

The effects of a cognitive behavioural intervention on stress, recovery and performance.

The conditioning of athletes may be described as a multi-level (psycho-socio-physiological) interaction of stress and recovery events that stimulate change in performance. Cognitive Behavioural Stress Management (CBSM) has previously demonstrated favourable changes in psychological and biological stress indicators, consistent with reductions in sports injury, and accelerated recovery following surgery. However, the effects of CBSM on the conditioning process (including the interactions of stress, recovery and performance change) remain speculative. The aim of this study was to investigate the effects of a time-limited, athlete-focused CBSM program on the conditioning process through a longitudinal intervention-control, matched-pairs assessment of stress, recovery and performance indicators. Thirty-two Collegiate rowers (mean = 20.0 years, range 18 - 29 years) preparing for the 2007 Australian Rowing Championships were recruited and stratified into 16 intervention-control matched pairs. The study duration spanned 17 weeks of the 2006/2007 domestic rowing season, including one week of baseline assessment, three weeks of CBSM intervention implementation and 13 weeks follow-up. The intervention consisted of six 1-hour CBSM training sessions over three weeks, which included instruction on the regular use of CBSM methods in response to daily stressors. The measurement of biological stress was achieved via weekly determinations of salivary cortisol, whereas perceived measures of stress, recovery and performance readiness were primarily obtained through completion of the Recovery Stress Questionnaire for Athletes. Rowing performance was also assessed using the time to complete a maximal 2000 meter ergometer time-trial at regular intervals across the season. Primary data analysis will assess the change in stress, recovery and performance measures between groups over time.

WEST, J., (University of Queensland & Centre of Excellence for Applied Sport Science Research, Queensland Academy of Sport), GALAMBOS, S. (University of Southern Queensland & Centre of Excellence for Applied Sport Science Research, Queensland Academy of Sport), TERRY, P.C. (University of Southern Queensland), & HOOPER, S. (Centre of Excellence for Applied Sport Science Research, Queensland Academy of Sport)
