

Abstract

Title:

The importance of prolonged physical activity for the fitness level of younger school-age children (on the example of Olympic all-around).

Objectives:

The aim of this paper is to investigate, using the Olympic Diploma competition as an example, whether regular participation in the competition has an effect on higher fitness levels in younger school-age children.

Methods:

Descriptive statistics (arithmetic mean and standard deviation) and data analysis (ANOVA method) were used to determine the difference of long-term physical activity on fitness level and to compare these results between children.

Results:

The theoretical part defines human development, especially younger school age, and also the development of physical abilities. It also describes motor tests, the history of testing and research on motor fitness testing in the Czech Republic and worldwide.

The results compiled in this thesis were provided by the organisers of the Sazka Olympic multi-sport event and only lower primary school children aged 6 - 11 years were assessed. The arithmetic mean and standard deviation were calculated and the difference of long-term physical activity for the fitness level of the children was also calculated using data analysis (ANOVA method).

The study population comprised a total of 95,430 children aged 6 - 11 years, with 52,825 children in the assessment years (2017 - 2019), including 26,534 boys and 26,291 girls. The results of 8 motor tests of the Olympic Diploma competition were evaluated. The results were evaluated, both overall and in individual years. The children were divided by age and assessed together, but also divided into boys and girls. The most important division is the division between children who participated in the competition for the first time, versus children who participated in the competition for several times.

The biggest difference in the children's averages was in the sit-ups discipline, for both boys and girls. The smallest difference was in the deep lunge in both cases.

The importance of prolonged physical activity on fitness levels was demonstrated in both boys and girls in the disciplines of deep bending, sit-ups, stork stance, endurance running and basketball throwing. In T-running, significance was demonstrated only in girls, while significance was not demonstrated in boys. On the other hand, in the 60 m sprint, significance was demonstrated only in boys, while it was not demonstrated in girls. In the standing jump, significance was not even demonstrated in either sex.

Keyword:

Movement level testing, testing, versatility, sensitive period