SENSITIVITY OF DAILY WELLBEING AND NEUROMUSCULAR FATIGUE MEASURES TO TRAINING LOAD AND SLEEP IN HIGH SCHOOL AGE ATHLETES

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INTRODUCTION

• Previous studies have shown the sensitivity of daily wellbeing questionnaires (DWB) and countermovement jumps to training load in elite adult athletes. ¹,²
• Sleep length has previously been shown to affect mood, but no study has yet considered its impact on wellbeing questionnaires alongside training load. ³
• The purpose of this study was to assess the sensitivity of a DWB, the Perceived Recovery Status scale⁴ (PRS) and countermovement jumps (CMJ) to training load and sleep length in high school age athletes.

METHODS

• Fifty-two high school age athletes (age 17.3 ± 0.6 years, height 173.0 ± 18.2 cm, body mass 73.7 ± 12.6 kg) volunteered to participate in this eight week study.
• Prior to their first training session of the day, participants:
  • Completed DWB and PRS
  • Provided details on the previous day’s training loads and sleep length
  • Completed 3 maximal CMJs
• Partial correlations were used to assess the linear relationship between DWB, PRS and CMJ with training load and sleep length.
• Correlation coefficients (r) were calculated and magnitude based inferences were used to assess for practical significance.

RESULTS

• There was a most likely small positive relationship between DWB and sleep length (r = 0.28; ± 0.05).
• There was a most likely small negative relationship between PRS and training load (r = -0.23; ± 0.05).

ACKNOWLEDGEMENTS

The research, travel and conference fees for this poster were funded by the Carnegie Adolescent Rugby Research (CARR) project.

REFERENCES