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# A comparison between physical fitness of children practicing judo and non-practicing children based on International Physical Fitness Test

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## Abstract

**Background and Study Aim.** The ongoing technological development as well as negative effects of environment pollution which are noticeable for a common human, constitute the phenomena which have an impact on the development of civilization diseases. The objective of research was the knowledge about the general physical fitness of teenagers who practice judo and those who do not. It was wondered whether in the young age of 10-11 years old the judo trainings may have the impact on increased level of physical fitness. The authors also formed the question whether the people who practicing judo have the increased physical fitness in comparison to the boys who do not practice any sport.

**Material and Methods.** The group of 44 children in the age of 11-12 years old was taken to the analysis, including 22 people who practice judo and 22 people who do not practice any sport discipline. International Physical Fitness Test S. Pilicza was used to the research. The arithmetic average, the standard deviation, the coefficient of variation and student's t-test for independent samples were calculated.

**Results.** In all samples people who practice judo, achieve better results. According to the results of research, the majority of people having the increased physical fitness, refer to judo group (14 people), which constitutes 63.63% of those who train, while in the non-practicing group 36.36% of people is at the high level of physical fitness, what should be considered as a very good result. In the non-practicing group the majority of people qualify to the average level of the physical fitness (11 people), what constitutes a half of the primary school group. Those who practicing judo, are at the following physical fitness levels: high and average, no one has been at the low level. Among non-practicing children, 3 people are at the low level which is 13.64% of non-practicing people.

**Conclusions** The boys who practice judo, had better results in all samples. The judo training comprehensiveness leads to the development of all motor skills. The results indicated the significant differences in flexibility, strength and power tests. Practicing boys are at the high level of strength. People who do not practice any sport, besides school classes, achieved good tests results.

**Key words:** judo • fighting sports • martial arts • physical fitness

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