

Abstract

Title: Comparing the results in general physical tests with performance of canoe sprint athletes

Aims: The aim of the diploma thesis is to compare the results between the common physical tests and specific performance of canoe sprint athletes.

Methods: I used quantitative research (deduction) with data analysis methods from the testing and measurements of general physical abilities to obtain the necessary answers regarding the issue of the diploma thesis. The ensemble consists of a total of 302 probands who were tested at least once between 2013 and 2023. 165 men kayakers and 137 women kayakers from the youth and junior categories were tested with general physical tests for selection into the SCM (youth center). General physical tests included a 1 500 m endurance run (nowadays it is 800 m), a 200 m swim test (nowadays it is 100 m) and a power endurance test for the bench press and pull-up exercises. Performance on the water was taken from the results of the nomination races in Račice. Competitors who did not participate in the nomination races were excluded from the study. Results between each general physical tests and performance on the water were compared by using graphs.

Results: The results showed a significant correlation between the outcomes of general fitness tests and on-water performance. Athletes with better on-water performance achieved higher results in the fitness tests. The best kayakers consistently achieved higher results compared to the average of other competitors, and this trend was evident across all age groups. With increasing age, athletes' performance in bench press, pull-ups, and swimming improves, while running test performance remains stable. Overall, it can be concluded that the performance level in SCM tests is high, with the best athletes setting the standards for others, reflecting the quality of training methods and preparation of these athletes.

Keywords: Testing, Fitness abilities, Canoe sprint, Performance, Comparing