

Abstract

Title: Comparison of explosive strength of lower limbs in different ski and snowboard disciplines.

Aims: The aim of this thesis is to compare explosive strength of lower limbs in different ski and snowboard disciplines.

Methods: This is an empiric-theoretical thesis. A simple experiment (testing) was used to verify the hypothesis. 6 used sets participated in the quantitative research. Testing was carried out using two standardized tests, broad jump and vertical jump (Sargent jump). In both tests the best of the three trials was evaluated.

Results: In two tests for the explosive strength of the lower limbs significant differences in this ability were shown between some ski disciplines and snowboardcross. The best results in both tests were achieved by representatives of alpine skiing which disproved our hypotheses. Only the expectation that ski jumpers would perform better than the nordic combination was fulfilled.

Key words: explosive strength, broad jump, vertical jump, skiing, cross country skiing, grass skiing, nordic combination, ski jumping, alpine skiing, snowboardcross