## **Abstract**

Title: Twelve minutes test of rugby players considering the aspects of their score clasification.

Objectives: The main objective of this bachelor thesis is to define the level of endurance ability at every player individually and how does this ability influence their clasification. The next aim of this paper is whether the results of endurace ability correspond with the chosen parameters (lengh of players history, type of wheelchair and the influence of players experience before the injury).

Methods: The main method of this thesis is testing - modified twelve minutes Cooper test for wheelchair sportsmen, which was measured in training units during the period of June 2019 at 23 objects. Tested players are at the age of 23 - 40 years old, who are active wheelchair rugby players with a different length of playing history. All subjects suffer from spinal cord injury, specifically quadriplegia. The final assessment was based on evaluation table called "Field test estimation of maximal oxygen consumption in wheelchair users", which operates with five health levels (excellent, above-average, average, below-average, poor). Recorded data was transformed into an electronic form and then processed by Microsoft Excel 2013, where it was evaluated and transformed into tables and graphs.

Results: When evaluating the travelled distance we found out that two objects achieved the level of excellent, seven objects achieved the level of above-average, eleven objects achieved the level of average and four objects achieved the level of below-average. None of the objects achieved the level of poor. According to parameters as is the type of wheelchair, the length of previous playing history and the playing experience before the injury, we evaluated the achieved endurance level and how this level influences their classification. The objects were divided by their classification level into four groups, where it was emerged that two players from class 1,5 and 2 achieved the level of excellent and players from class 0,5 and 1 where none of the players achieved the levels of excellent. Four players from class 1,5 and 2 achieved the level of above-average, and players from class 0,5 and 1 ???. The length of playing experience was also evaluated and it was found out that the players with playing experience longer than 10 years were divided as follows: one player at level excellent, four players at level above-average and three players at level average. Also in classification of 1,5 points of evaluation the endurance ability on defence and offensive wheelchair it was showed of that objects on defence wheelchair were divided as follows: one player at level excellent, two players at level above-average. On offence wheelchair the players were divided as follows: one player at level above-average and two players at level average. The last observed area was playing experience before the injury, where we found out that players with previous experience were divided as follows: two players at level excellent, six players at level above-average and one player at level average. The players without the playing experience were divided as follows: one player at level above-average, ten players at level average and four players at level below-average.

Keywords: modified Cooper test, spinal cord injury, endurance ability