Citation for published version


DOI

Link to record in KAR

http://kar.kent.ac.uk/58587/

Document Version

UNSPECIFIED

Copyright & reuse
Content in the Kent Academic Repository is made available for research purposes. Unless otherwise stated all content is protected by copyright and in the absence of an open licence (eg Creative Commons), permissions for further reuse of content should be sought from the publisher, author or other copyright holder.

Versions of research
The version in the Kent Academic Repository may differ from the final published version. Users are advised to check http://kar.kent.ac.uk for the status of the paper. Users should always cite the published version of record.

Enquiries
For any further enquiries regarding the licence status of this document, please contact: researchsupport@kent.ac.uk

If you believe this document infringes copyright then please contact the KAR admin team with the take-down information provided at http://kar.kent.ac.uk/contact.html
Abstract

Psychological correlates of challenge and threat states in a sport setting

Carla Meijen

Staffordshire University

In sport, athletes can broadly respond to a competitive situation in two ways, as a challenge or as a threat. Challenge and threat states are thought to have distinct cardiovascular patterns, which are indicative of underlying neuroendocrine changes in norepinephrine, epinephrine, and cortisol. The challenge pattern is characterised by increases in cardiac responses (heart rate, cardiac output, ventricular contractility) and a decrease in total peripheral resistance (TPR; widening of the blood vessels). The threat pattern is characterised by increases in cardiac responses and no change or an increase in TPR (e.g. constriction of the blood vessels). In this study, the correlates of challenge and threat states in sport are examined, namely emotional responses, self-efficacy, and the use of psychological strategies in sport. Cardiovascular responses (heart rate, cardiac output, preejection period, and total peripheral resistance) of 64 collegiate athletes will be collected using impedance cardiography during a control condition (friend speech) and an experimental condition (important sport situation speech). Participants displaying a cardiovascular pattern characterising a challenge state are compared with participants displaying a cardiovascular pattern characterising a threat state. It is hypothesized that pleasant emotions and high levels of self-efficacy are associated with a challenge state and unpleasant emotions and low levels of self-efficacy with a threat state. Preliminary findings will be discussed in relation to future research directions in both sport and biopsychology and implications for applied practice.