

## **Abstract**

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**Title:** Observation of the effect of neuro-visual training in youth ice hockey players

**Objective:** The aim of this bachelor's thesis is to investigate the effect of the development of reaction speed and coordination of the player with the help of a developed test battery and a training plan that focused on neuro-visual training and its exercises that included reaction and coordination elements in the age categories of younger and older students. Another objective was to compare the data obtained from the test batteries between players who completed the training plan and those who did not complete the training plan.

**Methods:** The following tests from statistical analysis were used to compare the results: paired T-test, T-test for independent samples and Mann-Whitney U test. 20 players in the age range of 10-13 years, i.e., players in the junior and senior categories, participated in this research. The study was conducted for 9 weeks, with an initial testing immediately in the first week with the first training sessions. After the 8-week training program, a final measurement was conducted in the following week.

**Results:** The results suggest that players who received training with neuro-visual elements statistically improved in coordination without the puck, reaction speed without the puck and with the puck compared to players in the control group. In coordination with the puck, these players, despite improved times, were not statistically significantly different and therefore it cannot be argued that the neuro-visual training was more effective in these parameters.

**Keywords:** ice hockey, neuro-visual training, reaction ability, coordination skill, sports vision, athlete performance