

## **Abstract**

**Title:** Trends in world and czech swimming performance during years  
2000-2017

**Objectives:** The aim of this thesis is to analyze the performance development of czech and world elite swimmers in the last 18 years. The trend of progressive performance changes is monitored in the male and female categories in all individual disciplines on the short course races.

**Methods:** To obtain the data for the thesis, we used a combination of historical and documentary methods. The initial data processing was performed by basic statistical survey, in the result part in the graphical form, with used tables and graphs with partial discussions. The studied object was represented by the national czech and world swimming records of the short course of all individual disciplines for women and men in the senior category

**Results:** During the period 2000-2017, in all individual disciplines, record-breaking values in the Czech Republic and in world swimming were improved. The trend of swimming performance development in the Czech Republic is comparable to the performance development in the world swimming. The development of record values have been greatly influenced by changes in swimming rules, especially in rules, which defines swimwear. The 2008-2009 period shows a significantly above-average value of the flooded record time.

**Keywords:** swimming, sports performance, changes in rules in swimming, development of world swimming records, development of Czech swimming records