

## **Abstract**

**Title:** Impact of stress situations on heart rate and air consumption under water

**Objectives:** The aim of this work is to determine context between stress situation at beginning divers, their heart rate and air consumption. Next aim is to evaluate whole measurement and determine the most risky, by us measured factor, according to air consumption . Next important aim is to find out, how similar are measurements of single targets and according to it eventually determine optimal recommendation leading to increasing safety of most participants, and individuals as well. And last not least goal is to conduct to optimal method of psychological resistance of diver.

**Methods:** In our thesis we used a method of analysis and a method of comparison. We applied the method of analysis in each individual measurement and the method of comparison in part comparing each measurement together.

**Results:** By measurements was found out, that air consumption is at different stress situations under water dissimilar. There is also very wild difference between air consumption and heart rate at each specimen.. Like optimal method of psychological resistance of the diver was selected method of combination. Significant stress, was dive itself. The combination consists of training concrete situation and method of general stress handling.

**Keywords:** scuba diving, heart rate, air consumption, stress

