

Preliminary study on the influence of boot studs on rugby players' sprinting performance

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ABSTRACT

Sprinting ability in rugby players is an essential skill for the purpose of chasing and tackling opponents, and to run fast while carrying the ball to the try line. One of the key requirements in sprinting performance is the right boots selection. This study aims to investigate the influence of different boot studs towards sprinting performance of amateur rugby players. A total of ten rugby players took part in the 40 m sprinting test on the natural grass rugby pitch. Each player performed the sprinting using three different shapes of boot studs i.e., cone, blade and triangle stud shapes. Fully automated timing gates were placed at the 0 m and 40 m mark of the sprint track. Data obtained from the experiments were recorded according to the studs' shapes for statistical analysis. The results showed that majority of the players were sprinting faster using blade studs compared to other two studs with mean time recorded of 6.18 ± 0.33 s. The statistical analysis revealed moderate differences in sprint performance between cone and blade with (0.99 ± 0.25) while differences between cone and triangle was trivial (0.05 ± 0.18). However, the differences between blade and triangle were moderate (-0.86 ± 0.28). The analysis showed that players experienced similar sprinting ability when they changed their boots from cone to blade, and blade to triangle. The findings demonstrate that amateur rugby players should use boots with blade studs to establish better sprinting ability for natural grass pitch.

KEYWORDS

Boot studs; Rugby; Sprint

ACKNOWLEDGEMENTS

The authors would like to thank the management of Kuantan Vocational College for providing facilities and the rugby players, and to Universiti Malaysia Pahang for financial assistance under grant no. PGRS210345.