

## High ecological method for quantifying training load in youth water polo players

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The assessment of internal training load (ITL) using the session rate of perceived exertion (session-RPE) has been demonstrated to provide valuable information, also in team sports (Impellizzeri et al., 2004; Moreira et al., 2012; Scott et al., 2013). Nevertheless, no studies investigated the use of this method during youth water polo trainings. Thus, the aim of this study was to evaluate youth water polo trainings, showing the correspondent level of reliability of the session-RPE method. Thirteen male youth water polo players (age,  $15.6 \pm 0.5$  y; stature,  $1.80 \pm 0.06$  m; body mass,  $72.7 \pm 7.8$  kg) were monitored during 8 training sessions (80 individuals training sessions) within 10-days. The Edward summated heart rate zone method was used as a reference measure of internal training load; the session-RPE rating was obtained using CR-10 scale modified by Foster. The Pearson product-moment was applied to regress the Edwards' heart rate zone method against CR-10 session-RPE for each training session and individual data. Analyses reported overall high ( $r=0.88$ ;  $R^2=0.78$ ) and significant ( $P<0.001$ ) correlations between Edwards's heart rate and session-RPE methods. Significant correlations were also showed for each training session ( $r$  range: 0.69-0.92;  $R^2$  range: 0.48-0.85,  $P<0.05$ ) and individual data ( $r$  range: 0.76-0.98;  $R^2$  range: 0.58-0.97,  $P<0.05$ ). The present results confirmed the session-RPE method as an easy and reliable tool to evaluate ITL in youth water polo, allowing coaches to efficiently monitor their training plans.

### References

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### Key words

Rating of perceived exertion, heart rate, internal training load, team sports, monitoring training.