

Abstract

Title: The influence of synchronized swimming on respiratory functions

Objectives: The aim of this bachelor thesis is to demonstrate the effect of synchronized swimming on respiration functions. Specifically, verify and document the values of selected dynamic breathing parameters of the research female participants, depending on their age and length of specialized training.

Methods: Data were analyzed through basic statistical operations and specific calculations for lung volumes.

Results: Partial confirmation of the truthfulness of both hypothesis put forward for the purposes of this thesis. Hypothesis No. 1 was confirmed for forced expiratory volume in one second (FEV1), Tiffeneau-Pinelli index (FEV1/VC ratio) and forced vital capacity (FVC). Hypothesis No. 2 was confirmed for forced expiratory volume in one second (FEV1) and forced vital capacity (FVC).

Keywords: Synchronized swimming respiratory functions, breathing, spirometrie