

Abstract

Title: The impact of strength training on throwing speed in handball players aged 11-13 years.

Objectives: The aim of this thesis is to assess the impact of strength training on goal shooting in handball players.

Methods: This is an experimental study that utilizes methods of measurement, intervention, and comparison between two groups – control and experimental. The speed of shots at the goal was measured using radar equipment, and the height of vertical jumps using the Optojump device. In total, two measurements were taken. The first measurement of both groups was conducted before the intervention, which was undertaken only by the experimental group. The second measurement of both groups took place after the completion of the intervention, which lasted once a week for 8 weeks. The resulting data were finally processed and evaluated using the T-test and effect size.

Results: The experimental group showed significant improvement in shooting speed on goal, the control group did not exhibit any significant changes.

Keywords: Handball, strength training, resistance training, isometric strength training, bodyweight strength training, throwing velocity, youth, children, fundamental movement patterns.