
#### Abstract

Titel: Recovery duration and its effect on acceleration

Objectives: The primary goal was to find out the effect of different recovery duration between sprints of 30 m distance. The secondary goal was to find out what are the views of trainers from different sports sectors on the interval of rest, the nature of the rest, and how they can influence the speed.

Methods: Data for the results of my bachelor thesis were obtained by the method of testing and subsequent comparison of repeated speed runs to $4 \times 30 \mathrm{~m}$, among which there was a different interval of rest. Measurement was attended by 15 football players of adolescent age. Three groups of soccer players after a classic pre-match warm-up (warm-up, mobilization, and dynamic balless exercises, ball exercises) have completed two runs of 30 meters, among which rest was 4 minutes. Subsequently, each group had a different recovery duration when GROUP I rested 10 minutes, GROUP II 20 minutes, and GROUP III 40 minutes. After a set recovery interval, the test was to complete a 5 minute run, which contained a shortened version of the special running excersizes and followed by another two runs of 30 meters with a 4 minute interval of rest. In total, 3 measurements were taken, and the groups changed all the intervals with the weekly spacing.

Measured values were compared and processed using the VAR.P variance function. F.TEST in Microsoft Excel.


Results: In speed tests with different duration of recovery, the probands reached the worst average times after the rest interval of 10 minutes. On the contrary, probands reached the best times after the duration of recovery 40 minutes. The results of F.TEST have values $\mathrm{p}>0.05$, so the results are statistically insignificant. From the point of view of material significance, the results indicate for the acceleration test a duration of recovery of 40 minutes as a period of re-training.

Keywords: soccer, speed capabilities, adolescence, incorporation, testing

