

Ratchanon Santaveesuk 2012: The Effects of Plyometric Training on 15-Meter Running Speed in Soccer of Male Students at The Institute of Physical Education Suphanburi. Master of Arts (Physical Education), Major Field: Physical Education, Department of Physical Education. Assistant Professor Nattaya Keowmookdar, Ph.D. 126 pages.

The purpose of this research was to study the effects of plyometric training on 15-meter running speed in Soccer of male students at The Institute of Physical Education Suphanburi. The subjects in this study consisted of sixty male 19-year-old students at the Institute of Physical Education Suphanburi. The subjects were divided into two groups: control group and experimental group, each of which comprised 30 students. Both groups were trained eight weeks and three times per week. Data were statistically analyzed in terms of mean, standard deviation, t-test for dependent samples, t-test for independent samples, one way analysis of variance with repeated measure and Tukey's test at the .05 level of significance.

Findings revealed that the difference in running speed in 15 meters within the treatment and control groups before and after 4 and 8 weeks, as well as between the treatment and control groups after the 4<sup>th</sup> and 8<sup>th</sup> week were not significant at .05 level. However, closely comparing the means of the treatment group and the control group in the length of time in running, from the beginning of the training at 2.75 seconds, it has decreased to 2.74 seconds after 4 weeks to 2.67 seconds after 8 weeks, which means that there was a gradual increase in running speed. In running speed, small differences are critical for winning, so, the plyometric training in this study can be used for training 15-meter run improvement in Soccer and other related sports that need short-distance speed running.

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Thesis Advisor's signature