

原 著

高校生ラグビー選手の重心動揺について

The postural sway of center of gravity in high school rugby football players

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Abstract

This study examines the measurement results relation to postural sway of the center of gravity, physique and fitness test in high school rugby football players. Several points of the study are noteworthy.

First, in terms of physique there appears to be no significant difference between students who play “Forward (FW)” and those who play “Backs (BK)” in height. It was found that students playing FW were heavier than those playing BK regarding body weight, percent fat, and lean body mass. In terms of athletic ability however, it was found that those playing BK exceeded those playing FW regarding measurement result values by grip-strength and the 20m shuttle run ($p<0.05$).

Secondly, it was found that those playing BK were lower than those playing FW, in terms of Environment Area (Env.Area) in center-of-gravity agitation. It had been thought that those playing BK would have excelled in terms of balance in the postural sway of the center of gravity.

Finally, a case study regarding center-of-gravity agitation found that the student who was selected by the All Japan Team for those under the age of nineteen values for Length (LNG) and Env.Area in center-of-gravity agitation was in fact lower than another student who plays the same position. However, the differences were not significant between the two students in terms of physique and measurement values of athletic ability.

This study suggested that the measurement values of postural sway of the center-of-gravity agitation can be used as another index to judge the motor fitness in rugby football players.

キーワード 高校生ラグビー選手, 重心動揺, 運動能力, 競技力

High school rugby football player, Postural sway of center of gravity,
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