

## **EVALUATING RESEARCH INTO AROUSAL AND ANXIETY IN SPORT**

### **Methods of Measurement**

The three most common methods of measuring arousal and anxiety are questionnaires, physiological measures and observation. Questionnaires include the Competitive State Anxiety Inventory (CSAI) and the Sports Competition Anxiety Test (SCAT). Physiological measures involve measuring changes in physiological indicators of arousal such as heart rate, muscle tension, breathing rate. Observational methods involve observing and recording behavioural indicators of anxiety such as biting nails, fiddling with clothes, touching face, as well as changes in performance. These methods all have strengths and weaknesses. The questionnaire method used by Burton and Bird and Horn is probably the easiest method as large amounts of data can be gathered quickly and the method can be used in a sports setting. However, questionnaires are subject to bias in that participants may respond to demand characteristics or be influenced by social desirability. Participants may also have difficulty understanding the questions or applying the descriptions to themselves. Limited response options may also make selecting answers difficult. The Weinberg and Hunt study used both physiological and observational methods. The advantages of physiological methods are that they are scientific and reliable and are not open to bias. However they are impractical in a sports setting. Observational methods can easily be used in a sports setting but they are subject to observer bias and results are often difficult to analyse.

### **Data**

Both the questionnaire method used in the Burton and Bird and Horn studies and the physiological method used in the Weinberg and Hunt study produced quantitative data which can easily be analysed and allows comparisons to be made. However qualitative descriptions and explanations are lacking and it could be argued that these studies provide a reductionist view of anxiety.

### **Usefulness/ Practical Applications**

These studies show that for many athletes performance deteriorates when they are anxious and that cognitive anxiety is the most damaging. Research into anxiety and sports performance which tells us more about when and how anxiety is likely to effect performance is useful to athletes and coaches who can use this information to try to develop strategies to control or reduce anxiety, thereby minimizing its effects on performance. According to the results of Burton and Bird and Horn, these strategies should focus on cognitive anxiety.