

Stress research  
within sport  
psychology  
psychology essay



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Although a number of studies and research have been carried out to determine the effects of stress and anxiety on athletes in various sports in general, the impact of these on individuals associated with surfing remains an unexplored area. However, a lot of existing material that applies to general sports can also be applied to surfing and surfers in particular.

When individuals as sportspersons encounter stressful situations, the outcome in terms of positive (e. g., excitement) or negative (e. g., anxiety) emotional responses, and their subsequent effect on performance, will be influenced by the individuals' ability to successfully manage the different external or internal demands of the sports as perceived (Wann, 1997).

Responses of stress have been associated with, for instance, situations in which the athletes perceive a lack of ability to cope with the stress encountered (Woodman & Hardy, 2001). Thus, they will likely try to actively utilise different coping strategies in order to alter the appraisals, situation or emotional response in the different sports they engage in (Heugten, 2001).

## **2. 1 Anxiety Research**

Anxiety is well-studied construct in a range of psychological research areas, including sports, and has over the years undergone considerable refinements with regard to conceptualisations and inventories used. For a comprehensive understanding of the present body of knowledge of anxiety in sports, an appropriate starting point for this dissertation is to briefly overview the related historical developments within mainstream psychology. Whereas issues referring to anxiety were only occasionally mentioned in psychological literature during the first decades of 20th century, albeit discussed by philosophers for centuries and included in theories by Freud, the number of

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published articles in psychological and sports journals increased dramatically after 1950 (cf. Endler & Kocovski, 2001; Spielberger, 1966). The growing empirical interest could be explained, at least partly, by the development of inventories such as the Manifest Anxiety Scale (MAS; Taylor, 1953) and the Institute for Personality and Ability Testing (IPAT) Anxiety Scale (Cattell, 1957). Although these inventories were regarded as significant advancements to the study of anxiety, mainly because they provided researchers with new assessment possibilities, the early research still struggled with problems of ambiguities and vagueness in the conceptualisation of the construct. Specifically, anxiety was generally regarded as a global personality trait, expressed among individuals as stable differences in character. Explicit distinctions between stable anxiety tendencies and unstable anxiety reactions were, however, seldom provided in the studies conducted (Cattell, 1966; Spielberger, 1966). In addition anxiety was frequently treated synonymously with constructs such as neuroticism, stress, depression, tension and fear, which further increased the conceptual confusion (Cattell, 1966).

Noticing the abundance of definitions used in the first phase of anxiety research, and highlighting the need to both define what anxiety is and to exclude what it is not, Cattell and colleagues (e. g., Cattell & Scheier, 1958) identified two distinct factors of anxiety through the use of factor and correlational analyses. The first factor was referred to as a trait because it included variables consisting of relatively stable personality characteristics. The second factor was instead labelled as a state anxiety factor on the basis that it included variables with unitary response patterns that appeared to

fluctuate over time (Cattell, 1966). Elaborating on this work, Spielberger (1966) took these findings a step further and formulated a conceptual framework of trait-state anxiety, in which the distinction between a stable and an unstable dimension of anxiety was highlighted (Spielberger, 1966). Herein, anxiety as a personality trait (A-trait) was regarded as an individual's average or normal level of anxiety, unrelated to the impact of situational variables, and was defined as: “ a motive or acquired behavioural disposition that predispose an individual to perceive a wide range of objectively nondangerous circumstances as threatening, and to respond to these with A-state reactions disproportionate in intensity to the magnitude of the objective danger” (Spielberger, 1966, p. 17). In order to enable assessment of the new conceptualisation of anxiety, the 40-item inventory “ State Trait Anxiety Inventory” was developed (STAI; Spielberger, Gorsuch, & Lushene, 1970), containing a trait scale (i. e., how one generally feels) and a state scale (i. e., how one feels at the moment). The scale later was revised and renamed as the STAI-form Y (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), and has played a significant role as a standard international measure of anxiety in psychological research (Spielberger & Diaz-Guerrero, 1983).

## **2. 1. 1 Anxiety research within Sport Psychology**

The interest of anxiety experienced by athletes in relation to sport competitions increased dramatically in the beginning of the 1970's and continues to be an intensely studied topic. Yet, issues of “ athletes losing their nerve” had indeed been mentioned much earlier in the psychological literature. For example, Griffith (1934) discussed observations of athletes that displayed good sport techniques at practice, but were poor “ game

performers” who was not used explicitly, concepts such as “ crowd shyness”, and “ fear responses” among athletes can be interpreted as early expressions of what we today label as sport performance anxiety or competitive anxiety. Moreover, Griffith (1934) noticed that “ the athletic field and locker room are veritable experimental laboratories for the study of emotion and mood” and that “ the athletic field makes a more accessible laboratory for the practical study of various psychological traits than is made by almost any other situation into which human beings may venture” (p. 23-24).

The increased research interest of the role of anxiety in sport competition was certainly shown in Europe. During the late 1970's, the European Federation of Sports Psychology (Federation EuropeÄ-ne de Psychologise des Sport et des Activites Corporelles; FEPSAC) initiated an international research project specifically dedicated to increasing the understand of anxiety in sports (Schilling & Apitzsch, 1989). Because the STAI was relatively brief (40 items), and was therefore easy to apply in sports settings, it was judged suitable for sport psychology research and was soon adapted and regarded as a significant advancement in measurement(Schilling & Apitzsch, 1989; Smith, Smoll, & Wiechman, 1998). Studies utilising the STAI, which included a range of sports, generally supported that the state scale of the STAI was sensitive to changes in anxiety levels among athletes, but less support for the usefulness of the trait scale was found (Spielberger, 1989).

## **2. 2 Stress Research within Sport Psychology**

The word stress, like success, failure, or happiness, means different things to different people and, except for a few scientists, no one has really tried to

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define it, although it has become part of our daily vocabulary. As mentioned by Graham Jones, the study of stress remains a subject field of great interest to both the academic researchers, as well as, sports professionals (Jones, 1993). Personnel, who are there to provide support and coaching assistance to the surfers and other athletes, need to know the psychological forces that may define the behaviour of an individual (Logoff et. al, 2008). The understanding of these forces and behaviours helps these professionals in knowing ways in which stress may affect the performance of the surfer or any other athlete negatively (Holding, 2000). Stress is an integral part of the natural fabric of life in which a person's behaviour is evaluated by others can be stressful (Spielberger, 1979).

Martens, Vealey, and Burton (1990) stated, " stress has been defined as stimulus, intervening and response to variables by different researchers. As a stimulus variable stress is a precipitator; as an intervening variable, a mediator; and as a response variable, a behavior." There are many factors which can cause stress for an athlete. There are two ways these are demonstrated, the stress model (fig-1) and the stress response process (fig-2). See the figures below.

<http://thesportdigest.com/archive/files/volume-17-number-4/fullerton-vol17no4-stress.png>

Figure Stress model by Jones and Hardy (1990)

The stress model demonstrates what factors affect stress in sport. Stress can affect performance, the way an athlete responds to the stress can affect it,

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and the management of the stress can negatively or positively affect the athlete's stress level.

The stress response process (shown below) consists of five stages. Stage 1 is the environmental demand; stage 2 is the athlete's perception of the environmental demand; stage 3 is the stress response to the environmental demand; stage 4 is the behavioural consequences of the stress response to the behavioural demand; stage 5 is the return to a homeostatic position.

<http://thesportdigest.com/archive/files/volume-17-number-4/fullerton-vol17no4-stress2.png>

Figure Stress Response Process, Reilly & Williams, 2003

Stress is a factor of life that affects everyone, but athletes tend to suffer from it more than non-athletes, due to the amount they are required to balance, between schoolwork, practices and games, as well as family pressures and everyday life.

Stressors can be defined as causes of stress. A wide range of physical stimuli acts as stressors, including exercise, restraint, heat, cold, noise, pain, shock, injury and infection. All of these can elicit stress responses which are a simple monotonic function of the intensity of the physical stimulus (Hockey, 1983). Researchers studying sports stress identify Stressors as elements in sports that interrupt an individual's physical and emotional state that may ultimately affect his performance (Patton, 1980). Stressors may be a result of the sport nature itself, communication with fellow trainers and other athletes, and compensation and benefits. Lack of control and lack of

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direction amongst the team, constructors and trainers is a common issue in sports that leads to stress amongst the athletes (Davis, 2000).

Psychological stress is currently defined in at least two different ways. It refers first to the dangerous, potentially harmful or unpleasant external situations or conditions (stressors) that produce stress reactions, and secondly, to the internal thoughts, judgements, emotional states and physiological process that are evoked by stressful stimuli (Spielberger, 1979). Bainbridge (1974) has defined information-processing capacity as the processing operations and processing strategies which a person has available. An individual's level of performance will be a function of the processing capacity and the task demands, and a person's experience will be important in terms of the processing operations and processing strategies that have been developed. Most people work below maximum effort most of the time, and, although they can increase their effort to the maximum for short periods of time (Bainbridge, 1974), continuous work at maximum levels of effort results in more rapid onset of fatigue. Jones (1993) also suggested that a large proportion of the athletes failed to perform to potential because they were unable to maintain their concentration in the face of distractions. This is clearly not just a problem for elite athletes; it is a problem for all serious sports performers, no matter what their ability level.

## **2. 2. 1 Sign and Symptoms**

There are many signs and symptoms of stress, and everyone is different, so one sign or symptom described by one athlete may not be what another athlete experiences. Ray and Weise-Bjornstal (1999) described seven

categories in which an athlete may experience stress. These categories are:  
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affective, behavioural, biological/physiological, cognitive, imaginal, interpersonal, and sensory (Ray and Weise-Bjornstal, 1999). Each category has its own signs and symptoms. Affective signs and symptoms include: anxiety, anger, guilt, depression, shame and feeling sorry for oneself. Behavioural signs and symptoms include: sleeping disturbances, restlessness, aggressive behaviour, alcohol or drug abuse, sulking, crying, poor performance, absenteeism, and clenched fists. Biological or physiological signs and symptoms include muscle tension, increased heart rate, indigestion, stomach spasms, pain and headaches.

Cognitive signs and symptoms are frustration, worries, distortion, exaggeration, unrealistic performance expectations, self-defeating statements and self-handicapping. The imaginal signs and symptoms include images of failure, images of reinjures, flashbacks of being injured, images of helplessness, and images of embarrassment. The interpersonal signs and symptoms include withdrawal, manipulation and argumentation. The last category, sensory, includes tension, nausea, cold sweat, clammy hands, pain and butterflies in the stomach (Ray and Weise-Bjornstal, 1999). There are many signs and symptoms of stress, which are not all experienced by each person, and each person can experience a variety of signs and symptoms.

## **2. 3 Emotions and mood**

Anxiety as an emotional response to stressful situations has been mentioned previously in this dissertation, but athletes' experiences of being anxious are also sometimes referred to in the literature as a mood state. Whereas constructs such as affect, emotion and mood are closely related, on a theoretical level they refer to distinct constructs (Beedie, Terry, & Lane, <https://assignbuster.com/stress-research-within-sport-psychology-psychology-essay/>

2005; Lane, Beedie, & Stevens, 2005; Mellalieu, 2003). Moods and emotions are instead generally more narrowly specified, and mood (e. g., an anxious mood) is often referred to as a relatively long-lasting, diffuse state not directly related to any specific objective. Furthermore, moods are proposed to predominantly impact the cognitions of the individual (e. g., memory and information processing) (Davidson, 1994; Lane & Terry, 2000; Siemer, 2005; Vallerand & Blanchard, 2000). Emotions, on the other hand, are often regarded as short-lived and more intense reactions tied to a specific event or object, evaluated as significant for the individual, that could be real but also subjectively appraised (Lane & Terry, 2000; Vallerand & Blanchard, 2000).

In line with a range of research areas within the general field of psychology, a continuous movement toward positive psychology has indeed been evident within sport emotion research during the past years (Dominelli, 2004). To date, research presented in the literature also suggests that this trend, in which not only anxiety but also positive emotions are accounted for, is a beneficial gateway for the further development of a sound knowledge base of athletes' emotional responses to anger and stress.

## **2. 4 Coping with Stress**

The term “ coping” is used to describe means and techniques through which athletes and sports professionals can handle the existing stressors, by either making adaptations to their playing strategies or to themselves. Coping is considered integral to the stress process and has been conceptualized from both a trait and process perspective. If coping is view from a trait perspective then athletes are considered to apply a relatively fixed set of coping strategies across different time points and situations. However, in the <https://assignbuster.com/stress-research-within-sport-psychology-psychology-essay/>

extant literature coping is typically viewed as a dynamic process (Gould et al., 1993). In this regard, coping can be defined as “..... constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984). Because coping is central to the stress process athletes do not necessarily experience a negative psychological or emotional state in response to stressors. Athletes with positive belief in their ability to cope, and in goal attainment, are proposed to those with negative expectancies are proposed to interpret their competitive anxiety symptoms as facilitative to sport performance, whereas those with negative expectancies are proposed to interpret their competitive anxiety symptoms as debilitating to sport performance (Jones & Swain, 1992). Perceptions of the ability to cope with situation may also impact physiological responses. Individuals who performed a task in front of an audience (stressor) are found to record different physiological responses depending on whether they perceive the task as a challenge or a threat (Blascovich, 1992).

### **2. 4. 1 Types of Coping**

There are two main approaches for coping with the stressors. These are Problem-focused coping and Emotion-focused coping (Abraham, 2000). Coping with stress and anxiety is an every-day requirement for normal human growth and development. Going to school, or into a new job for the first time, being separated from parents or loved ones, doubting one's own adequacy in relations with other people, job pressures and deadlines, speaking or entertaining in public are among the many potential sources of stress. (Spielberger, 1979).

The most commonly applied higher-order classification in sport psychology distinguishes between coping strategies that intend to directly address a situation that induces the stressful experience (i. e., problem-focused coping, sometimes also called task-oriented) and strategies that intend to regulate the emotional response or to cognitively reappraise the situation (i. e., emotion-focused coping) (McClure, 2000). This broad classification is based on a process-oriented perspective of coping in which coping is viewed as an inherent, simultaneous part in the transaction between environment and person and is defined as: “ constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Cooper & Palmer, 2000).

Importantly, problem-focused and emotion-focused coping have often mistakenly been treated as two distinct phenomena. Problem-focused coping is one where an individual seeks to change a stressful situation, such that the individual gains control over it and can resolve it successfully (Savickas, 2001). On the other hand, emotion-focused coping is one where the individual attempts to control his own strain response instead of the stressor. This may involve distracting his own self, taking medicines or other substances for reducing the emotional reaction or discussing the situation with a friend or family. Both these coping approaches are useful in handling stress and related strains. However, problem-focused coping is considered the effective of the two (Lennard, 2001).

Even though the view of coping as a process is the most widespread approach within sport psychology research, other researchers contend that <https://assignbuster.com/stress-research-within-sport-psychology-psychology-essay/>

athletes possess different coping styles that predispose them to use a preferred set of coping strategies across a variety of situations or, alternatively, over time but in similar situations (Dominelli, 2004). As Lazarus suggests, to fully understanding a surfer's (athlete's) choice of a certain coping strategy, one needs to understand the individual's personal meaning and appraisal of the situation, which will in turn be dependent on his or her personality. Surfers and athletes are also likely to differ in their ability to cope in a flexible manner across situations as a result of individual differences in cognitive processes such as the ability for complex thinking (Savickas, 2001).

## **2. 5 Competitive Anxiety in Sports**

Even if athletes respond differently to competitive situations perceived as stressful, increased levels of anxiety are a fairly common emotional response that could lead to detrimental effects on performance. Thus, the study of the anxiety response in competitive situations has received much attention within sport psychology literature. Within this field of research, the constructs of arousal and state anxiety have often been used relatively synonymously. Although these constructs are often highly related, they should be distinguished conceptually because of the different implications they have for both theory and assessment (Arent & Landers, 2003; Krane, 1992; Woodman & Hardy, 2001).

### **2. 5. 1 Arousal**

In the literature, arousal has often been described with a number of labels such as activation, "psyched up", mental readiness, energy mobilisation and excitation (Zaichkowsky & Takenaka, 1993). Moreover, arousal is commonly <https://assignbuster.com/stress-research-within-sport-psychology-psychology-essay/>

discussed within the construct of motivation, involving an energising function that physiologically places the individual in a state of readiness and directs the behaviour and mind to the goal or task at hand (Lavallee, Kremer, Moran, & Williams, 2004). Whereas arousal has generally been treated as one-dimensional in nature, it has also been argued that not only physiological, but also behavioural and cognitive, components are involved (Weinberg, 1989). In line with this notion, Gould and Krane (1992) defined arousal as a “general physiological and psychological activation of the organism that varies on a continuum from deep sleep to intense excitement” (p. 121). Other definitions with more direct focus on physiological responses, for example “the organism’s phasic physiological response to environmental stimuli” (Hardy, Parfitt, & Pates, 1994, p. 328) have also been applied in sport psychology research. Theoretical explanations of the impact of arousal on sports performance suggest that arousal might display either a direct or indirect effect. The direct impact occurs as a consequence of arousal, altering the athlete’s access to cognitive and physiological resources, whereas the indirect effect influences performance by the athlete’s interpretation of physiological symptoms as either positive or negative (Hardy, 1996; Hardy et al., 1994). It should be noted that arousal could affect performance either positively or negatively, depending on the intensity level and the nature of the skill or task. Thus, fine-motor skills (e. g., golf putting) requiring control of unwanted muscle activity and precision, or task that require a high degree of concentration or decision-making (e. g., open skilled), will tolerate merely low levels of arousal before performance is negatively affected. In contrast, gross motor skills (e. g., weight lifting) or task with lower decision demands (e. g., closed skilled) will benefit from

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increased arousal levels and, thus will tolerate higher levels of arousal before performance is impaired (Landers & Arent, 2001).

## **2. 5. 2 Competitive state Anxiety**

Early sport psychology researchers were predominantly interested in the arousal construct, but more recent research has frequently focused on state anxiety in preference to arousal. State anxiety is generally regarded as an unpleasant emotional reaction related to stressful situations, in which the arousal component is one inherent element (Woodman & Hardy, 2001). An important distinction between arousal and anxiety is that anxiety involves interpretation of the situation as threatening, whereas arousal is unrelated to any such interpretations (Hammermeister & Burton, 2001). Moreover, anxiety has been suggested as a better predictor of the performance outcome than arousal when the tasks are of a more complex nature and contain a higher cognitive load (Arent & Landers, 2003)

The current most dominant view of state anxiety is to treat it as a multidimensional construct that, apart from the trait-state distinction, also is separated into a cognitive and somatic sub-dimension (Jones, 1995; Martens, Burton, Vealey, Bump, & Smith, 1990; Woodman & Hardy, 2001). This perspective was adopted from anxiety research in educational and clinical psychology, whereby the two research disciplines independently found evidence for the distinction of state anxiety as a cognitive (worry) and somatic (emotionality) component (Davidson & Schwartz, 1976; Liebert & Morris, 1967). Based on test-anxiety research in educational psychology, the cognitive element of anxiety was labelled as “worry” and was defined as individuals’ cognitive concerns and negative self-expectations, worry about <https://assignbuster.com/stress-research-within-sport-psychology-psychology-essay/>

the situation and possible consequences. The somatic component was instead referred to as “ emotionality” and defined as the individuals’ perceptions of physiological and affective elements of anxiety, including indications of autonomic arousal and unpleasant symptoms such as tension and nervousness (Liebert & Morris, 1967; Morris, Davis, & Hutchings, 1981). In the clinical literature, a distinction was instead made between “ cognitive anxiety” (i. e., conscious awareness of unpleasant feelings about oneself or external stimuli, worry and disturbing visual images), “ somatic anxiety” (awareness of, for instance, blushing, increased heart rate and muscular symptoms), and “ attentional disturbances” (Davidson & Schwartz, 1976). Even though test anxiety research and clinical research each labelled the cognitive-somatic distinction a bit differently, the cores of the sub-dimensions were rather similar. The constructs of cognitive anxiety/worry and somatic anxiety/emotionality were further proposed to display co-variation in stressful situations and were therefore not viewed as totally independent constructs (Morris et al., 1981).

Cognitive anxiety, in particular, is suggested as being associated with antecedents of threats against the self (e. g., self-presentation threats), whereas somatic anxiety is suggested as linked to antecedents (e. g., environmental stimuli) that elicit increases in autonomic arousal (cf. Burton, 1998; Wilson & Eklund, 1998; Woodman & Hardy, 2001). For example, athletes generally respond with increased state anxiety in situations in which competition is viewed as important for the athlete and the outcome is perceived as highly uncertain (Martens et al., 1990a; Raglin & Hanin, 2000). A premier antecedent to state anxiety in these situations is the perception of



threat (e. g., worry of failure or of negative social evaluation)

(Hammermeister & Burton, 2001). Building on work by Lazarus and colleagues (Lazarus, 1999; Lazarus & Folkman, 1984) and applying it more specifically onto sports situations, Cerin, Szabo, Hunt, and Williams (2000) further underline the complexity involved. They suggest that the interplay between variables such as (a) demands, constraints and opportunities within the competitive situation, (b) temporal and stable situational and personal factors (e. g., age, gender, experience, a variety of personality dispositions, the nature of the sport), and finally (c) the athlete's appraisal of the situation and coping behaviours, are all important variables to consider in order to understand the athlete's emotional responses and subsequent behaviour (Cerin et al., 2000).

## **2. 6 Anxiety/stress and Performance**

Precise identification of the relationship between stress and performance has proved elusive. This elusiveness has been at least partly due to a general lack of precision in defining and distinguishing between key concepts such as arousal and anxiety. The relationship between anxiety and performance has attracted much research. The origins of this work can be found in the early study of arousal and performance, in which anxiety generally was regarded to be present when arousal states were high (Weinberg, 1989). Although theories such as Drive theory (Hull, 1943; Spence & Spence, 1966), the inverted-U hypothesis (Yerkes & Dodson, 1908) and Reversal theory (Kerr, 1977) all have contributed to the understanding and development of the field, their original focus was aimed at the relationship between arousal and performance – and consequently not at anxiety and performance.

## 2. 6. 1 Inverted-U Theory

Inverted-U hypothesis derived from the work of Yerkes and Dodson (1908), which is a hypothesis applied to sport, which states that performance improves as arousal levels increase up to an optimum point, beyond which it deteriorates. Although arousal and anxiety are not seen as synonymous, they are taken as being interrelated - hence the hypothesis is often used to predict the effects of competitive anxiety on performance (Graydon, 2002). In practice, this means that a little excitement and stress associated with competition or performing in public can have a positive effect, but a situation that is too stressful is detrimental. Both of which depend upon the assumption that the stress-performance relationship can be explained as a function of changes in a very general arousal system. In particular, a considerable amount of research effort has been expended on the investigation of the inverted-U hypothesis (e. g. Klavara, 1978). The findings from this research have been equivocal but more importantly, a situation has been created in which terms such as stress, arousal and anxiety have been used interchangeably in many cases. (Jones, 1993)

Despite looking at arousal, anxiety and stress as separate topics; it can be found that they are closely related. Essentially, there are two components, the physical and the psychological, and it is the psychological or cognitive aspect of arousal that can have the most damaging effect on performance. Nevertheless, individuals differ in their basic anxiety levels (trait anxiety), just as they differ in their response to demands. The key factor is how the individual perceives the demand, and knowledge of cognitive techniques can

help alter or modify negative perceptions and consequently improve performance.

## **2. 7 Crowding**

During the last decade, researches have directed ever greater attention to the process and results of human crowding. According Stokols, 1972, studies on crowding have uncovered a great many antecedent conditions, psychological responses, and consequences of crowding. Karlin, 1978, have suggested that any of three events can evoke the label “crowded”: congestion with resource scarcity; inability to control interpersonal interaction; and extremely close physical proximity to others (Karlin et al., 1987). There is other further suggestion that the presence of large numbers of others be added to this set of events, as this factor is most often associated with label “crowding” (Altman et al., 1980).

## **Chapter Three**

### **Methodology**

#### **3. 1 Aims of the Study**

The literature suggests that high levels of anxiety could obstruct performance and decision making in athletes and Surfers in particular. Therefore, the aim of the present research project was to examine the relationship of psychological components of state and trait anxiety in surfers and swimmers. Swimmers were deemed a suitable choice because they are engaged in activities similar to those of Surfers but without the additional stressors of dealing with waves and weather. This was done by using the

Competitive State Anxiety Inventory-2 (CSAI-2d) questionnaire (Jones & Uphill, 2004) to obtain quantitative results.

Research has also supported that the need to not only assess anxiety intensity but also athlete' positive or negative interpretation of anxiety symptoms. Some concerns have also been expressed, for example that anxiety could be confounded with more beneficial performance states or that facilitative directional ratings merely express the belief that the symptoms will be beneficial (Burton & Naylor, 1997; Jones and Uphill, 2004). These concerns suggest the need to further investigate athletes' perceptions of the state in order to increase the conceptual clarity of anxiety construct.

Qualitative studies have recently increased in number in anxiety research (Hanton & Connaughton, 2002; Hanton et al., 2002; Hanton, Mellalieu, & Hall, 2004), but qualitative research that investigates in depth what athletes perceive as discriminating between debilitating and facilitative i