

Apinan Suebpimpawong 2008: The Effects of a Plyometric Training Program and a Response Training Program on the Eye-Foot Response Time of Table Tennis Players. Master of Science (Sports Science), Major Field: Sports Science, Interdisciplinary Graduate Program. Thesis Advisor: Miss Apasara Arkarapanthu, Ph.D. 122 pages.

The objectives of this research were to study and compare the effects of a plyometric training program and a response training program on the eye-foot response time, reaction time and movement time of table tennis players. A simple random sample of 24 subjects was selected from table tennis players aged from 13 to 17 years in the Ubonratchatanee sports school. They were randomly assigned into 3 groups: a control group; a plyometric group; and a response group. The control group practised using only a table tennis training program. The plyometric group practised using a plyometric training program and the table tennis training program. The response group practised using a response training program and the table tennis training program. The training programs were undertaken three days per week for eight weeks. Data on response time, reaction time and movement time were analysed using ANOVA and 2-way and 1-way ANOVA with repeated measures. Multiple comparisons were conducted using Tukey's method. The statistical significance level was set at $p < 0.05$.

The major findings were: 1) There was a significant improvement in the eye-foot response time, reaction time and movement time in the plyometric group throughout the 8-week training period. While the response group improved their eye-foot response time and reaction time, the control group only improved their reaction time. 2) After four weeks of training, the plyometric group had a faster response time than the control group, whereas there was no significant difference in the reaction time and movement time. 3) After eight weeks of training, the plyometric group had a faster response time than the control group and the response group. The plyometric group had a faster movement time than the control group, but there was no significant difference in the reaction times.

Student's signature

Thesis Advisor's signature

