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PHYSICAL FITNESS OF LITHUANIAN PRIMARY SCHOOL CHILDREN. PILOT STUDY

Cesnaitiene, V.1, Emeljanovas, A.1, Mieziene, B.1, Tumynaite, L.1, Fjørtoft, I., Kjønnsniksen, L.

Lithuanian Sports University

Introduction

At present, studies have shown that despite the physical activity recommendations and greater investment in the promotion of children's physical activity, there is still not enough attention paid to testing children's physical fitness. In particular, there is a lack of analysis of younger school-age children's physical fitness and its influencing factors. It is well known that underdeveloped physical abilities of children have a negative impact on their health and well-being in childhood and adulthood (Corbin et al., 2014). Therefore, such studies are very important aiming at improving children's health indicators.

Methods

Data from 242 primary school students aged 7 – 11 years were gathered, 52.7% of them were boys. The 9 items test battery, developed by Fjørtoft et al. (2011), included the following tests: standing broad jump, jumping a distance of 7 m on 2 feet, jumping a distance of 7 m on one foot, throwing a tennis ball with one hand, pushing a medicine ball with 2 hands, climbing wall bars, performing a 10 x 5 m shuttle run, running 20 m as fast as possible, and performing a reduced Cooper test (6 minutes).

Results

Boys performed better than girls ($p < .05$) on total fitness and most separate tests, except for performing a 10 x 5 m shuttle run, jumping a distance of 7 m on 2 and 1 feet. Comparison of physical abilities of differently aged boys has shown that strength and strength endurance indicators improve with age. Agility, coordination, aerobic endurance did not statistically significantly differ comparing the indicators for 7-, 8-, 9-, and 10- year-old boys. Comparing physical fitness indicators for differently aged girls we did not find statistically significant differences. Height, weight, BMI and body fat mass were not related to the total physical fitness. Pushing a medicine ball with 2 hands was associated with a higher score on height, weight and BMI ($r = .332, .343, .260$, respectively).

Discussion

Results obtained from the girls do not reflect the distribution of the overall children's physical fitness indicators in the aspect of age groups. While the improvement of these indicators is observed with age, it is not statistically significant ($p > .05$). These findings may be influenced by the small sample size which is characteristic of the pilot study. We did not observe significant differences comparing physical fitness indicators for children in Lithuania and other countries. Boys' physical fitness indicators improved with age and were statistically significantly ($p < .05$) different from those of girls.

References

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