

THE INFLUENCE OF MATURATION ON THE RELIABILITY OF THE NORDIC HAMSTRING EXERCISE IN MALE YOUTH FOOTBALLERS

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BACKGROUND

- Despite its benefits eccentric resistance training (e.g. Nordic hamstring exercise, NHE) has been shown to improve performance in youth populations
- Before such training practice can be used it is important to know if youths can reproduce measures of eccentric hamstring function

AIMS

1. Establish the reliability of the NHE in male youth footballers
2. Determine if maturation influenced the NHE reliability

METHODS



RESULTS

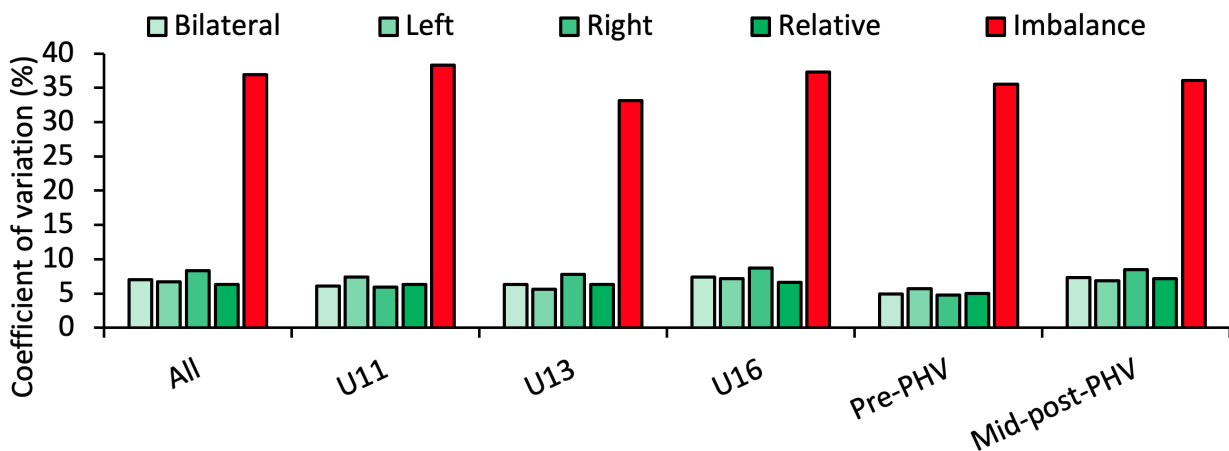


FIGURE 1. RELIABILITY STATISTICS FOR THE NORDIC HAMSTRING EXERCISE ACROSS GROUPS

- Reliability for bilateral, left, right and relative peak force for the U11s, U13s and U16s was favourable (CV = <8.7%) and demonstrated no clear pattern between groups
- Those less mature (pre-PHV) demonstrated better reliability (CV = 4.8 to 5.7%) than their mature counterparts (mid-post PHV; CV = 7.2 to 8.5%)
- Imbalances yielded poor reliability for all comparisons (CV = >30%)

CONCLUSIONS

- Practitioners can be confident in measuring bilateral, left, right and relative strength across maturation in male youth football players
- Maturation affected the reliability; those less mature provided more repeatable measures
- When measuring eccentric hamstring imbalances, practitioners should exercise caution

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