# SEØNZ

SPORT & EXERCISE SCIENCE

NEW ZEALAND —



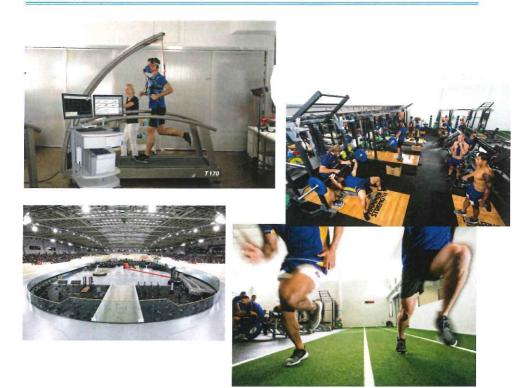
### SPORT & EXERCISE SCIENCE

— NEW ZEALAND —

## **SESinNZ: reconnecting Academics and Practitioners**

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training group responses seem to be sensitive to the maturation status of the individuals. Specifically, training elicited small effects on 10m sprint performance for pre and circa-PHV individual's whereas post-PHV individual's responses were trivial. **Take home message**. A 6-week functional movement training programme induces meaningful improvements in sprint performance for youth males circa-PHV.

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Functional movement, maturation and physical performance in youth female netball athletes

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Introduction. The need to understand how maturation and functional movement relate to physical performance in female netballers is important to aid in the facilitation of their performance enhancement. The purpose of this study was to examine the relationship between movement competency, maturation and physical performance outcomes of youth female netball players. Methods. A cross sectional sample of 8 female senior high school Netball players (Age: 16.4±0.6 y; maturity offset 3.9±0.5y) had their movement competency assessed utilising the Functional Movement Screen (FMS). Physical performance tests including speed, agility and both horizontal and vertical bilateral jumps were assessed utilising Netball New Zealand guidelines. Results. FMS scores demonstrated a very large (r=0.75) and large (r=0.56) relationship with horizontal Jump and vertical jump respectively. FMS competency was moderately correlated with maturation (r=0.41) and locomotive tasks (r=-0.37 to -0.45). There were trivial to moderate relationships between maturation and physical performance test outcomes. A very large correlation between maturation and vertical jump height (r=0.72) was identified. Discussion. The findings demonstrate that aspects of physical performance may be influenced by functional movement ability and maturation. Take Home Message. Consideration of strategies that increase functional movement competency may be advantageous in improving physical performance in youth female netball players.

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#### Does maturation influence functional performance in youth males?

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Introduction Understanding the role biological maturity has on athletic motor skills may have implications for athlete development programmes. The purpose of this study was to identify the influence maturation has on functional performance in youth males. Methods A cross sectional sample of 97 youth males (Age range 13.2 to 15.7 years old with a maturity offset of -1.0 to 2.6 years) were allocated into either pre, circa, or post PHV maturation groups. Participants performed 20m sprint, unilateral horizontal jump, and 10s bilateral tuck jump (TJ) assessments. Results Significant group differences (p <0.01) revealed increased maturation status positively influenced speed performances (ES = 0.64 to 1.03) but not jump performances. Associations between speed performances and horizontal jump performances were large to very large (r=-0.67 to -0.74). Discussion Maturation status appears to influence speed especially over 10m and 20m but not initial acceleration or jump capability, despite the strong associations between speed and horizontal jump performances. Take home message It appears there is a need to consider biological maturity when determining speed characteristics in male youth.

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