

Sajjar Chuchuvy 2006: Effects of Instrument-Assisted and Partner-Assisted Flexibility Training on Butterfly Swimming Speed at 50 metre. Master of Science (Sports Science), Major Field: Sports Science, Interdisciplinary Graduate Program. Thesis Advisor: Associate Professor Bunjob Piromkam, M.Ed. 93 pages  
ISBN 974-16-2506-5

The major purposes of this research were to study and differences effects of instrument-assisted and partner-assisted flexibility training on butterfly swimming speed at 50 metre. The subjects used in the research consisted of 30 children who were 12 – 14 years, and who were athletes for suandusit , suandusit university (Bangkok) The children were divided into three groups for the study, with each consisting of 10 subjects each with method simple random sampling. The control group training which used only a swimming speed program, which experimental group 1 was given training the swimming speed program plus a instrument-assisted flexibility training program. Experimental group 2 received the swimming program and partner-assisted flexibility training program. The instrument used in the research consisted the butterfly swimming training program, are instrument-assisted flexibility program and partner-assisted flexibility program .The training programs for all groups period 8 week, with training scheduled 5 days per week. The subjects were tested of .50 metre swimming speed, dorsi flexion, and plantar flexion, flexibility of trunk, and flexibility of shoulder pretest-posttest of 4 week and 8 week. The data were analyzed using mean and standard deviation, one-way analysis of variance: ANOVA, two-way analysis of variance with repeated measures, one-way analysis of variance with repeated measures procedures, along with multiple comparisons testing using the tukey's method. All of the statistical testing utilized the .05 level of significance.

The results of this research found that the speed of butterfly swimming at 50 metre of experimental group 1 and 2 were significant difference from control group after 8 week ( $P < .05$ ). However, experimental group 1 and 2 were not significant difference after 8 week. In addition, the speed of butterfly swimming at 50 metre of control group after 8 week were significant difference from 4 week ( $P < .05$ ). The speed of butterfly of experimental group 1 and 2 pretest, after 4 week, and 8 week were significant difference ( $P < .05$ )

Sajjar chuchuvy Bunjob Piromkam

Student' s signature

Thesis Advisor' s signature

5 June 2006