

ABSTRACT

Title: The level of equilibrium sporting abilities of gymnasts in younger school age compared to physically inactive population.

Purpose: The purpose of this diploma paper is to compare the level of equilibrium ability of younger school age sport gymnasts (i. e. of the age of 8-10 years old) to the girls at the same age, who are not taking part in sports. This level of abilities is compared based on simple static and dynamic equilibrium tests. Furthermore I would like to find out if the level of equilibrium capability influences the final place they get on gymnastic competitions.

Methods: This research was made based on the group of 15 female sport gymnasts and 15 girls who are not doing sports (all of them at the age of 8-10 years old). We tested equilibrium abilities of each testee using simple tests showing the level of static and dynamic balance. In particular we used standing stork test, blind standing stork test, standing on one leg after turning (to evaluate static balance) and blind back and forth walking (to evaluate dynamic balance). Based on measured output we set a point scale from 1 to 5 (according to the tests) to compare results. The comparison was done also using the average score of measured values.

Results: After evaluation of all measured data it is clear that the group of sports gymnasts has boldly better ballance abilities than the not sporting population in all relevant tests. The Sports gymnasts showed higher level of the static ballance as well as the dynamic one. The experimental group reached better results in evaluation of best achievements and performed remarcably better ballance abilities also in average values.

Keywords: Balance abilities, coordination abilities, sport gymnastics, training of balance in sports gymnastics, posture, management of balance.