

## ABSTRACT

A. Dedi Kenedi, 2017. "Effectiveness of Weight Training Method Recovery System and Leg Length on Achievement of Swimming Start". Dissertation. Sport Education Studies Program. Postgraduate. Semarang State University. Promotor Prof. Dr. Soegiyanto, MS., Copromotor. Dr. Sulaiman, M.Pd., Promotor member Dr. H. R. Boyke Mulyana, M.Pd

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Swimming start looks simple but it can determine the swimming achievement. Footsteps in the start of swimming need to be done to get the distance forward, therefore leg length support is needed. How are the differences and interactions between the system load training method set and the super-set system load training method associated with the recovery system and the length of the limbs against the swimming start achievement? The purpose of this research is to analyze the effectiveness of weight training method, super set system set system, recovery system and limb length to the result of swimming start.

The method used in this research is the experimental method with 2 x 2 x 2 factorial design. The sample of this research is 40 athletes of student sports club of Cirebon city. Analysis of research data are using ANOVA and continued with Tukey Test so that they can describe the result of research.

Research Achievement 1) Weight-bearing system sets are more effective than super-set system load training, and system set exercises are better than super set training systems on swimming start achievement. 2) There is a difference of influence between long limbs with short limbs to the swimming start achievement. 3) There is a difference of effect on the active recovery system with passive to the result of swimming start. 4) There is an interaction between the weight training method and the length of the limb to the swimming start. 5) There is an interaction between the weight training method and the recovery system to the swimming start achievement. 6) There is an interaction between the length of the limb and the recovery of the swimming start achievement. 7) There is an interaction between the leg length load training method and the recovery system to the swimming start Achievement. The achievement of hypothesis testing proved there is interaction between weight training, leg length, and rest.

Research conclusions are that the system load workout set is more effective and better than the super-load system load training with respect to long limbs and active recovery as well as jointly affect the swimming start achievement. Suggestions In further research can be performed similar weight training, involving elements and potential or additional other variables with the same or different training methods.