

The Effects of Plyometric Training on Balance, Anaerobic Power and Physical Fitness Parameters in Handball

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ABSTRACT The aim of this paper was to investigate the effects of a 10-week plyometric training (PT) on static balance (SB-unipedal), dynamic balance (DB-bipedal slalom), anaerobic power (AP) and some physical fitness parameters (PFP). Female handball players (aged: 15.13 ± 0.87 years) were randomly selected into an experimental group (EG; n= 14), and a control group (CG; n= 12). At the beginning of the examination, SB-unipedal, DB-bipedal slalom and PFP were measured. Wilcoxon test was used for comparison within groups and Mann-Whitney U test was used for comparison of between groups. Research findings show that the EG made significantly greater improvements than the CG in the SB-unipedal (left), AP, 30-meter sprint, agility, vertical jump (VJ), and horizontal jump (HJ) performances ($p < 0.05$). Finally, 10-week PT positively affects SB-unipedal (left), AP, 30-meter sprint, agility, VJ and HJ performances. In order to gain positive results for these parameters, the PT program should be added and applied regularly in handball practice by coaches.