ANALYSIS OF REPEATED-SPRINT SEQUENCES IN WELL-TRAINED YOUNG SOCCER PLAYERS

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The purpose of this study was to examine the nature and occurrence of repeated-sprint sequences (RSS) in well-trained young soccer players, as a function of age, playing position and time.

Methods. Time-motion analyses using a global positioning system (GPS, 1 Hz, SPI Elite, GPSports, Canberra, Australia) were performed on 99 highly-trained young soccer (U13, U14, U15, U16, U17 and U18) players during ≤2 international games (i.e., 344 files). Sprint activities were defined as at least a 1-s run at intensities >19 km.h⁻¹ or ≥61% of the individual peak running velocity; RSS, as a minimum of 2 consecutive sprints interspersed with a max. of 15, 30, 45 or 60s.

Results. The number of sprint per RSS was 2.5 ± 0.3, with no effect of age (Fig. 1 & 2). The younger teams presented more RSS than the older teams (P<0.001, Fig. 1). RSS occurrence was affected by playing position (P<0.01, Fig. 2), decreased during 2nd half (P<0.001) and ranged from 2 to 42 for U13, 0 (with 6% of player-matches with no RSS) to 43 for U14, 0 (26%) to 25 for U15, 1 to 39 for U16, 0 (27%) to 14 for U17 and 0 (20%) to 24 for U18.

Conclusions. Both the occurrence and the nature of RSS are affected by age, position and playing time. Present results also question the importance of RSA as a crucial physical component of soccer performance in developing players.