

DIFFERENCES IN MOVEMENT BEHAVIOUR BETWEEN EXPERT AND INTERMEDIATE GOALKEEPERS IN THE INTERCEPTION OF CORNER KICKS

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Introduction

Task analysis and comparisons between expertise levels had been popular topics in sports sciences, especially in football. However, there are not many studies about goalkeeper's performance in corner kicks. The aim of the present study was to determine whether there are differences in movement interception behavior between goalkeepers of different level of expertise.

Methods

Eleven young goalkeepers (5 experts and 6 intermediates) took part in this experiment. The experiment involved evaluating a total of 220 corner kicks (reduced to 192 in analysis). Goal keeper was required to catch a corner kicked from the left as from the right side (10 each) while the goal keeper was situated at the goal line. They were instructed to perform like in a match. The test was recorded by video and their movements were analyzed frame by frame. Dependent variables were: time between the first touch by kicker and the goal keeper start to move (Run up); The time between the first touch of the kicker and start of the hands in direction of the ball (Hands); The time between the first touch of the kicker and start of the jump (Jump); The time between the first touch of the kicker and the catch (Catch). For each dependent variable separately, a Group (Experts vs. Intermediate) x Corner direction (Left vs. Right) ANOVA with repeated measurement design on the last factor was carried out with Alpha level set at 0.05.

Results & Conclusion

Table 2 Means and standard deviations for performance (in seconds) in corner kicks analyzed from kick. Asterisks (*) mark significant group effects in right and left sides, accents (ˆ) mark significant group effects in total.

	Experts			Intermediates		
	Right	Left	Total	Right	Left	Total
Run up	0.69 ± 0.15	0.79 ± 0.11	0.74 ± 0.08	0.58 ± 0.14	0.57 ± 0.26	0.58 ± 0.19
Jump*	1.66 ± 0.23	1.67 ± 0.12	1.68 ± 0.07	1.51 ± 0.14	1.64 ± 0.10	1.60 ± 0.07
Hands*^	1.64 ± 0.23	1.66 ± 0.11	1.65 ± 0.09	1.45 ± 0.06	1.63 ± 0.14	1.54 ± 0.05
Catch	1.97 ± 0.24	2.01 ± 0.14	2.00 ± 0.09	1.81 ± 0.08	2.02 ± 0.13	1.91 ± 0.07

Results revealed significant main effect of group for Jump ($F(1,9)=5.5$, $p=.04$) and for Hands ($F(1,9)=6.4$, $p=.03$). The expert goalkeeper significant jump and start his catch significant later in comparison to intermediate, which is alignment with earlier reported findings by Oudejans, Michaels, and Bakker (1997).

References

1. Oudejans, R.R.D. et al (1997). J SPORT SCI, 15 : 587-595.