Anxiety, Depression and Perceived Sporting Performance amongst Professional Cricket Players

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Introduction

- Mental health in sport is a hard-hitting topic that is frequently the subject of news coverage and increasingly a theme for avid research. Cricket in particular has been the vanguard within the sporting arena, with several high profile players and coaches striving to break the taboo of mental health amongst players and bring the topic into the public forum (1).

- Some suggest that cricketers, participating in a game unique in its statistical analysis of individual performance, prolonged periods of play away from home and extended solitary game time to reflect on errors, may be especially prone to developing depression (2). Furthermore, in-keeping with other professional sports, an abrupt fall from the spotlight to anonymity and premature retirement secondary to injury or loss of form, may occur at a much earlier age than typical vocations.

- This hypothesis is supported by a recent study reporting a higher rate of suicide amongst male Test cricketers when compared to the UK male general population (3). Twenty suicides amongst 2794 male Test cricketers from 1877 to 2014 were documented. Depression and alcohol misuse were common within this cohort.

- Moreover, it has been widely reported that a level of anxiety, deemed to be within the individualised zone of optimal functioning (4) can be beneficial to sporting performance. Several theories suggest that if the level of anxiety lies outside the zone of optimal functioning, above or below, then performance will deteriorate. A succession of theories have since expanded on these central themes, incorporating the influence of self-confidence and physiological arousal (5). What remains clear is that stress and anxiety exert a powerful influence on sporting performance.

Aims

1. Ascertain rates of anxiety and depression by screening professional cricket players using the Generalised Anxiety Disorder Questionnaire (GAD-7) and Patient Health Questionnaire (PHQ-9), respectively.
2. Identify the prevalence of several confounding factors for poor mental health.
3. Investigate whether professional cricket players perceive stress and anxiety to be beneficial to their sporting performance.

Methods

- 21 male professional cricketers were included in this anonymous questionnaire based study.
- The final questionnaire consisted of a series of demographic fields, the validated complete PHQ-9 and GAD-7 and a final section exploring the player's perceptions regarding anxiety and performance.
- Analysis was conducted utilising Microsoft Excel.

Results

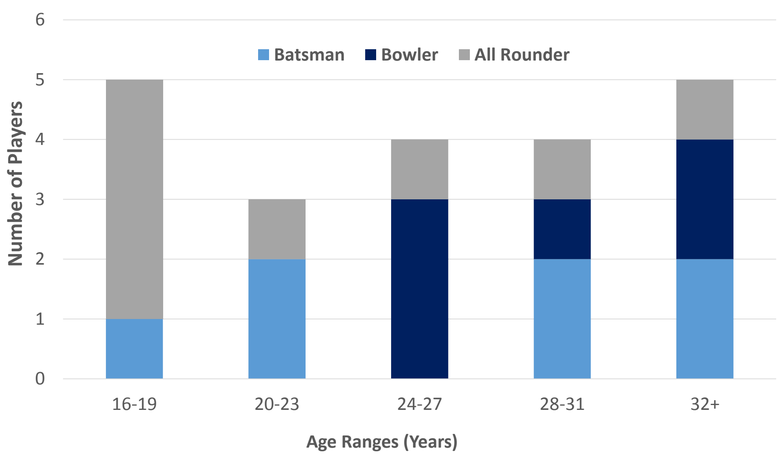

Figure 1. Graph to show player age range distribution and identified playing position (n=21). Relatively even distribution of age ranges and playing positions.

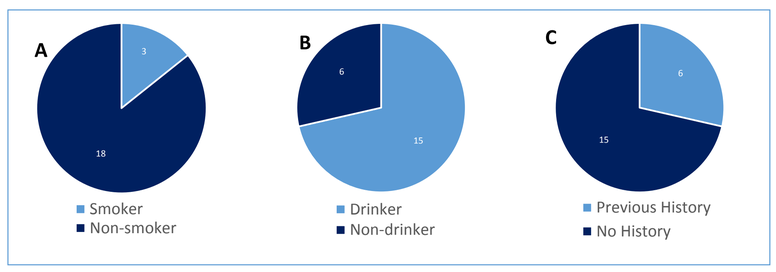

Figure 2. Pie charts to depict prevalence of potentially confounding factors for mental and physical health (n=21). A) Smoking history **B)** Alcohol history. Of the players who drink alcohol, the average consumption is 9.8 units per week **C)** Mental health history. No players had a history of illicit drug use. Regarding medications, two players were currently taking analgesics.

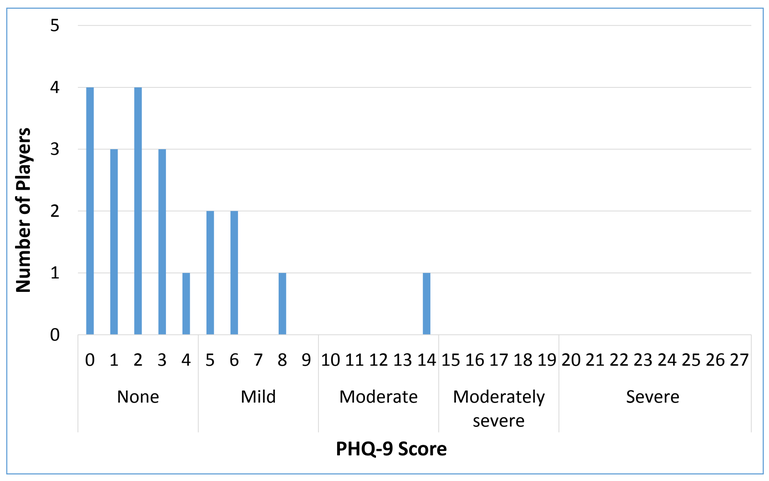

Figure 3. Graph to show PHQ-9 score distribution (n=21). Six players had a positive depression screen, five scoring mild and one player within the moderate range.

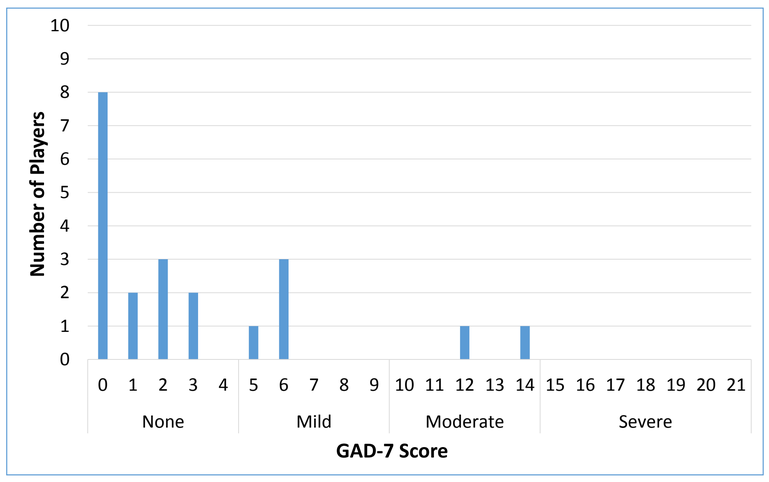

Figure 4. Graph to show GAD-7 score distribution (n=21). Six players had a positive anxiety screen, four scoring mild and two players within the moderate range.

Results continued

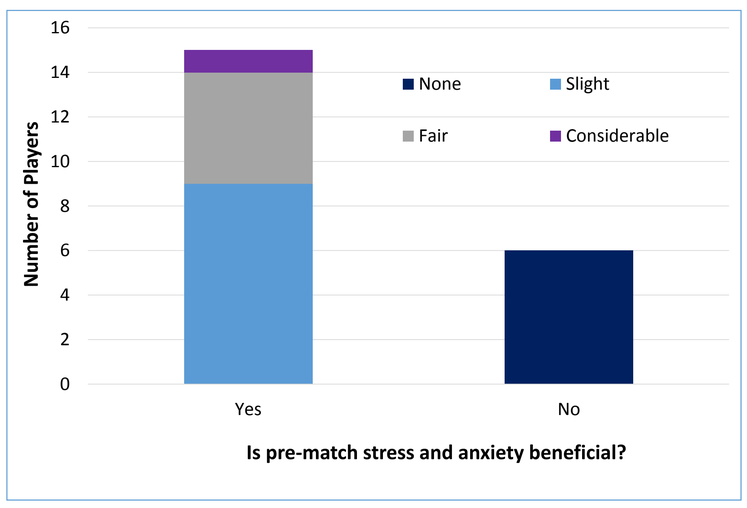

Figure 5. Graph to show perceived optimal pre-match stress and anxiety levels (n=21). Fifteen players thought pre-match stress and anxiety was beneficial to their sporting performance. Of these, nine thought slight, five thought fair and one thought considerable levels were optimal.

Conclusions

- Undiagnosed anxiety and depression may exist in professional cricket teams and as such better screening is required.
- Further health promotion is needed regarding alcohol misuse and smoking habits.
  - Although the average alcohol consumption of 9.8 units/week was within the latest guidelines (14 units/week), 5 players exceeded the guidelines.
- The majority of players feel some level of stress and tension are beneficial for their performance, with a slight amount being the most common perceived optimum.
- Players need further work with coaches, psychologists and medics to ensure that control of pre-match stress and anxiety is optimal for performance gain without affecting their health.

Next Steps

- Repeat the study at various stages of the season to identify any seasonal fluctuations in findings
- Address the diagnosable anxiety and depression by potentially incorporating a clinical psychologist into the health and performance MDT
- Enhance the study by utilising the Competitive State Anxiety Inventory-2 (CSAI-2), which is one of the most frequently used instruments when assessing anxiety in sport psychology research
- Correlate performance and exertion statistics with CSAI-2 scores to ascertain optimal levels of anxiety for individual peak performance

References

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The Royal Orthopaedic Hospital NHS Foundation Trust