

THE EFFECT OF WEIGHT TRAINING USING COMPOUND SET METHOD ON THE STRENGTH AND ENDURANCE MUSCLE OF UNY ARCHERY ATHLETES

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ABSTRACT

Weight training with the compound set method is weight training which is done using two different types of tools. The exercises are carried out sequentially with no pause during resting when switching equipment. This compound set method aims to train the same group of muscles using different tools. Training with this system can provide maximum response to a group of muscles that are trained so that the potential for increased muscular endurance is possible. This study aims to determine how much influence the weight training with compound set methods has on the strength and endurance of UNY archery athletes.

This study uses an experimental method with one group pre-test-posttest design. The study population was UNY archery athletes. Sampling was done by purposive sampling. The instrument used to measure muscle strength uses the hand grip strength test, while to measure the endurance of the upper, lower and middle body muscles using the muscular endurance test with four kinds of test items namely bench jumps, modified dips (man), modified push ups (woman), bent-leg curl-ups and abdominal crunches. Data analysis techniques use the normality test to find out whether the data has a distribution that is normally distributed. Variant homogeneity test to test the similarity of the variance of experimental group data. Hypothesis testing using t test.

Based on the results of the t test analysis obtained t value of -14.532 with a significance value of 0,000. Because the significance value of 0,000 is smaller than 0.05 ($p < 0.05$), it can be concluded that there is a significant difference in strength in pre-test and post-test. This result can be interpreted that there is a significant effect of weight training using the compound set method to increase the strength of UNY archery athletes. As for muscle endurance, based on the results of the t test analysis obtained t value of 13.396 with a significance value of 0,000. Because the significance value of 0,000 is smaller than 0.05 ($p < 0.05$), it can be concluded that there is a significant difference in muscle endurance during pre-test and post-test. This result can be interpreted that there is a significant effect of weight training with the compound set method on increasing endurance of UNY archery athletes.

Kata Kunci: *weight training, compound set method, strength and endurance of muscles*