THE EFFECTS OF APPROACH ANGLE AND TARGET POSITION ON INSTEP KICKING ACCURACY AND BALL SPEED WITH SKILLED SOCCER PLAYERS

Original scientific article

Abstract

Kicking accuracy and ball speed are the most important indicators of a successful soccer instep kick. The purpose of this study was to examine the effects of target position and approach angle on ball speed and kicking accuracy of powerful soccer instep kicks. Ten skilled adult soccer players (age: 25.9 ± 5.5 years; height: 1.79 ± 0.06 m; mass: 72.6 ± 7.5 kg) kicked a total of twenty-four powerful instep kicks using a standard size 5 ball, at two 0.6×0.6 m right and left targets from their self-selected approach angle, 30° and 45° (direction of the kick was 0°). Kicking accuracy and ball speed were analysed by two high-speed cameras at 300 fps. The mean values for ball velocity of the three approach angles were higher for left target than right target (p < 0.05), there was no significant difference between two position of target in kicking accuracy. For each target separately, results revealed that there was no significant difference between approach angles in kicking accuracy and ball speed. Our results suggest that, for right-footed players, the instep kicks toward left goal corner target is more speed than right target.

Key Words: instep kick; approach angles; soccer player; position of target.