

## MODEL OF ANTHROPOLOGICAL CHARACTERISTICS RESPONSIBLE FOR SUCCESS IN SWIMMING IN YOUNG SWIMMERS

### **Abstract**

*On the sample of 10 selected swimmers, members of national swimming team of Bosnia and Herzegovina, it was conducted the research with the aim of finding those anthropological characteristics that are responsible for success in swimming. The paper presented the results of analysis of the influence of some anthropological components, which directly influences the result of swimming. It is tested the hypothesis that the significant correlation between anthropological dimension set in latent form and the results of success in swimming is expected. Conducted a regression analysis, but in a way that the previously isolated factors as the latent dimension, brought in connection with a sports result in swimming. This was due to determine the maximum possible model from existing data. Sixteen of the latent dimensions or factors are included, of which: 3 morphological factors, 5 isokinetics factors, 2 functional factors, 2 factors analysing blood composition and 4 motor factors. All these factors together represent a set of anthropological characteristics of swimmers in a way that they are connected and integrated into the whole. Results of this study show that success in swimming can be considered functional abilities, especially the maximum consumption of oxygen – VO<sub>2</sub>max, and balanced systolic and diastolic pressure. Then, the optimal morphological structure, which seeks specific swimming model, and also highly developed but at the same time and very specific colored motor abilities model differentiated in a way that ensures optimal operation in extremely specific medium, such as water. Finally, indicators of blood and isokinetic indicators can be considered much less important for achieving results, but it is not excluded that they may be important in the training process of transformation in individual stages.*

**Key words:** models, anthropological characteristics, swimmers, relations, result

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