Activity demands and speed profile of young female basketball players using ultra-wide band technology

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Performance profiles have begun to be identified as extremely useful in order to help coaches individualize training according to the age and gender of athletes. Therefore, the aim of this study was to determine the activity demands and speed profile of U18 female basketball players during competitive matches. Time variables (real and playing time), distance variables (distance performed, distance in speed zones, high intensity distance and distance covered sprinting) and speed variables (number of sprints, sprint duration, maximum speed and average speed) were recorded from forty-eight players belonging to four teams (13 guards, 22 forwards and 13 centers). WIMUPRO? inertial measurement units with ultra-wide band (UWB) indoor-tracking technology recorded six matches during final four in the season 2018/2019. A one factor ANOVA with Cohen?s effect sizes (d) were used to identify the differences between groups (playing position and match day). Distance per minute (123.96 vs 112.67 m), high intensity distance per minute (15.48 vs 14 m), running distance (403.2 vs 541.28 m) and average speed (5.05 vs 5.41 km/h) were significantly higher on day 3 than 1, respectively. About playing position, forwards played more minutes during games, so covered a greater distance, more sprints and high intensity actions than the rest. In spite of fatigue, day 3 showed a greater intensity than day 1, therefore, the last day was the crucial one for the teams in the tournament. Forwards when playing more minutes obtain higher absolute values but not per minute which could mean a lower performance of the team.

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