game. Like say for example if I wasn't up for a second team game. You have to the management and coaches make it clear to the player that you've got a lot to prove here, there are people watching you, this is a way for you to get the springboard back into the team and onto the full England side.

SM - So if you had to say one thing what would it be?

P9 - The biggest thing is the springboard, you know, if you can't play at this level you are not going to progress any further and people around you are looking for you, you're the catalyst. That sort of chat.

SM - So if you were in that position what would have made you 'up for it'?

P9 - I just think a coach coming up to me, or one of my mates I've played with before, coming up and saying, Look it's a shithole but the teams sort of relying on you, you are one of the most experienced players here, they're looking for you to break the game for them on occasions, and they are going to look to you and follow you. If you're down in the dumps and not interested then they are going to think well why I am I bothered. So it's sort of like you're the pied piper. Even if your not and your the prop or say the winger. You just say to them look these guys are looking for you to get involved, coming off your wing looking like you are hungry for it. And if you're hungry then everyone else is going to be.

SM - Ok, can you recall your frame of mind before the match when you thought had a really good game?

P9 - Er, I had a really good game away at London Scottish and we lost. We lost quite decisively. You know I honestly thought most things I did went really well. My kicking was good, my goal kicking was good, my punting was good. I made a lot of breaks. I was sound defensively and I though

individually I had a great game. But you know the question you have to ask your self is? I had a great game but ten is the catalyst for the side. nine, ten, eight whatever, why didn't you win?

SM - So personally for you would you say that was a good performance?

P9 - Yeah it was one of those games where I could do nothing wrong. I was firing balls seventy yards in the air off the foot and making breaks like nine, ten off the line out. Straight past the seven and in between the ten, straight through. It's just things like that. But I couldn't say I approached the game any different.

SM - And that was away?

P9 - Given our shit away form. It's one thing I've really tried to concentrate on this year is we sort of set objectives at different times of the season and one of mine was sort of play consistently well. You know he said to me on occasions you are faultless out here, but I want you to play well away.

SM - So was one of those objectives in your mind before you went out to play against Scottish?

P9 - Yeah, We'd been away to Wasps two weeks before and it was my first game back in the side. After being injured and not playing, and I played dwell again there. And I thought well you can't sort of be up and down. That's the consistency I'm looking for. And maybe that's made me more focus. I just wanna keep getting better. You have to plateau to get better and you have to dip to get better. But it's you know we just like to keep it going like that. There are going to be games when you're not going to make big breaks and not all your kicks are going to go over. But you can be sort of playing well in other ways. You know you can be tackling well, you can be contesting tackle ball well. But is not sort of visible, but if it's slowing opposition ball down. A good coach will notice that. A good coach will notice a winger who pokes his nose in and holds the defence whilst his mate on the other wing scores ten tries. That's the art of being of a good coach. And if you're consistently doing that and the coach doesn't recognise that, or says you know you score done try in ten matches, your mates scored ten in ten. You're poking your nose in and stopping the defence and he's scoring. Then that's the art of good coaching. It's all about confidence. I think a lot of the boys don't have confidence that Hilly would recognise that. It got better and P.'s better.

SM - Why would you say that is?

P9 - It's appreciation of the game. Hilly was a scrum half. Too narrow. You've gotta have a feel for the game. You don't see everything that's going on.

SM - So would you say the coach had an influence prior to going out to play the match?

P9 - I think you can have an average coach and if he gets the players psyched up, then that's halve the battle. Like wise you can have a coach that's brilliant but if he can't get the players motivated. Which even at this level I think you need to, maybe, you shouldn't have to, but you do.

SM - So that coach that has just left. Could he psych the players up?

P9 - Oh yeah, I mean he was pretty good all round. I think the players can look at themselves and say well effectively we lost him his job because we didn't play. We are good enough we proved we can go out an beat sides regularly. We've just got to go out an do it. We can win away from home, we just got to go out there and do it.

SM - We've talked about matches when you have played really well. Can you recall any matches were you would say you played badly?

P9 - Not recently (pauses). Not so much I played badly. What I used to do was go through phases of games. Again I think it works out to this sort of percentage. In my position at fly half or scrum half say, you can't make every decision right, you can't perform every skill perfectly, it's impossible you do it so much. You can have you hands on the ball sixty, seventy times a game. You know you can't make sure you do each one right. I think if you do then you're quibbling out of making decisions. Or making a break or whatever. I you have to go into contact five times and then next time there's space out wide then you've got to do that. It used to be more sort of I'd have a good spell in the game and then everything would go wrong and I'd pick up again and it'd be like that. I can't ever remember having a real shocker. I can remember certain aspects of the game and thinking it wouldn't have mattered if I'd have carried on all day I never of have done it. I remember we went to Orrell and West Hartlepool and couldn't find touch for the life of me and it wouldn't of mattered what I'd have done. This one game against Orrell was just a joke. I scored a couple of tries and slotted a few kicks. We won forty-nine to six. But could I find touch? Could I fuck! The team played well and we won but Hilly was having a go at me afterwards, and that was on the back of the West Hartlepool game the week before. The game we won but I kicked poorly for touch. I think for some people you start performing a skill badly and it just drops and drops and drops. I've seen it with other players.

SM - Does a problem like your line kicking affect what you think about for the next game?

P9 - I've always had different ideas, varying ideas about this. If somebody is not performing a skill well I always the idea was to get tout there and practice and make sure you do right. But then I maybe thought that well if some players is not doing something right, and you've got him out her practicing. You're obviously getting at the problem but you're cementing that problem by constantly telling him he's not doing it right, constantly having him practicing, and I think there's somewhere in between where yeah you can do a bit of practice but it's like an a longer term basis and you say, yeah you know ok if you are going to do that try and minimise it. Try and minimise the opposition you get yourself in where you those mistakes. Rather than stopping the mistakes altogether and constantly going on at them. I don't practice but I think you should practice. I think that if you berate somebody and have them out there constantly practicing. Say, you know C. has a had a problem with somebody kicking the ball to him and him knocking it on. He's had a problem with that in the last few games. I think it's on part of everybody that when we are out there and in that situation and he does it well we positively reinforce. So don't mention too much about it if he fucks up. I think eventually he will do it less and less until you can't remember the last time he did that. So don't make to much of an issues of it really and positive reinforcement when he does it well.

SM - We have discussed how you and the team prepare mentally for matches, the routines you go though and the skills you employ. We've also talked about how you feel before you play and any advice you would give to younger players who have problems getting into the right frame of mind before they play. Is there anything else you would like to add or comment on that we have already discussed?

P9 - No, not really know. I think sort of post match is ...(pauses).. I care about the game when I am on the pitch. When I come off I'm like that's it forget about it. I think that sort of is a habit. You know if you're constantly winning. I think it's great to come off and say we won. It's good to come off and say 'fucking hell we lost'. I think a result against what you become accustomed is real good. Not that you should ever go out and do that but I think you've really go to learn from that, and if you've been winning a few games and then you take a loss. I think you use that more positively than another win.

SM - So it motivates you?

P9 - Yeah, In many ways not to let it happen again. In many ways to.. you know do you really analyse your performance when you play well and win, do you?, I don't think you do. I think you're more analytical when you lose an play badly than if you are playing well.

SM - So how do you as a team analyse performance?

P9 - We'll have a team meeting on the Monday to talk about Saturdays game if we won and didn't play well. Likewise when we lost a couple of weeks ago we still played badly. So we'll analyse that. The last game we won we did analyse what we done well and tried to make sure we took that into the next occasion. I'm not sure everybody does that. I'd recommend that, certainly. If teams aren't doing well, people aren't doing well. Analyse when you play well and try and repeat that, instead of being hypercritical of yourself. You know I did this wrong, I did that wrong. Because that again is not positive reinforcement.

SM - Ok P9 that's great. We've covered a lot of things there. Is there anything else you would like to add or comment on that we have already discussed?

P9 - No, I think you've got plenty of shit there kiddo.

SM - I would just like to add that the interview is in complete confidence with total anonymity. You are welcome to have a copy of the transcript and make any changes if you wish, or add any further comments?

P9 - No, it's ok.

SM - Ok, P9. Thanks very much for your time and good luck with the rest of the season.

Interviewee: P10
 Venue: Cheltenham -home of interviewee
 Time: 4:15pm
 Date 11/03/99

SM - Thanks for agreeing to be interviewed today P10.

P10 - That's ok Steve.

SM - As you know I have played junior international rugby and I am interested in the psychology of pre match preparation. Specifically, how international players such as yourself prepare mentally for matches. My overall aim of the interview is to glean information that can be used to help younger players with their mental preparation for matches. If it's ok with you I am going to tape the interview for my research. You can have a copy of the transcript which you can add to or change. The interview itself is in complete confidence with complete anonymity and feel free at any time to add any comments or changes as we go along.

P10 - All right.

SM - Ok P10, first I'd like you to think about the build to the game on match days for you and the team. Using the time line as a guide, talk me through a typical build up from arriving at the ground to kick off.

P10 - Uhm (pauses), the kick off is at three. We generally meet about 12:30pm. Between 12:30pm and 1:00pm, there will be a meeting at one or 1:15pm. There will be a team meeting, which is very light, just run through a few ideas. The opposition a little bit, and a little bit ourselves. Then that's it and then it's personal preparation from there on in.

SM - So where do you go after the team meeting?

P10 - Personally after the meeting I like to go to the physio, get myself strapped up. You know ankles and what not. Depending on what state I am in at the time! And what needs strapping and what doesn't. I'll get myself all sort of strapped up and ready to go. Uhhh and then after just have a quick pop out, look around the pitch. If I'm captain for the day I have to take in consideration the wind, or what the conditions are doing. So have a quick look at that. And then er.. I like to get myself ready quite early. Kit on, boots on, tracksuits and then I've sort of got some time between being ready and going out onto the pitch for the warm up.

SM - So what do you do in this time?

P10 - Just mull around really. Try to keep it pretty light, personally myself, don't like to get too heavy too early. Lounge around, have a bit of a laugh. You have to pick the right people. Because obviously some people like to switch on quite early. So I just wander you know the people who are like yourself and taking it quite light sort of still.

SM - Are there any patterns i.e., are forwards or backs more light hearted and relaxed?

P10 - No, I think it's just personalities. There are a couple of guys you know if you crack a joke with, they will just give you a stare like 'Come on I'm trying to get myself up for the game'. But there are other ones who are just like myself. What we normally do then is meet as a team about 2:30pm, half an hour before kick off. So I like to go out about ten minutes before that and do my own personal warm up.

SM - Would you say you have a routine?

P10 - Yeah. I just do a bit of a ... a lap of the pitch. Then some work on the SAQ ladders. Because basically I like,, I don't like to get sluggish I like to keep everything sharp. So you know if you start jogging round too much you end up plodding round, so I keep it quite short and sharp on the SAQ ladders. Just go through those, the various routines that we do. Then a quick stretch and we come together as a team.

SM - So whereabouts on the pitch do you do the warm up?

P10 - Normally I do a bit behind the posts. Basically while I'm doing that you obviously get a sense of the crowd and the atmosphere. Especially if you are playing away. You know, just soak up, get used to the surroundings. Have a good look round and familiarise your self. And er basically what I try and do is, not that I worry too much about at home, but if were playing away, I'll sort of like try and liken to Kingsholm. I'll imagine myself running out of the tunnel, the stand in front of us is the shed. So I'm trying to make everything as similar as playing at home, as much as I can.

SM - Ok, talk me through this familiarisation a bit more?

P10 - Say for example, we're playing at Wasps. We'll sort of run out from the side. What you'll do, you'll find there will be a lot of Gloucester supporters on the opposite side where you run out to. So you know the same as it would in the Shed¹⁰. So I just try to think it's just the same as playing at Kingsholm. Gloucester supporters are there. Wherever I play. Which ever ground it is I try and imagine familiar surroundings. It's just to make it not such a hostile environment to play in. Just another stand. If it was Kingsholm that would be the Shed. If that was the Kingsholm that would be the hospitality boxes. And then we come together, and that's when I suppose I start switching on really.

SM - How long is that before the kick off?

P10 - About half an hour. That's when I really start to concentrate.

SM - Is it still the individual warm up then?

P10 - No, then we would be moving on to the team stuff. We do a bit of handling. Hit a few bags, going through a few line-outs, whatever. But that's when, instead of sort of being in myself. It's when the communication comes out and I start talking to everyone else. Get the adrenaline going.

SM - Ok, so that's your team warm up, what happens next?

P10 - After we've finished warming up, about fifteen minutes before kick off, back in the changing room. Obviously if I'm captain for the day. I would have probably done a bit of talking during the team warm up. Just sort of talking through things we've gone through in the week. Little things maybe if were playing a certain team, just little things to concentrate on. Keep reminding the guys, someone whose come in and hasn't played in a while. Plenty of talking to him. Also, when we come back in after the team warm up. I spend, obviously if I'm captain, tell the guys to get themselves ready and give them a couple of minutes to themselves, five minutes to themselves (pauses) and let them sort of go to the toilet, last bit of strapping, get their shirts on or whatever an then basically we come in and then it's not a case of ranting and raving. It's just talking all the time, reminding people what you wanna

¹⁰ The 'Shed' is an infamous supporters stand at the Gloucester Kingsholm ground

do, erm.. some of a couple of the players just like to sit down and talk through. I always sit down myself as well. I always just like to sit down. I like to visually go through the first kick off. Because it's always one you get caught out with (laughs). First kick of the day and you drop it on the kick off. So that's always one I like to do.

SM - So does being captain change your preparation in that last half hour before kick off?

P10 - I still talk but not as much. If I'm not captain then Dave will be captain. He'll be doing a lot of the talking so you know you don't want to talk over him. So I feel like something needs to be said then I'll say it, but otherwise I'll just sort of mingle in. Sort of do my own preparation. It's not a case of the captain has to do it all. There's a lot of experienced players in there. And I am, and I let everyone else chip in and have a word. And probably when I'm not I'm one of the ones just chipping in and having a word if it needs to be said. I think if someone had to try and do it all by themselves, especially me, I like to have quite a quite few, have a bit of time to myself as well. I think if you try to do it all by yourself you end up forgetting about your own game. You'd be so much worried about everyone else that you'd end up losing your own focus.

SM - Has an occasion like that ever happened to you?

P10 - I don't think so. I'm in a panic at the moment because I never win the toss very much! At not very good at tossing the coin. But that doesn't really bother me. If the communication is pretty good, I know my role as captain. It's basically I've got the play makers in the side, nine and ten and eight. and if I feel the games tactically going wrong or If I want to change a call or if it's a penalty do we want to kick for goal or kick it in the corner?. It's just the final decisions. As far as playing wise, don't find it too bad.

SM - Ok, that's your build up on match. Now I want focus in more detail on that phase between having come in from the warm up and preparing to go out for the kick off. So what do you do to get yourself into this right frame of mind?

P10 - Erm (pauses) I suppose the first thing I think about is just running through all the calls in my head. Especially if we've got anything new. You know, lineout calls, where I'm supposed to be what I've got to do. I'd go through the scrum, restarts, all the set pieces.

SM - Have you got a set routine that you go through?

P10 - Yeah, what I normally do is I just run through the calls, just you know because I'm with England one week and the club the next if I don't know I'll have to go and ask someone. Then sort of in the changing room, going out on the pitch, warming up. As I said before jogging round. Looking to soak up the atmosphere of the place. Get a sort of feel for it.

SM - Does that differ depending on whether you are home or away?

P10 - I don't think so. You always get the big rigmarole about the home and away thing. I pretty much do the same whether were playing home or away. I like to keep everything as similar as possible.

SM - Would you say the crowd plays a big role in getting you up for games?

P10 - The thing that I find, wherever you play. When you're warming up there is always some Gloucester supporter somewhere in the stand. So when you do a lap you always get you know a bit of the supporters giving you a cheer and that. And at Kingsholm it's just louder. So you get the boost maybe a little bit more when you are at home.

SM - How doe that make you feel?

P10 - It's a good feeling, especially when we come together as a team. We always do a lap, so you're jogging up in front of the shed and they will all be cheering and shouting at you and it gives you quite a sort of warm feeling as you're going up there. Gets you up there (points to his head). You feel a bit of pride welling up inside you. Which is always quite nice before a game. Just top get you going up a bit.

SM - Ok so you've gone through the warm up and your back into the changing room?

P10 - Yeah that's right.

SM - So what starts to go through your mind ten minutes before kick off?

P10 - When I'm back in the changing room I'm having a little quiet word to myself. In the warm up I'm going through the calls. Yeah, what I normally find is when I'm in the changing room, I'm asking myself some questions. You know like 'Can I do this?' And erm 'I am going to be able to do this?' You sort of ask yourself these doubting questions. 'Am I gonna feel fit today? Am I gonna feel good?' Or is it.. you know you have days when you run around and you can keep running all day. And other days you know it's really hard going. There are probably gonna bit a bit of self-doubt questions and probably a little bit of fear sort of comes in and then after I sort of answer them and say well I did it last week, I did it last weekend. So there's no reason why I can't do it this weekend. And then also I did it against, I've done it against New Zealand and South Africa there's no reason why I can't do it against whoever you know Harlequins, Wasps and I've played against this bloke for three or four seasons, and every time it's fine. So I'll ask myself these questions and then I'll answer them. I'll say 'Of course you can do it, and it's not as problem, you've done it before'. So that's probably when I really get down to the nitty gritty.

SM - Tell me more about this?

P10 - People often say you're always very relaxed. You never take anything seriously and I do get myself up, but you know it's probably ten, five minutes before we go out. I'm not running round in the warm up thinking about I'm gonna have fifteen pints of cider after the match! Or the birds that I think I fancy in the night-club! I'm always thinking about the game, but it's all pretty... quite relaxed ...

SM - How would you describe that difference in feeling between warm up and in the dressing room before the game?

P10 - It's just you know I don't let things worry me. You got the thing like.. it's raining you know there nothing you can do about it. Your shorts are ripped.. your shorts are tight... you can do something about that. So I'll change them when I get back in. So you've go things that you can't do anything about and there's things you can sort out. It's just I don't let things get to me. But I suppose once I get into the serious nitty gritty thing, you know, then if my shorts, I suddenly realised ... I would be more worried about it. And I would start to get unfocused and it would annoy me. Over the years I've been coached by a lot of people and the saying is don't play the game before the game. That's one of my favourite sayings. A lot of people they get uptight and they are playing the game through in their minds. By the time they come actually out they've already done it and I'm sort of pre-match pretty relaxed and then sort of get myself going in the last five, ten minutes before kick off.

SM - Ok so lets focus on the last five, ten minutes before kick off. You talk about the questions that you ask your self. What else is going through your mind?

P10 - Also about that time I like to do a little bit of visualisation. Because it's my worst nightmare like I said. The first kick off. You can balls it right up, its your whole game. So I always visualise just catching the first kick off. Probably the first tackle as well. On my right shoulder and on my left shoulder.

SM - How clear is that picture then?

P10 - It's quite clear, 'cos they're actions I've done before. It's not like there any new actions. There quite clear in my mind. I can recall the success and failure that's happened before. I just block out the failure and concentrate on the success.

SM - Would you say you do a lot of visualisation?

P10 - No, not really, just a little bit before kick off. I have really since we were England Colts. I started thinking about it after we did a few sessions with a Sport Psychologist. That was the first sort of time I really came across it. Since then you know, people mention it. I think it is quite good, you see yourself, you're going through your mind, I'm catching the ball, I'm catching the ball, I'm catching the ball enough times. Then when you come to it you know you can catch the ball. So I do quite like that.

SM - Are you in or outside of your body?

P10 - I am outside my body. Watching myself, as if on the video analysis.

SM - Would you say it works?

P10 - I don't know I still sometimes drop the ball! (laughs). It's not one hundred percent. I would say it helps. I think it's just a confidence thing. Mainly, I think it gives you that little bit of self-confidence, just before you go on the pitch.

SM - Ok, so what sort of feelings are you experiencing just before kick off?

P10 - I suppose in the last five minutes, we normally come up as a team, and we are all stood round in a huddle. So in those last five minutes you are all very close and you know and you're looking at each other. In the last five minutes, It's sort of a feel of although you are an individual, it's a team game. You're stood there and you're close to the other fourteen guys. So, it's sort of (pauses) very sort of I don't know a warming feeling you get. You're a member of a team, you're one person in a team but you know you've got to perform and you know the other guys, and your sort of you know, the work you've put in the week before and all over the season and as team. It's a satisfying feeling. I think anyway, that you're working for each other. So that's the sort of towards the very end, the last five minutes, when we are all together.

SM - So how would you describe this warm feeling?

P10 - Pride I think, yeah, cos it's a team sport you are all friends. So you are going out there and you are doing it for each other, and you are doing it for the supporters. It's definitely a sort of a pride feeling, just before you go out it sort of wells up inside you a little bit. Sort of I'm gonna do it for the team type stuff.

SM - Would you say you get excited or nervous at all?

P10 - I think probably the most nervousness I get is when give myself a couple of doubting questions in the changing room. That's the only nervousness that and more just when you are stood on the pitch waiting for the kick off. 'Cos you are stood you are stood there waiting. That's more an anticipation sort of nerve more than anything else. You are not quite sure how it is going to go. You know obviously it's going to be a hard game. But is it going to be a hard close game or is it quite comfortable.

SM - Is that in your head or do you experience it physically, for example butterflies?

P10 - No it's more in the head than anything else. That's the only time I sort of get nervous. I wouldn't of thought, I know that I don't get over psyched.

SM - So that five minutes before kick off, if you are not nervous what are you feeling?

P10 - I'm, probably still quite relaxed uhm, you know its sort of a relaxed feeling, you know you've got eighty minutes hard work in front of you. So, it's sort of (pauses) you're telling yourself you've got eighty minutes and you know it's hard work. I suppose it's an anticipation feeling. You've trained for it all week. You've built yourself up for the Saturday and that's what you've been concentrating on all week. So I suppose it's an anticipation thing. You tell yourself, eighty minutes hard work and it's all gonna be over. I think it's the build up in the week you trained for, you've got yourself ready, you're there and you tell yourself. The next eighty minutes and you can relax again. Then you obviously relax and.. You mention the build up to match day but you could probably start with the build up on the training session on the Monday. It's almost like a crescendo before you actually go out. You've slowly built yourself up all week and then you've actually done the final preparation and then just before you go out it's the crescendo, eighty minutes and then relax again.

SM - Would you describe this as?

P10 - I think it's probably pressure. Obviously league points and wanting to win. You put pressure on yourself wanting to win. The pressure of the league points, the pressure of the supporters. You've got the pressure of the man with money.

SM - Does the money play a part in you thinking at this stage?

P10 - I think by that stage, you know money has gone out of the window. If you were being paid or you weren't being paid, You'd be there. It's the fact that you are obviously put s a little bit more pressure on you. If you go back three or four years ago, you could have a bad and people would say, he had a bad game this week he'll play better next week. But now there is the scenario you have to perform week in week out. So it's a case of you have to get yourself in the right frame of mind. Get yourself mentally right. For me it's the pretty much relaxed approach. Last five, ten minutes I'm really switching on.

SM - Do you see nervousness as a good or a bad thing?

P10 - I think if you weren't nervous then there is something a little bit wrong. I think maybe if it was a friendly or a pre-season then But when it's a league game, cup game. I think cup games a little bit more. Cup rugby - it's a one off. You win you're in the draw the next morning, you lose and you're not. I think you've got to be a little bit nervous, just, the nervousness gets you going, it gets the blood pumping round your body, and gets you ready to play. Also I think there's also fear of failing.

SM - Would you say that is the team or your own personal performance?

P10 - Both. Obviously everyone wants to win. But then the team can still win and personally I could have had a bad game. So both factors there. Probably a little bit personally more at that stage. You know being a little bit ambitious and wanting to get on. Also if you personally haven't performed but your team still wins then you feel as though you have let a few people down.

SM - Ok, so that's your routine. What I want you to think about now is good and bad performances. Games when you think you played really well or really badly. So can you remember that last time you would say you had a really good match?

P10 - I think...(pauses) when we played against Leicester at home, just before Christmas. I think we lost but I was happy with my performances obviously I was playing against Martin Johnson¹¹. So you say 'I'm playing against Martin Johnson, I've got to pick myself up here, one hundred and ten percent', just to get by. So that was a good game.

SM - So why do you think you played well?

P10 - You sort of.. happy with yourself, things are going well. Set piece is going well, you feel comfortable. (Pauses).. When things are going well for you. Things just sort of happen, nothings rushed, sort of it all fits into place.

SM - How would you describe that?

P10 - I don't know. It's just sort of one of those... it's sort of some days it happens, some days it doesn't t you know. You just seem to have it that day. Your lungs aren't hurting your legs aren't aching (pauses) everything just goes right for you. When you've got the ball in your hands you make the right decisions. You're putting the good tackles in, the big tackles. Some days they come, line out, win a lot of ball. Restarts, scrummaging going well, you are comfortable in the scrum. It's a comfort factor. When you're playing well you feel comfortable. A game where we played London Irish away. I would of said it was one of my worst games this season. It just didn't feel comfortable. Nothing was different. They were a very good side. They were going through a bit of a purple patch, obviously it was away. I think Ireland had beaten France that weekend or just lost to them, but it was a good performance. So the whole place was packed with Irish people. My legs felt heavy, scrums, didn't feel comfortable in the scrums. The line out was rushed or slow. You just generally didn't feel comfortable. People are running around you. You get the ball and you drop it.

SM - Was the build up any different between when you played really well and that game?

P10 - As I said before, home and way I try and keep it. Obviously there are gonna be certain factors that you can't control that are going on made a difference. But I try and keep it the same as can. Get strapped, get ready, warm up, keep it similar.

SM - If there was someone looking into the dressing room on those two occasions would they have seen anything different with you?

P10 - The fact that it was away and home, it would have a pretty similar build up. No it was pretty similar. The only difference was maybe the build up because we stayed in a hotel. So the night before in a hotel. It's obviously not the best because the food, you know, it's all right but it's not probably what you would cook for yourself. Different bed, different room. You have to sort of weigh it up. Staying in a hotel to travelling on a coach for a long distance in the morning. If you do stay in a hotel it's not the same as.. you'd much rather sleep in your own bed. Besides that everything would have been pretty much the same. But for me it was just the fact that.. it wasn't the fact that I was playing badly, it just felt as I was playing badly. It was just the fact that the team I was playing against was running us around.

SM - Did you feel in control of the situation then?

P10 - Against London Irish, No not really, no. Against Leicester although we lost it, we only lost by three points. So it was very close. We were always going to score in the game. But against Irish we were never really in it. They basically sort of ran us around and we were chasing shadows. We had times when we were in control of the game against Leicester. Even when we weren't controlling it, we were still in it. But there was time at London Irish when we weren't even it. With that comes the uncomfortable feeling. I think, everything may not be worse, but you think it's worse. It's like you think, Feel tired.

SM - What was the atmosphere like in the dressing room before the Irish game. Was it any different to the Leicester match?

P10 - Nothing major. I think we've made a big effort this season to try and get things as similar as we can, and be as positive as we can when we are away. Whether we try too hard to be to sort of.. build it up as much as we can and instead of just relaxing and getting on with it as we would at home. Obviously when you're not winning way from home you try different things. We try and keep it as positive and similar as we can.

SM - Is this a pressure the players feel when you play away?

P10 - Yeah, I mean a lot of people talk about it. The way I look at it is that not many people win away anyway. If you look at.. there's a few here and there that win away from home. Obviously a couple of the lower teams struggle. I think Gloucester have been labelled 'cos we've never done it. But now you get a handful in the season. So it is hard to win away. Teams do play better at home. I don't think it's a problem for us. It's a general problem. I think. But we just seem to get the rough end of the stick, we've never won away.

SM - Have you ever had times when you haven't been up for a match, or things haven't been right in those five, ten minutes before kick off?

P10 - No, not really I suppose. I'm just trying to think whether it may have been rushed or something Over the years you sort of find your happy medium and developed into this sort of routine thing. Maybe if you go back three or four seasons. To the sort of beginning when I started playing. You might find a different routine and things wouldn't have gone like that

SM - Can you recall that at all?

P10 - Not, really no. It's all a bit of a blur really. I suppose I've had this routine now for a couple of seasons. This has sort of been similar. I think I have just developed it. You take bits from here, you grab ideas, you're always trying different things. You always get new coaches. New people come in and mention things and you think I like so you take a little bit. Obviously I picked the visualisation from Austin and people before¹² (pauses) and you sort of get your ideas and you find things you are happy with. The routine you are happy with. You know you get people who do things exactly the same. I wouldn't say I do that, anything exactly the same, but it's pretty similar sort of type. Just sort of picked it up over the years. Things I'm happy with and I've got sort of happy with the routine. It's done me quite well. I suppose over the last couple of years I have been happy with my game and so have had no reason to think, where am I going wrong. If I had some loss of form I might have to sort of rethink..... I might be going somewhere wrong in my preparation. I've been quite happy with the way I've been playing so I've been sticking with the way I have been preparing.

SM - So, talking about mental preparation and the state of mind you are in before you play. Do you think it affects performance?

¹¹ Current England and former British Lions captain

¹² Sport Psychologist

P10 - I think yeah. There has to be. I think my personal view is. A lot of people say were gonna get someone in and have a look at it, but my personal view is that if the player got to that sort of level of rugby anyway. He should be able to mentally get himself in the right frame of mind anyway. Obviously if he's got there and like I said before something starts going wrong. The you might have to bring someone in and help him, point him in the right direction again. You thin you've got to get your mind right, because (pauses) compare to another sport like football. In football you may not need the mental, whereas in rugby.. I think if you don't get yourself in the right frame of mind then you can find yourself drifting. Especially in a contact sport like rugby. You find yourself drifting and then your out you lose that sort of mental edge and mental toughness if you like. For that eighty minutes you've got to have that edge. You've got to be a dominant force on the pitch. You've got to say to yourself, 'it is a contact sport and if he's gonna come in and hit hard you've got to come in and hit that bit harder'. But if you're sort of like.. 'perhaps I'm not gonna get my body in that same position next time'. I suppose it's happened to everyone you've gone out you've not got yourself quite right and you've suddenly been knocked on your arse. You suddenly got to sort of put yourself mentally right during the game. You've got to get yourself quickly and think oh shit, I'm gonna knocked to pieces unless I sort it out.

SM - Can you recall when that has happened to you?

P10 - I wouldn't have said it has happened recently. But it has happened to me before, earlier. One of the ones was a couple of years ago when we used to go and play in the Anglo-Welsh. We went down and played in Wales somewhere, I think it was Newbridge. They were struggling at the bottom of the Welsh. They were bottom. We thought, Welsh team we'll hammer them no problem. They came out an the first five minutes, sort of fired it into us and you're rocked back and you think 'Oh Christ I've let myself go here'. You think you've done. You've done the routine. But you haven't really been thinking about. You sort of suddenly have to switch yourself during the game.

SM - Would you say that is hard to do then?

P10 - It's quite hard to do, because once you've started and you've let them get the edge on you. It's always hard to get back into things. When you are out on the pitch, you're trying to play the game and also get yourself right up top. You've definitely got to make sure you're mentally right before you go out.

SM - Ok, so that's you personal preparation. Does the atmosphere in the team dressing room affect your preparation at all?

P10 - I think the atmosphere in the changing room is a positive thing for me. Because players are talking. Obviously there have been experiences where you've been... people have said something and you think why has he said that? Because that's just stupid. Especially at Gloucester and the representative stuff played in. The changing rooms.... everything's... people only say things if they think it needs to be said, and it's a positive thing. So I think the atmosphere in the changing room. I like people sort of coming up an you know patting me and saying you know, 'Big game today, same as last week'. Or they say 'You are playing against so and so today you've got to put a bit extra in'

SM - So how does that make you feel?

P10 - It sort of just gives you a bit of a pick up and switches you on. As I say you can drift. It's not so much drifting but little reminders, giving you a reminder all the time and keeping you focused.

SM - So what is the climate like in terms of activity, noise and behaviour in those last five or ten minutes before the match?

P10 - With ten minutes to go there will be people doing they're own thing. Quite a few like to sit down. A few of them will be talking. (pauses), people strapping.. It will be quite a hectic atmosphere. Things are going on. Then as the five minute mark sort of comes, then, we sort of all come together. Everything is sort of done and then the activity sort of drops of people doing stuff. But then the intensity of the players minds, concentration, and amount of focus picks up a bit and er you know. You often get someone saying, 'Come on boys pick it up a bit, it feels flat in here' because they can't quite feel the edge in the air, of the players sort of, you know getting ready to play.

SM - Can you tell when it's there and when it isn't?

P10 - Yeah. It's just sort of looking around. You can see peoples faces. If they're wondering or you know, sometimes people aren't sort of confident of going on and you can tell that. If you look around and you look into everyone's eyes, you can sort of see if they are there or not.

SM - Say this feeling, this edge is not present in the dressing room. Would that affect you at all?

P10 - No, I don't think so. I'm sort of pretty much in my own head. I feel that people aren't there then obviously I will sort of gee them up. Say a few things, or if not a little thing I find quite useful is just to get people.. we do a little sharpener, just get then jogging, they can build it, build it and then just have a little sharp count to three. Just to get the team doing something together. Just to raise their level of focus.

SM - So that is if the dressing room is feeling flat. Do you do that every time?

P10 - Not every time. Sometimes you can look around and you can tell they are there. You are happy with the way.. for example the Harlequins game. We knew it was a must win, to keep the season alive for us and also the supporters were starting to get on our backs. You just have to look round an the guys all knew wit was such a big game. You could look around and see that everyone was focused. There's a couple, in the last five minutes I tend to switch out of relaxed mode. There's a couple of guys and they are still pretty relaxed. Especially more like the experienced guys. They're there but they're not sort of ranting and raving. They are quite relaxed and focused.

SM - What sorts of things are they doing?

P10 - A few of the forwards are sort of rubbing shoulders together. There's no really, no one really gets carried away. Myself, I have had people banging heads etc. But it doesn't get to that stage in the Gloucester changing room.

SM - What about the England dressing? Does that differ in any ways?

P10 - I would say it is pretty similar (pauses). There's not much of a difference. Obviously playing for Gloucester is pretty important. But there's that slight added edge when you are playing for your country, which gives that you know, the whole thing a little bit more importance.

SM - What about in the dressing room?

P10 -It's harder when you are playing representative stuff because you don't know how people are going to react to things. So you know I would probably say I was a lot more quieter when I am away with England. It's case of there are experienced internationals there and what not. It's then just a case of concentrating on your own jobs, making sure you perform yourself. I feel comfortable, but if there was something I felt really needed saying I would say it. But it's a case of, there's such a lot of class and experience around you things don't need to be said, that maybe need to be said when you are playing a bit of club rugby.

SM - Is the atmosphere you talk about with Gloucester present in the international changing room?

P10 - I think the atmosphere is pretty much the same in the changing room. The only difference in internationals is when you get out on the pitch and the old national anthem. Whatever representative rugby you play. You jog out and your stood there for the national anthem. That's an added extra bit of a psych up. Just at the end. It's just like whereas at Gloucester you've got the build up and you are out, you've got the build up you are out and then you have got the national anthems. Which is like a little bit of a top up of a feeling of pride, and representing your country.

SM - Ok, I want you to put your coaching hat on now. Imagine I was a younger player. 2nd row, who had problems getting focused before kick off. What advice could you give me?

P10 - Whatever you do make sure you are happy with it? Don't do something because someone else is doing it. Or I'm doing. Just 'cos I'm doing it doesn't mean to say you should do it. Whatever you do make sure you are comfortable with doing it yourself. I think, obviously it's not so much as giving advice, but I think it's letting rest of the team. Just go and have a chat with the rest of the guys. When you've got a spare second just pop over and have a quick word with the lad. Give him a pat and say good luck and just remind of when he's scrummaging it's nice and tight, or in the lineout so build his confidence up by getting players talking to him. As he grows in his own self-confidence, he'll find a routine that he is happy with. Obviously I'd suggest things that have worked for me like a little bit of visualisation, when warming up just run through the calls. When you're warming up just soak in the atmosphere of the ground, have a good look around. Things that I have done myself. Maybe have a couple of quiet minutes to yourself in the corner. Just thinking about your aims and goals for the game. When someone comes in they've got lots of things going round, say to them basically you've got you set piece, focus on your set piece and then everything else is going to fall into place.

SM - Ok, out of all those pieces of advice. Which one would you say would be the most important.

P10 - I'd probably say have a couple of quiet minutes by himself, and think about what he wants to do on the pitch. His aims and his goals. So say I'm gonna win all my own lineout ball, and have a high work rate in the loose. Something specific like that.

SM - That's great. One thing I'd like to go back to is when you talk about when you were younger you sometimes had problems getting into the right frame of mind. Have you ever been in the wrong frame of mind in the build up to the game and the suddenly thought, I'm in the wrong frame of mind and got yourself re-focused. How have you done that?

P10 - We were playing a cup game against Wakefield. It was about an hour before kick off, and I was just sat there, strapping my thumbs up and just getting my kit on sat in the corner and the referee, Tony Spreadbury, came in and he was chatting away checking the studs, talking to the front row and he said 'Any problems boys, just come and speak to me' and for some reason I just stood up and said 'Tony my mums not very well, my sister just split up with her boyfriend and I'm not feeling too good. Have you got any advice for me?' It just came out everyone just bursts out laughing and Phil Greening looked at me and sort of shook his head as if to say 'what the fuck are you doing?'. Once we go that out of the way I sort of said to myself 'I'm miles away I've got to get myself sorted out'. In some ways it was quite good cos it cleared the air. The time before we had played Wakefield away in the up and we had lost. So the boys were tense. There was a quite a lot of pressure and you know a couple of the senior guys looked at me and shook their heads. It was about three or four years ago. So me and Phil greening were in the team and we were both pretty young. We laugh about it now, in some ways it relaxed the boys a bit, but after I thought 'I've gotta get my head right there'.

SM - So how did you get yourself back into the right frame of mind?

P10 - It was just a case of getting back into the routine and sit myself down, and say ok that was a laugh lets get down to the serious stuff. You sort of train yourself to get into the right frame of mind to get into the zone. You're sat there and you're chatting away and then you say ok, lets get my head round the game. It's gonna be a hard game. I don't want to get my head kicked off or anything. So I'm gonna go out there with the right attitude.

SM - So that's developed over the last few years?

P10 - Yeah, I think definitely. When I first started playing, I had bits and pieces. But over the years it's come together. It's all about being professional. For me personally I think its a good preparation. Other people might think it doesn't suit me at all. But I think it's a case of getting something you are happy with. When we come together as a team. When you do a drill, but it's a case of after the game talking and saying you know.

SM - Do you get at a lot of that, people not happy with the warm up?

P10 - Yeah, we tend to mirror the warm up on the Friday in the team run. Sometimes you run the width of the pitch. People don't want to run the width of the pitch, like forty metres. If you're doing handling thirty metres at the most. If there is something that I don't want to do in the warm up I'll probably go off and stretch, and not do it. Maybe say contact drills, hit the bag ten times. I'm happy to do three or four hits on each shoulder. And then I'll go and do some stretches. Or if, what I normally do is so we are doing some handling, and happy with it, I'll just sit down and stretch. Same with line outs, we do some and I'll say I'm happy with that I don't want to do any more.

SM - Do you ever get times where the warm up goes really badly?

P10 - There's been times when as a team, in the team warm up we've been dropping balls and just basically right we'll go for another jog and come back. While we are jogging we'll say this is a bad start lets forget about that and we'll go again. Nine times out of ten as soon as we get back and start again it's ok. It's just a case of people not being quite switched on. Everyone likes to warm up a little different, Mapes likes to go off and do his kicking. The scrum half like to go and work in the corner and the front five like to warm up in the changing room! It's a case of getting something that everyone is happy with. If I'm not happy with what we a doing I will go for a stretch

SM - We have covered a lot there, your pre match preparation and the team build up, your good and bad performances. Is there anything else you would like to add?

P10 - You've got to get the mental bit right, you've got to get the physical bit right. You've got to get it all together. I think some people try to cram the mental bit right in the end whereas I'm pretty relaxed. You've got the build up to the match all week. You've got to gradually build up. Say in the team run. All through the week it's getting closer and closer, and then in the team run we use it as a sort of a practice. And come the come the game on Saturday you already know you've got yourself in there right mental state. So it's not such a hard thing to do. As if to say you've been suddenly switched off all week and then you suddenly come to the Saturday and you switch yourself on. You give yourself bursts, when you are training in the week. You're mentally there an then you relax. And then you get yourself mentally up. By the time Saturday comes, it's not such a hard thing to get yourself up. It's a case of making sure you stay switched on for the team run. And then it's not going to be so hard for the Saturday when you do it then.

SM - Does how the team run goes, affect Saturday?

P10 - Not really. I don't think about a bad team run and start panicking about the game. If we have a good team run, it's a case of it's gone and forget about. Lets start thinking about the next thing, the game.

SM - R. that's great. Is there anything else you'd like to add or comment upon?

P10 - No I think that's all.

SM - Just to add that you can have a copy of the transcript and are free to make any changes you wish, and that the information has complete confidentiality and anonymity.

P10 - There's nothing in there I can get done for!

SM - Thank you very much and good luck for the rest of the season.

Interviewee: P11
 Venue: Cardiff - Home of interviewee
 Date: 20/05/99
 Time: 2:00pm

SM - Ok P11, Thanks for agreeing to be interviewed today. My interest in research is in the psychology of pre-match mental preparation. As you know I have played myself at Junior level international. What I am interested in talking to you about today is the psychological experience that international players go through before the start of the match. My aim therefore is to find out how you prepare mentally for matches and what mental states you experience prior to kick off. The purpose of the interviews therefore is to use the information to provide help for younger players and their mental preparation. I am going to tape the interviews for use with my research, feel free at any time to add any comments or changes if you wish. I will also make a copy of the interview, which will be available to you to make any changes, if you wish. The interviews and all the information from the research are in the strictest confidence and your responses will have complete anonymity.

P11 - OK, that's fine with me.

SM - Using the time line as a guide I'd like to ask you about the build up to kick off for the team on match days. Talk me through a typical build up to kick off for the team on match day?

P11 - Well, I normally have an early 'ish quiet night the day before, So I have a lie in on the Saturday morning. I will normally just lie in bed till about ten'ish. If we have a home game then I might lie in bed for a bit longer. Because I wont have to be down at the club until 1:00pm for a 3:00pm kick off. If the game is away then we have to be at the club a bit earlier, for the bus ride. It's never too early because you haven't really got to go to far in Wales. So I'll stay in bed and watch television in the morning, just relax really, try not to think about the game at all. I mean it's not that I don't want to think about it, but you can get too psyched up too early for matches. In the morning my body is ticking over nicely, I know I've got a game in the afternoon, and I don't want to get too excited too early.

SM - What happens if you get too excited too early?

P11 - Well if like I start to think about the match straight away you can waste a lot of energy thinking about the game, who your playing against and what the opposition is going to do. You can switch yourself on to early and like be ready to play at 11:00am in the morning. When that has happened to me before I have got the ground in hell of a state. You know I have been really hyped up and raring to play with two hours to kick off, and by the time kick off comes around you are flat and knackered and lethargic.

SM - So for you it's a relaxed morning?

P11 - Yeah pretty relaxed, just doing odd things in the house, watching television and just chilling out. I like to be in control with my preparation for the game. That really starts with the Friday as well. I like to do what I want to do the day before, you know have a nice relaxing day, no travelling, no training, no late nights or anything, that follows through to the morning of the match. So after getting up I will have some food, chill around for a bit and then head over to the ground where we meet about 1:00pm for home games.

SM - How does this change if you are away?

P11 - For away matches I have to get up earlier and we have to meet down the club earlier, or the bus will pick the boys up along the way. As I said before because I live close I get the bus at the club. But we still try and get to the oppositions ground for about 1:00pm.

SM - So tell me how you are feeling in this time period?

P11 - Just as relaxed as possible really, trying to keep myself calm and not think too much about the game. I feel a slight tingling in my stomach, but for me it's all about feeling physically fresh in the morning. I hate feeling tired before a match, So in the morning I might stay in bed for a bit longer, just so that I wake up feeling a bit fresher. My whole morning is focused around just relaxing and helping myself stay fresh. If I feel tired, as I said, I may go back for a kip, or I will do some stretching, especially my back and my hamstrings. That can be one of the problems I get when I wake up, and they are stiff, that can make me feel unrefreshed and lethargic. So I will spend time in the morning making sure my back and hamstrings are loose. If I don't do it before I leave the house I know I won't have time to do it properly in the club at the game, because we will be doing other things, so it is important I feel loose and relaxed going to the ground.

SM - What thoughts are going through your mind on the morning of the match then?

P11 - Not much really, I know I have got a game coming up so I try and shut off, not too think about the game in the afternoon, as I said before really, If you start to build up the match in your head too soon you will be fucked by the time you come to play it. If things are not in my control, like I have to go to town on the morning or I have business to sort out then that can bother me a bit and not make me feel as relaxed as I would like to be when I turn up at the game. I like to do things my own way and in my control as much as possible. If it is a really big game I still try and relax in the morning. But if it is an international, for example, you are in a hotel with the rest of the boys and it's harder to do that, because you will have a team meeting in the morning and the build up is even more intense. The day before for example we will have be a run out, and we will definitely have team meetings.

SM - How do you deal with these if you like to stay relaxed in this time period?

P11 - I just don't let myself get to psyched up really. I take in what the coaches are saying, you know team tactics, moves and stuff, but as soon as the meeting is over I shut it away in my head. Close the door on that and revisit it then next meeting or when we get together then next day for the match. I have to try harder to relax, but it still works. Then on the morning of the match I will sit in my hotel room and watch TV, trying to relax as much as possible. Most of the boys try and sit in the rooms and relax really. I don't no any really who are that intense on the morning of the match, well one or two but they are exceptions. Most just stay relaxed until the team meetings and arriving at the ground. I stay relaxed by taking my mind off the game, you know you have a big game coming up whether it's that afternoon or in a days or two's time. You have all the focus and the energy and the adrenaline stored or on tap you know, just bottled up.

SM - Can you talk me through the build up for the team from meeting at the ground to the kick off?

P11 - Well we arrive at the club for about 1:00pm, with a view to having a team meeting about 1:30pm. In that time we will sit in the club and talk, Some of the boys will have a drink of lucozade or something like that or some food. Some go and have a walk around the pitch, that's what I like to do.

SM - Why do you do that?

P11 - I like to get a feel for the surface, you know get a feel for the conditions, the wind and where it is blowing from, if the sun is out and is going to be in your eyes and stuff like that. I have always done it really, walked the pitch. I like to walk to all the lines and just visualised the ball coming to me, say on the twenty two to receive a drop out, or the halfway to receive a kick off. I walk and put myself in all the corners where I will receive the ball, I also stand on the lines and picture myself catching takes in the lineup. I find it really helpful. So when I get out on the pitch for the match I have been there already and done it successfully. So I know that I can do it again. Some of the boys will talk to each other about moves and certain situations and

how we are going to play. That really tends to be the halfbacks, and perhaps some of the other backs, the forwards don't tend to do as much tactical talking, the hooker may throw a couple in from the line, for the same thing as me I guess, just for the feel. It also helps just to take a up a little bit of time and stop you from sitting around in the club or the changing room and stewing really. For me that's the worst bit, the waiting around, waiting around to get changed you know? sat in your tracksuit or blazer. You just want to get your boots on and get on with it and get into playing the game.

SM - So after that it's the team meeting?

P11 - Yeah, then after that it's the team meeting.

SM - Tell me about the team meeting?

P11 - Well last about twenty minutes really and is just the coach laying down the law to us. Sometimes it's just reinforcing things we have done in training over the past week and reminding us to keep up our performances from the previous weeks. Other times it's a real bollocking we have to buck our ideas up kind of telling off. That's what's good about our coaches, they know when to press the ballistic buttons, when everyone needs picking up, and they know when to just keep us bubbling over and let us do the talking. The meetings are just covering all the aspects of the way we are going to play, what is expected of each player, how we are going to play the opposition, not too much on them, more on us really, and the motivational stuff at the end really. They always seem to get the talks right you know, they are very good, whoever takes the talk, at gauging the feeling amongst the lads and pressing the right buttons.

SM - So how do you feel when you come out of the team meeting?

P11 - You come out very focused, you feel focused on the game. There is a focus about the whole team then. It's like everyone is switched on in the same wavelength. The laughing and joking has all stopped. Everyone has got their professional heads on and it ready to prepare to play rugby. You know, everyone looks motivated and ready to go for it, we go into that meeting into fives, sixes and sevens and we come out team, a single unit, that's how I see it.

SM - How would you describe the feeling?

P11 - It's one of simmering excitement, and building energy, you are starting to release the taps and let the energy flow begin and get you ready to play. This sounds a bit strange but you are really aware that you are part of the team. There is a feeling of togetherness, everything goes into the meeting in bits and bobs but we come out of there more as a team, that feeling gets more I guess when we go out on the field to warm up, and it's even stronger when you run out for the match.

SM - So then it's changed and onto the warm up?

P11 - Yeah then we go and get changed, get all your strapping, rub downs and stuff done and then we are out for about 2:15pm. The proper team warm up starts about twenty five past two. So if people want to go out early and do more stuff, then they can, however if some want to come out and do just the team warm up then they can. A lot of the backs go out early to do their intensive warm ups, and some of the forwards like the props only come out when they are called (laughs). I like to go out as soon as possible, and make sure I feel fresh and loose, I do a lap of the pitch and do some stretching, a little bit of passing and some more stretching, with some striders, just to make sure I am nice and loose really. The team warm up starts then and is pretty much standard, half laps of the pitch, stretching, handling drills, a bit of contact, some unit work, a quick unopposed for a few phases and then everybody is back in. That finishes about 2:45pm. After that we go back in the changing rooms for our final preparation and then it's last words from the coach, we are on our own, two minutes from the kick off and then he gives us the call and we are out there.

SM - Does being home or away affect the team preparation at all?

P11 - No not really, because we are very professional about everything and we try and keep the preparation as similar as possible. So we will arrive at a ground for an away match with plenty of time to have a break before the team meeting, and so that everything isn't rushed.

SM - Are there any other factors do you believe affect team preparation

P11 - The preparation is perhaps a bit more relaxed for non-leagues or friendlies and stuff like that you know. Pre-season games or matches on the eve of internationals, if you are not involved in representative stuff. On those matches the intensity of focus and concentration as a team is not as strong as league, cup or representative matches. People don't take the games as seriously, people are talking at the team meeting and often the same feeling isn't there. Also there tends to be the time for the rest of the squad to get a run out and then you have people who aren't used to playing with each other week in week out. You have players thrust into different roles that they are not quite used to. Say if the hooker who comes in is not as chopsy or talkative as the number one then immediately the same atmosphere won't be created on and off the field, and the make up and actions of the team to each other will be difficult. In those circumstances if you are a regular player, it is very hard to get yourself up for the match (pauses) I'm not saying people don't try as hard, because you will get hurt, it's just that instead of you dying to get out there and play, it's like going out to work with knowing you have a job to do, there isn't as much desire there. I know with professionalism, the desire should be there for every game, but it is hard to motivate and prepare yourself for those types of games. It can often work to your benefit sometimes because playing relaxed games can be more enjoyable if both teams are in the same boat. It's when the opposition are far stronger, or are taking the game more seriously, that you have problems.

SM - When do you 'switch on' for the game?

P11 - I switch on for the game during the warm up. That gets me physically focused, I then go into the changing rooms and that do my mental focusing and all that stuff.

SM - Ok, tell me a little more about how switch on in the warm up?

P11 - Well I use the warm up to get me physically ready to play, by the end of it my body needs to feel as though it is ready for contact, to do this I do all the stretch and the drills to raise my heart rate, but I also need to have some contact so that my muscles and my body feels ready for the game. If my body feels ready for the contact then I am buzzing and full of energy. That's what I am aiming for just to get myself feeling strong, alert and full of energy.. that's what the warm must do for me. So I might do some reaction time stuff, side-stepping off either foot, or some short sprints. I will hit a contact pad a few times, and I will do some pick up simulated tackles or do a one on one scrum against one of the guys in the pack.

SM - So how would you describe this feeling you are aiming for?

P11 - It's just as I have said, full of energy, sharp as in alert and strong and powerful. I then go into the changing room physically ready, I sit down and get myself mentally focused. That means switching my concentration on. Channelling my energy into what I am going to do.

SM - So how do you do that?

P11 - I just sit down in the corner, quiet and all that and picture myself going through my jobs on the field. For me that is my line outs and my scrums and making big hits. I really feel the hits in the tackle as well, just imagining what it would feel like physically to make the hits. I go through my job and all the things I am going to do, mostly it what the coach has been emphasising in the week or a target or some goal I have set myself for the match.

At the moment I am really getting back into making big hits again, so I have set myself the target for the match. Sometimes it's just to go out and focus on tackling, because the coach has set my tackle count isn't high enough. It's really just something you are going to do to get yourself in the game. It's very easy to ghost through the first ten or fifteen minutes of match unless you go out there and make an impact straight away, for me that used to be line outs, but now I don't worry about that so much. Now it's really getting a tackle in straight away so I am in the game (pauses). Everything else really takes care of itself after that.

SM - So when you imagine these things, how clear is it?

P11 - It's not really images of myself and other players or team on the field, it's more the feeling of the contact and the hit. I can't like make the opposition or things like that. There is just someone I am going to tackle and I think and feel and see that.

SM - Are you inside your body when you do this or watching yourself on video?

P11 - No I am inside my body just feeling the hits and stuff.

SM - Is that all you think about?

P11 - No I also talk to myself in my head at times before the kick off but that's just before we go out.

SM - Ok, lets move on to that time period, you've come in from the warm up, you are sat in the changing room with about ten or fifteen minutes to go?

P11 - Yeah.

SM - So what else is going on in the dressing room, what are other people doing or saying?

P11 - It's strange really, because people are doing different things, some are sat down like me and very quiet, others are on their feet stretching and getting last minute preparations sorted out, you know like tape and stuff and going for a piss and all that. Some of the players are walking around, and some of them, will be talking to each other.

SM - Does the talking bother you at all?

P11 - No not really, I don't mind it because I don't need it to get me psyched up, I can do my own thing. If people want to talk out loud and gee other people up as their way of switching on then that's fine by me. By that time anyway I am focused and not really listening or looking at anyone else.

SM - So what happens then?

P11 - It will be about ten minutes to go and the skipper will say his last words and we will be left on our own and the door is shut. That's when everything starts to pick up and it gets noisier and people become more active. Just before then which I was describing, come to think of it is a relatively quiet period, people are talking but a lot of us are quiet and are not speaking, but when the coach leaves and the ref. comes in and tells us that there is five minutes to go that's when the hype accelerates and the adrenaline starts going mental. Everyone is up on their feet, the R. or J. will be giving us the death or glory speech then. That will be something like shouting at us you know and tapping into our heads and really getting us geared up. That's when everyone comes together and we have a big team squeeze in a circle, the looking into each others eyes stuff and then we go out on the pitch.

SM - So what kind of stuff does they say?

P11 - Most of the last minute stuff is all the same really, just asking you to play not for yourselves but for each other and the supporters and the country you know. If it's against someone particularly big rivals they will talk about them as the motivation and say what we are going to do them, bodies on the line stuff and all that, death or glory you know.

SM - So what is going through your mind then, what are you feeling?

P11 - You just feel so psyched up, all systems go you know you are pumped and full of energy, you just want to get out of that dressing room and make a hit on someone. It's not like wild aggression and you want to kill someone but I feel really strong and powerful and just want to get that energy released and running around.

SM - So would you describe this feeling then, excited or what?

P11 - It's more than that really, it's intense energy and excitement coupled with adrenaline rushes. There is also a great feeling of pride just before you go out. You look at your team mates and you feel very confident, you know they are your mates, I mean even in professional rugby and representative stuff and all that. You still have to be confident in the people around you. You all rely on each other. When you look at each in that huddle you know they are not going to let you down and you also feel motivated not to let them down, so you owe to them to do your best and do your job out there. You know your mates and you are going out there to play what your job is and enjoy yourself.

SM - So you don't get nervous or anything then?

P11 - No I don't get nervous just before you go out to play. You have concerns, and stuff like that in the build up to the match. As I said before the build up in the days to the game you can get yourself really wound up by thinking about the game all the time and put your mind into a bit of a mess, wasting energy and all that. That can build throughout the morning of the match and peak before kick off if you don't nip it in the bud. But for me it's not nerves like feeling sick or butterflies or anything like that. It's more intense concentration and focus in the build up to the match. You are like preparing your body for contact so you have to increase your focus and prepare for that, which is why I think I am quiet in the changing room and team meeting. It's keeping a lid on the adrenaline. Then you release that top before kick off and the energy all comes out and your body is pumped.

SM - So you see being nervous as a good a bad thing?

P11 - I think nervous like spewing up all the time and worrying yourself shitless is bad yeah, but I don't get that. I think most players are just focusing their energy on preparing to play, you know thinking about the match and stuff. If you think about it too much and it fucks your head and your body up then sure that's nervousness. But in order to play rugby And any sport really you have to have a little bit of concern or preparedness you know anticipation or apprehension, to make you alert for the game, but I wouldn't call it nerves.

SM - So for you then it's all about timing your preparation and release of energy to the right moment?

P11 - Yeah, I guess so. I think you learn from experience when you have too psyched up in the past and wasted all your energy in jumping round in the changing room, banging your head against the wall or running on the spot (laughs).

SM - So you used to do that?

P11 - Yeah I did, I'd get on the pitch with heavy legs and totally knackered and spend the first twenty five minutes running around like a headless chicken (laughs). Giving penalties away and starting fights and stuff like that. Don't get me wrong you need aggression, and you need to make hits, but you can go over the top and running into every ruck at two hundred miles an hour. Most of the time I'd take someone out and spend five minutes getting up off the ruck or wrestling on the floor. If you look at the kiwis they steam into rucks and mauls and play with so much intensity, but it is all controlled. They know when to slow down and speed up. Over here we are either to gung ho or not tough enough. Nowadays I go out on the field in control of my aggression, as I said before I feel powerful and strong and alert. That really is my goal for the preparation for the game. To get to the whistle for kick off feeling alert, strong and ready for a battle.

SM - As opposed to?

P11 - Well being headless and not in control or not feeling in best condition (laughs).

SM - Now I want to carry that theme a little further. Now I want to ask you about your mental state before kick off and how this may affect your performance. I want you to think about the last time when you thought you had a really good match?

P11 - Ok.

SM - What game was it? and can you describe why do you think you played well?

P11 - Uhh (pauses), my last good game won't have been for a while because of this (points to his knee)¹³. So I guess it would have to be the international against Romania, yeah that was a good match for me.

SM - So why do you think you played well? What did you do in the game?

P11 - Nothing spectacular really, just my job. I won all my own ball in the line outs, we had a really solid scrum and I remember getting around the park, making loads of good runs and putting some awesome hits in. In fact we played well as a team that day. Yeah I remember putting some good hits in and having loads of gas that day.

SM - Describe to me how you felt during the game?

P11 - You feel as though you can run all day, you know, you have loads of energy and you are strong as an ox. It's almost like your in tune with the match, you are in the right place at the right time. You don't really think or feel anything because it all goes so fast. But everything you do goes well, you know, you are on a roll, you go through a massive phase of about seven phases of play on the trot and you don't feel knackered, you are chasing everything, fighting for every scrap and piece of possession. It's like being turbo charged, you get rushes and rushes of energy pumping all game.

SM - So what is going on in your mind?

P11 - Not much really (laughs), I mean when you have days like that, as I've said, everything goes so fast, you don't really have time to think about anything. You almost automatically do things, you are in the right spot at the right time, it's like you anticipate what is going to happen and your are always right. That's what happened against Romania. That's what happens when things are going well. For me I get a rhythm in my head and I get on a roll and go from one good phase in the game to another. You can have some matches where you have purple patches or spells where everything is perfect and you can run all day, but often you lose that and have periods where you are not in the game. It's very rare to have matches where you are on a roll for the whole game. But when it does happen you are buzzing for the whole match.

SM - Can you recall how you felt before the Romania game in the preparation to kick off?

P11 - Yeah in a sort of way that I can remember how I feel when I play well. I can't remember specifically that day, you know how I felt. I can remember the events and the build up. But the feelings and stuff where like I have felt when I play well.

SM - So you notice a difference in preparation when you play well and play badly?

P11 - Not so much a difference in preparation, but a difference in the way you feel before I go out to play.

SM - Ok, tell me about how you feel before good matches?

P11 - Like I said before. As long as I physically warm myself up and I feel good then I am confident of playing well and having a good match, no matter who I play against. so for me good preparation is feeling physically fresh and alert and strong. That means a good thorough warm up and my muscles feeling nice and loose. Not feeling to full or empty in the stomach, and knowing I have eaten the right things in the build up to the match. That is my basic requirement that I must fulfil before I play, I have to be right physically, and the mental stuff, being psyched and focused will follow from that.

SM - So what is the correct 'mental stuff'?

P11 - What feelings and emotions?

SM - Yeah.

P11 - It's feeling relaxed, focused and confident. Motivated and eager to go out and play and knock people around just feeling good really, buzzing and up for it, you know. What's also important is the fact that the rest of the team are up for it as well, you know, there is a buzz in the dressing room before the game, that feeling you get. That's always there before matches when we do well. You know we are going to play well when the team is buzzing.

SM - Tell me a little bit more about what you describe as the 'buzz' in the dressing room?

P11 - It's just the atmosphere that the team brings into the changing room before the match. Before some games the atmosphere is really quiet even in the final five minutes, when everyone should be on their feet and buzzing and talking and getting ready to go, there is something missing, it's like the whole dressing room is switched off or the adrenaline tap has been turned down in the place. Turn that over to when the whole place is buzzing and you can feel the atmosphere. It's like everyone is up for it and you can tell it you can feel it.

SM - When you mean up for it. What are they doing? What are they saying?

¹³ The participant was currently recovering form knee ligament surgery

P11 - It's hard to describe really, but you get the feeling that everyone is psyched up and you are all tuned in together, people are moving around and bouncing and are talking and saying the right sorts of things. Not any old crap and swearing and shit like that. But you know what they are saying is showing they are tuned in. I guess it's just an overall feeling of like, 'We are all up for this and we are going to go out there and do it'. It was like that before the Romania match, you everyone was totally focused and into it. But when it doesn't happen it doesn't happen.

SM - What effect does the dressing room have on you then?

P11 - When you can feel the buzz it gives you a bigger confidence boost. You know already that you personally can do the business, but seeing everyone else around up for it gives you that extra edge and extra bit of togetherness and drive to play for each other. I used it get me more focused. It just really makes you more confident that you are going out there and you are gonna win the match and do the business.

SM - Are you nervous at all before you play?

P11 - No, as I said before, it's not really nervous, in the build up it's concern and increased focus and concentration but in the changing room and before kick off its all excitement and adrenaline to get out there and play. I have been nervous before and that hasn't helped my game at all. But that was when I was a lot younger.

SM - So what do you think contributed to this mental state you experience before good games?

P11 - It's as I told you, you know, I have to get a good warm up in and feel fresh and full of energy, feel ready to play, you know. I try and get to feel that way all the time now. With the professional game it happens most of the time, it has too because you are getting paid to do a job, so you have to be able to get yourself focused and physically ready to play, otherwise you get dropped and lose your job. So for me it's changed since professionalism has come in because you have an added responsibility to be ready, not that it wasn't like that before because you would risk letting your team mates down if you weren't ready, but now everyone has to make sure they are up for matches, and I think I have developed a pretty consistent routine. I rarely have matches now where I am not focused or up for it.

SM - Ok, lets move onto those games shall we? I want you to think of the last match you felt you didn't play very well in, can you tell me who it was against and why you didn't play very well?

P11 - I can't really recall one game in particular, can tell you about what happens when I have a shocker?

SM - Ok then.

P11 - Well it's the opposite of the storming games really. Things just don't go right for you, whatever you try or do doesn't work, you drop passes and miss tackles and just don't seem to be in touch with anything. I especially feel really tired and sluggish in those types of games, and I feel lacking in energy, really slow, you know, not able to act. There doesn't seem to be any intensity to my game, whereas when things are buzzing and I am on a roll, this time it's very hard to get into the game and you feel cold. Often I tend to drift in and out of matches, you know, you are either playing, but you are off the pace, I seem to drift through the match, getting to rucks and mauls just as the ball is going the other way or missing tackles and stuff like that. There isn't any feeling of power. The game tends to drag on a bit as well, you know when you are going for it and playing well everything is over in a flash. But when you are having a shocker it drags and drags and you are looking at the clock thinking about the game and wishing it would hurry up. Yeah, I also do a lot more thinking when things are going as well, you know over analysing where I should be and stuff instead of just letting it happen.

SM - What about before the match, what is your mental state like then, when you haven't played well?

P11 - It's funny really because I know when things are not right, you don't feel physically fresh, you feel tired, whether that is because you have had a hard week because of training or not much sleep or a lot of travelling, but I can go out on the pitch feeling very tired and lethargic, and unless I do something about it in the first part of the game, I will feel that way all through the match. There are other times when it is not happening in the dressing room and you go out on the pitch and get caught cold by the opposition, and by the time everyone has woken up you are chasing the game.

SM - Can you tell me a little bit more about what you mean by the team being cold?

P11 - Well, it's just the buzz not being there and everyone being quiet and not focused, it doesn't happen very often because we are a professional club and we have to be consistent with our performance.

SM - So what reasons could you give for the team being cold?

P11 - Perhaps because it is a friendly, a second team match or really weak opposition, you know like in the cup or something. It used to happen a lot more when I was younger. Thinks like away trips and getting to grounds just before kick off and shitty dog shit dressing rooms in the middle of nowhere, that would mess up preparation and people's motivation. You can almost see it when we play cup games against Mickey Mouse teams in cow fields. People switch off you know and laugh about the place and the dressing rooms or they just shake their heads that they have to play in places like that. That can't lead to flat dressing rooms and flat games, or games that take a while to get into. As I have said it is rare nowadays, because you have to prepare the same for every game, with the same amount of effort and motivation. But it is very hard. Like for me after the international against Romania I had to go back and play on the cup against some piss poor club halfway up the valley in the middle of nowhere. No matter how hard you try you are still not going to have the same intensity as you had for 60,000 people playing for your country as opposed to one man and his dog.

SM - So for you when you have bad games you tend to be in the wrong frame of mind before you play?

P11 - I don't feel physically good and that affects your focus out on the pitch. Also as I've said if the team are cold and the dressing room is flat then that can make you think 'what's going on and why isn't everyone up for this?' You do worry that people aren't up for and it is going to be a bad day, whilst you have to make sure that you are motivated and up for it, if the others around you aren't it's very easy for everyone to get into the same sluggish frame of mind. That's when you go out on the pitch and get caught cold. Instead of one of you drifting in and out of matches the whole team does it, that's when you get problems.

SM - So would you say there is a link between how you feel before you play and your performance out on the pitch?

P11 - Yeah, I would say there is. If you don't go out there fully psyched up and prepared for the contact and stuff and ready to be alert and sharp, ready to react, then you are going to get cold and chase the game. Once you chase the game you are fighting yourselves and the opposition and that's twice the effort then. Then if you don't get your head together you will have a shocker for the rest of the match, and if several of the guys aren't switched on then it's like infectious and it rubs off on the rest of the team and they will start to lose it and then the game is down the pan. That's not to say every time I have gone out and played shit every time I have been feeling tired and stuff, sometimes you can get yourself into the game in the first five minutes, whether that is a fight or a big hit or a line out take. That can get my blood pumping and the energy flowing and get me into the game. But it is a lot harder to do that, it's better to be prepared from the off. So yeah I would say there is a link, because you can't go out there and play to your best ability unless you are prepared and warmed mentally and physically to play. But you can still get it back, but it's a lot harder. With professional rugby now we have all got our routines for preparation and that is what we need to get us there to be ready for the first whistle.

SM - So you get yourself in the right frame of mind by being physically prepared and then setting yourself targets for the match and seeing yourself making hits?

P11 - Yeah.

SM - How did you develop this routine? Have you always had it or do some one teach you it? Where did it come from?

P11 - I guess it just developed really. I tried the banging the head against the wall stuff and shouting and stamping and sprinting on the spot, that just wore me out. In fact when I played youth internationals and stuff like that that was a lot more common. The captain would try and get everyone screaming as loud as possible together counting to ten, but it just left me knackered. Now we just do quick reaction stuff, just to keep you alert, that soon before kick off you don't need physical stuff because you are already there with the warm up. You just need bringing together with the team focus to make sure everyone is on the same wavelength. So I guess my routine has just developed really, through trial and error. Some things I tried wouldn't get me up for it and others would. I am happy with my routine at the moment and I don't think it needs developing that much.

SM - So you got there through trial and error?

P11 - Yeah, I guess I did. Doing all the shouting and stuff was what I tried to get rid of the tension feeling, you know that increased focused and concentration feeling I get. All I found that was doing all the physical stuff just psyched me out. So I stick with my controlled relaxed feeling of power and focus on feeling good physically and thinking about my job.

SM - What effect does an international have on your preparation and your mental state before the game?

P11 - It just intensifies everything really. Your motivation, your focus, your energy and your adrenaline. It goes off the scale. The build up starts earlier and in that way you have to try a little harder to keep it bottled.

SM - So no problems with flat dressing rooms?

P11 - No, not all, the dressing room is absolutely buzzing, there is so much pride and passion in there. It is a tremendous feeling of togetherness and drive to go out there and do it for your country. It's a very indescribable feeling. You just feel kind of like the strongest person on the planet, because you have so much pride and respect for the jersey and what it mean to everyone in Wales. You don't have to try and get motivated, or try and get yourself feeling fresh, it just happens automatically. It's a very emotional experience that leaves you massively drained at the end.

SM - What about the anthems?

P11 - They just seal it all off, if by some stupid reason you weren't ready to die for your country before, after the anthem it is mental. It is really indescribable. Such a lift, just a top up to what is already bubbling over. An unbelievable experience.

SM - Ok, now I want to ask you a little bit more about when you perhaps have played in the past and you have been in the right frame of mind before a game. How do you go about changing that before you play or when you get on the pitch?

P11 - For me, not being ready to play is not feeling physically there, so I do everything possible to get my body feeling ready. If I finish the warm up and something still feels tight like my back, I will go and get a rub from the physio. If I have an injury I will make sure it is stretched loose and strapped or whatever so that I am totally happy it won't let me down. Sometimes I have a cold, or my airways are blocked so I will have a sniff of some smelling salts just to open the lungs, that helps. Other times I might scrum down against one of the boys in the pack, just to get my body into the feel of the contact that is going to come up. Before my knee trouble we used to practice doing hits on the pads just before the kick off, or do a couple of hits on the machine. That would do the trick for me. It's just to make sure my body is ready for what is going to happen. When my body is there then my mind follows and I become focused. So I use my body to settle my mind and get me focused.

SM - What about if you go out on the pitch in the wrong frame of mind?

P11 - If that happens, which it doesn't these days, then it is even more important that you have to really have to try and get into the game as soon as possible, even more so than normal.

SM - Can explain what you mean by that?

P11 - What getting into the game as soon as possible?

SM - Yeah, what do you mean by that, what do you have to do?

P11 - Getting into the game as soon as possible is doing something like making a hit or a run or a take in the lineout. I always aim to do that when I play because it settles you into the game and you go with rhythm of the game. It's just to get you going really. If you don't you can drift through a game without ever really making an impact or contribution. For me it is easy because if we are receiving kick off I know I have a very larger chance of receiving the ball and so it is important for me to get that right so I will focus on that as my way into the game. Other times if we are kicking off then they will clear to touch and we will have the lineout. So I will either have to take the catch or I will be involved with a drive. So that is my way in. But I try as much as possible to get a tackle in or get the ball in my hands early to get the energy explained and the blood pumping. Scrums and line outs do that but they are not direct contact. Doing runs and hits is like your own way of getting stuck into the other team and getting yourself in the game.

SM - Ok, finally, I'd like you to put your coaching hat on for a few minutes.

P11 - It's looks like it will be on for a lot longer with this knee! (laughs)

SM - Yeah, Ok, I want you to imagine I was a younger player coming to you and asking for advice about how to improve my mental preparation for matches. What recommendations would you give to me about mental preparation for playing?

P11 - Uhm I guess (pauses)... Well the first thing really is that what may work for me may not necessarily work for anyone else. You know, each to their own and all that, but I think that younger players perhaps lack a bit of confidence in their own ability, well not their ability in themselves, but in their ability to perform at the top level. I certainly found that when I was younger, and that made me quite nervous at times and affected my game. So I think for younger players their pre-match concentration should all be focused around maintaining and boosting their confidence. That all really starts on the training pitch. You know, being in good physical condition, or having had a good training week or previous sessions in the build up to the game. If you get them to put the hard work in the week then when it comes to the game you can encourage to think about how well training has gone and how fit and strong they are and that they are going to do the business. What I found very helpful when I first started playing seniors at Swansea was how much support and confidence boosting I got from the senior players in the team. They would look after both on and off the field, whether that was sorting someone out who had just laid one on you or it was giving you words of encouragement before you went out to play. Yeah I found that very useful so I would have a word with perhaps some of the senior players in the team to keep an eye on him and perhaps take him under their wing. Often you listen and respect the senior players in your team more then you do your coach.

SM - So what sorts of mental preparation would you recommend? What should I be focusing on if I have problems getting my mind right, getting 'switched on'?

P11 - You've got to start with a good warm up to get you physically prepared so that you know your body is ready to play. Then you've got to find yourself a quiet few minutes and sit down and go through your jobs for the match. Think about what you are going to do and what you want to. Maybe chat with the coach and ask him what he expects of you from the match and what he wants you to do. Then just think about your jobs really. A bit of seeing yourself playing and doing it will help, but is really about focusing your mind to prepare for contact and being strong and alert. Again if you are still having problems talk to some of the senior players or watch what they do to find out. You may find getting hyped and psyched up may be what you need so getting physical in the changing room may be best. Or if get to hyped then sitting down and doing some stretching and stuff like that, just some short sharp reaction drills, that may be best.

SM - Out of all those you have mentioned, which of them would you consider most important for younger players to focus on?

P11 - I think just getting what is personally right for you. As I mentioned before I tried banging my head against the wall and screaming my head off and that just wasted energy and made me like a headless chicken. I have also tried being relaxed and not warmed up enough and that left me being caught cold and getting bashed around until I woke up. So the players have to find out what is right for them.

SM - But out of all the advice you have mentioned?

P11 - Probably to get the training in and have a good build up in the week, so you can think about how good your ability is and that can give you confidence to perform, and. But the role of the other players is very important as well.

SM -Why do you think that?

P11 - Because rugby is a very unique team game where if your mates let you down you can get seriously hurt. Having confidence in one another is very important. If I don't think anyone of more of the team I am in capable of doing the business, or I have doubt and anyone else in the team has doubts then you have got problems already 'cos players will be worried about them doing their jobs. With us at the moment there are no weak links and we have got a really good team spirit and that gets you through a lot of hard times.

SM -Well I think that is about everything covered that I wanted to ask. Is there anything you feel that we anything we haven't discussed? Or any further points that you would like to add or comment upon or change?

P11 - Uhm, (pauses).. no I can't really think of anything really.

SM - We have covered quite a lot, your build up to matches, your mental and physical preparation, how you feel and think before you play, your best and worst performances, your mental preparation and coaching advice for other players.

P11 - No I think that is everything.

SM - Ok, just to add that the interview and information is in the strictest confidence and complete anonymity and you will be able to have a copy of the transcript and make any changes to the recording if you wish.

P11 - Ok.

SM - Thank you very much for your time and good luck with the rest of the season.

P11 - Cheers.

Interviewee: P12
 Venue: Swansea RFC
 Time: 1:30pm
 Date: 26/04/99

SM - Ok P12, Thanks for agreeing to be interviewed today?

P12 - That's ok Steve.

SM - Just a little background information to begin. My area of research is in the area of the psychology of pre-match mental preparation. I myself have played junior level international level. My specific interest is in the psychological experience that international players such as yourself go through before the start of the match.

P12 - Right, ok.

SM - My aim of the interview today is to find out how you prepare mentally for matches and what mental states you experience prior to kick off. I hope to use the information from the interviews to provide help for younger players and their mental preparation for matches.

P12 - Ok.

SM - If it's ok with you I am going to tape the interview for use with my research. Feel free to add any comments or changes if you wish as we go along. As soon as the interview is written up you will be able to have a copy and make any changes or comments. Ok?

P12 - Sure.

SM - Oh, and one last thing, the most important. The interview will be conducted in the strictest confidence and with complete anonymity.

P12 - Good, I don't want any press finding out 'bout my mind! (laughs)

SM - Ok, using the time line as a guide, I'd like to ask you about the build up to kick off for the team on match days. Talk me through a typical build up to kick off for yourself and the team on match day?

P12 - From getting up in the morning?

SM - From when you get up to when you kick off.

P12 - I get up around 9:00am on Saturday mornings, don't really do having a lie in like, 'cos I am looking forward to the game. Lying in bed just winds me up a bit and makes my head spin so I get up nice and early. I'll have breakfast, play with the kids, talk to the wife, do some things in the house, nothing too strenuous really. But I am looking forward to playing so my mind is starting to think about the game.

SM - So you are excited or nervous?

P12 - Excited really, just looking forward to playing. I don't get nervous in the morning.

SM - Ok, so you are in the house...?

P12 - Yep, do my business in the house in the morning, I sort my kit out, I have to have it all prepared nice and early so I am not rushing to get ready. Then I like to clean my boots, watch anything on the telly like. When I clean my boots I start to think about the game bit more.

SM - So what are you thinking about?

P12 - Just the thought of playing really, it's nothing detailed like, but it's the thought that I am going to be playing. It is my job, the game on Saturday is like the highlight of my week. So I am not think 'bout playing against any one or the any moves or rucks or stuff like that. It's more just thinking to myself 'Game this afternoon' and 'This is what I have been waiting for all week'. Really for me like the build up starts in the week, not just on the Saturday. Sunday after the match you are relaxing and recovering from the day before. Then Monday in training it's looking forward to the next game like, so the build up begins, it lifts and lifts all week and builds through to the Saturday. So when I wake up on the morning I am looking forward to playing and the build up is really there.

SM - Put a name of this feeling you are getting when you are cleaning your boots and looking forward to the game?

P12 - A feeling (pauses). increasing excitement, you are starting to buzz, the body is starting to warm up and feel like some action. The psych up is beginning.

SM - So, you've cleaned your boots..?

P12 - Aye, boots cleaned then kit together say tara to the wife and kids and it's in the car and off to the ground. I have about an hour drive to get to St Helens from Ynys, so I have plenty of time to wind myself up and get ready.

SM - Tell me more about that?

P12 - Well the journey is my time alone with myself like. It's my chance to get myself wound up and in the mood for battle. I have the radio on, no tapes or any type of music like, just the noise. It's the time I say to myself in my head, 'Going to play well today' and ask myself the questions 'Are you up for it?'. So I do all my questioning in the car and I answer them all like.

SM - What do you mean?

P12 - Well on the way my head is asking my questions, it's part of the excitement and build up, I am asking myself if I am gonna play well, then I answer them, saying 'Yes, you've done it before, you can do it again'.

SM - So by the time you get to the ground?

P12 - By the time I get to the ground I am there, I am bubbling like. I am really eager to play and psyched. I like to get to the ground early. I can't stand hanging around at home or in the car. So I get there early. If we have to be at the club for 1:00pm, I will be there at 12:45pm. I like to get to the club early. Chat to the ground staff, chat to the management, soak in the atmosphere. I love the atmosphere of match days. It's my bread and butter like. As soon as I can I'll have a look at the pitch, take a ball with me and have a walk around. I do that to get used to the wind say. I like to have a feel of the ball in my hands early, just walk around the pitch have a couple of throws at the posts, so that I am beginning to get my aim in.

SM - So walking the pitch is all part of the warm up?

P12 - Yep, I like to get out and get involved, get the build up going as soon as possible, get a feel for everything, soak in the atmosphere like. I like to be there when the rest of the guys turn up. To make sure they are all up for the game as well. Just chat to them and find out if they are ready as well and make sure they want to play. Just to know, confirm it in my mind really.

SM - And what are the rest doing?

P12 - Milling around like, some are walking the pitch others are chatting. I like to have words, specially with the rest of the front row, my boys, B. and D. But M. and A. or T. as well. I like to have a word with them. Make sure they are into the match and they know what we need to do today.

SM - So what feelings?

P12 - Excitement, psyched just looking forward to the game, the head and the body are starting to buzz like, everything is starting to get ready.

SM - So what is next on the time scale?

P12 - We are into the dressing room where we get changed and have a team meeting in there about 1:30pm. That lasts about twenty minutes or so and then we finish getting changed, we go out and warm up for 2:15pm maybe 2:20pm, then back in for 2:45pm and it's out on the park then. That's the build up to the match.

SM - Tell me a bit more about the team meeting?

P12 - It's good, very good. We all sit in the changing room, sit down in our places, then the boss goes through his team talk. Like I say it's a good one. He is very good at his talks. He reinforces all the goals and targets, the aims we have been working on through the week of training. Just brings them to the fore and reinforces them. It may be that we need to tighten up the drive in the line out or it may be the midfield working on their defence. So he goes into real technical stuff about units. But he also does the motivational talk as well. He is very good at that. He knows what makes people tick. He knows what buttons to press to work the boys up. He does it well with me.

SM - What does he do?

P12 - He knows that I get wound up about my scrum, well I call it my scrum I mean the Swansea scrum, all he has to do is have a little dig, perhaps say 'Cardiff put the squeeze on you last week' just little digs like that. I don't have no one say a word against our scrum. For me, that is one of my basic jobs.

SM - So the boss talks to individual players?

P12 - Yep. He picks people out, perhaps those who know they have had a bad game the week before. Well not a bad game but perhaps they have let themselves down a little and need to buck their ideas up. As well as individuals he will talk to us as a team. Sometimes it's a telling off, sometimes it's a praise or a lift speech. When we come out of the meeting we know what we have to do as individuals and as a team. Oh, G. has a word as well. He puts his weight in. The meeting is for motivation but it is also for us to sort out our jobs and what is expected of us in the match.

SM - Do you find the preparation changes if you are playing away as opposed to home?

P12 - No not really, the club tries to keep our preparation the same that we don't like have too much getting in the way of our usual routine. If we are away obviously there is a bus journey, especially if it's over the border to play. But if it's in Wales I will drive to the ground because of where I live being in the middle of the grounds.

SM - How about international matches?

P12 - What my preparation?

SM - Yours and the teams?

P12 - For Wales everything goes off the scale. It's the proudest moment and time of my life when I am involved in internationals. It still is, every time still, it is very emotional for me, representing my country. It is the best feeling in the world, so for those games I am even more hyped up and raring to go. I just love them, the pride and the passion. It's just such a massive chance and opportunity to be able to play for your country. That is something that we are beginning to get through to the younger players again, the hywl. Over my career it has been lacking in a lot of Welsh teams I have played in, sure they have been hyped, but they haven't had the hywl. That's what makes playing for Wales so special.

SM - So the preparation is more intense?

P12 - Intense (pauses)... intense is a very good word to describe the build up. The team meetings, the press the crowds, they are all more intense than at club level. With that comes the pressure, but I don't feel that I just feel the pride and the passion.

SM - You mentioned the crowd there, how much of an influence is that upon you?

P12 - You can't knock playing in front of a full house at Cardiff or Wembley for that matter. It becomes more than a rugby match when you play for your country. You aren't just playing for your team mates, you are playing for all of Wales, then it becomes a battle, Wales against England or whoever. You have a bad game and you don't just let yourself down, you let all the people of the nation down. A home crowd hypes you even more, just makes you more wound up, more excited, gives you more hywl.

SM - And away crowds?

P12 - I love them. I just use them to get me more hyped, and make me more motivated and clued up for my game. I use the crowd home or way, friendly or unfriendly, I use them to my advantage. When you are away from home, say at Twickers (in a posh voice), you know if the crowd goes silent, then you have got them blowing, on the back foot like, and you are doing them over. The same thing happens when we play at places like Ponty or Cardiff for Swansea. They always have gobby, mouthy supporters, but shutting up them gives me great pleasure. As you know I get a lot of abuse for my style, I get a lot of lip from the crowd, so I like to give it back when to their team when the crowd goes quiet.

SM - Are there any other occasion you can think that you believe affect team preparation?

P12 - Perhaps friendlies or pre-season matches, because they tended to be take more light hearted, then the build up is not as strong, and the preparation is not as long. But for club and international matches the build up are keep very similar.

SM - So your preparation is pretty similar?

P12 - Yep.

SM - Ok, so we have moved out of the team meeting and by this time you say you are buzzing?

P12 - Sure, buzzing and really hyped like.

SM - So what next?

P12 - Then everyone finishes getting changed, we have a rub, all that, and then we are into the warm up. The warm up is about twenty odd minutes long, it's quite intensive.

SM - Tell me a bit more about the warm up?

P12 - Couple of laps to get the blood flowing. Stretching in the corners, more laps, some stride work, building up the speed to sprints. Then some ball work, some passing drills and grids. We move onto pad work and get the contact sorted. Then the units split up, backs and forwards, we go over and hit a few scrums on the machine and I throw some spotters in to the lineout.

SM - So what are you thinking about in the warm up?

P12 - The warm up is there to get my throwing and striking grooved. Make sure it is all in order and I have got my arm in and my range is good to A or M.. I am thinking about making sure all those things are happening and I am loose and stretched. I am not too worried about putting my legs around the back of my head and doing too much stretching or physical stuff. My job is in the set pieces and the rucks and the mauls. It also involves making sure the rest of the boys are hyped. So I will spend the warm up talk the rest of the pack up, making sure B. and D. are especially there. That's as much important for me during the warm up as it is for someone like T. to make sure his stretched off and sprinting at full speed.

SM - So you are motivating people in the warm up?

P12 - Yep, that's one way of looking at it. The boss is the main motivator, as well as G. but I have to make sure that we are going to function as a pack. That is one of my key roles. I am one of the most senior players in the team and I have got a big responsibility to make it happen out there. That may not be by scoring three tries or running the length, that is for the boys out wide, and the poseurs like C. My job is to wind the opposition, to disrupt their thinking, and mess up their communication. I have to make sure the boys are up for it to do that.

SM - So you've done your bit for the warm up, then you come back in, what happens then?

P12 - We come back into the dressing room. Everyone gets it together. By that I mean taping heads, strapping, toilet. We have five minutes to ourselves. I will be talking to everyone, especially the forwards, just making sure they want the game, I'll have a chat with the backs, not as much but just encouragement, making sure that they know they are riled and are up for it. No shouting or anything, I am just having a quiet word with some of the key players. You see some of them and you know they don't need words because they are up for it. So it varies, sometimes I will do a lot of talking, other times not much.

SM - What are people doing at this point?

P12 - A lot are sat down, just a general noise of people doing their last preparation, then once that is done, it will go quiet, everyone thinking to themselves, just sat down, Plum says a few words, he leaves, then it's just the team, just the boys, then it all goes into overdrive and everyone gets on their feet, gets vocal, everyone is talking and there is a buzz about the place. G. says his stuff, I will say my bit to the everyone and to the front five Team gets together for a big hug like (demonstrates with arms outstretched) and we have a squeeze, eyeball each other, then out.

SM - So what is going through your mind from the coaches speech right through to the final squeeze?

P12 - I am just excited and eager to get out there and play. My head, my body, it's all just buzzing, you can feel the blood boiling and you just want to go out there and play. I am ready for battle at that stage. All the wait is nearly over and the doors are open and you can let all the feelings out and let the energy go.

SM - Tell me a bit more about the buzzing feeling?

P12 - Your whole body is active, ready for the contact, ready for the battle that is going to happen. That is what the game is becoming even more, especially up front, it's a war, it's all about the contact and getting the shove on your opposite number. You have to have your body ready for the contact, and your head together to keep you alert to keep you alive, to top you from getting hurt. I'm not teeming at the ears before I go out or that kind of thing, I have control over my aggression, it's a cocktail of aggression, motivation and excitement, ready to play.

SM - What part does the rest of the team play in getting you ready? Do they affect your preparation?

P12 - When you play in rugby, and in any team sport I guess, any team sport where you like have to put your body on the line for each other, then what the rest of the team are doing and saying or the feel they create, rubs off on you and what you do and say rubs off on them. So if the boys are really up for a match it will lift me even more. On the other side of the coin, if they haven't got their heads on like, then I am in shit and I have to try and get them there. It will affect me because I will worry more about talking them. It just gives you a little bit of anxiety 'cos you aren't sure whether they will be there when you get on the pitch.

SM - Does that affect you, the worry?

P12 - A little bit, it is really concern more than anxiety or anything like that, you know not being to do your shoes up because you're so nervous. But a little bit of worry that will put a doubt in your mind. That's why I do all my talking to everyone from the warm up in really, and before that. My bread and butter is the scrum and the line out. For that to function I need B. and D., or B. and P. if it's for Wales to do their jobs. They have to be up for it so that's what I make sure is right.

SM - Would you say you notice a difference in the atmosphere of dressing rooms?

P12 - What between club and international?

SM - No between a good and a not so good atmosphere?

P12 - Oh definitely, very definitely like. When it's on the button and everyone has their head on like the room is buzzing. The boys are active, you can taste the atmosphere it is so thick. It tunes everyone in together makes us a team, rather than bunch of players like.

SM - And when it is not there?

P12 - Cold, very cold. Players are not active or doing their usual things, they seem to be in their shells, very quiet. The noise of the buzz is not there, no one is saying the right things and we don't seem like a team, just a bunch of lads. Again you can just sense it.

SM - Does that translate itself onto the field?

P12 - Bad atmosphere, flat atmosphere before have meant we have had slow starts and been caught on the back foot, caught cold. Even when the warm up has been good and warmed us up. We just start cold for ten to fifteen minutes and don't start well. It takes a lot to get into the game. That is what I hate because it gives the opposition one over on you straight away and allows you to be dominated, once you are dominated it's a bitch to get out of it. It may not be up front, but it may be the backs or certain units that are not functioning. Just out of tune with the rest of the team. If it happens to a lot of the units, or a lot of the players then we can be fucked like, and the game is over before it starts.

SM - So what about when there is a good atmosphere?

P12 - When it's good we go out there and have a flyer, we hit the ground running and blow teams away for the first twenty minutes, hitting rucks, braking tackles, making yards. Then after that that is the challenge to keep it up for the next twenty minutes 'till half time

SM - So what would you say contributes to a good atmosphere and a not so good atmosphere, and then lead to a good or a bad start?

P12 - Hard to say like (pauses). You could say... (pauses). A lot of things really. Good performances rely on almost all if not every player doing their job. That means every player being up for the match, ready to put their body on the line and die for each other for the cause. Serious now, that is the level of commitment you need, especially at international level. If like, one or two payers aren't psyched up, because they are carrying a knock, are knackered, or have their mind on something else. Or any kind of reason to stop them being totally focused. That will make them not up for it in their heads and off the pace when they play. So every player has to be focused to work together. We are all part of a unit, two or three boys heads aren't in it like and we have got problems. We can carry passengers, one or two at most, but that's all. At any time in the game you may have to rely on any of the other players to save your skin to win the match. That takes a lot of commitment. Professionalism has helped that a lot.

SM - Ok, that's the lack of atmosphere with the team, what about on an individual basis? Have you ever noticed times when your performance has suffered because you haven't been in the right frame of mind? Or better performances because you have really had your head on?

P12 - Because of professionalism, and the pride in your performance, you owe it yourself and your club, and country to be ready to play and to want to play. If you aren't sure about playing then you shouldn't be there. So getting a head on for a match shouldn't be a problem. There have been times when my mind hasn't been right and I have not played as well as I could have. Probably not the whole game but I have had bad starts, or not been in the game as much.

SM - What has been your frame of mind?

P12 - When that has happened it hasn't been quite right, maybe a doubt or two about my ability, or a worry about things outside of the game. Sometimes you can be sat in the changing room and everyone else around you is there and you ain't like. It's almost like a bubble effect. You are trapped in this bubble looking out at everyone doing their business, and you are there but you just can't get a hold of the atmosphere. Your mind wanders, and yep find it hard to focus on your job. So you're thinking about things that happened last week or about things that are going to happen in the future. Your mind really is not on the job. The level of drive of psych up isn't there for whatever reason. This happened more when I was younger mind. Now I treat rugby as work and I am glad to be fit and able to play, and be able to play it for a living instead of having to do something like I used to do, like underground.

SM - Could you say why your mind wasn't there?

P12 - Lots of things, like I just mentioned, poor build up in the week, being knackered or unfit, injured like. Not really wanting to play, if it is a shitty friendly, or if there have been things in your life going on that were more important then rugby.

SM - So what happens to your game when your mind isn't right?

P12 - All of my jobs that I talked about earlier like, they just don't happen. I'm quiet for a start, that and the rest of the pack, I may have problems with my throwing and the scrums may not be there.

SM - How does it feel?

P12 - Like a bag of shit to be honest. Your head and body feel bad, heavy and tired. The mood you are in is bad. Everything takes ages and nothing seems to go right in the game, nothing goes your way.

SM - What about good games? What is a good game for you?

P12 - As I said earlier, just doing my job really. Annoying the opposition hooker, and the rest of the pack and the team. Trying to wind them up, put them off the game, break their concentration. So they lose their discipline, give away a penalty and break their rhythm. Of course my basics are scrums and line outs, and I like to have the odd bit of pace on the wing! (laughs). So really like a good match for me is doing all of those, the pack going well in the scrums, that is my bread and butter, and no not straight in the lineout. For me my game goes beyond just performing the skills.

SM - Given what you have describe to me about when your mind has been tight and not right. Do you see a link between how you feel before you play and your actual performance?

P12 - There are a lot of other factors, most importantly the opposition that can stop you from playing well and having a good match. Even if you are in the right frame of mind, totally psyched and with your best head on like. But if you aren't there, you ain't got much chance of having a good match, no matter who you are playing against. So I would say that you need at least to have your head right to give you par for the chances of playing well. You can get it together if you aren't totally there. But it is very hard to do.

SM - How would you do that?

P12 - Kick something off in the first scrum or ruck by putting one on my opposite number or prop, saying that though they are getting a big big for me these days (laughs).

SM - So you would start a fight?

P12 - Aye, do something to wake me up and get my head on, get the aggression and the hype going.

SM - And you find it works?

P12 - It has done in the past. Something that gets you into the game. Whether you become involved in a fight or you start it, it may just be a big tackle or big scrum. You need to get into the game. It is so important if you are a forward like. I would respect one of the pack to have a word with me. That is what I would do.

SM - What do you mean by that?

P12 - Have one of the boys talk to me, or have a word with them. Get their head right. Say like 'Pull your finger out' or 'Get into it'. Something to like snap them out of it. You haven't got time to sit down and have a pint with them, but it is a quick word when there is a stoppage or you are on your way to a scrum or line out. It's a pick up.

SM - So mental preparation is important?

P12 - Definitely, definitely. This is a professional game. You can't afford to like turn up for a match hanging and smelling of booze. Fitness, discipline and professional attitude. That's the name of the game now. You have to have your head on for matches, you have to take your rugby seriously.

SM - Ok now I want to ask you about when you become 'switched on' for the game? When do become totally focused?

P12 - I switch on.... (pauses) when we go out for the warm up. After the team meeting. That is when I am totally head on. Before that I am serious, but I may be able to have a little bit of general chit chat with everyone. But the team meeting that's business as usual time, that's when work really begins. From there on in it is all building to the kick off.

SM - Why would you say then after the team meeting?

P12 - Because the team talk is the clue in point. That's is the kick start I am looking for to put me into head on mode. As I say, it has been building like all morning, but the meeting does it for me. All the stuff Plum says about the opposition, I use that to wind me up and make my head right for the match. It gets me thinking, 'Right got to put one over on him today' 'Not gonna let him do me' 'We are gonna beat this lot' or I challenge myself saying like 'You let them do you over last time, they got a push on you in the scrum, ain't gonna happen again'. So as well as the boss talking me up I am doing that to myself as well.

SM - What does that do for you?

P12 - Just gets the aggression going more, the blood bubbling and eagerness and desire flowing. Internationals are more on top of that. I just think about who I am playing against and what I am gonna do them like. All the emotions pride, passion and hwl is all massive and that channels you and gets your head on.

SM - So you think about the opposition. Is that pictures or is it just thoughts?

P12 - I do like to see myself playing against the opposition, throwing a few line outs and a couple of hits in the scrum, I'm think about what I am going to do to them at the same time. All helps to get my head on.

SM - So these, pictures, are they images, do you feel as well as see them?

P12 - No, I just see myself doing parts of my game against the opposition whilst I am talking myself up. I don't really feel anything like that.

SM - Are you watching yourself on video or are you in your body?

P12 - I am in my body, performing my jobs.

SM - Ok, you've mentioned already a little about nerves and anxiety. I'd just like to ask you little bit more on that matter. You say that sometimes you experience doubts over your ability?

P12 - I did, that was when I was young and really just beginning my career. I'd worry about who I was going to be playing against, maybe some one like Billy James, Ian Watkins or Alan Phillips, but that was because I was a new kid on the block like, and I was not sure of my ability. I don't worry about that at all now. What sometimes can concern me is the rest of the boys, especially the pack and the front row. Guys like B. and D. have got a lot of self-confidence for someone so young. What the problem is though is that in some games I worry when not all the boys are up for it, and then how the scrum is going to cope.

SM - So you wouldn't say you get nervous about playing before the match?

P12 - No not all like. I know my ability and I know that I can cope with what ever I am faced with. At the moment I know that we as a team, at Wales and Swansea, can cope with whatever, so I don't worry about who we are playing. Before if I was in a team who I didn't think could cope, like a front row that you wasn't totally confident in. Then you get a bit anxious, or unsettled about the game. It's a big thing for the front row to trust reach other, because you have to rely on each other, if one of you isn't doing the business you can get shafted, that goes for the rest of the pack really, and eventually extends to the team.

SM - So if you are confident with the guys you are playing with it makes a big difference?

P12 - Yeah sure. I am always confident of my ability, but that is not enough because of what rugby is and the amount of trust in your team mates you have to place.

SM - So the nerves is in the form of doubts or concerns in your head?

P12 - Aye, not massive or anything but in my head. No butterflies or that like. I get a buzz in my body but nothing like nerves in my body.

SM - So, in your opinion is being nervous a good or a bad thing?

P12 - Being nervous is good up to a point. You need to be bothered about the match. You need that edge, that drive to get out on there to play. You don't need tense and sick and heavy butterflies. A little on edge is good because it sharpens you. Not fear, but a little bit of edge of the unexpected. It's more excitement than nerves at times though. To me nerves is wandering around in a mess shiting yourself like about the match, going out there and not finding your man in the line out, doing stupid things, like killing the ball, perhaps because you are nervous about making a big impression that you become over excited, and give away penalties for killing the ball or starting trouble, or being offside. That happens all the time in players, I have seen that a lot. There is a very fine line between being excited for a match and it being good for you, and there is a line between being nervous and getting psyched out and having a bad game.

SM - So what is the difference?

P12 - Experience (pauses), yeah experience and learning to deal with the pressure of internationals and big matches. Listening to your body and head, when it's warm and when it's cold and needs warming up.

SM - Staying with the idea of advice and experience I want you to put your coaching hat on now. I am going to ask for some recommendations for coaches and younger players. I'd like to you to imagine I was a younger player coming to you and asking for advice about how to improve my mental preparation for matches. What recommendations would you give to me about mental preparation for playing?

P12 - You have to choose something that suits you best. A system, a routine a strategy that is the same every match. So that your preparation is consistent. What I do may not be right for the next player let alone a younger hooker. So a lot of my advice would be to go away and try different things and find something, or a mix of several things like, that they find works for them.

SM - So what sort of routines?

P12 - Maybe having a really good warm up with lots of stretching and plenty of throwing I and contact to make them feel confident about their preparation so that they know the warm up has gone well and they can tell themselves that they are going to be fine because the warm was good and went well. You see sitting down and telling yourself you can do well like, and telling yourself you are good player is one way. A lot of the front row though is all about the other two guys, like the front five, so I would also talk to the two props or perhaps the jumpers, and get them to perhaps have a little chat with him before the match, boost his confidence, get him psyched up. Say stuff to him to make him wound up and motivate him, or if he looks nervous, have a word in his ear and build him up. That's where the rest of the team fits in. If he gets on with the rest of the pack and the front row, if he feels part of a unit then he will be more confident about doing his job, and they will feel confident with him and it will rub off on each other. That is very important like.

SM - So establish a routine?

P12 - Aye, get yourself a set routine of drills you go through from waking up in the morning to the kick off. Maybe even the night before, I don't know 'cos you'd have to find out more. But a routine aye.

SM - Which of those factors do you consider most important for younger players to focus on?

P12 - Younger players have to get it into their heads that they are professional. Rugby is their job like, so they have to make sure all of their job is up to scratch. Practice line outs, hits in scrum, work on pre-match preparation. Rugby is about contact and dominating your opposite number, but also having team mates to rely on around you. That takes trust, respect and time. You need the right attitude for that. If you want to become the best you need the attitude so that you are prepared to work on the skills. So I would say a professional determined attitude is the most essential.

SM - How did you develop your routine of preparing for matches and becoming switched on?

P12 - I played a lot of rugby, some of it shit rugby like. I learned what got my head right and what didn't get my head right. When I was younger playing youth rugby I would get sent off a lot for fighting too much. Just because I would see that the match was all about sorting my opposite number out. So before kick off I would get worked up and thing about kicking off on the field. Too much aggression and too much anger. I have toned that down now and I use some of it to my advantage. You can beat a hooker who is faster and stronger than you in the mind. You use your head and your skill. Rugby is not just about speed and power, not a straight lift or throw. It is about using all those things and having the right attitude and toughness. That just developed with me. I was lucky to play with players who brought me along and looked after me, on and off the field, helped me and showed me how to wind people up, get the rest of the team psyched like.

SM - So you are happy with your routine where it is today?

P12 - Very happy, aye.

SM - There is a lot of information there, team preparation, your build up, good and bad matches, coaching advice. Is there anything we haven't discussed you feel you would like to?

P12 - You have a lot there, I think I have used up my mouth for a while.

SM - Are there any further points you would like to add or comment upon or change?

P12 - No, all done. I didn't really think I did that much preparation of what you would call a mental kind but I guess after talking to you I do.

SM - Just to add that the interview has been in the strictest confidence and with complete anonymity. When the interview is typed up you can have a copy and make any changes to the recording if you want?

P12 - I don't think that will be necessary.

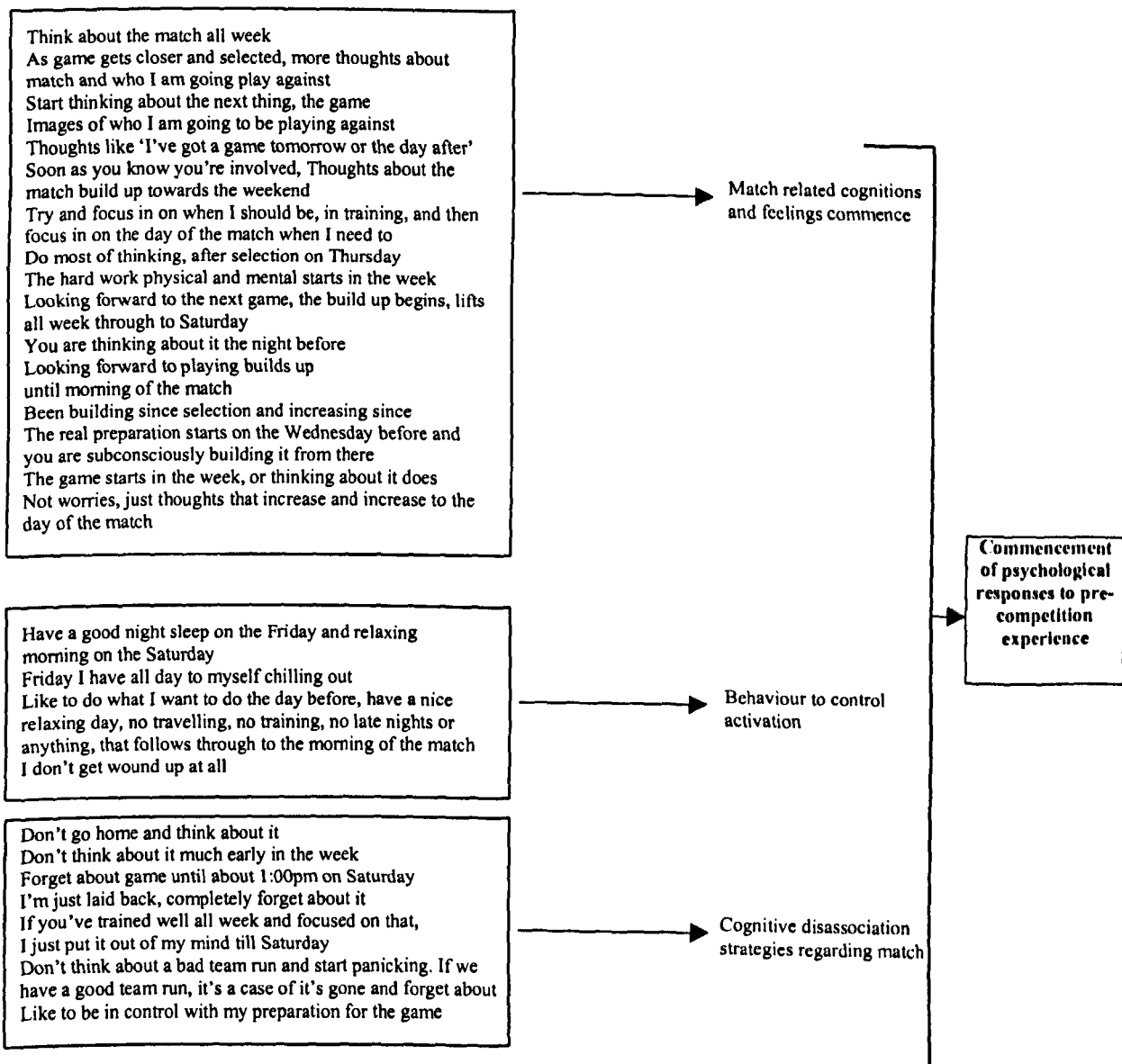
SM - Thank you very much for your time P12 and good luck with the rest of the season and the World Cup.

APPENDIX G.

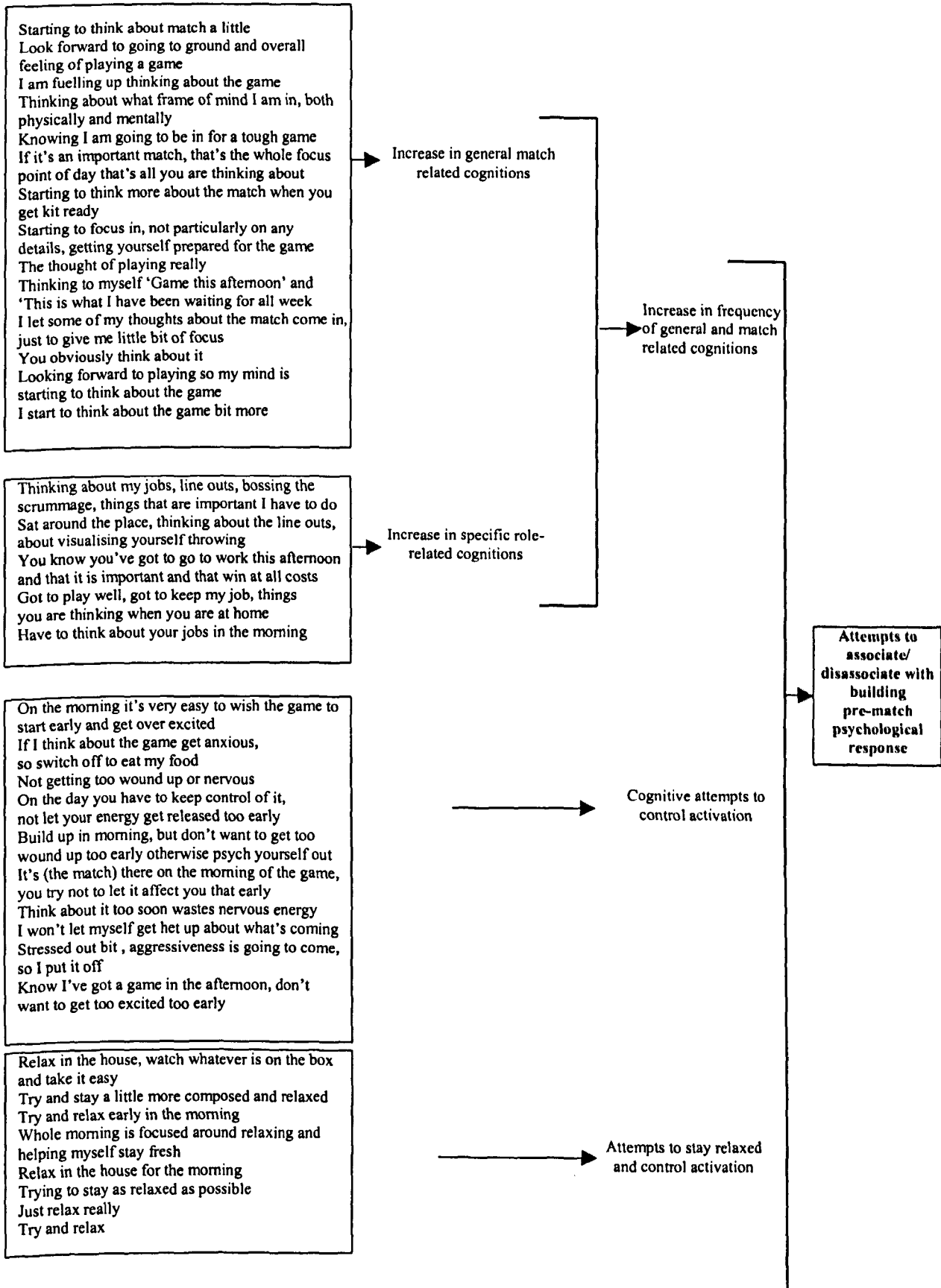
HIERARCHICAL CONTENT ANALYSIS

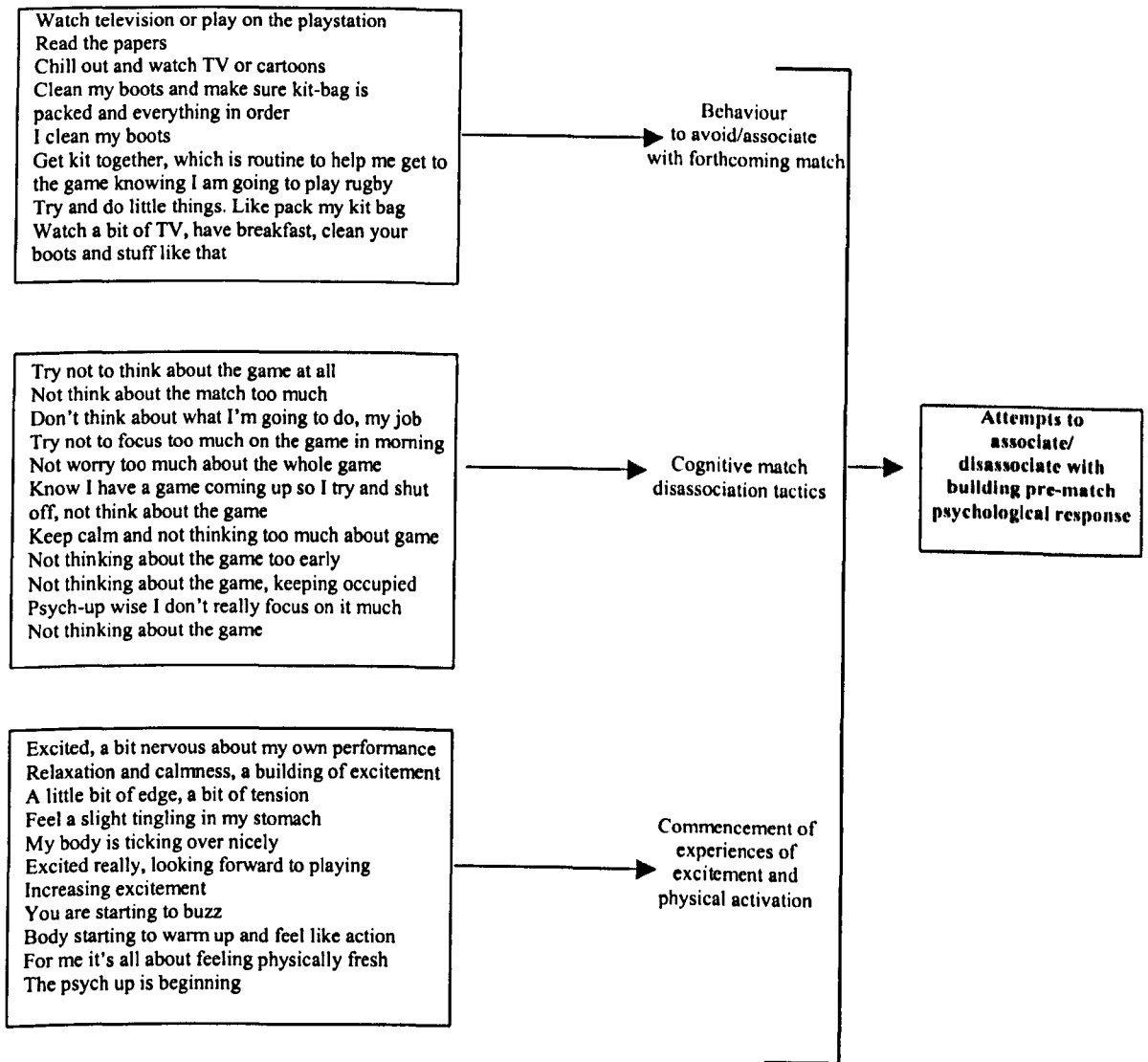
A: Temporal patterning of psychological pre-match experience

1. Build up to Match Day

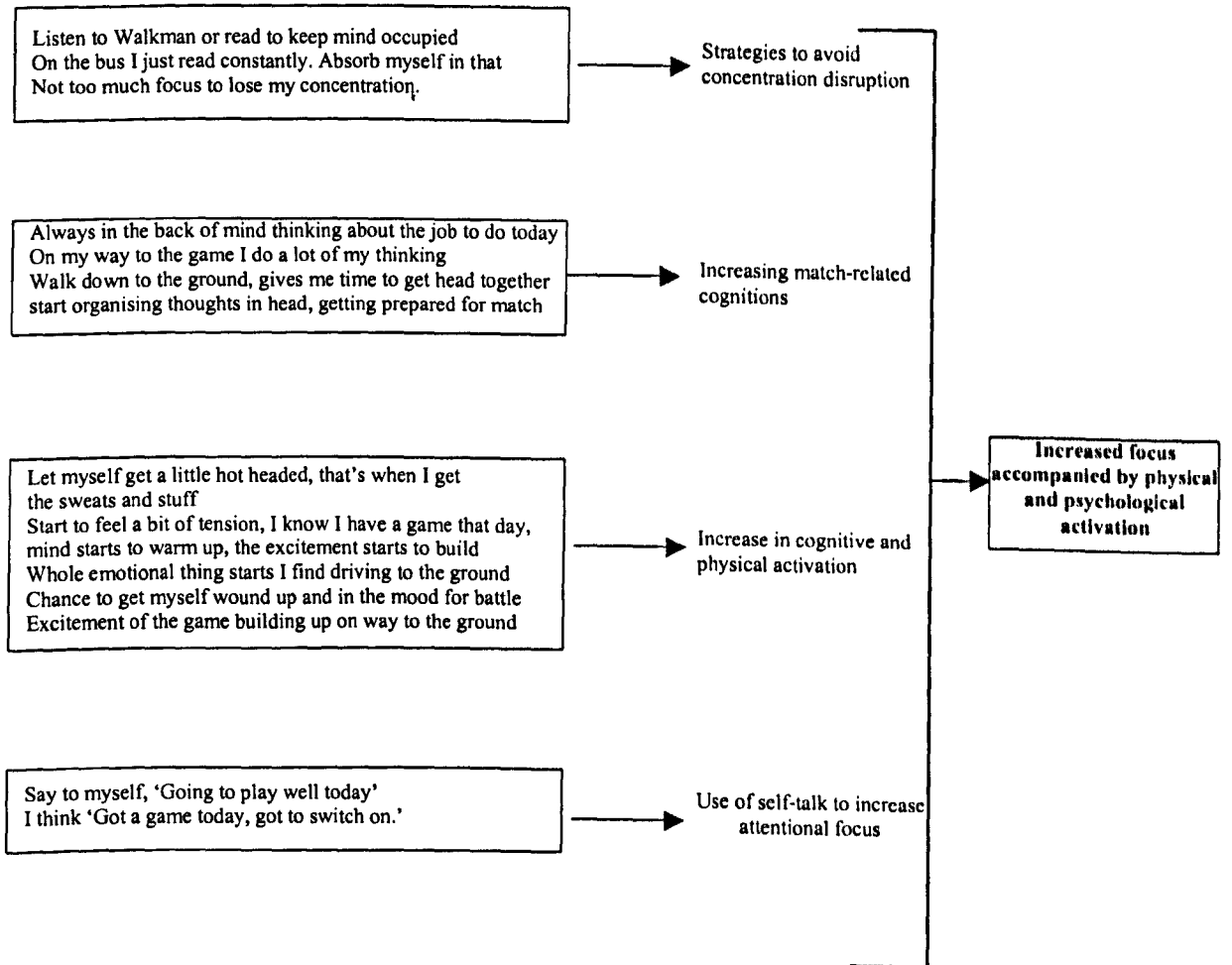


2. Morning of the Match

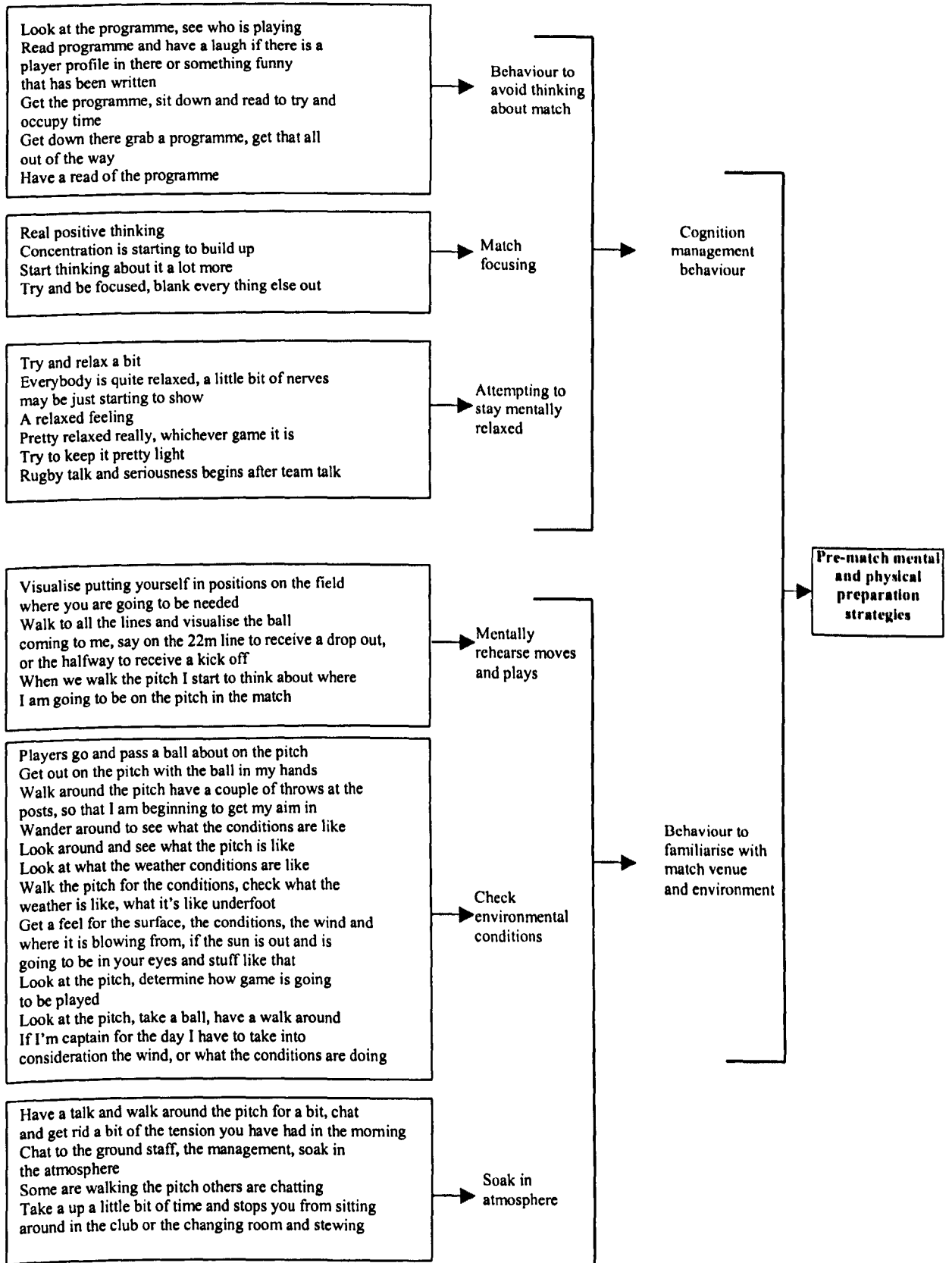


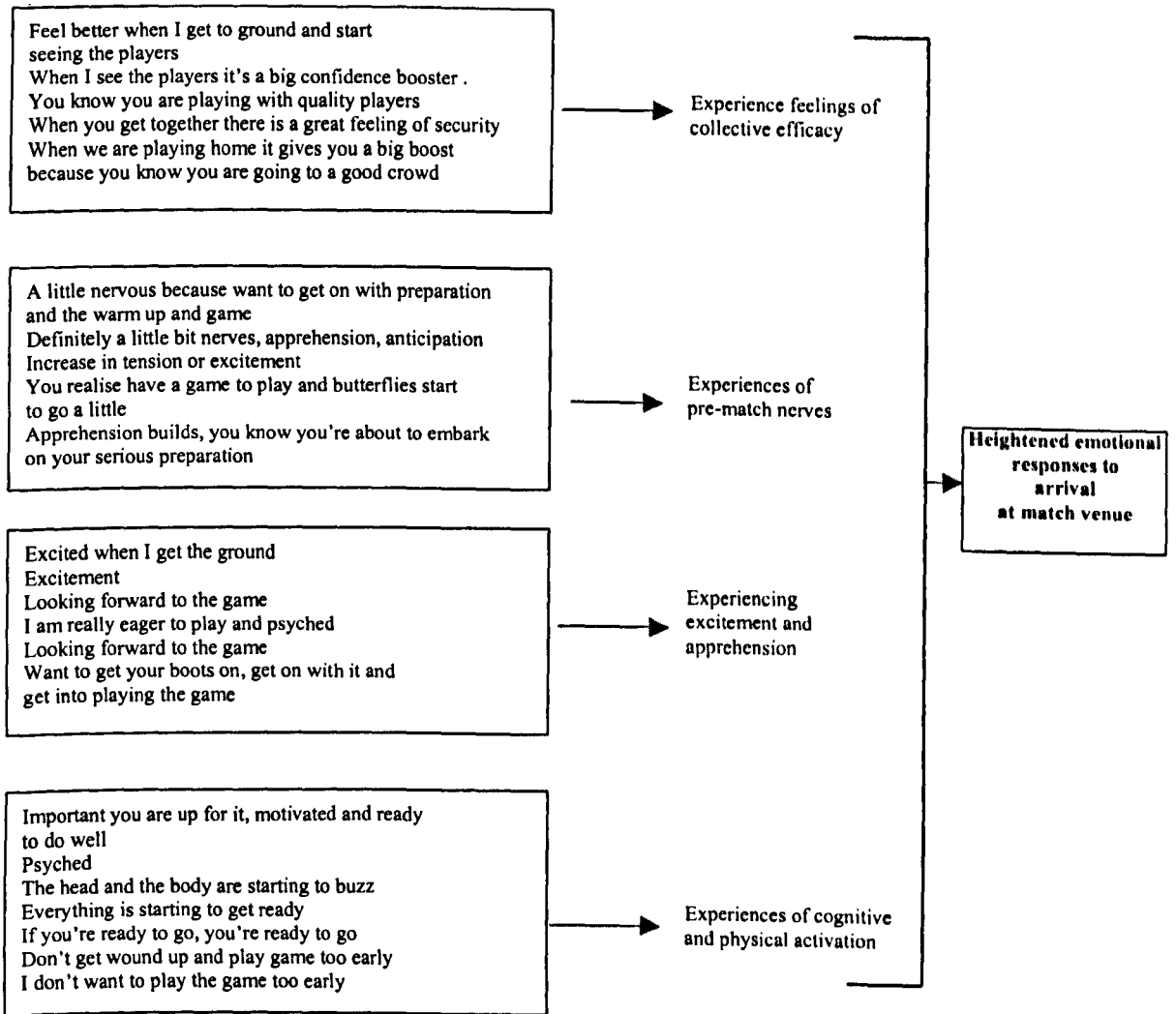


3. Drive to Venue

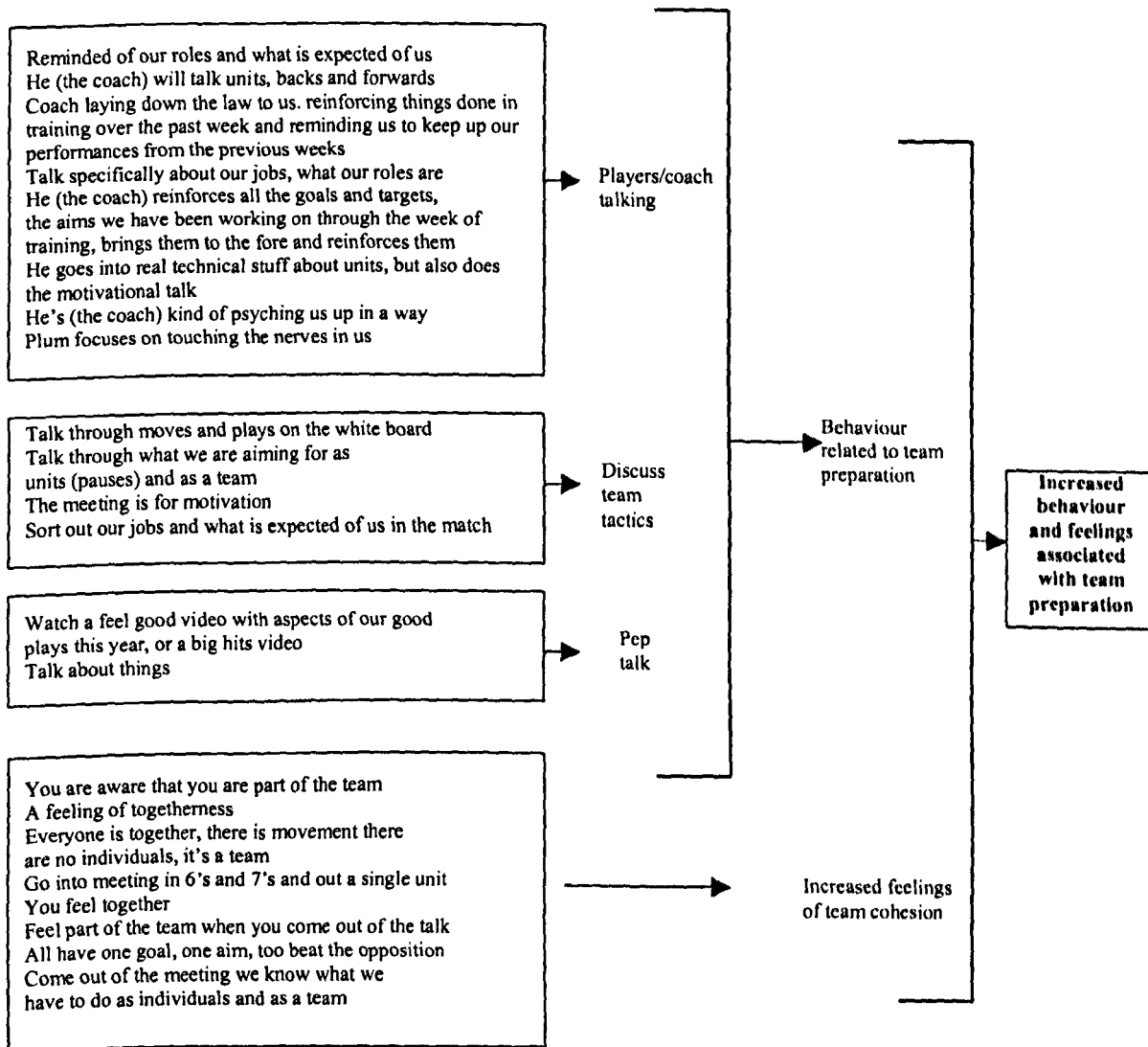


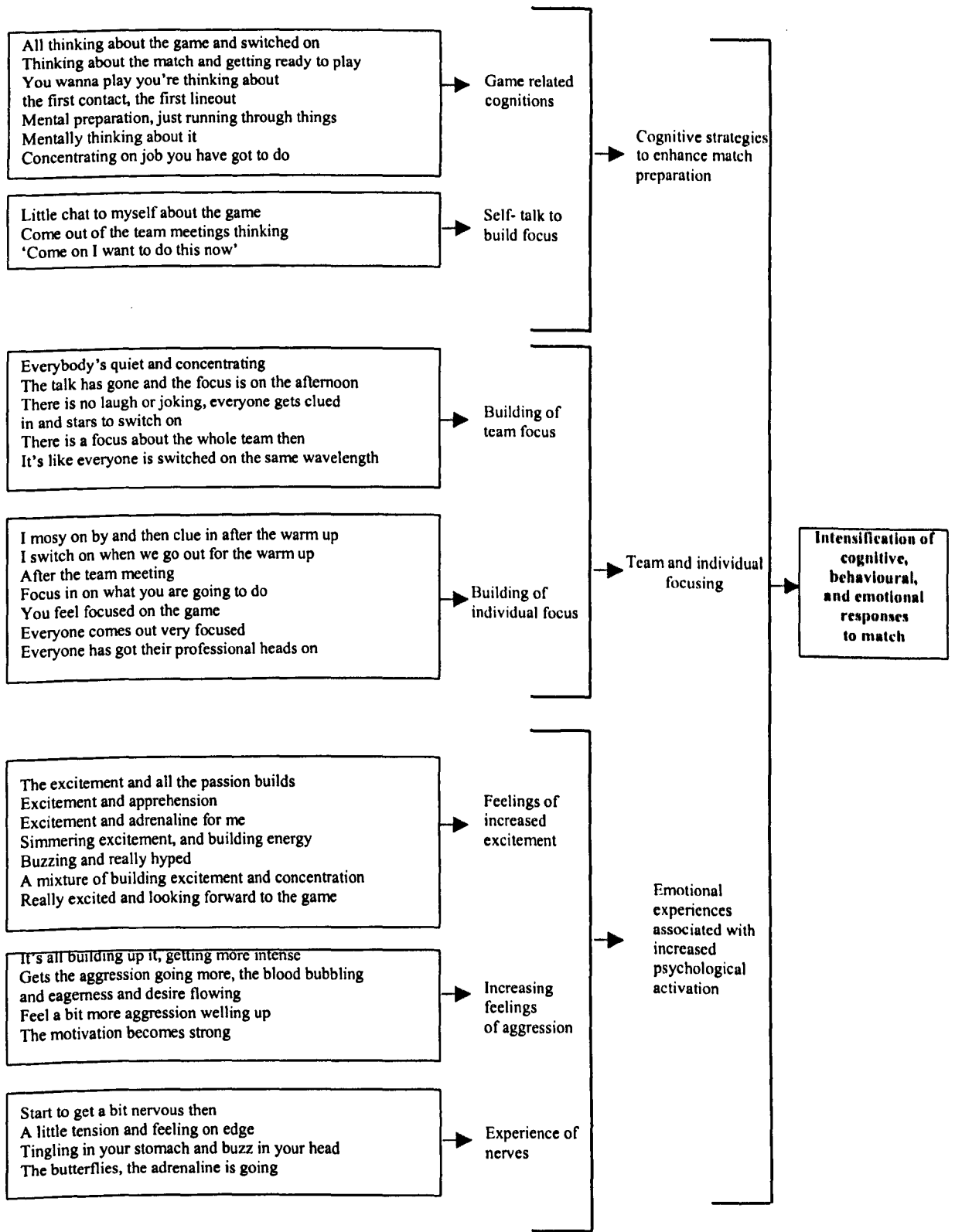
4. Arrive at ground



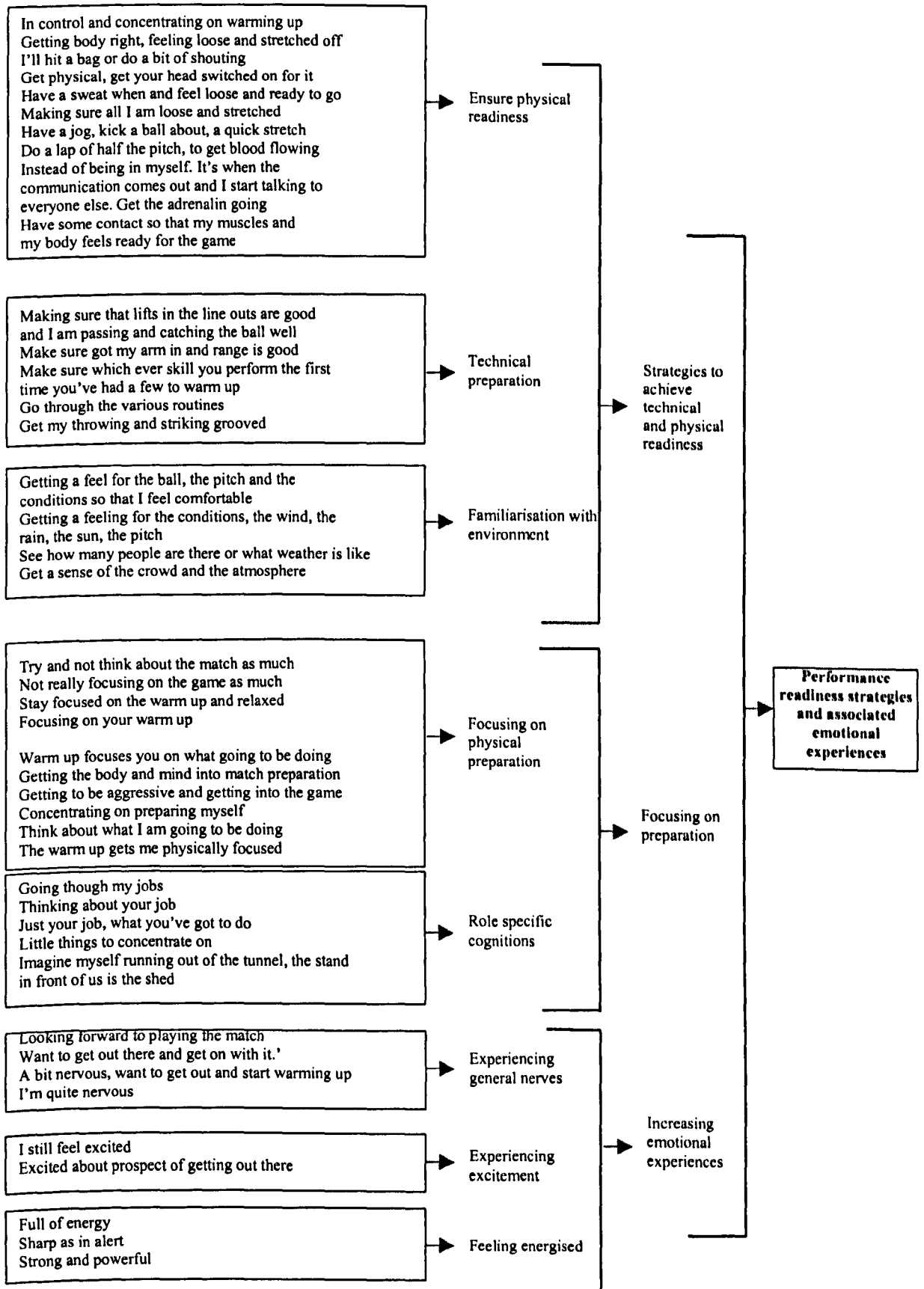


5. Team Meetings

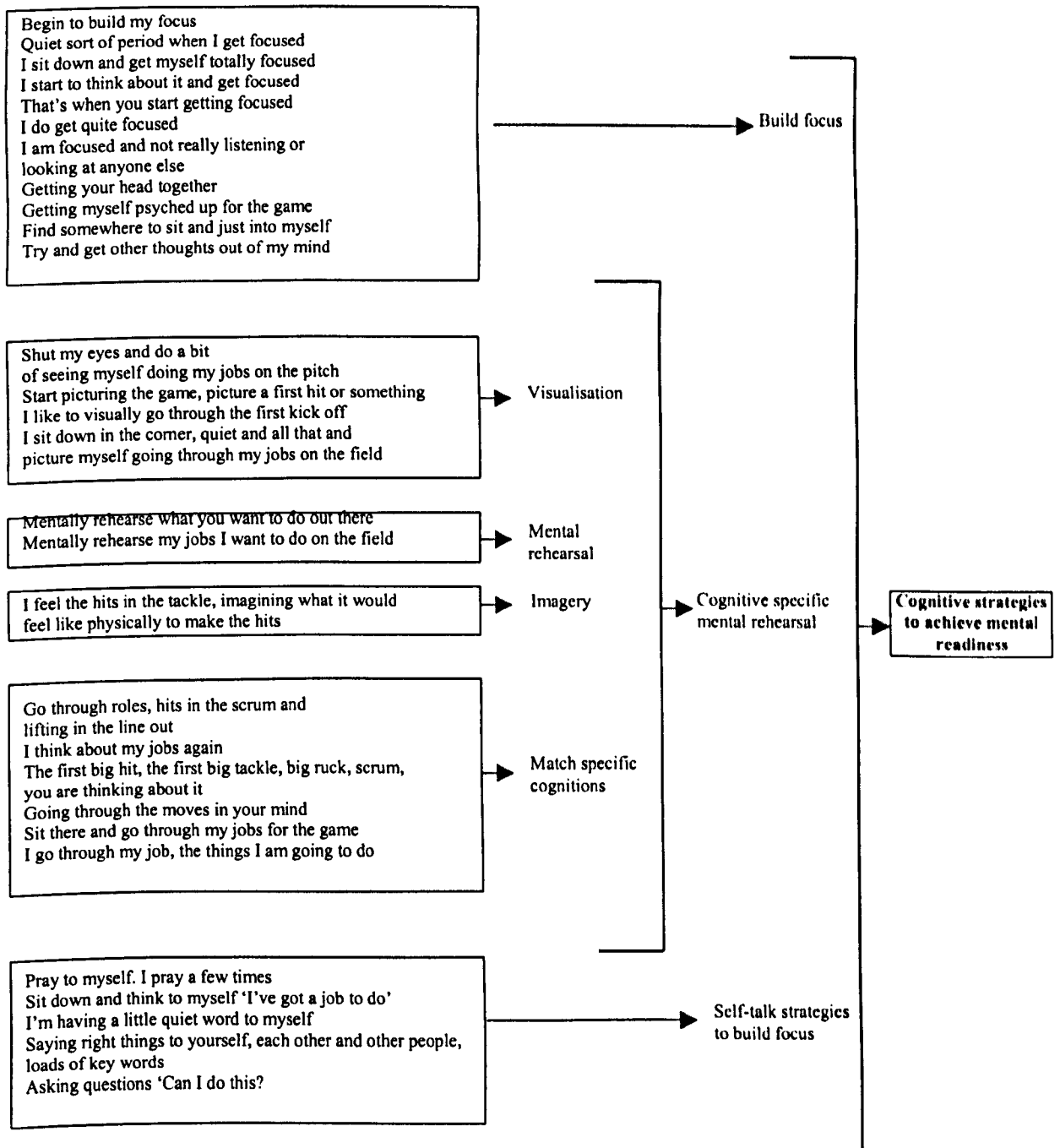


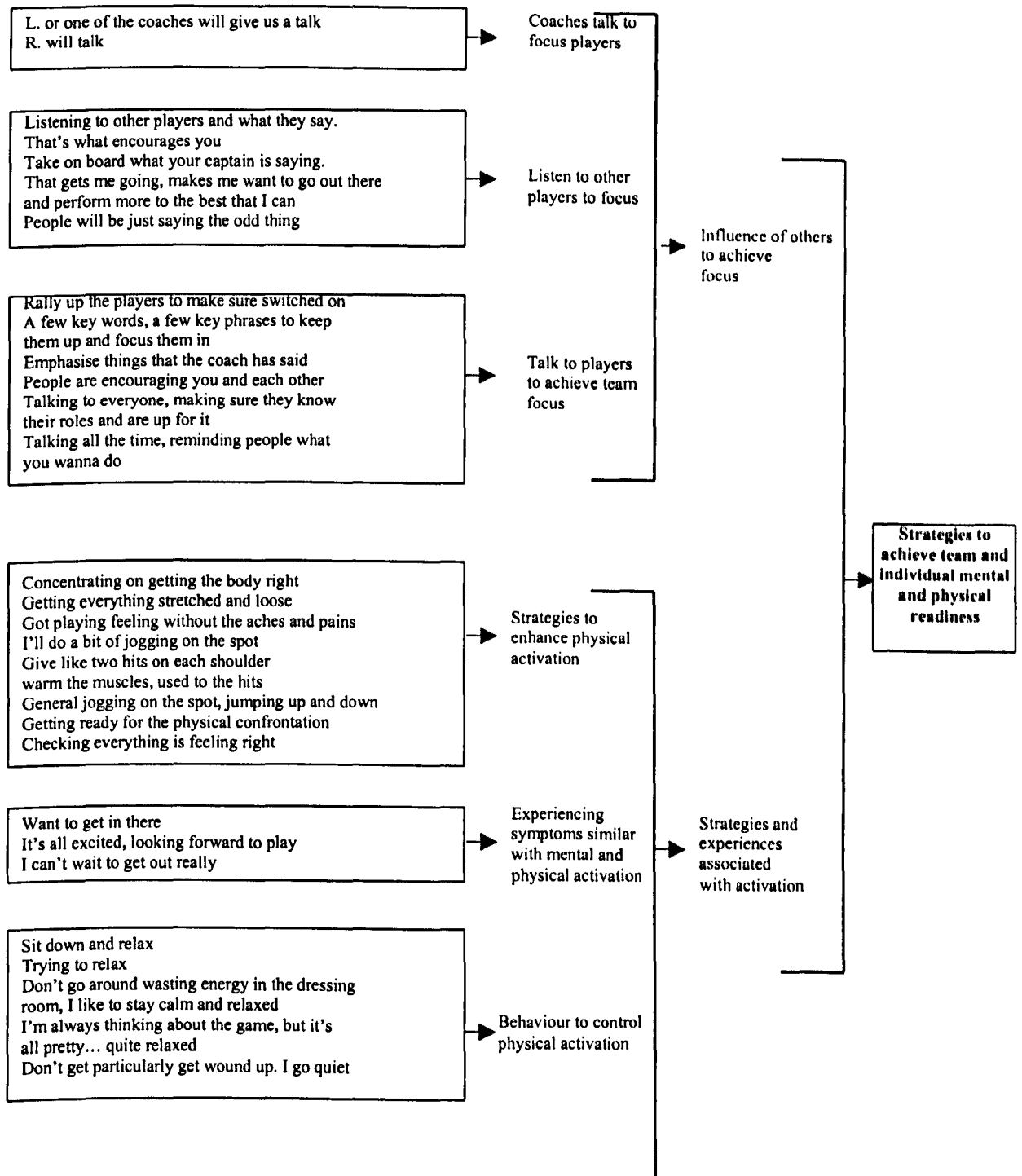


6. Warm up

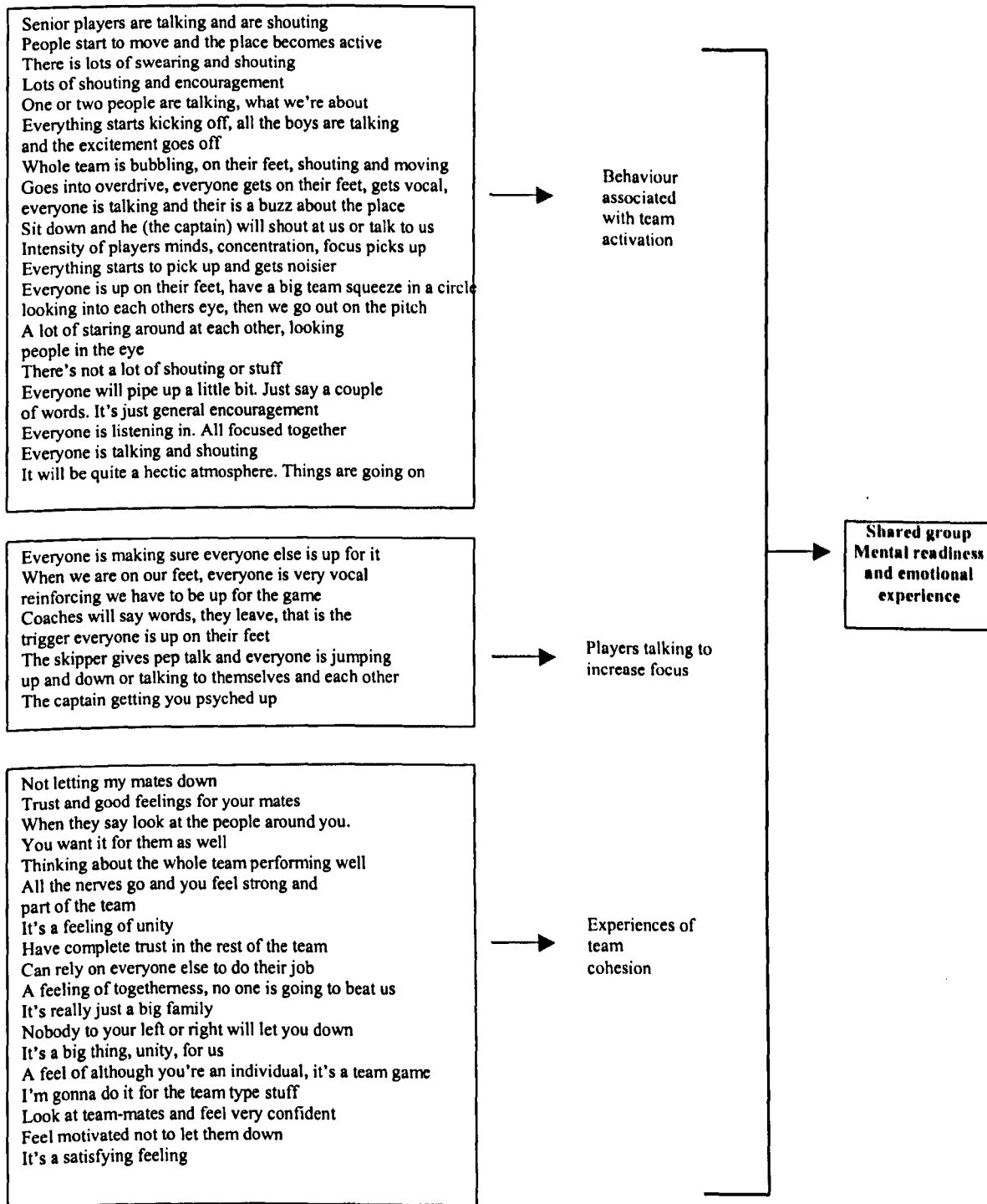


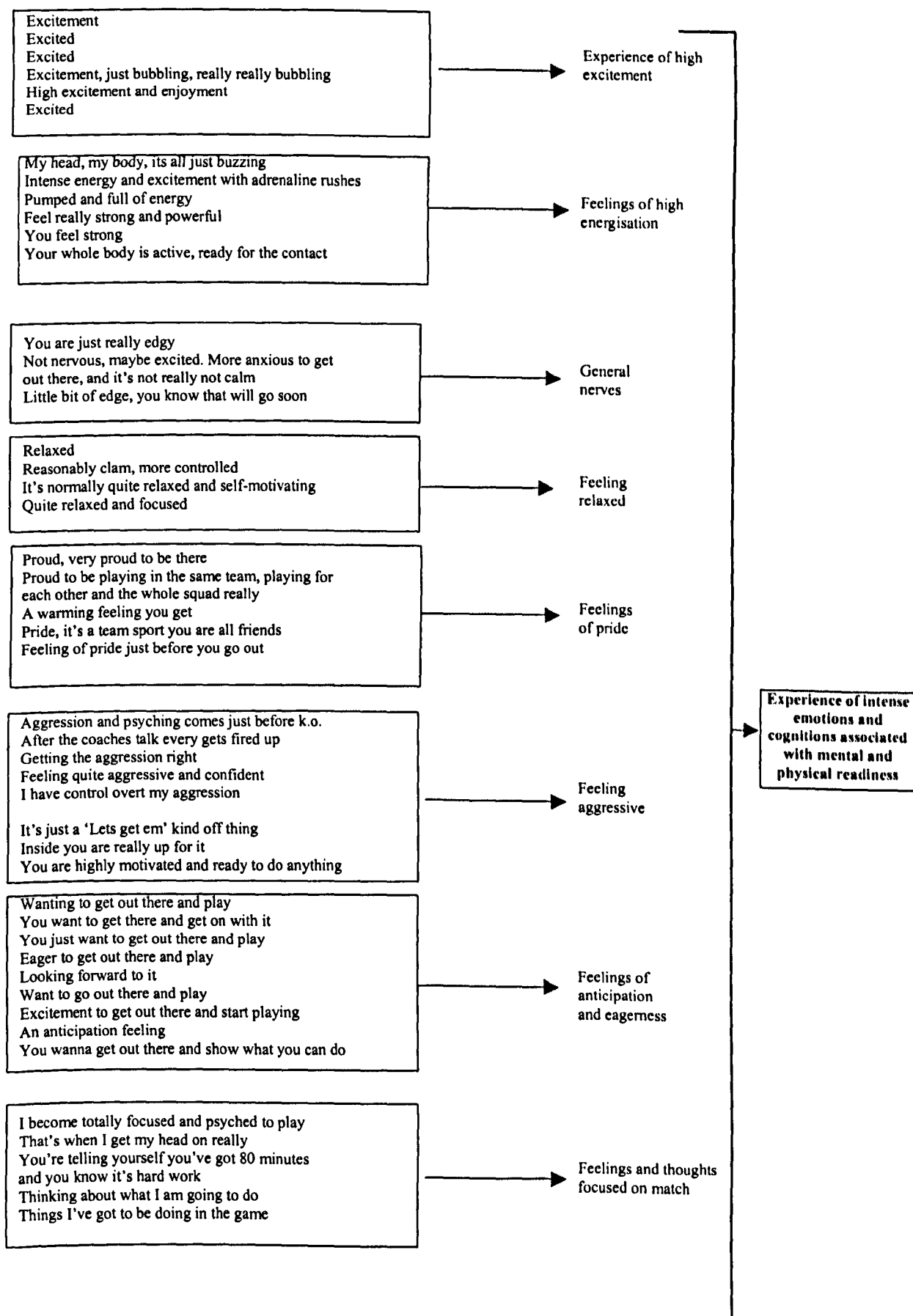
7. Back In



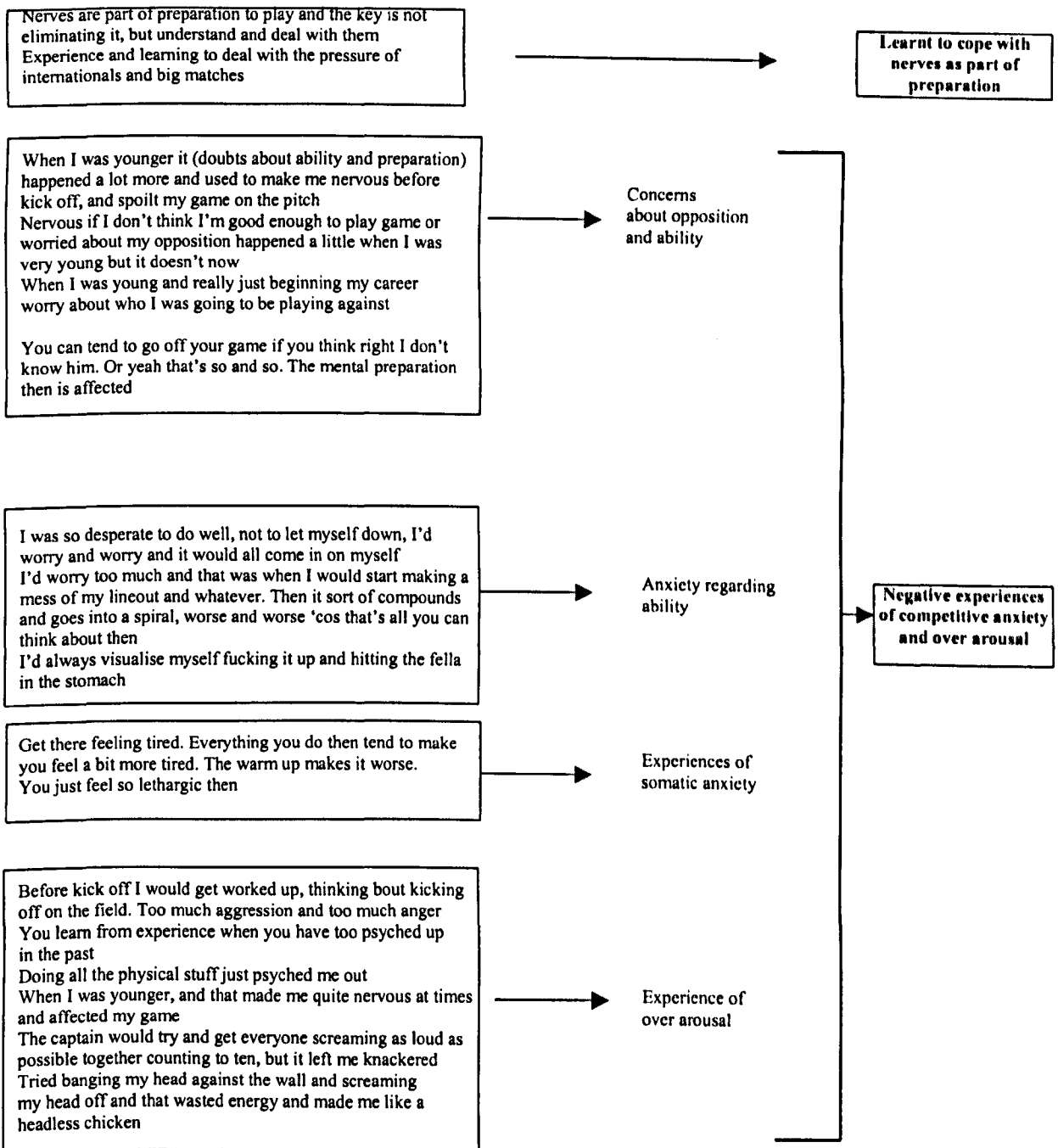


8. Huddle (H)

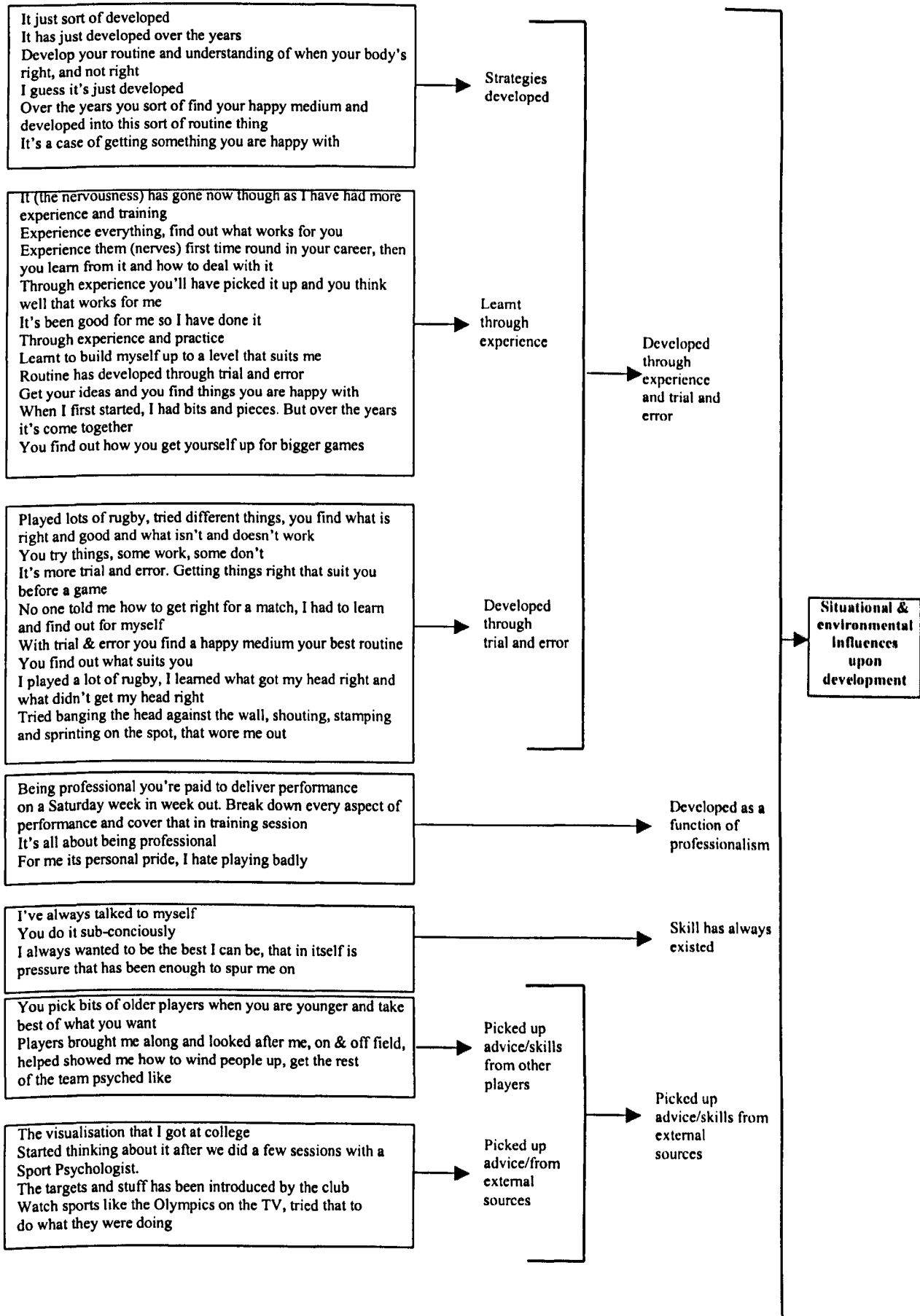




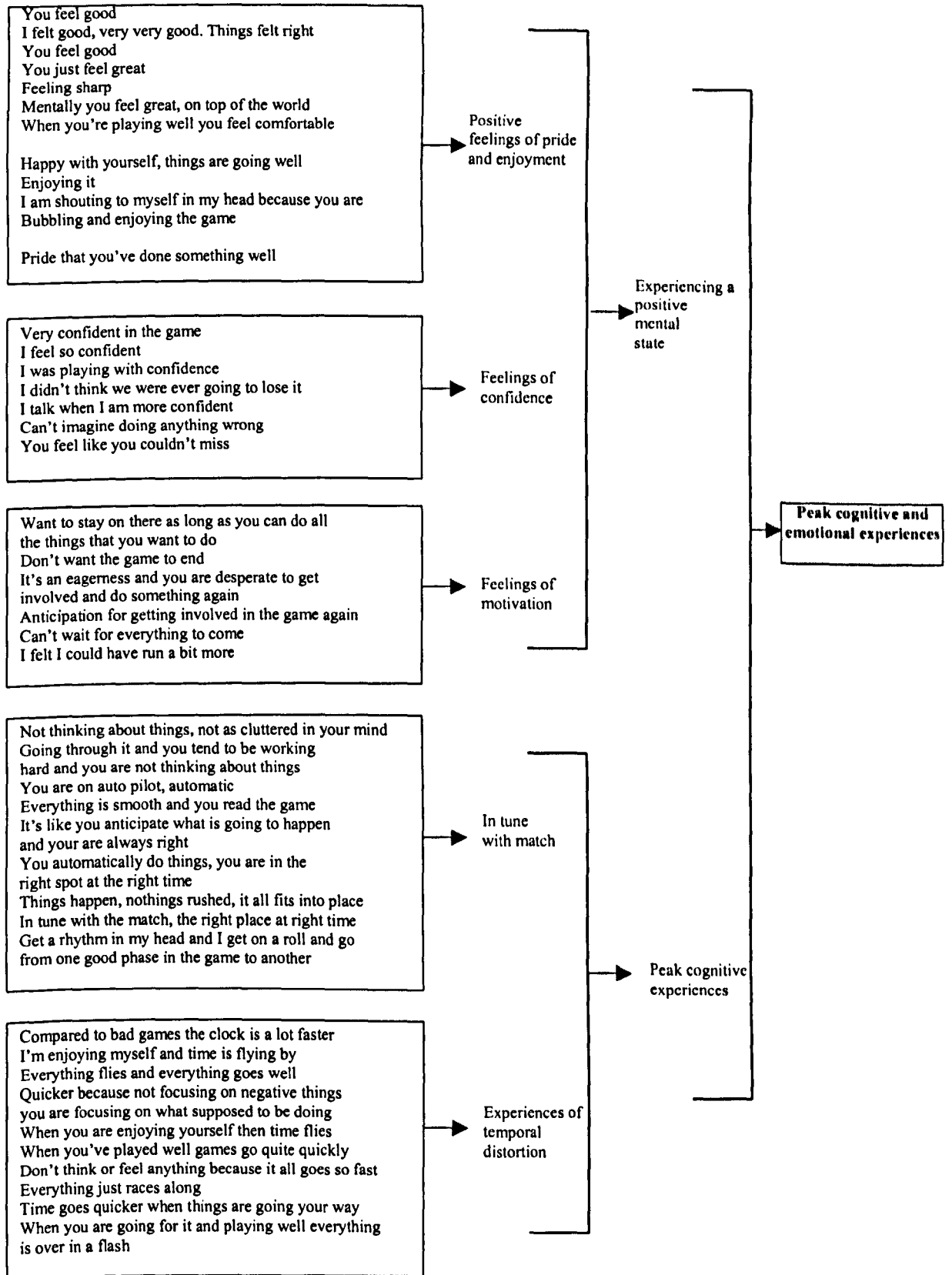
B: Early pre-match experiences

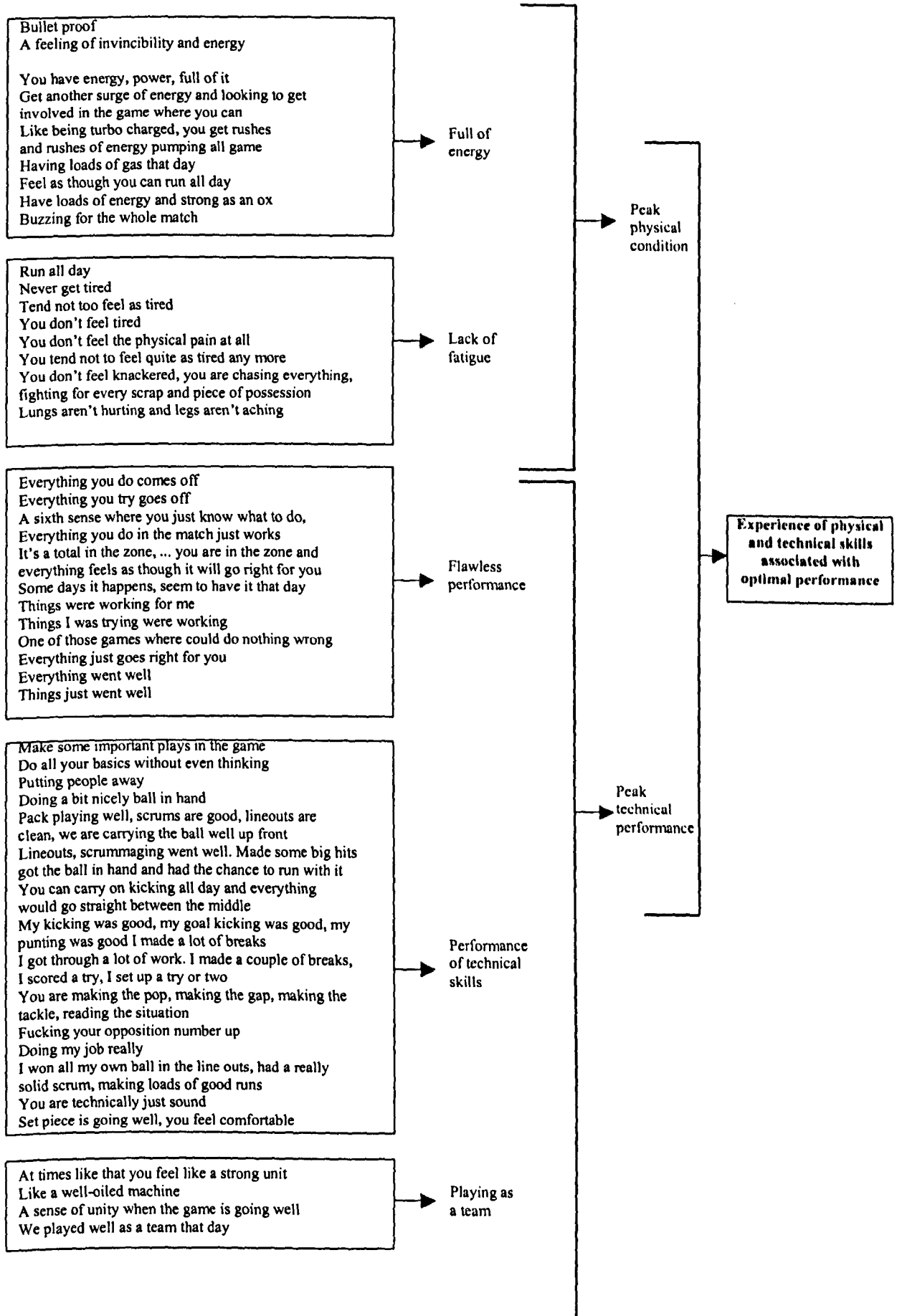


C: Development of psychological strategies

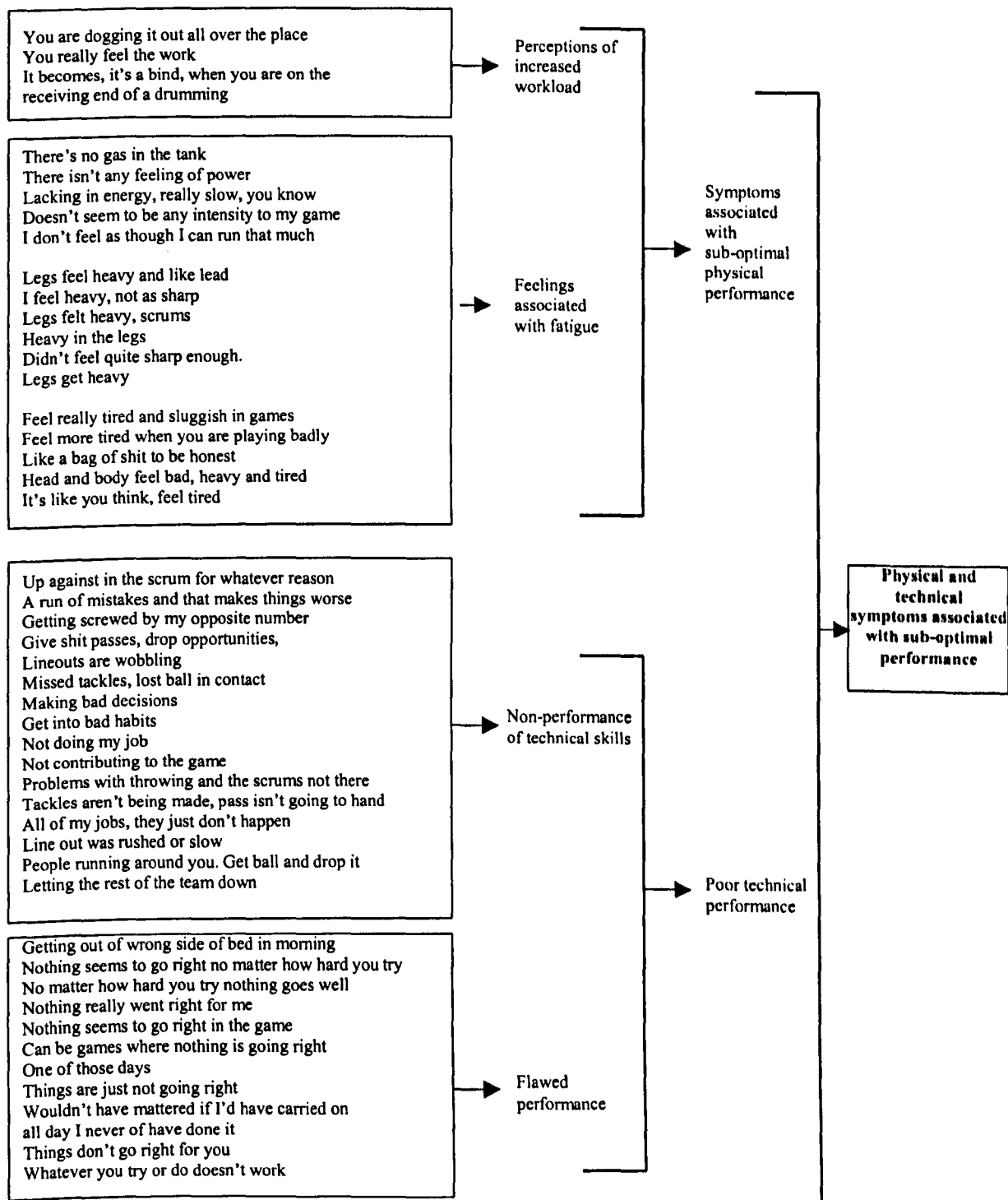


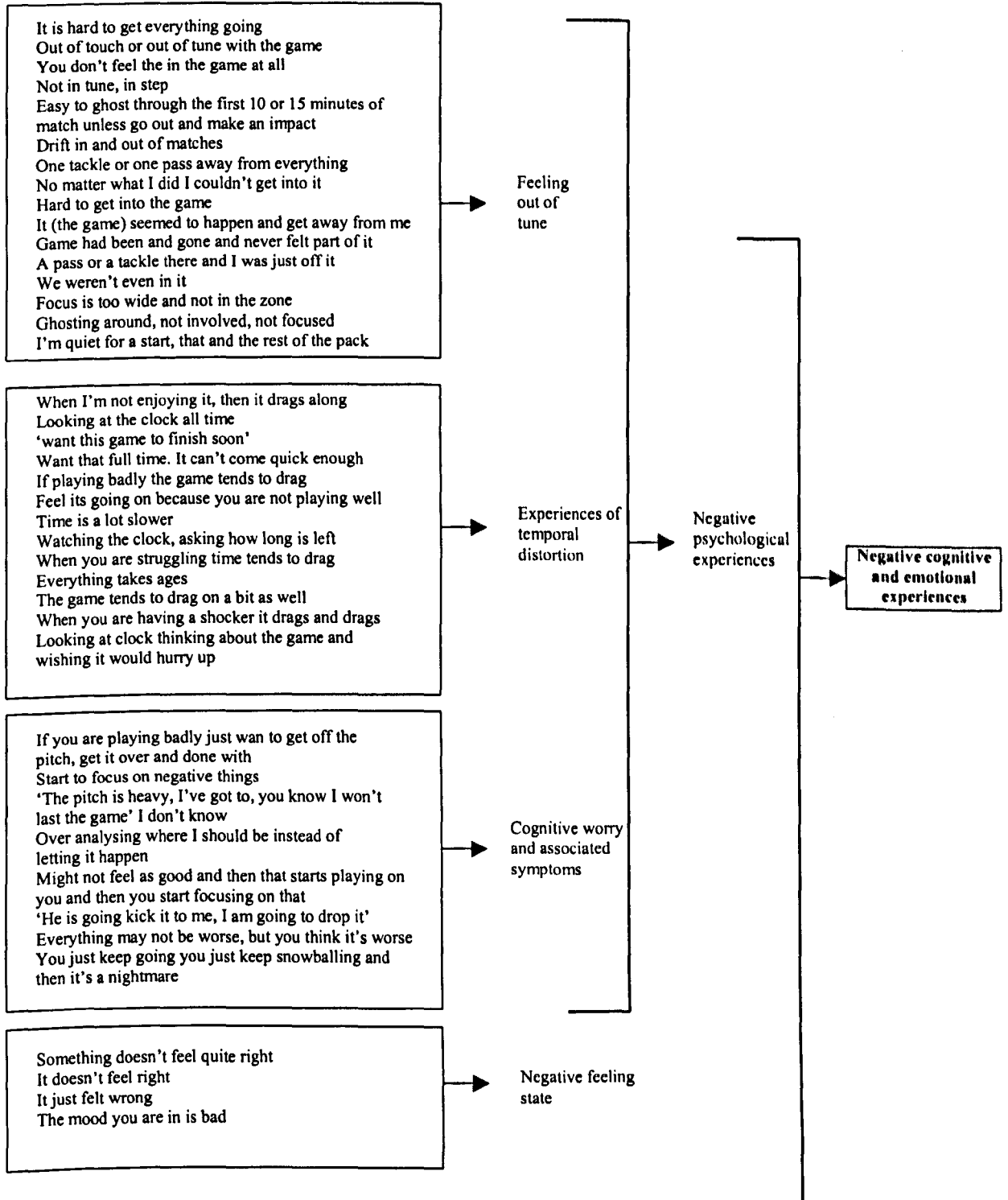
D: Psychology of good performance



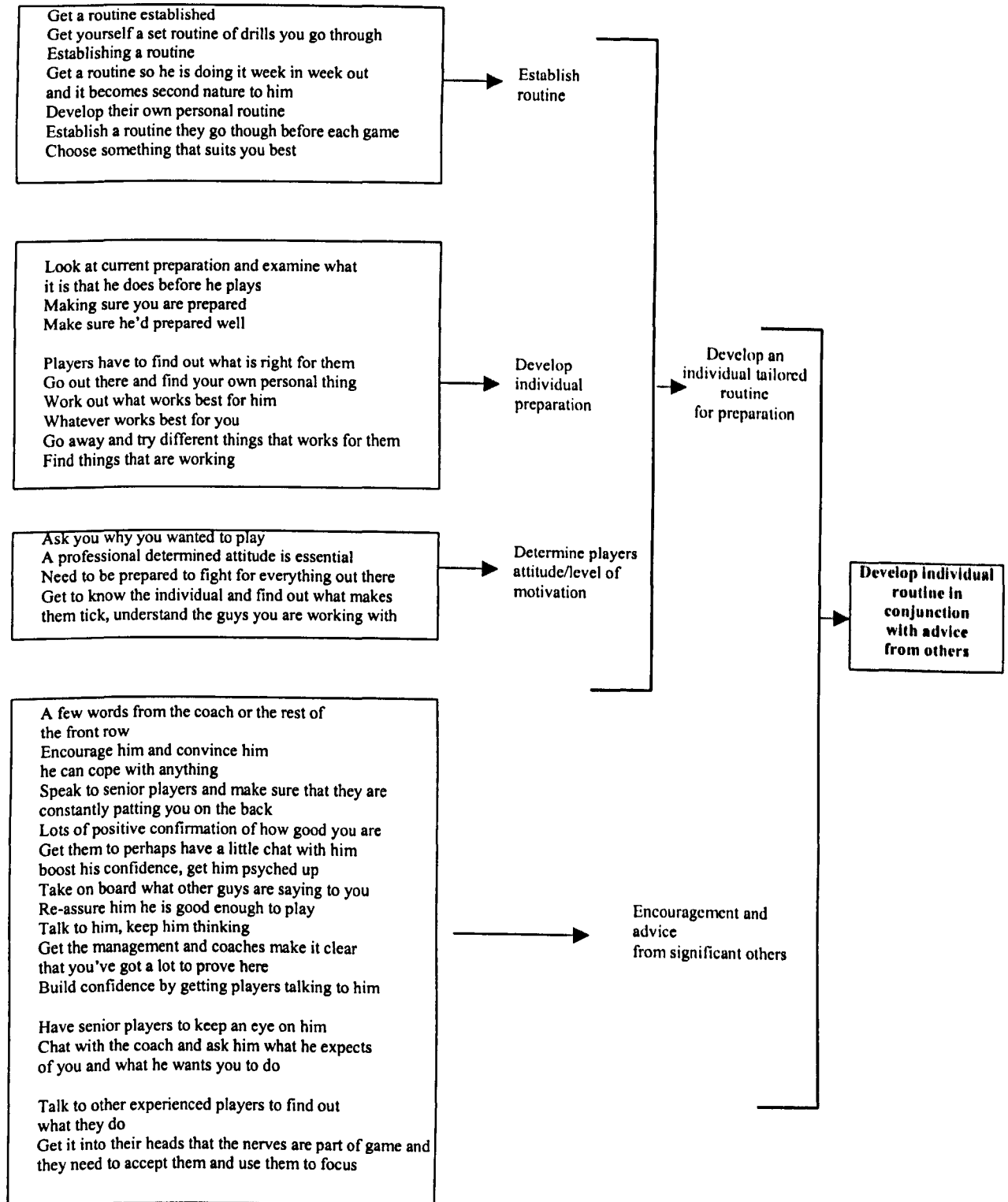


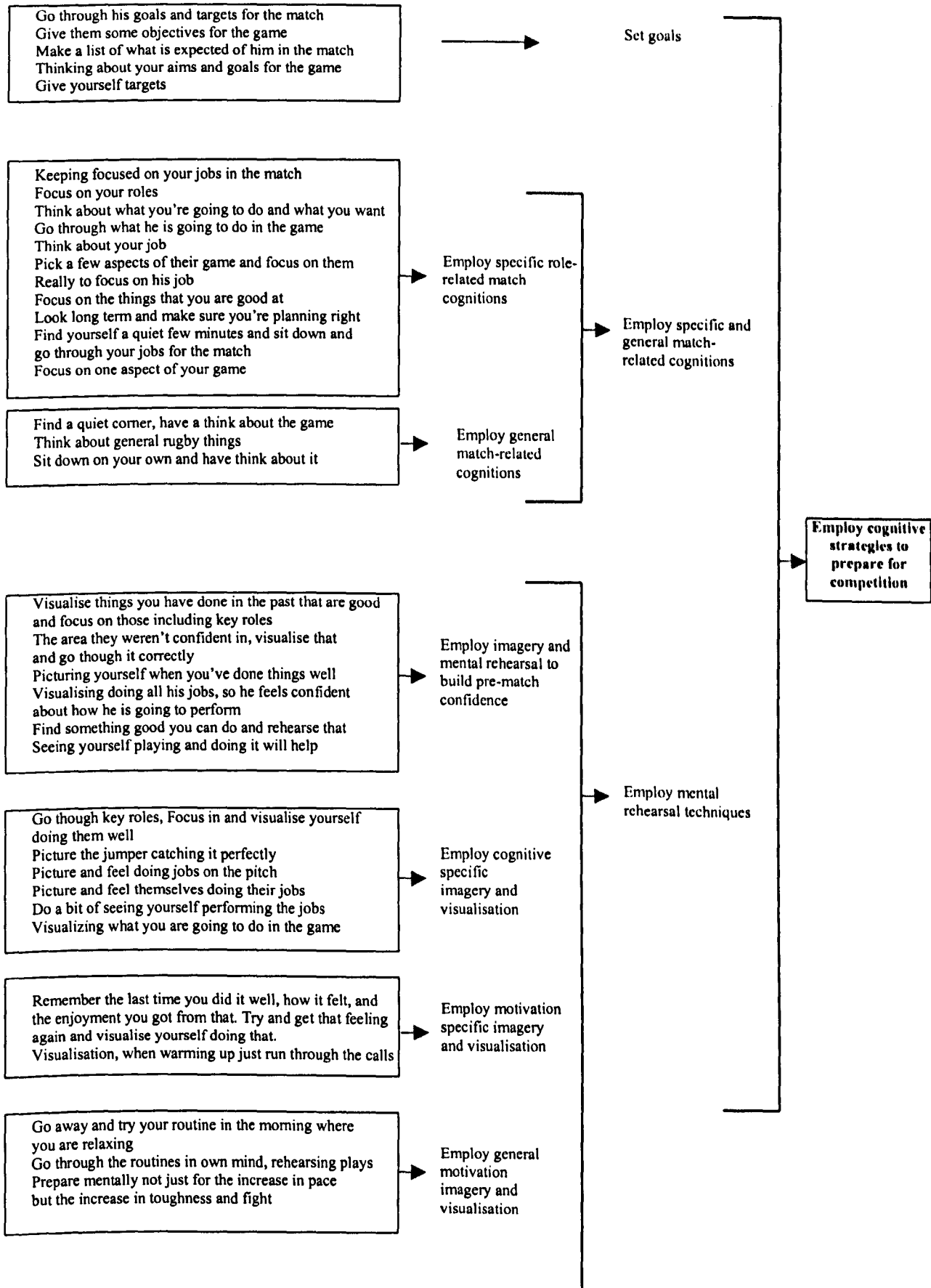
E: Psychology of bad performance

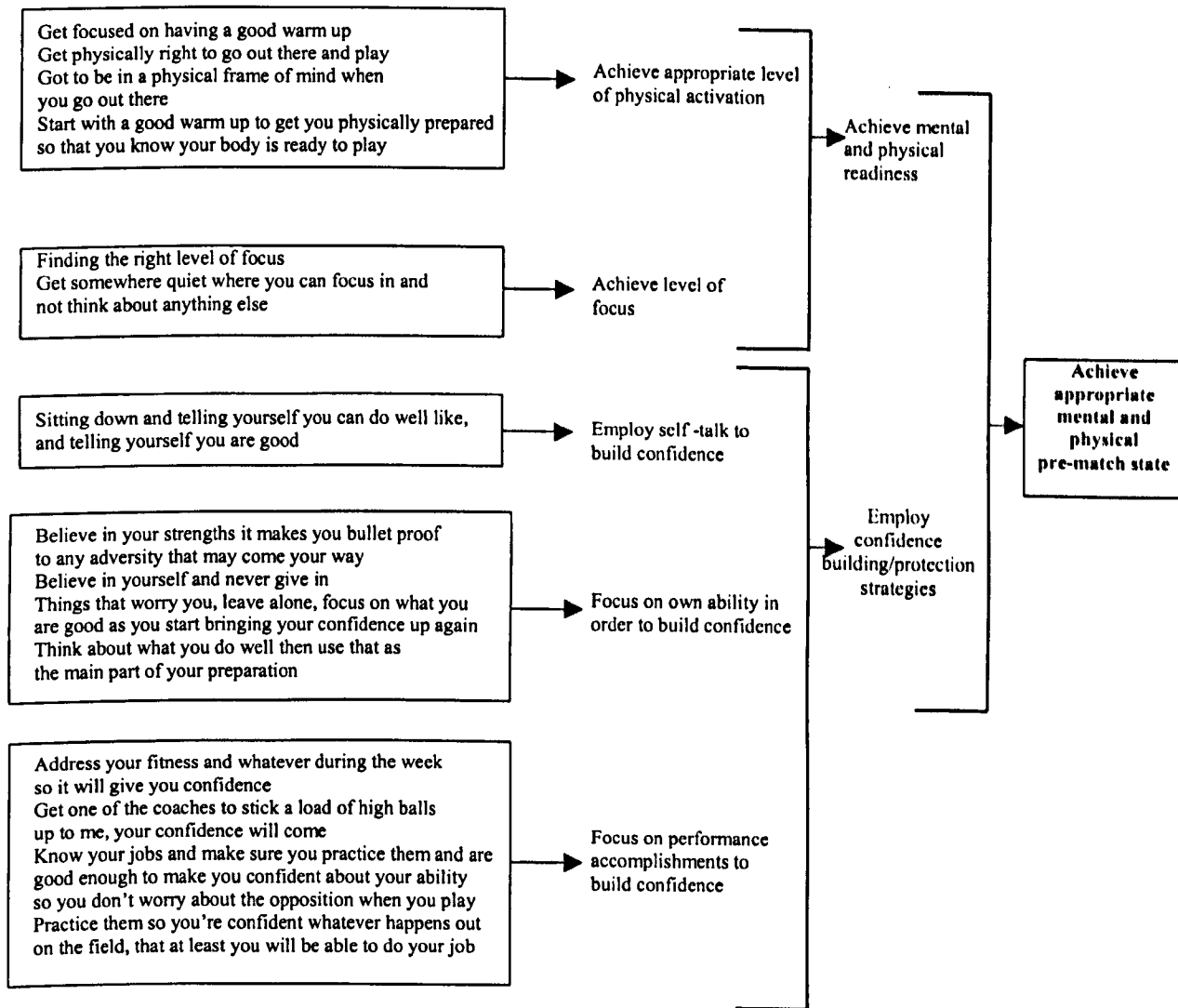




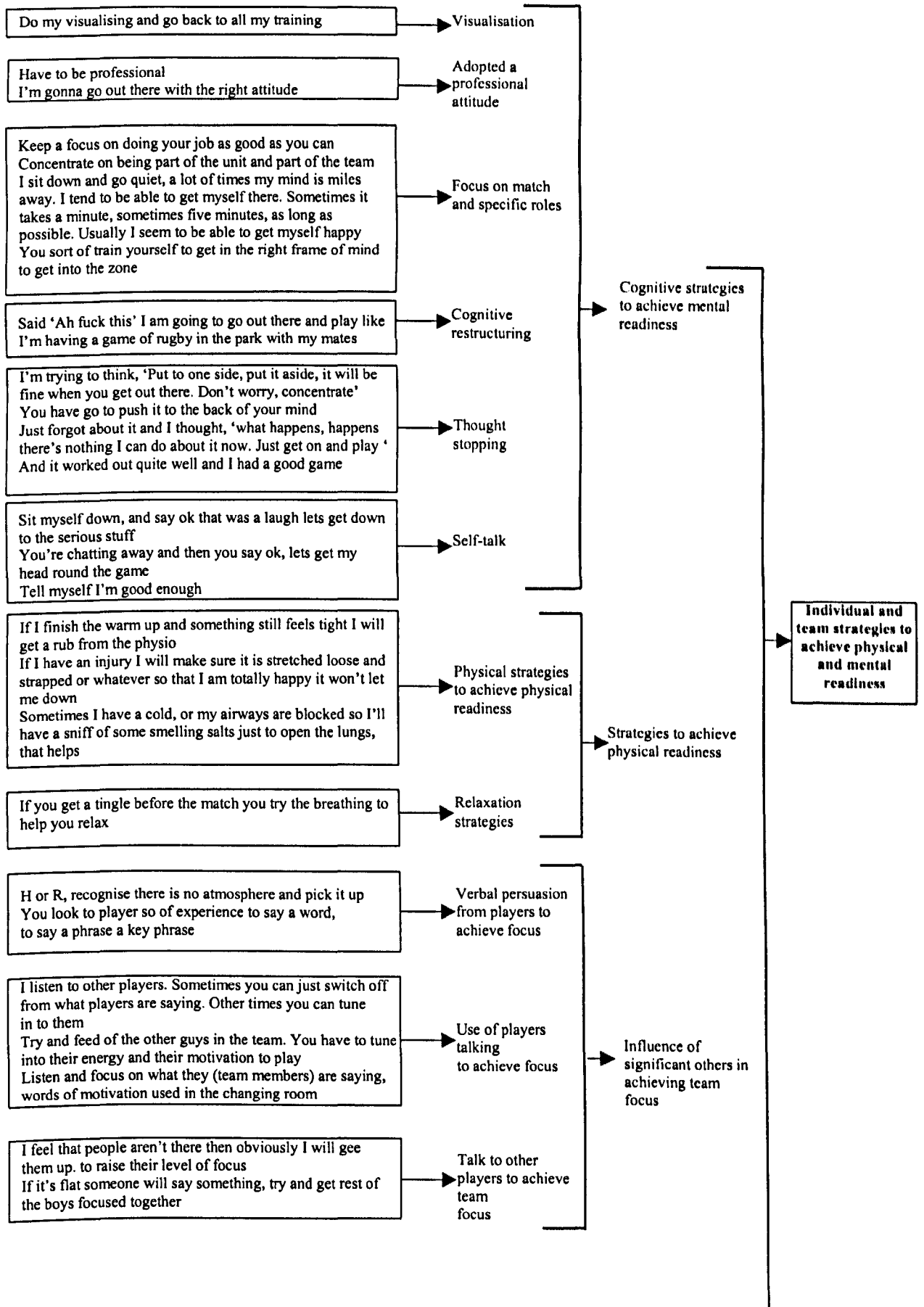
F: Coaching advice



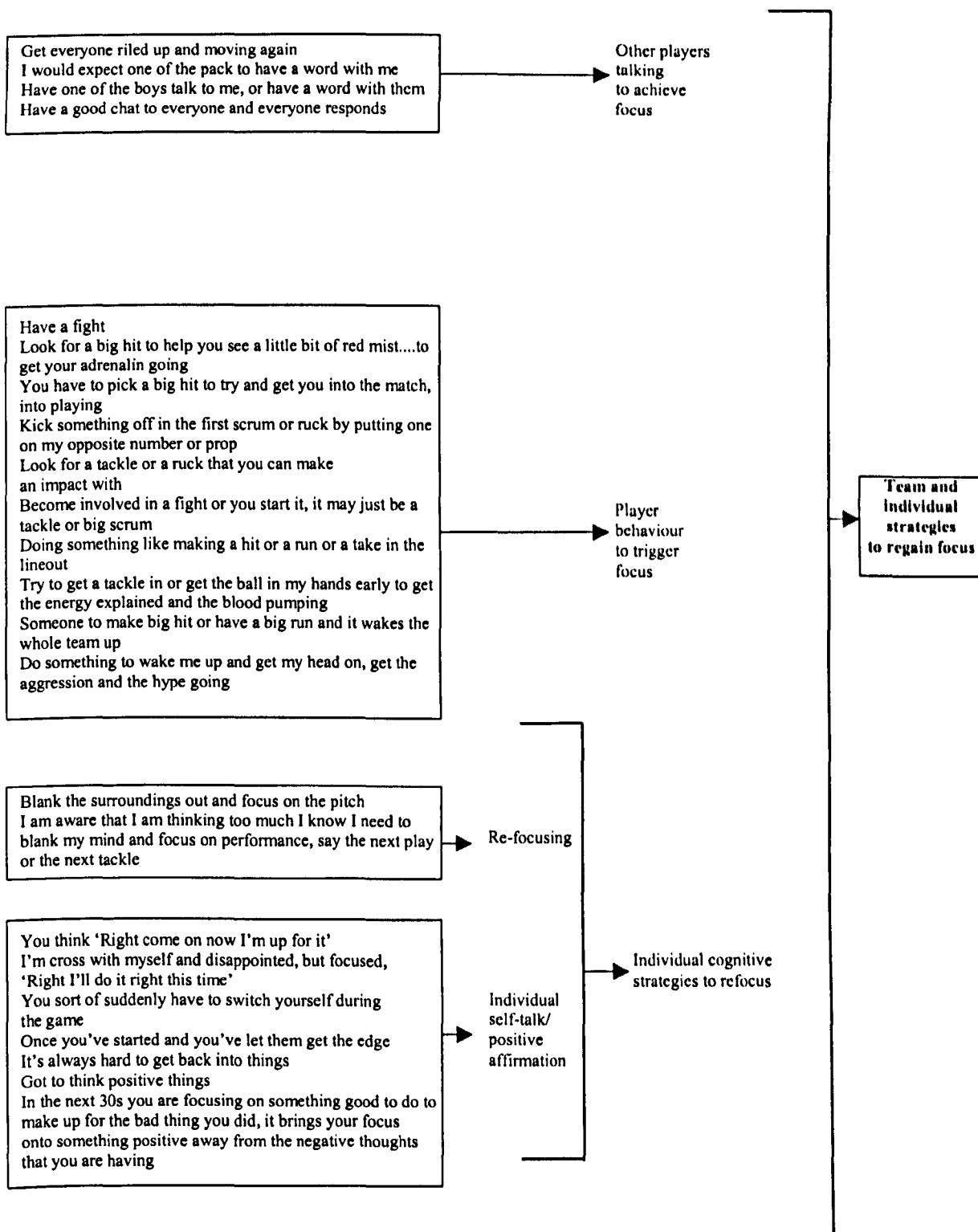




G: Strategies employed to correct inappropriate pre-match mental states



H: In match strategies employed to gain focus



APPENDIX H.

ADAPTED RUGBY VERSION OF THE PERFORMANCE PROFILE

APPENDIX I.

THE SPORT IMAGERY QUESTIONNAIRE-2

Sport Imagery Questionnaire - 2

Please fill in the blank or circle the appropriate answer:

Sport: _____

Level of Competition: Recreational Club Varsity Provincial National International

Sex: M / F

Age: _____

Athletes use mental imagery in training and competition. Imagery serves two functions. The motivational function of imagery can represent emotion-arousing situations as well as specific goals and goal-oriented behaviours. The cognitive function entails the mental rehearsal of skills and strategies of play. A strategy is a plan or method of achieving some goal. In sport, this often is referred to as a game plan. For example, playing a *pressure game* to create turn overs is a possible strategy to use in basketball, and this could be done executing various skills and tactics (i.e., skills put together in a sequence) such as presses and man-on-man defences. Another example of a strategy would be playing a *baseline* game in tennis; how this is actually accomplished (i.e., the skills performed) would vary considerably over the course of a game. This questionnaire was designed to assess the extent to which you incorporate imagery into your sport. Any statement depicting a function of imagery that you rarely use should be given a **low rating**. In contrast, any statement describing a function of imagery which you use frequently should be given a **high rating**. Your ratings will be made on a seven-point scale, where *one* is the **rarely** or never engage in that kind of imagery end of the scale and *seven* is the **often** engage in that kind of imagery end of the scale. Statements that fall within these two extremes should be rated accordingly along the rest of the scale. Read each statement below and fill in the blank the appropriate number from the scale provided to indicate the degree to which the statement applies to you when you are practising or competing in your sport. Don't be concerned about using the same numbers repeatedly if you feel they represent your true feelings. Remember, there are no right or wrong answers, so please answer as accurately as possible.

APPENDIX J.

SOCIAL VALIDITY QUESTIONNAIRE

POST INTERVENTION FOLLOW-UP QUESTIONNAIRE

Having completed the study we would now like you to answer some questions relating to the various aspects of the mental technique you have been using. Please take a few minutes to read through the questions below and consider them in relation to how you feel about the technique you have been using. Remember, there are no right or wrong answers, all I am looking for are your honest views and opinions.

Read each question and then rate your response based on the following scale:

1	2	3	4	5	6	7	8	9	10
Not at all				Moderately so					Very much so

Q1. How important to you is improvement in pre-match mental readiness? _____

Q2. Do you think any changes in your pre-match mental readiness have been significant? _____

Q3. Has the technique proved acceptable to you? _____

Q4. Has the technique proved useful to you? _____

Q5. In order that I can learn more about the effectiveness of the technique you have been using, in the spaces below, can you provide any explanation(s) as to how you felt the technique was effective / ineffective in changing your pre-match mental readiness?
