Journal of Human Kinetics volume 62/2018, 167-175 DOI: 10.1515/hukin-2017-0168
Section III – Sports Training

DE GRUYTER OPEN

Soccer Small-Sided Games Activities Vary According to the Interval Regime and their Order of Presentation within the Session

by

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In order to investigate the physical demands of widely used in soccer small-sided games (SSGs), we compared game variations performed under different interval (fixed or variable) and timing regimens (beginning or end of a training session). Twelve male players wore GPS devices during the SSGs to record total distance, relative distance, distance at different speeds, and maximum velocity variables. Four variations of SSGs (4x4) were randomly applied: beginning of a training session with fixed and variable recovery, or end of a training session with fixed and variable recovery. During the beginning or end of a training session settings with fixed recovery duration, 2-min of playing and 2-min of recovery were provided. During the beginning and end of a training session settings with variable recovery, athletes kept playing until a goal was scored, or up to 2-min if no goals were scored. Results were analysed using MANOVA. Total distance and relative distance were higher in the beginning compared to end of training sessions for both fixed and variable recovery duration (small to moderate effect sizes). Distance at various speed ranges (i.e., 13-18 km/h and >18 km/h) was higher ($p \leq 0.01$) at the beginning than at the end of training sessions with variable recovery. In addition, distance >18 km/h was higher at the beginning of a training session with variable recovery than fixed recovery and at the end of a training session with variable recovery than fixed recovery. In conclusion, several physical demand characteristics are affected by the moment of SSG application, while others respond to the recovery regime during SSGs, thus providing indications to the coaches to prescribe the intended training intensity by manipulating the context.

***Key words**: youth athletes, soccer, game-based training, movement patterns.*

Introduction

Studies investigating the physical demands associated with soccer matches have shown that players cover between 10 and 13 km per match (Bangsbo et al., 2006), including a high number of high-intensity activities (150-250 actions) interspersed with recovery periods (Stølen et al., 2005) and specific technical-tactical demands (Rampinini et al., 2009). To cope with these requirements, players need to develop optimal levels of speed, strength, agility, and aerobic power (Reilly and Gilbourne, 2003), in fine combination with proficiency in ball-related skills and decision-making abilities (Gabbett et al., 2009). Although research has aimed to determine the most effective ways to train team sports players (Bishop, 2009), the great complexity

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Authors submitted their contribution to the article to the editorial board.
Accepted for printing in the Journal of Human Kinetics vol. 62/2018 in June 2018.