

## **Abstract**

**Title of the master thesis:** Analysis of FUNFitness program for persons with mental retardation - Special Olympics participants

**The aim:** To compare test results in the program FUNFitness for a group of sports population of mentally retarded persons with Down syndrome, a group of persons with cerebral palsy and a group of persons with simple mental retardation.

**Method:** evaluation, empirical research observing and comparing the variables between the different types of health diagnoses, descriptively association relationships

**Results:** The analyzed data were obtained of the participants of the European Special Olympics games held in 2005 in Olomouc. The measured data was divided into groups according to medical diagnosis of participants: the persons mentally retarded (MR) with cerebral palsy (n = 32), MR persons with Down syndrome (n = 18) and those with simple MR (n = 35). Using series of tests in program FUNFitness flexibility, strength and balance were compared between selected groups. The most statistically significant difference (p <0.05) were found between groups of people with Down syndrome and those with simple MR. The results showed that group of DS have the weakest strength and balance, which are found in poor strength capability of the lower extremities and poor ability in equilibrium test standing on one leg with closed eyes.

**Key words:** Mental retardation, Special Olympics, program FUNFitness