

The Effect of Plyometric Training Program on Soccer Pass and Receive, Jump High and
Maximal Oxygen Consumption Performance of Soccer Players
in Amateur League Level

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Abstract

Introduction: This research mainly focus on comparison and elucidation the effect of plyometric training program on some physical efficiency of soccer amateur league level such as soccer pass and receive, jump high and maximal oxygen consumption performance.

Methods: The study included 30 soccer players in amateur league level age 20 ± 0.3 years, height = 168.3 ± 8.2 cm, body mass = 61.6 ± 7.4 kg) which was selected based on purposive sampling method. The subjects were equally divided into 2 groups; plyometric training group (PT) and control group (CT). PT group was trained 3 day/week for 8 weeks while CT group was trained by traditional training program. The physical efficiency was determined in all subjects by using Loughborough Soccer Passing Test (LSPT), Vertical jump test and Astrand-rhyming Cycle Ergometer Test.

Results: After 8 weeks of training program, we found that PT group significantly increased physical performance when compared to those in CT group such as pass and receive performance (61.80 ± 10.2 , 55.80 ± 8.2 sec.), jump high (57 ± 7.4 , 63 ± 8.8 cm) and maximal oxygen consumption performance (47 ± 8.6 , 55 ± 7.4 ml/kg⁻¹/min⁻¹) (all parameters were showed as mean \pm standard error, $p < 0.05$).

Conclusions: Our study clearly revealed that the plyometric training program significantly increased overall of physical efficiency in soccer players. This outcome can be apply to improve physical performance in junior soccer players or soccer players in amateur league level.

Keywords: Plyometric training, Pass and receive, Jump high, Maximal oxygen consumption