

ABSTRACT

The aim of this study is to determine how the level of motor skills of third-grade elementary school students changes during the school year and what differences arise from the test results of students who attend the volleyball training program at Aero Odolena Voda Volleyball Club and students who do not attend the program. We used the Unifittest (6-60) test battery as a tool to assess the level of motor skills, which includes four motor tests. Testing took place at the Elementary School in Odolena Voda. The experimental research involved 64 students aged 8-9 years, including 10 girls and 13 boys who attended the volleyball training program. The average height of children in the experimental group was 136.5 ± 4.5 cm for girls and 142.1 ± 4.1 cm for boys. The average weight of girls was 28.6 ± 3.8 kg, and the average weight of boys was 36.5 ± 4.1 kg. In the control group, the average height was 136.6 ± 5.8 cm for girls and 137.6 ± 3.7 cm for boys. The average weight was 31.4 ± 6.1 kg for girls and 33.25 ± 4.6 kg for boys.

The level of physical fitness in children was first assessed in September 2023, and the second measurement took place in May 2024. We examined whether the volleyball training program influenced the level of motor skills in younger school-age children. We also compared the skill levels with the general population. Basic statistics were used for data analysis.

It was found that the level of certain motor skills increased in the experimental group. Specifically, there was an improvement in strength-dynamic endurance of the abdominal flexor muscles of the hip joint and endurance capacity. The experimental group showed improvement in the "Sit and Reach for 60 seconds" test and the "Endurance Shuttle Run 20m" test. However, there was no improvement in dynamic explosive strength of the lower limbs in the "Standing Long Jump" test, either in the experimental or control group. The average result in the "Endurance Shuttle Run 10x4m" test for all groups in May 2024 was worse than in September 2023. It was confirmed that BMI has an impact on a child's motor performance. Students in the obese and overweight BMI category demonstrated lower motor performance compared to students in the lean and proportionate category."

KEYWORDS: Unifittest (6 – 60), motor skills, physical fitness, Younger school age, Somatic measurements, Motor tests