

# FACING UP TO THE CHALLENGES OF STRESS

- **Staffordshire University research shows cardiovascular testing can help athletes cope with the intense pressure of competition**
- **The approach has been successfully used at Premier League football clubs, by a Team GB squad and in first-class cricket**
- **Multinational companies including Sony now apply the research in their workplace training schemes**

In sport, the difference between winning and losing can often come down to the way athletes cope with psychological stress. Our researchers developed a groundbreaking method to help them react positively to the pressure of competition, and its potential reaches into sport, business and many other scenarios.

The approach, developed by Professor Marc Jones and his team, has been successfully applied in elite sports including professional football, international cricket, Futsal and equestrianism. Researchers are also currently working with a Team GB squad in the run-up to the 2016 Olympic Games in Rio.

Underpinning the approach is the Theory of Challenge and Threat States in Athletes. This proposes that psychological stress may be conceptualised by athletes in one of two ways – as a challenge (positive) or as a threat (negative). Each is indicated by a distinct cardiovascular response.

Professor Jones says: “What we’ve observed is that when people respond well to pressure, there is an increase in cardiac output and a decrease in vascular resistance – meaning the blood vessels widen and blood flows through them more easily. This means blood can get to the muscles and the brain more quickly. When people have this response, they do well”.

“However, when people have a threat response, the blood vessels constrict, meaning the blood can’t get to the muscles and the brain as quickly as we’d like.”

The research is impacting a wide range of sports. To date, more than 80 cricketers have benefited from this research, including players at Nottinghamshire Country Cricket Club, whilst 35 youth players at Stoke City Football Club were tested and given feedback and advice.

Outside of sport, an increasing number of multinational companies and organisations are using the principles in staff training, including Sony Mobile and Sony Europe, who have used the research in their Senior Leadership Development Programmes.

Professor Jones says, “It can give managers, coaches and leaders or anybody in a one-to-one interaction some guidance about how they can help the people they work with to respond well to challenges.”

To find out more about Professor Marc Jones and his research on the Theory of Challenge and Threat States in Athletes, read the case study in full at: [www.staffs.ac.uk/stress](http://www.staffs.ac.uk/stress)

Or you can hear more from Professor Jones by finding him in our Expert Explains Series. [www.staffs.ac.uk/expertexplains](http://www.staffs.ac.uk/expertexplains)



**MARC JONES**

Professor of Stress and Emotion

Alongside his duties as a professor in Psychology, Marc also has a broader research role in the faculty, allowing him to investigate new areas of psychology. After gaining his PhD, he chose to specialise in Sports Psychology and has a great relationship with the Academy at Stoke City Football Club.

Much of Marc’s scholarly work has centred on the causes, control and consequences of stress and emotion in sport, and it’s this research that has led to him being published in a number of different papers. In the wider field of Psychology, he was given the honour of being a keynote speaker at the annual British Psychological Society Division of Sport and Exercise Psychology Conference.

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