28th ECSS Anniversary Congress, Paris/France, 4-7 July 2023

Decision making influences movement variability and performance of elite female football players in a ball resistance task

Tuyà Viñas, S., Fernández-Valdés Villa, B., Pérez-Chirinos Buxadé, C., González, J., Moras Feliu, G.

National Institute of Physical Education of Catalonia: Institut Nacional dEducacio Fisica de Catalunya

INTRODUCTION:

Nowadays, constraints are included in resistance training in order to develop strength within the context of sport and to maximise its effectiveness [1]. Considering that perceptual-cognitive abilities play a fundamental role in sport as they are directly related to individual and team success [2], decision making could be introduced in resistance training as a constraint to promote the development of the athletes abilities in a holistic way. Therefore, the aim of this study was to investigate the effects of the attacker and defender decision making on movement variability and performance during an elastic resisted forward-backward movement with ball in elite female football players.

METHODS:

Twenty-three elite female football players (22.65 \pm 5.16 years, 167.00 \pm 6.37 cm, 59.75 \pm 14.08 kg) performed the resistance task with ball as attackers and defenders without (NDM) and with decision making (DM). The movement variability was analysed by calculating the sample entropy of the acceleration, recorded at the lower back with an accelerometer. The accuracy of attacker's passes was measured as an indicator of task performance using a scoring scale.

RESULTS:

The movement variability was higher in DM compared with NDM only in the defender. Furthermore, the attacker had a higher movement variability in both NDM and DM compared to defender. The attacker's passing accuracy was lower in DM than in NDM.

CONCLUSION:

These findings suggest that adding a decision making to a football specific resistance task increased the defenders movement variability and compromised the attackers passing accuracy. Therefore, it is a useful strategy to reduce the control and movement regularity of the player who plays the role of defender and to increase the technical difficulty for the attacking role, which can favour the adaptive process of the players.

Training and Testing Topic:

Presentation

Poster

European Database of Sport Science (EDSS)

Supported by SporTools GmbH

