Abstract

- Title: Biathletes long term physical preparedness level in preparatory period
- **Objectives**: To compare in selected control tests from prepartory period the best results of present biathlon junior representants and junior results of the best present biathlon sportsmen, who are nowadays in the world biathletes top, and to give long term development overview according to these tests.
- Methods: In this thesis, data collection method, data analysis method and comparison method was used. Data collection method was the first step where we summarized all available junior results from selected preparatory period tests. Furhter, the data analysis method was used to select the best achieved time for each junior competitor in selected tests and from all results. Comparison method was chosen for thesis conclusion where we compare and present all junior competitors best results in well-arranged tables and charts. Arithmetic mean was used as statistical method for work with results
- **Results:** On the grounds of performance level comparison shown in preparatory period control tests in 2001-2012 period, of present junior group and junior level performance of present top world biathlon sportsmen, we discovered that long term performance level of present juniors is worse than performance level of the then juniors.

Keywords: biathlon, shooting, roller skiing, motor tests, SCM (youth sport centre), junior category