Harit Hattha 2014: Effect of Plyometric Training on Agility of Futsal Players. Master of science (Sports Science), Major Field: Sports Science, Faculty of Sports Science. Thesis Advisor: Associate Professor Bunjob Piromkam, Ph.D. 97 pages.

The purpose of this research were to study and contrast the effect of Plyometric training on agility of futsal players. Thirty subjects were simple random sampling from male futsal players of The institute of Samutsakorn, age 17 - 22 years old. Subjects were randomly assigned into 3 groups with 10 subjects in each group. The control group performed only futsal training programe. The first experimental group performed established forword jump and futsal training programe. While the second experimental group performed established sidestanding jump and futsal training programe. Subjects were trained 3 days per week for8 weeks. All of the subjects were tested for Illinois agility test at the beginning of the study and after the 4<sup>th</sup> and the 8<sup>th</sup> week to training. Data were analyzed of mean, standard deviation, one-way analysis of variance, one-way analysis of variance with repeated measure, two-way analysis of variance with repeated measure and followed by using the Tukey's multiple comparison test. Results were considered significantly difference when p < .05.

The results of the study showed that agility of futsal players of 3 groups after the 8<sup>th</sup> week of training program was not significantly different. In addition the control group after 8<sup>th</sup> week of training showed significant difference from before training. First experimental group after the 4<sup>th</sup> and the 8<sup>th</sup> week of training comparing with the 4<sup>th</sup> and the 8<sup>th</sup> week before training was significantly different. For the 2<sup>nd</sup> experimental group, there was significantly difference between the 4<sup>th</sup> week of before & after training, as the same as the 8<sup>th</sup> week of before and after training. From this study, the effect of these two ways of training (befor & after training) could create the agility of Futsal players effectively. The trainer, therefore, could later select the appropriated program for the players.

Student's signature

Thesis Advisor's signature

