

TRAINING AND MATCH SESSIONS EFFECTS IN STRAIGHT SPRINT AND CHANGE OF DIRECTION ABILITY IN WHEELCHAIR BASKETBALL

ABSTRACT

Objectives: The main purpose of this study was to analyze the effects of training and match sessions in straight sprint with and without ball, and change of direction ability on male national wheelchair basketball (WB) players. **Methods:** 15 male WB players (30.45 ± 11.56 years) who were members of the First Division Spanish WB team participated in this study. Seven players were excluded from the study for not participating in all training sessions and matches. **Results:** The training and match sessions induced a significantly higher performance in 5 m straight sprint time ($p < 0.01$, mean dif. = -4.32%, $d = -0.46$, moderate), but not in the 20 m straight sprint ($p > 0.05$, mean dif. = -0.75%, $d = -0.06$, trivial), neither in the T-Test ($p > 0.05$, mean dif. = 0.23%, $d = -0.02$, trivial). However, the performance in the 5 and 20 m straight sprints with ball decreased significantly after the 5 weeks ($p < 0.05$, 5.26%, $d = 0.36$ and $p < 0.01$, 14.60%, $d = 1.00$, respectively). **Discussion:** The main results of this study showed that in-season 5-week training and match sessions were efficient for improving 5 m straight sprint in WB players, but not 20 m straight sprint and change of direction ability (T-test). In addition, small sided games, conventional training and match sessions have not been effective in improving straight sprint performance with ball (i.e. 5 and 20 m). **Conclusions:** Adapted sports coaches and physical trainers should consider implementing specific training tasks for improving sprint, change of direction ability and basketball-specific skills in addition to an integrated training.

KEY WORDS

training task, impairment, agility.

