

Kinematic and Tactical Analyses in Youth Soccer

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Introduction

While in professional soccer many statistics are given even in real-time, only few studies in youth soccer exist to analyse tactical and physical performance. The aim of our explorative study was to describe and compare kinematics and tactical performance of boys and girls in a 9-a-side soccer match.

Methods

A soccer match between a female and a male U13 team was recorded with two video cameras and a high-frequency local position measurement system (LPM). Kinematic data like total distances and speed structure were analysed. Speed zones were defined referring to the maximum occurring sprinting speed for boys and girls separately. Tactical performance was assessed by analysing characteristics of ball possession periods.

Results

The average total distance covered during the 60-minutes-match was not significantly different between boys (5341 m) and girls (5562 m; $P > .05$) and divided into walking (34.2%), jogging (35.3%), running (13.5%), high speed running (13.3%) and sprinting (2.4%). The playing time comprised 21 minutes of possession for the boys and 17 minutes for the girls, 16 minutes of stoppages and 7 minutes of phases without control. Boys and girls passed 1.9 times per possession in average ($P > .05$).

Discussion

The physical load and speed structure was similar for boys and girls. The number of passes per possession was not different for boys and girls, but quite low in comparison to professionals (Hughes & Franks, 2005). Moreover, the duration of stoppages was shorter and there were more phases without control in youth soccer than in professional soccer. More matches should be analysed focusing on different age groups, gender and levels of players, and allowing to create recommendations for training in youth soccer.

References

Hughes, M., & Franks, I. (2005). Analysis of passing sequences, shots and goals in soccer. *Journal of Sports Sciences*, 23, 509–514. doi:10.1080/02640410410001716779