

## **Abstract**

**Title:** About identification of motor predispositions in triathlon

**Aims:** The aim of our study was to find and verify appropriate indicators predicting the on-coming performance in a short triathlon and determine their level for the junior category.

**Methods:** In our study, we combined quantitative and qualitative approaches with a predominance of quantitative methods. In the first phase of the research, we used quantitative methods, confirmatory factor analysis for verification of models of predispositions and elaboration of performance standards for individual tests by means of T-points. In the second part of the research, we used the qualitative method (casuistic studies) to validate the test battery and its application in practice.

**Results:** We have compiled a structural model of motor predispositions for short triathlon, which explained 91% of all cross-correlations of seventeen used indicators. Predispositions for triathlon were categorized into five separate groups; for swimming, cycling and running (i.e. according to individual disciplines), and functional and psychological predispositions. Finding a lower limit boundary of performance in the completed tests is considered to be the most important issue for the assessment of future performance in triathlon. As a lower limit we have set the zone of 45 T-points.

**Key words:** diagnostics, factor analysis, Path diagram, performance prediction, talent