

Abstract

Title: The effect of controlled weight training on trunk and upper limb strength in former swimmers and hobby athletes

Objectives: The aim of our study was to determine whether the effect of several weeks of controlled intervention would improve upper limb and trunk muscle strength in a selected population group.

Methods: We used a Biokinetic swim trainer and a Cybex device to measure upper limb and trunk strength. To determine body composition, the TANITA MC-980 was used. Data were processed in MS Excel and SPSS, using Wilcoxon nonparametric paired test and Cohen's d coefficient.

Results: Both research groups showed improvements in upper limb and trunk muscle strength. However, none of the measured changes were statistically significant. Thus, the results can only be evaluated within our research sample. The probands with no previous competitive swimming career showed greater improvements in upper limb and trunk muscle strength than the proband group with a previous competitive swimming career.

Keywords: muscle strength, Biokinetic, Cybex, Covid-19