

Abstract

Title: The impact of nonspecific exercise on the coordination of the upper extremities in swimming style crawl

Objectives: The aim of this thesis is to determine whether the *exercise alternating circling of the upper extremities in standing* applied during the swimming lessons has impact on improving technically swimming style crawl.

Methods: The research involved 30 probands of the 1st degree of Faculty of Physical Education of Sport Charles University who have never taken part in swimming training. During the research was used only non-invasive methods. The measurement of height of body, upper extremity range and body composition on TANITA device. Testing was carried out in the laboratories of sports motorics at Faculty of Physical Education of Sport in Charles' University. Than testing in swimming pool was attended a swimming test at the distance of 25 and 50 m. Probands were testing in time and it was calculated number of strokes in a swimming test at the distance of 25 to 50 m.

Results: In the swimming test of 25 m distance it was statistically significant change in overall performance, only a high degree of material significance was confirmed in the frequency of the strokes. In the swimming test of 50 m distance we recorded a statistically significant change in the overall performance only in frequency of the footage, the statistical significance was not confirmed. Based on the results we believe that the non specific exercise in the most affected for the swimming performance and technique in the test of 25 m distance.

Key words: crawl, alternate circling of the upper extremities, technique, frequency, velocity