THE INFLUENCE OF MORPHOLOGICAL CHARACTERISTICS ON EFFECTIVENESS OF TEACHING SAILING

Abstract
The aim of this research was to determine the extent to which morphological characteristics influence learning of basic sailing techniques on balancer keel boats (Elan 19) in the population of adult beginners. The research was conducted on the sample of 135 regular students of the Faculty of Kinesiology, University of Zagreb, as a part of Water sports – Sailing classes. Morphological characteristics were measured in the premises of the Faculty of Kinesiology immediately before conducting practical part of the class. Criteria variables consisted of marks that examinees were given through standard procedure of knowledge assessment on Water sports-Sailing exam. The exam and lesson were conducted on Elan 19 sailboat type. The effectiveness of examinees was assessed on 1 to 5 scale. The knowledge of examinees was assessed on four technique elements: tacking, jibing, heading up and bearing away on positions: helm, main sail and jib. To determine basic morphological characteristics of the examinees, four anthropometric measures were selected: body height (ATV), body mass (ATM), body fat percentage (% fat) and total fat (Kg/fat). Results of regression analysis on twelve variables have singled out one statistically significant correlation (R=0,21) of body mass to the criterion variable heading up on jib position with only 4% of total variance. Further, through factor analysis two new variables are extricated, achieved sailing technique knowledge on jib and main sail position, and achieved knowledge on helmsman position. Also, through regression analysis was determined that in those variables no influence of morphological characteristics on final result exists either. On the basis of achieved results it is concluded that in teaching basics of sailing to adult beginners, the differences in basic morphological characteristics will not influence the amount of knowledge achieved.

Key words: morphological characteristics, sailing school, sailing